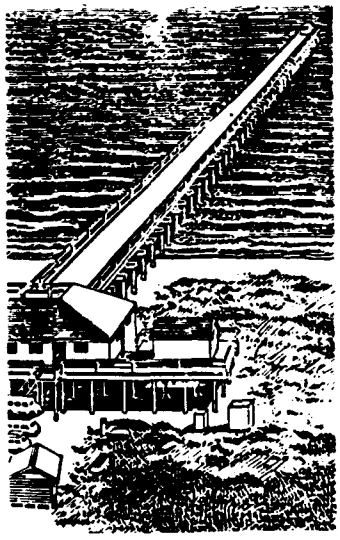
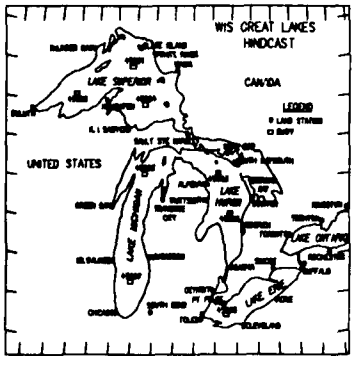
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WAVE INFORMATION STUDIES
OF US COASTLINES

WIS REPORT 23

# HINDCAST WAVE INFORMATION FOR THE GREAT LAKES: LAKE SUPERIOR

by

David B. Driver, Robin D. Reinhard, Jon M. Hubertz

Coastal Engineering Research Center

DEPARTMENT OF THE ARMY
Waterways Experiment Station, Corps of Engineers
3909 Halls Ferry Road, Vicksburg, Mississippi 39180-6199

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Thirty-two years of hindcast wind and wave information is summarized for 95 locations along the shoreline of Lake Superior in four data products: percent occurrence tables, wave rose diagrams, mean and largest wave heights and 32-year statistics tables, and return period tables. The procedures used to produce this information are discussed, and examples of verification against measurements are shown.

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# PREFACE

The Wave Information Study (WIS) was authorized in December 1976 by Headquarters, US Army Corps of Engineers (HQUSACE). The study is part of the Coastal Field Data Collection Program, which is managed by the Coastal Engineering Research Center (CERC), US Army Engineer Waterways Experiment Station (WES). The HQUSACE Technical Monitors for the Field Data Collection Program are Messrs. John H. Lockhart, Jr.; James E. Crews; Robert H. Campbell; and John G. Housley. Mr. J. Michael Hemsley was the former Program Manager, Ms. Carolyn M. Holmes is the present Program Manager, and Dr. Jon M. Hubertz is the WIS Project Leader.

This report is one of five that present the results of wave hindcasts for the Great Lakes. The Great Lakes hindcasts were performed by Dr. Hubertz, Mr. David B. Driver, and Ms. Robin D. Reinhard, assisted by Mr. Alan Cialone, Ms. Robin Hoban, and Mr. Donald E. Eicher, all of the Coastal Oceanography Branch (COB), Research Division (RD), at CERC.

The study was conducted under the direct supervision of Dr. Edward F. Thompson, former Chief, COB; Dr. Hubertz, Acting Chief, COB; Dr. Martin C. Miller, Chief, COB; and Mr. H. Lee Butler, Chief, RD, CERC, and under the general supervision of Mr. Charles C. Calhoun, Jr., Assistant Chief, CERC, and Dr. James R. Houston, Chief, CERC. The word processing was by Ms. M. Jane Stauble, COB, and Ms. J. Holley Messing, RD.

COL Larry B. Fulton, EN, is the Commander and Director of WES. Dr. Robert W. Whalin is Technical Director.

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CONVERSION FACTORS, NON-SI TO SI (METRIC) UNITS OF MEASUREMENT

Non-SI units of measurement used in this report can by converted to SI (metric) units as follows:

| Multiply | By | To Obtain |
|---|---|---|
| degrees (angle) | 0.01745329 | radians |
| knots (international) | 0.5144444 | meters |
| miles (US statute) | 1.609347 | kilometers |

# HINDCAST WAVE INFORMATION FOR THE GREAT LAKES: LAKE SUPERIOR

## PART I: INTRODUCTION

1. The primary purpose of this study is to provide an accurate and comprehensive database of information descriptive of the long-term wave climate for the Great Lakes. The goal is to accurately represent mean values of wave parameters such as height, period, and direction. At any station, the hindcast values are expected to differ at times from measured values, but this difference will generally be small and, in the mean, approach zero. It is also expected that the extreme values at any station will accurately represent actual conditions and provide reliable design wave information. This report describes the selection of a grid and hindcast sites, methods used to process and prepare input wind fields, numerical model calibration and verification, and production of a 32-year (1956-1987) hindcast. Information of this nature is essential to the efforts currently being undertaken by both US and Canadian interests in developing workable shoreline management guidelines and navigational aids. Projects benefiting from such information include dredging and dredge disposal, beach nourishment and erosion studies, and the design of coastal structures such as jetties, harbors, revetments, and breakwaters, as well as local projects for improving recreation safety.

2. Prior to 1979, measurements of wave data on the Great Lakes were scarce and quite short in duration. The available data were generally associated with site-specific studies and were usually located nearshore in shallow water. Very few data are available from wave gages, and many of these are in an unanalyzed, analog form. Visual wave observations are available from US Coast Guard stations at several shore locations and from commercial ships for waves offshore.

3. In 1979 the National Data Buoy Center of the National Oceanic and Atmospheric Administration (NOAA) extended their wave measurement program to the Great Lakes, using large, boat-shaped buoys equipped with anemometers, air-water temperature sensors, and vertical accelerometers for wave height measurements. The purpose of this program was to provide a comprehensive set

of climatological data for a long period of record from fixed locations in the near coastal and deep ocean areas adjacent to the US mainland. The first two buoys were installed in northern Lake Michigan and central Lake Superior, respectively. During 1980 and 1981, six additional buoys were deployed: two more in Lake Superior, one in southern Lake Michigan, two in Lake Huron, and one in western Lake Erie. Lake Ontario remains without a buoy.

4. These buoys provide the best long-term wave measurements available for the Great Lakes. Unfortunately, the buoys are removed during the heavy icing season of November to March and are, therefore, subject to miss the winter storms that produce the largest and most destructive waves. Figure 1 shows the location of each of these buoys. Wind and wave information from these buoys were used for calibration and verification of both input wind fields and the numerical wave model.

## Previous Studies

5. Prior to this effort, numerical hindcasts of the Great Lakes were conducted by Resio and Vincent (1976a, b, and c; 1977a and b; 1978), hereafter referred to as RV, for the US Army Corps of Engineers (COE) and by a number of Canadian firms for the Ontario Ministry of Natural Resources (1988a, b, and c). The RV study established the hindcast procedure for the Great Lakes that the present study employs, including guidance for the use of measured overland winds to estimate overlake winds. This hindcast was also the first attempt within the COE to use a numerical scheme for wave calculations instead of the standard empirical/analytical approach, such as the Sverdrup-Munk-Bretschneider method (Shore Protection Manual (SPM) 1984). The major differences between RV and the present study are (a) the length of the hindcast period and events hindcast; RV used up to a 69-year record (1907-1975) but only hindcast "storm events," whereas the present study uses a complete 32-year wind record (1956-1987); (b) the present study uses more recent wind information, which, because of improved technology, is of better quality than some of the early data; (c) the present study considers the effects of ice cover, whereas the RV study did not, although RV did provide guidance to include ice effects in a probabilistic sense; (d) the present study reflects advances in understanding of the physics involved in wave generation, propagation, and dissipation and

employs current techniques to model these processes. RV classified "storm events" as days with average wind velocities over the lake of 25 knots* or above, as recorded on the ships' anemometers. Results from RV were tabulated as return period statistics for use in design criteria at hindcast sites along the US coastline. The time series of wind and wave information was not archived.

6. The Canadian hindcasts were developed as part of a Shoreline Management Plan designed to fill the need for a wave climate database for the Great Lakes in Ontario. The approach was similar to that used in the present study. The overlake winds were estimated from several land-based meteorological stations (as per RV), and the presence of ice cover was included. The criterion employed to determine the extent of ice cover is similar to that used for the present study. The Canadian hindcasts produced a wave climate database for stations along the Canadian shoreline that were continuous in time. The time interval of each hindcast varies from 1971-1985 for Lake Erie, 1964-1983 for Lake Ontario, 1962-1970 for Lake Superior, and 1953-1987 for Lake Huron. Lake Michigan was not hindcast. The grid size and number of archived stations are specific for each lake and were selected to provide an accurate representation over the lake with the minimum number of sites. Because of damage during previous storms, shoreline erosion, and existing and proposed developments, these stations were considered priority sites by the Ministry of Natural Resource and Conservation Authority.

## Procedure

7. The selection of a grid was based on the grids used previously in the RV study to allow comparison with the present study. A 10-statute-mile square grid covering the entire lake was generated. Most of the nearshore and a few midlake grid points were designated as stations at which all model data would be saved (i.e. save stations) (Figure 2). Based on this grid, a land-water boundary matrix was established (0 = land, 1 = water) for computational purposes. Deep water was assumed across the grid; therefore no bathymetric

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* A table of factors for converting non-SI units of measurement to SI (metric) units is presented on page 3.

data were used. The measured winds from land stations surrounding each lake were converted to an elevation of 10 m after being adjusted for the effects of air-water temperature differences and the land-water interface. These adjustments are discussed in more detail in the following section. The winds were interpolated over the grid at 3-hr intervals.

8. Measured wave data were obtained from NOAA buoys. Prior to the development of the full 32-year data set, the model was run for selected periods of time (corresponding to available NOAA data), and the results were compared with measured data. Wind speeds were then modified, as necessary, as part of the model calibration process. Verification runs were then made for the entire set of available buoy data. Procedures for and results of model calibration and verification are discussed in more detail in subsequent sections.

9. Two data files were created and saved. One, referred to as the parameter file, contains a single record every 3 hr for 32 years for each station. This record includes station identification and location, wave height, peak spectral period, and average wave direction. The second file contains similar information in addition to the full two-dimensional (frequency and direction) distribution of spectral wave energy. The results of various parameter file analysis, including calculation of percent occurrence tables, mean and maximum monthly values, and return period statistics, are presented for the designated save stations. The location of each station is given in Table 1.

## PART II: DETERMINATION OF WIND FIELDS

10. The results of any numerical wave hindcast study depend heavily on the quality of the winds used to drive the model and are, therefore, only as good as the input data. In addition to the quality of the wind data, the length of the historical wind record is an important parameter. The longer the period of time that a particular parameter has been observed, the better are any estimates of statistical properties of that population. The only three sources of data with sufficient length of record for the present hindcast are (a) pressure observations at land stations, (b) synoptic weather maps derived from pressure observations, and (c) wind observations at land stations and on ships.

### Source

11. The calculation of winds from pressure observations or fields requires the use of a planetary boundary layer model and some simplifying assumptions. Therefore, it was felt that a more straightforward approach should be used. Ship observations were not included because of the inconsistent nature of these measurements in space and time. The incorporation of this information was seen as too time consuming for the present long-term study. Ship wind speeds were used by RV since they addressed only "storm events," which by nature are short in duration. The wind directions recorded by ships were not used in RV since they were often inconsistent.

12. With these factors in mind, estimation of the wind fields over each of the Great Lakes was accomplished by using the most reliable, long-term, continuous wind observations that were available from both US and Canadian coastal land stations. This approach is limited by the distribution of measurement sites around the lakes, but it is considered to be the best alternative. On the US side, these data generally came from National Weather Service stations located at larger airports near the lakes. The Canadian data, supplied by the Canadian Climate Centre (CCC), came from airports and various other CCC weather stations around the lakes. Figure 3 shows the location of the stations used, and Table 2 provides the period of record available for each station. Buoy-measured winds possessed a large number of

variable-sized gaps and a wide variation in terms of period of record for any given year. For this reason, they were not included in the following procedure.

13. The wind data, commonly measured and recorded at hourly intervals, were sampled every 3 hr beginning at 00:00 Greenwich Mean Time (GMT) on 1 January 1956. A 3-hr interval was chosen because of the lack of continuous hourly data. Gaps of short duration were interpolated to provide a continuous time series. All data were then corrected to an elevation of 20 m using the standard 1/7th power law for the wind speed profile (Davenport 1960). This approximation, given by

$$U_{20} = U_z\left(\frac{20}{z}\right)^{\frac{1}{7}} \tag{1}$$

estimates the wind speed $U_{20}$ at 20 m from the observed wind speed $U_z$ at elevation $z$ .

## Corrections

14. Corrections for the air-water temperature difference and for the difference in frictional effects between land and water were then applied. These corrections were based on two empirical curves developed by RV (1976c), one relating the overland-overlake wind speed ratio to the air-water temperature difference and one relating overlake wind speed $(U_w)$ to overland wind speed $(U_l)$ . The approximation of these curves is given by the following formula derived by Schwab and Morton (1984):

$$U_w = U_l\left(1.2 + \frac{1.85}{U_l}\right)\left[1.0 - \frac{\Delta T}{|\Delta T|}\left(\frac{|\Delta T|}{1920}\right)^{\frac{1}{3}}\right] \tag{2}$$

where $U_l$ is given in meters per second at an elevation of 20 m and the air-water temperature difference $\Delta T$ is measured in degrees Celsius. Air-water temperature differences derived from ship observations and classified as a function of month and 10-deg direction intervals (Table 3) were obtained from RV (1976c).

15. Overlake winds were then estimated from the measured overland winds using a weighted inverse distance interpolation routine with an $r^{-3}$ spatial

weighting function, where $r$ is the distance from the land station to the overwater grid point of interest. The final correction was an additional application of the 1/7th power law to correct the winds to an elevation of 10 m for input into the wave model.

## PART III: WAVE MODEL

16. The wave model used in this study, DWAVE, was developed by Dr. Donald T. Resio of Offshore and Coastal Technologies, Inc. It is described in Resio and Perrie (1989) and in an unpublished contractor's report* available from the Wave Information Study (WIS) Project Office.

17. DWAVE is a FORTRAN computer code that simulates wave growth, dissipation, and propagation in deep water. The modeled spectra are represented as fully two dimensional in discretized frequency and direction bands. Propagation effects and source-sink mechanisms are computed in terms of variations of energy levels in each of these frequency-direction elements. All wave parameters, such as wave height, frequency of the spectral peak, and mean wave direction, are computed from these discrete elements. Figure 4 shows how energy is partitioned in a directional spectrum within DWAVE. As seen there, each frequency-direction increment is envisioned as a "bin," and these "bins" are centered on specified frequencies and directions.

18. The physics embodied in DWAVE represents the state of the art in present understanding of wave generation. It is the first discrete-spectral model to be based on an $f^{-4}$ equilibrium range formulation, as supported by almost all past field experiments (Toba 1978, Forristall 1981, Kahma 1981, Kitaigorodskii 1983). As such, it represents the only model (including the third-generation models under development in Europe) that is consistent with energy conservation in the equilibrium range, as calculable from the complete or reduced Boltzmann integrals. The fetch-growth characteristics of DWAVE are similar to the Joint North Sea Wave Project (JONSWAP) relationships, i.e., wave energy increases linearly with fetch; and the duration-growth characteristics are roughly similar to those of Resio (1981) and the US Navy's Spectral Ocean Wave Model (SOWM).

19. DWAVE will run on computers ranging from desktop microcomputers to supercomputers. Many years of model development have led to an understanding

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* D. T. Resio and D. P. Bach, 1989, "Program DWAVE: Global/Regional, Deep-Water Wave Model User's Manual," Offshore and Coastal Technologies, Inc., Vicksburg, MS.

of the "trade-offs" between avoiding unnecessary tedious calculations and maintaining numerical accuracy.

## Theoretical Considerations

20. The model is based on the assumption that the wave field on a water body can be represented by a distribution of energy in discrete frequency and direction elements as schematized in Figure 4. The change in energy in each element as a function of time at all specified points on the water body is determined by the radiative transfer equation

$$\frac{\partial E_2(f,\theta)}{\partial t} = \vec{c}_g(f,\theta) \cdot \nabla \vec{E}_2(f,\theta) + \sum_{k=1}^{n} S_k(f,\theta) \qquad (3)$$

where $E_2$ is the two-dimensional spectral energy at frequency $f$ and direction $\theta$. The group velocity is $c_g$, and $S_k$ represents a number of functions that act as sources or sinks for energy. This equation is solved at each point in a square grid on the water body for successive intervals in time. The wind source term supplies energy to the sea surface and allows the wave spectrum to grow and the wave-wave interaction term controls development of the spectrum.

21. Hasselmann (1962) derived an equation for four resonantly interacting waves, which he showed to be the lowest order interaction capable of achieving a net transfer of energy among spectral components in a statistically homogeneous wave field. Although Hasselmann et al. (1973, 1976) argued that these wave-wave interactions controlled the shape of a spectrum, they did not pursue the spectral balance responsible for this tendency. Tracy and Resio (1982) showed that a number of exact geometric similarities were exhibited within the collision integrals for wave-wave interactions; however, they made use of these similarities only to improve the efficiency of numerical integration for the full integral. Only recently Kitaigorodskii (1983) demonstrated that inherent in the collision integrals for wave-wave interactions are geometric constraints on the gradient of energy density in the equilibrium range of a spectrum. Kitaigorodskii pointed out the analogue between this "equilibrium" range behavior and the Komolgoroff range in turbulence. Kitaigorodskii's derivation is based solely on dimensional

arguments and does not illustrate some of the important geometric scaling aspects inherent in the collision integral. A different derivation, one which follows the scaling aspects of this integral, is offered by Resio (1981).

22. This derivation implies that an equilibrium range in action density in a deepwater wave spectrum is representable as

$$n(k) = B'k^{-4} \tag{4}$$

where $B'$ is a constant with units time$^{-1}$ and $k$ is the wave number. Equation 4 is equivalent to that derived by Kitaigorodskii (1983), although the two methods of derivation differ significantly. Figure 5, from numerical calculations using the full collision integral, shows that, in deep water, an equilibrium range with this form does come very close to a constant energy flux equilibrium form. Flux divergence, which would produce steeper equilibrium range slopes, will occur for values of the power of $k$ less than 4; and flux convergence, which would produce shallower equilibrium range slopes, will occur for values of the power of $k$ greater than 4. Thus, there is a strong shape restoring-preserving tendency inherent in these energy fluxes due to wave-wave interactions.

## Wave Propagation

23. In DWAVE, each frequency-direction element in the directional wave spectrum is propagated independently, according to an upstream differencing method. This technique is presently employed in the latest third-generation models in Europe. Its advantages in terms of stability, execution time, and set-up simplicity outweigh any gains by using higher order propagation schemes. During the development phase of DWAVE, several higher order propagation schemes were tested in actual wave simulations. Typical differences in spectral energy contents and total energies, under these "real-world" conditions, were typically only a few percent or less.

24. A latitude-longitude grid is used in DWAVE. Propagation along meridians (or components of propagation along meridians) is the equivalent of propagation along great circles. Consequently, there is no curvature away

from a straight-line propagation along these axes; however, divergence/convergence effects must be incorporated for meridional propagation. For propagation along latitudes (parallels), there is no divergence/convergence; however, there is an angular curvature that must be considered.

## Numerical Simulation of Wave Growth and Dissipation

25. The proper simulation of the physics of energy transfer into and out of each element in the directional spectrum is essential to accurate wave modeling. In DWAVE, the simulated sources and sinks are as follows:

a. Energy transfer from the atmosphere to the wave field.

b. Energy transfer among wave frequencies (wave-wave interactions).

c. Energy transfer from waves to the atmosphere (swell propagating against the wind).

d. Energy losses due to wave breaking in deep water.

## Wind Input

26. The energy input into the spectrum is given by

$$\frac{\partial E_2(f,\theta)}{\partial t} = B(f,\theta)\,E_2(f,\theta) \tag{5}$$

where $B(f,\theta)$ is a function with units of time$^{-1}$ given by

$$B(f,\theta) = z\left(\frac{uf_m}{g}\right) f \cos(\theta_{wv} - \theta_{wd}) \tag{6}$$

where

$f$ = frequency

$z$ = dimensionless constant

$u$ = wind speed

$f_m$ = peak frequency

$g$ = acceleration of gravity

$\theta_{wv}$ = wave direction

$\theta_{wd}$ = wind direction

The constant $z$ is composed of the drag coefficient, the ratio of air density to water density, and an empirical constant and should have a value between 0.16 and 0.24. The value used in this study is 0.2.

## Description of Wave Growth and the Behavior of the Wave-Wave Interaction Source Term

27. From Hasselmann et al. (1973), Mitsuyasu (1968), and others, the following is obtained

$$\hat{E}_0 = J\hat{x} \tag{7}$$

and

$$\hat{E}_o = E_o \frac{g^2}{u_*^4} \tag{8}$$

where $J$ is a dimensionless empirical constant. Nondimensional values of energy $\hat{E}_0$ and fetch $\hat{x}$ are given by

$$\hat{x} = \frac{gx}{u_*^2} \tag{9}$$

where

$E_0$ = total wave energy

$u_*$ = friction velocity

$x$ = fetch

The constant $J$ ranges in value from $1.0 \times 10^{-4}$ to $1.5 \times 10^{-4}$. The value used in this study is $1.28 \times 10^{-4}$. Substituting the definitions of $\hat{E}_0$ and $\hat{x}$ into Equation 7 and taking a derivative with respect to distance for the equation, the following is obtained:

$$\frac{\partial E_0}{\partial x} = J\frac{u_*^2}{g} \tag{10}$$

Thus, Equation 10 indicates that the rate of gain of energy with fetch is independent of fetch. Converting to a time rate of growth,

$$\frac{\partial E_0}{\partial t} = \langle c_g \rangle J \frac{u_*^2}{g} \tag{11}$$

where $\langle c_g \rangle$ is an average group velocity such that

$$\langle c_g \rangle = \frac{1}{E_0} \int_0^{\infty} \int_{-\frac{\pi}{2}}^{\frac{\pi}{2}} \vec{E}_2(f,\theta) \cdot \vec{c}_g d\theta df \tag{12}$$

If a parameter, $\beta_1$, is defined such that

$$\beta_1 c_{gm} = \langle c_g \rangle \tag{13}$$

where $c_{gm}$ is the group velocity of waves at the spectral peak (i.e., $c_g(f_m)$ where $f_m$ is the frequency of the spectral peak), Equation 11 becomes

$$\frac{\partial E_0}{\partial t} = \beta_1 c_{gm} J \frac{u_*^2}{g} \tag{14}$$

In discrete spectral models, the radiative transfer equation,

$$\frac{\partial E_2(f,\theta)}{\partial t} = \vec{c}_g(f,\theta) \cdot \nabla \vec{E}_2(f,\theta) + \sum_{k=1}^{n} S_k(f,\theta) \tag{15}$$

where $S_k(f,\theta)$ represents energy input or loss at a spectral element with frequency $f$ and direction $\theta$ due to the $k^{th}$ source term, is solved at every time step for each water point in the computational grid. In order to estimate important spectral balances and energy exchanges due to nonlinear wave-wave interactions, it is essential to know the location of the spectral peak. In the previous WIS model, as described by Resio (1981), the nonlinear wave-wave interaction source term is treated explicitly. A problem with this approach is that the location of $f_m$ actually evolves during each time step and an explicit treatment which holds it constant over a time step can lead to significant underprediction of wave period.

28. To obtain an implicit representation for nonlinear source terms, begin by expressing the total energy in a spectrum in terms of a set of spectral parameters in a manner consistent with Equation 2.6 of Resio and Perrie (1989),

$$E_0 = \frac{1}{3}\lambda\alpha g(u_*^2 c_m)^{1/3} f_m^{-3} \tag{16}$$

where $\lambda$ is a constant of proportionality ranging in value from 1.5 to 2.0 and $c_m$ is the phase velocity of the spectral peak. The value used in this study is 1.75. The constant $\alpha$ ranges in value from 0.035 to 0.05. The value used in this study is 0.045. This relationship is appropriate for self-similar spectra with an $f^{-4}$ equilibrium range. As discussed by Resio and Perrie (1989), spectra of this type can be written in a fashion analogous to the form of the JONSWAP spectrum, i.e.

$$E(f) = \alpha \frac{(u_*^2 c_m)^{\frac{1}{3}} g}{(2\pi)^3} f^{-4} \Psi\left(\frac{f}{f_m}\right) \tag{17}$$

where

$$\psi\left(\frac{f}{f_m}\right) = \gamma^{\exp\left[-\frac{(f-f_m)^2}{2(\sigma f_m)^2}\right]} \quad for\ f \geq f_m \tag{18}$$

or

$$\psi\left(\frac{f}{f_m}\right) = E(f_m) \exp\left[1 - \left(\frac{f}{f_m}\right)^4\right] \quad for\ \ f < f_m \tag{19}$$

and $\gamma$ and $\sigma$ are the JONSWAP coefficients. From the form of Equations 17, 18, and 19, it is apparent that the parameter $\lambda$ is dependent on $\gamma$ and $\sigma$ in a fairly nonlinear fashion; however, the actual variability for reasonable values of $\gamma$ and $\sigma$ constrain $\lambda$ to be somewhere between 1.5 and 2.0, so the net effect of variations in $\gamma$ and $\sigma$ is not too large. In DWAVE the value of $\lambda$ is set at a constant 1.76.

29. Returning to Equation 16 and making use of the deepwater definitions of phase and group velocities, i.e.

$$c = \frac{g}{2\pi f} \quad ; \quad c_g = \frac{g}{4\pi f} \tag{20}$$

gives

$$E_0 = Q_1 f_m^{-10/3} \tag{21}$$

where

$$Q_1 = \frac{\lambda \alpha_*}{3(2\pi)^{10/3}} u_*^{2/3} g^{4/3} \tag{22}$$

and $\alpha_*$ is $\alpha$ divided by the square root of the drag coefficient, and from Equation 14,

$$\frac{\partial E_0}{\partial t} = J\beta_1 \frac{g}{4\pi} \frac{u_*^2}{g} f_m^{-1} \tag{23}$$

If $R = f_m^{-10/3}$, then Equation 23 becomes

$$\frac{\partial Q_1 R}{\partial t} = J\beta_1 \frac{g}{4\pi} \frac{u_*^2}{g} R^{3/10} \tag{24}$$

Separating the variables and integrating yields

$$\frac{10}{7}\left(R^{7/10} - R_0^{7/10}\right) = \frac{J\beta_1}{Q_1 4\pi} u_*^2 (t - t_0) \tag{25}$$

where the subscript "0" refers to initial conditions at time $t_0$. Rearranging and substituting $f_m$ back into Equation 21 yields

$$f_m^{-7/3} = f_m^{-7/3}\Big|_{t_0} + \frac{7}{10} \frac{J\beta_1 u_*^2}{Q_1 4\pi} (t - t_0) \tag{26}$$

If all dimensional quantities are factored out, then the change in $f_m$ over a time step is given as

$$f_m^{-7/3}\Big|^{n+1} = f_m^{-7/3}\Big|^{n} + \frac{J\beta_1}{\lambda \alpha_*} Q_3 \left(\frac{u_*}{g}\right)^{4/3} (t - t_0) \tag{27}$$

where the superscripts "n" and "n+1" refer to time-step counters and

$$Q_3 = \left(\frac{7}{10}\right)\frac{3(2\pi)^{10/3}}{4\pi} \tag{28}$$

Thus, the rate of change of $f_m$ can be seen to depend on four parameters, $J$, $\lambda$, $\alpha_*$, and $\beta_1$. Each of these parameters can be defined independently, $J$ and $\alpha$ on an empirical basis and $\lambda$ and $\beta_1$ from numerical constraints.

30. Equation 23 expresses a fundamental law for active wave generation. This can be converted into a nonlinear source term by equating $S_{NL}$ to differences in energy densities

$$S_{NL}(f,\theta) = [\hat{E}(f)|^{n+1} - \hat{E}(f)|^n]\Phi(\theta - \theta_o) \tag{29}$$

where $\hat{E}(f)$ is the estimated value of the one-dimensional spectral density $E(f)$, $\Phi(\theta - \theta_o)$ is an angular function, and $\theta_o$ is the mean wave propagation direction. The approach to a fully developed sea can be modeled by introducing a limiting parameter such that

$$T_m|^{n+1} = T_m|^n + p\frac{\partial T_M}{\partial t}\Delta t \tag{30}$$

where $T_m$ is the peak period and $p$ is given by

$$p = 1 \text{ if } f_m > f_{PM}$$

$$= 0 \text{ if } f_m \leq f_{PM}$$

and $f_{PM}$ is the "fully" developed peak frequency given by

$$f_{PM} = Z_c\, g/(2\pi u)$$

where $Z_c$ is a dimensionless empirical constant (taken as 0.9 in DWAVE).

31. Swell decay in this model is based on the concept of energy loss by nonlinear fluxes. In this form, the total energy flux from the "rear-slope" portion of the spectrum is estimated as

$$\Gamma_E = \left[\frac{a_1 (2\pi)^9}{g^4}\right] E_0^3 \, f_m^5 \tag{31}$$

where $a_1$ is a dimensionless empirical constant that ranges in value from 0.35 to 2.0. The value used in this study is 0.40. An explicit scheme is used to estimate the energy loss over the time step, and a part of the energy is redistributed to the forward face. A schematic of $S_{NL}$ is shown in Figure 6 from Resio and Bach.*

32. In summary, DWAVE is a computer code that simulates the growth, propagation, and decay of wave energy as a function of space, time, frequency, and direction. Wave growth occurs through transfer of energy from the wind to the sea surface. Part of this energy results in surface gravity waves. As energy continues to flow into the spectrum, wave-wave interactions transfer energy from the midrange portion of the spectrum to both the forward face and high-frequency regions. For constant wind input, eventually an equilibrium of energy versus frequency is reached. Wave energy is propagated in space through time as a function of frequency and direction of each of the discrete energy packets.

* Resio and Bach, op. cit.

## PART IV: MODEL CALIBRATION

33. Most numerical wave models require a certain amount of fine-tuning, or calibration, when first applied to a particular area. A model can be calibrated in several ways, including adjustment of certain internal parameters that control processes such as wave growth, propagation, and dissipation; adjustment of external parameters, such as input wind fields; or a combination of both. To determine if, and to what degree, the model used in the present study required calibration, modeled winds and waves taken from the grid point closest to each buoy location were compared with the same buoy-measured parameters for the period 1981 to 1986. Stated accuracy for the measured parameters is +/-0.2 m, or 5 percent, for wave height; +/-1.0 sec for spectral peak period; +/-1.0 m/sec, or 10 percent, for wind speed; and +/-10 deg for wind direction (Gilhousen et al. 1990). Percent distribution histograms of measured (Buoys 45001, 45004, and 45006) versus modeled (WIS Sta 94, 95, and 92) wind speed, wave height, and peak spectral wave period were examined. Figure 7a shows that the distribution of wind speed at Buoy 45001 (WIS Sta 94) is significantly different, with the buoy exhibiting a smaller (50 versus 64) percentage of wind speeds 5 m/sec and less, and a higher (50 versus 36) percentage of speeds greater than 5 m/sec. The resulting wave height distribution plot (Figure 7b) reflects the differences exhibited by the winds, particularly at the extremes. A difference in the distribution of peak periods is evident (Figure 7c). Similar trends are evident in the distribution plots for Buoys 45004 and 45006 and their corresponding WIS stations, 95 and 92 (Figures 8a, b, and c and Figures 9a, b, and c).

34. Given the inherent problems in assimilating wind data from irregularly spaced (both spatial and temporal) observations and in determining how best to blend all the available data, it was felt that the input wind field was the most "free" parameter to vary for model calibration. The best approach was determined to be an adjustment to the input (modeled) wind speeds that would force a closer match to the measured wind speed distribution. This adjustment was accomplished by plotting the cumulative distribution curve for both the measured and modeled wind speeds, selecting, from each curve, wind speed values at fixed percentage values (10, 20, 30,...etc.), and determining the best fit relationship between the selected values. This procedure was

done for all three buoys and resulted in an adjustment to the original modeled winds based on the linear relationship:

$$Y = 1.1129\ X + 0.58 \qquad (32)$$

relating measured $(Y)$ and modeled $(X)$ wind speeds. Subsequent to this adjustment, wind speeds of 10 m/sec and greater were further increased by 2 m/sec to provide better correlation with the larger waves produced during storm events. The effect was to re-distribute the modeled wind speeds, resulting in the distribution shown in Figures 10a, 11a, and 12a. Wind directions were unchanged. This improved agreement in wind speeds resulted in the corresponding improvement in the wave height and peak period distributions shown in Figures 10b and c, 11b and c, and 12b and c. Based on this improved agreement, the above procedure was considered sufficient and was used for the entire 32-year hindcast.

## PART V: VERIFICATION

35. An important question to ask in any study involving numerical models, whether used for hindcasting purposes as in the present study or as a forecasting tool, is, "How well does the simulated data reproduce, or predict, what has, or what will, occur?" The ability to answer this question with any degree of confidence depends on the availability and quality of field measurements within the study area. As was pointed out in the introduction, wave height measurements on Lake Superior prior to the installation of the NOAA buoys were scarce.

36. The main source of verification data are the NOAA buoys which, for purposes of this study, have provided data for varying portions of 6 years (1981-1986). In an effort to verify both the model and the corrections made to the input wind speeds, all available data from each of the three buoys was compared with corresponding modeled data via time-history plots and various statistical measures. Figures 13, 14, and 15 show representative samples of time-history comparison plots for each buoy location. In general the agreement is quite good, with all high wave events (greater than 2 m) correctly modeled in both time and amplitude. Tables 4 through 9 contain the wave height and peak period statistics for the 6-year period for each buoy location. The mean and maximum values are in close agreement, with correlation coefficients ranging from 0.73 to 0.85 for wave heights and 0.63 to 0.76 for peak periods. Peak period is a statistically unstable parameter, particularly during times of low wave energy when it may be difficult to define a spectral peak, and would therefore be expected to produce lower correlations.

37. Although the NOAA buoys provided much needed information for the calibration of the winds and the verification of hindcast wave heights and periods, they unfortunately provided no information for the verification of hindcast wave directions. Nevertheless, based on the results of the calibration and verification phases, it is believed that the hindcast data are within the stated accuracy of the measured parameters and therefore represent a reliable estimate of the actual wave conditions.

## PART VI: ESTIMATION OF ICE CONCENTRATION

38. Lake Superior is the largest and most northern of the five Great Lakes with a mean depth of 149 m, a length of 563 km, and a width of 257 km. During a "normal" Great Lakes winter, the ice cover on Lake Superior can reach 75 percent during the second half of February and remain as high as 50 percent through the end of March. One obvious effect of this extensive icing over is a reduction in open water, resulting in both the elimination of some or all of the 95 stations of interest and a significant change in the fetch lengths available for wave generation. The number and location of stations either lost or impacted by the reduced fetch depend on whether it is early, middle, or late winter.

39. Given the relatively high percentage of ice coverage experienced by Lake Superior during a normal winter, any effort to develop a long-term wave database would be incomplete without including the resulting effects. To accomplish this, additional model runs using ice-modified, land-water boundary data were made for the same 32-year period as the open-water hindcast.

40. Land-water matrix modification was made possible by using an extensive, 20-winter, digital data set compiled by the Great Lakes Environmental Research Laboratory (GLERL) of the NOAA (Assel et al. 1983). This database consists of ice concentration observations, beginning in the winter of 1960 and including all of the Great Lakes, made by both US and Canadian government agencies. The data are partitioned into nine half-month intervals starting with the latter half of December. Ice concentration values are given in increments of 10 percent from 0 (open water) to 100 (total ice cover) for individual grid cells measuring 5 km square.

41. The GLERL analyzed each half-month data set to provide the maximum, minimum, average, median, and modal ice concentrations for each 5-km cell. The median value, which represents an estimate of the 50-percent point of the ice concentration probability distribution, is referred to as the "normal" winter ice concentration. This particular statistical value was chosen because it was "subjectively determined that the median ice concentration patterns provided the most coherent pattern of the progression of ice-cover formation and decay over the winter season" (Assel et al. 1983). It was decided, therefore, that the GLERL-derived, median ice concentration values

for each of the nine half-month time periods would provide the best data for modifying the original land-water boundary matrix.

42. The procedure for incorporating the progression and decay of the time-dependent ice cover was complicated by the fact that different grid cell sizes were used for mapping the ice concentration (5 by 5 km) and for hindcasting the waves (16 by 16 km). To facilitate a direct relationship, ice-concentration values from a block of nine grid cells (three by three) were averaged to produce one value corresponding to a cell that was approximately the same size as a hindcast grid cell. If the ice-concentration value in this larger cell was 50 percent or greater, it was considered, for modeling purposes, to be totally covered, and the corresponding hindcast grid point was changed from a water point to a land point.

43. This procedure resulted in the formation of nine half-month land-water boundary matrices reflecting the various stages of ice-cover development and decay (Figures 16a-i). The hindcast model was then re-run for the 32-year period, using the appropriate matrix for each date. The results were again summarized in the form of percent occurrence tables, mean and maximum monthly values, and return period statistics.*

* Appendices C (Percent Occurrence Tables, Ice Conditions), D (Mean and Maximum Monthly Values, Ice Conditions), and E (Return Period Tables, Ice Conditions) are available for loan by request from the WES Technical Information Center Library or the WIS Project Office, USAE Waterways Experiment Station, 3909 Halls Ferry Road, Vicksburg, MS 39180-6199.

## PART VII: EXPLANATION OF SUMMARY TABLES

### Percent Occurrence Tables

Description

44. Two types of tables are printed: azimuth tables and tables for all directions. The azimuth tables give the percent occurrence of waves in height and period ranges for specified direction bands at each station. The title of each table provides station identification and azimuth, or midpoint angle for each of the sixteen 22.5-deg direction bands (Table 10). The period ranges were derived from the period ranges available from the WIS hindcast model (Table 11), and the height ranges are in 0.50-m increments. Values in the azimuth tables represent the percentage of the 32-year period during which waves occur from the specified azimuth range for the indicated height and period ranges. The values have been multiplied by 1,000 to allow more accuracy while using less printing space. Summations of period and height ranges are provided in the last column and row of each table. The summations also have been multiplied by 1,000. The last line in each azimuth table contains the following information for the specified azimuth range and station:

a. The mean wave height $H$ .

b. The largest $H$ .

c. The mean spectral peak period $T_p$ .

d. The number of cases (wave occurrences computed at 3-hr intervals over the length of the hindcast for that direction band).

45. The all-directions table for each station is printed following the 337.5-deg azimuth table for each station. This table gives the percent occurrence of waves within specified height and period ranges coming from all directions. Values in the all-directions table are multiplied by 100. The parameters listed in the last line of the table are derived from all directions for the full 32 years, and the total number of cases (93,504) is the number of cases calculated in the 32 years analyzed.

Use of the tables

46. The tables have been developed to produce the most detailed information available in a summary report.

Example

47. To find the number of hours that waves of 1.50 to 1.99 m and 4.0 to 4.9 sec are expected to occur from the 90.0-deg band at Sta 1 for the 32-year interval, the value read in the table for the specified station, azimuth, height, and period should first be divided by 1,000, which for this example yields 0.155 percent (Appendix A). Then 0.155 is divided by 100 to give the probability (0.00115) and multiplied by the number of hours for the 32-year interval (93,504 cases times 3 hr = 280,512 hr) to yield the number of hours that the specified wave is expected to occur. The simple conversion process is:

$$\frac{\text{Value read in table}}{1{,}000 \times 100} \times \text{number of hours in time interval} = \text{number of hours specified wave is expected to occur}$$

For this example:

$$\frac{155}{1{,}000 \times 100} \times 280{,}512 \text{ hr} = 435 \text{ hr}$$

## Wave Rose Diagrams

Description

48. The wave rose diagrams use wave height $H$ and wave direction $D$ and present analyses of the 32 years of hindcast data. The diagrams show the percent occurrence of $H$ ranges from eight (45-deg) direction bands. The percentage of waves occurring from each direction for the specified station is displayed in a triangle at the end of each leg of the diagram.

49. As in most wave rose diagrams, the width of each bar segment indicates the $H$ range, and the length of the bar segment indicates the percent occurrence of waves from the specified direction. The distance between each circle in the diagram is 20 percent. Each leg of the diagram represents 22.5 deg to either side of the primary direction of the leg. For example, the

leg to the north represents waves coming from 337.5 deg (NNW) through 0 deg (N) to 22.5 deg (NNE).

Use of the diagrams

50. The diagrams are intended as visual aids and are not appropriate for detailed analyses.

Example

51. The wave rose diagram for Sta 1 (Appendix A) indicates that 27 percent of the waves were from the southwest, 225-deg band (waves moving toward the northeast), and of the 27 percent, approximately 33 percent were 0.0 to 0.4 m, about 45 percent were 0.5 to 0.9 m, about 13 percent were 1.0 to 1.4 m, etc. The total for each leg is 100 percent for the specified direction.

## Mean $H$ , Largest $H$ , and 32-Year Statistics Tables

Description

52. Two tables that summarize the mean and largest $H$ for each month and year are provided for each station (Appendix A). The mean table also provides a mean monthly value and mean yearly value of $H$ . The largest $H$ table provides the largest $H$ hindcast for each month in each year. The 32-year statistics tables provide the following:

a. Mean $H$ .

b. Mean $T_p$ .

c. Most frequent $D$ band .

d. Standard deviation of $H$ .

e. Standard deviation of $T_p$ .

f. Largest $H$ .

g. $T_p$ of largest $H$ .

h. $D$ of largest $H$ .

i. Date and time (GMT) of largest $H$ .

Use of the tables

53. The tables can be used as a quick reference in determining estimates of the wave climate in an area.

Example

54. To determine the mean $H$ at Sta 1 for January 1956, simply read the value in the specified column and row (Appendix A). The mean $H$ for 1956 is given in the MEAN column opposite 1956. The mean $H$ for all January's is given in the MEAN row under JAN. For this example:

a. The mean $H$ for JAN 1956 = 0.8 m .

b. The mean $H$ for 1956 = 0.8 m .

c. The mean $H$ for all JAN's = 0.9 m .

The largest $H$ table can be read in a similar fashion, and by scanning the columns and rows, additional information can be determined:

a. The largest $H$ for JAN 1956 = 2.6 m

b. The largest $H$ for 1956 = 4.7 m

c. The largest $H$ for all JAN's = 6.0 m

## Return Period Tables

Description

55. An analysis of extreme storm wave heights was performed for each of the save stations. The procedure, developed by Goda (1988) and currently available in CERC's Automated Coastal Engineering System, fits five candidate probability distributions to a series of ranked extreme wave heights. In the present study, a Fisher-Tippett Type I distribution was chosen because it provided the best overall match to the input data. The 32-year extremal statistic tables (Appendix B) are in the following format:

a. Wave heights for recurrence intervals of 2, 5, 10, 20, and 50 years are listed.

b. The standard error of wave height for the specified return period is included in parentheses next to each wave height estimate.

c. Angle Classes 1, 2, and 3 are defined as viewed by an observer on shore (Figure 17):

(1) Angle Class 1 - Mean wave approach angle greater than 30 deg to right of normal to shore.

(2) Angle Class 2 - Mean wave approach angle within 30 deg to either side of normal to shore.

(3) Angle Class 3 - Mean wave approach angle greater than 30 deg to left of normal to shore.

(4) Angle Class All - includes all directions.

56. Table 12 lists the azimuths of the vectors normal to the shoreline for each station.

Use of the table

57. Estimates of extreme wave heights and their standard errors can simply be read from the table for the desired return period and station. Table 13 provides the factor by which the standard error should be multiplied to obtain bounds for various levels of confidence and the corresponding probability of exceeding the upper bound. Table 14 can be used to find the probability of one or more waves, or larger waves, of a specified return period occurring within 1, 10, 25, or 50 years.

Example

58. Wave height values for specified return periods are simply read from the table for the desired station. For example, the 50-year maximum for Sta 3, Angle Class 1, is 6.5 m. The 50-year maximum for Sta 3, all directions, is 6.6 m. Table 14 shows that the 6.6-m extreme wave height has a probability of 0.18 of being equaled or exceeded at least once in 10 years.

## PART VIII: RESULTS

59. A 32-year time series of historical wave heights, periods, and directions has been developed for Lake Superior using the latest version of The Coastal Engineering Research Center's deepwater wave model. The data presented in this report, in the form of graphs and tables, serve to verify the hindcast procedure as well as present a concise and useful summary of a very large data set.

60. Information contained in this report can be quite useful for initial assessments, but users must keep in mind that the results from this hindcast represent deepwater conditions, and, as such, should be used only as approximations to coastal conditions. For detailed coastal wave information, such as that required for the design, construction, operation, and maintenance of coastal structures, one must take advantage of the full two-dimensional spectrum (available on magnetic tape) from the nearest deepwater point and use an appropriate shallow-water wave transformation model to bring the waves to the point of interest.

61. One of the more important parameters reported is the return period wave height. It is often this extreme value that guides the design of many coastal structures, such as selection of the appropriate rock size for a jetty or breakwater. Coastal engineers, both within the COE and in the private sector, responsible for the design of coastal structures on the Great Lakes have relied heavily on the results of RV for estimates of extreme waves. The return period wave heights estimated in this study were compared with those reported in RV. The results, illustrated in Figure 18 and listed in Table 15, compare the wave heights at co-located stations for return periods of 5, 10, 20, and 50 years, respectively. Each plot shows a similar pattern, with the return period wave heights from the present study (WIS) consistently higher then the RV return period wave heights. Although each study exhibits a similar trend, the differences range from very little at Sta 1, 2, and 3 to over 4 m at Sta 47, 48, and 49.

62. The low wave heights predicted by the present study for Sta 43, 59, 60, and 61 are the result of station location. Each is sheltered from the effects of the dominant winds, Sta 43 by the Keweenew Peninsula and Sta 59, 60, and 61 by Whitefish Point and several small islands.

63. The large waves predicted for Sta 46 through 52 are the direct result of an intense winter storm that caused widespread damage in the Upper Great Lakes during the period 27-29 November 1966. Winds of 30 to 35 m/sec from the north-northeast and waves of 8 m were reported by ships in eastern Lake Superior. The fetch length to the north-northeast of these stations is on the order of 250 km, sufficient distance, according to the SPM (1984) nomograms for deepwater wave height prediction, for winds of this magnitude to generate 10- to 11-m waves. These curves represent monochromatic wave conditions and do serve to indicate, particularly when coupled with ship observations, that the return period wave heights reported in the present study (WIS) are realistic and that, perhaps, the RV estimates are low.

64. The wave data presented in this report are the result of a substantial effort to develop, numerically, the long-term wave climate for Lake Superior. Based on statistical and time-series comparisons with a large amount of measured data, the reported data are considered to be an accurate and reliable wave database and will prove essential to current and future coastal engineering and navigational projects on Lake Superior.

## REFERENCES


Assel, R. A., Quinn, F. H., Leshkevich, G. A., and Bolsenga, S. J. 1983. "NOAA Great Lakes Ice Atlas," GLERL Contribution No. 299, National Oceanic and Atmospheric Administration, Great Lakes Environmental Research Laboratory, Ann Arbor, MI.

Davenport, A. G. 1960. "Rationale for Determining Design Wind Velocities," Structural Division Journal, American Society of Civil Engineers, Vol 86, pp 39-68.

Forristall, G. Z. 1981. "Measurements of a Saturated Range in Ocean Wave Spectra," Journal of Geophysical Research, Vol 86, pp 8075-8084.

Gilhousen, D. B., et al. 1990. Climatic Summaries for NDBC Buoys and Stations Update 1, National Weather Service, National Data Buoy Center, National Space Technology Laboratory, MS.

Goda, Y. 1988. "On the Methodology of Selecting Design Wave Heights," Proceedings, Twenty-First Coastal Engineering Conference, American Society of Civil Engineering Conference, American Society of Civil Engineers, Costa del Sol-Malage, Spain, pp 899-913.

Hasselmann, K 1962. "On the Nonlinear Energy Transfer in a Gravity-Wave Spectrum--General Theory," Journal of Fluid Mechanics, Vol 12, Part I, pp 481-500.

Hasselmann, K., et al. 1973. "Measurements of Wind-Wave Growth and Swell Decay During the Joint North Sea Wave Project (JONSWAP)," Deutsche Hydrographische Zeitschift, A8(Suppl), No. 12, p 95.

Hasselmann, K., Ross, D. B., Muller, P., and Sell, W. 1976. "A Parametric Wave Prediction Model," Journal of Physical Oceanography, Vol 6, pp 200-228.

Kahma, K. K. 1981. "A Study of the Growth of the Wave Spectrum with Fetch," Journal of Physical Oceangraphy, Vol 11, pp 1503-1515.

Kitaigorodskii, S. A. 1983. "On the Theory of the Equilibrium Range in the Spectrum of Wind-Generated Gravity Waves," Journal of Physical Oceanography, Vol 13, pp 816-827.

Mitsuyasu, H. 1968. "On the Growth of Wind-Generated Waves (I)," Report of the Research Institute of Applied Mechanics, Kyushu University, Vol 16, pp 459-482.

Ontario Ministry of National Resources. 1988a. "Wave Hindcast Database for Lakes Erie and St. Clair," Sandwell Swan Wooster, Inc., Don Mills, Ontario.

_____. 1988b. "Wave Hindcast Database for Lake Ontario and Lake Superior," MacLaren Plansearch Limited, Wilowdale, Ontario.

Ontario Ministry of National Resources. 1988c. "Wave Hindcast Database for Ontario's Great Lakes: Lake Huron/Georgian Bay," Philpott Associates.

Reich, B. M. 1983. "How Frequently Will Floods Occur," Water Resources Bulletin, Vol 9, No. 1, p 187.

Resio, D. T. 1981. "The Estimation of a Wind Wave Spectrum in a Discrete Spectral Model," Journal of Physical Oceanography, Vol 11, pp 510-525.

Resio, D. T., and Perrie, W. 1989. "Implications of an $f^{-4}$ Equilibrium Range for Wind Generated Waves," Journal of Physical Oceanography, Vol 19, pp 193-204.

Resio, D. T., and Vincent, C. L. 1976a. "Design Wave Information for the Great Lakes; Report 1, Lake Erie," Technical Report H-76-1, US Army Engineer Waterways Experiment Station, Vicksburg, MS.

_____. 1976b. "Design Wave Information for the Great Lakes; Report 2, Lake Ontario," Technical Report H-76-1, US Army Engineer Waterways Experiment Station, Vicksburg, MS.

_____. 1976c. "Estimation of Winds Over the Great Lakes," Technical Report H-76-12, US Army Engineer Waterways Experiment Station, Vicksburg, MS.

_____. 1977a. "Design Wave Information for the Great Lakes; Report 3, Lake Michigan," Technical Report H-76-1, US Army Engineer Waterways Experiment Station, Vicksburg, MS.

_____. 1977b. "Design Wave Information for the Great Lakes; Report 4, Lake Huron," Technical Report H-76-1, US Army Engineer Waterways Experiment Station, Vicksburg, MS.

_____. 1978. "Design Wave Information for the Great Lakes; Report 5, Lake Superior," Technical Report H-76-1, US Army Engineer Waterways Experiment Station, Vicksburg, MS.

Schwab, D. T., and Morton, J. A. 1984. "Estimation of Overlake Wind Speed from Overland Wind Speed: A Comparison of Three Methods," Journal of Great Lakes Research, Vol 10, No. 1, pp 68-72.

Shore Protection Manual. 1984. 4th Ed., 2 Vols, US Army Engineer Waterways Experiment Station, Coastal Engineering Research Center, US Government Printing Office, Washington, DC.

Toba, Y. 1978. "Local Balance in the Air-Sea Boundary Processes, III. On the Spectrum of Wind Waves," Journal of the Oceanographic Society of Japan, Vol 29, pp 209-220.

Tracy, B. A., and Resio, D. T. 1982. "Theory and Calculation of the Nonlinear Energy Transfer Between Sea Waves in Deep Water," WIS Report 11, US Army Engineer Waterways Experiment Station, Vicksburg, MS.

Table 1

Lake Superior Stations

| Station | Latitude,deg N | Longitude,deg W |
|---|---|---|
| 1 | 47.95 | 89.42 |
| 2 | 47.80 | 89.63 |
| 3 | 47.80 | 89.84 |
| 4 | 47.67 | 90.07 |
| 5 | 47.67 | 90.28 |
| 6 | 47.67 | 90.50 |
| 7 | 47.53 | 90.70 |
| 8 | 47.53 | 90.92 |
| 9 | 47.38 | 90.92 |
| 10 | 47.38 | 91.13 |
| 11 | 47.23 | 91.13 |
| 12 | 47.08 | 91.35 |
| 13 | 47.08 | 91.57 |
| 14 | 46.95 | 91.57 |
| 15 | 46.80 | 92.00 |
| 16 | 46.80 | 91.78 |
| 17 | 46.80 | 91.57 |
| 18 | 46.95 | 91.35 |
| 19 | 46.95 | 91.13 |
| 20 | 47.08 | 90.92 |
| 21 | 47.08 | 90.50 |
| 22 | 46.95 | 90.50 |
| 23 | 46.80 | 90.50 |
| 24 | 46.65 | 90.50 |
| 25 | 46.65 | 90.28 |
| 26 | 46.80 | 90.07 |
| 27 | 46.95 | 89.84 |
| 28 | 46.95 | 89.63 |
| 29 | 46.95 | 89.42 |
| 30 | 47.08 | 89.22 |
| 31 | 47.08 | 89.00 |
| 32 | 47.23 | 88.78 |
| 33 | 47.38 | 88.57 |
| 34 | 47.53 | 88.35 |
| 35 | 47.53 | 88.13 |
| 36 | 47.53 | 87.93 |
| 37 | 47.53 | 87.72 |
| 38 | 47.53 | 87.50 |
| 39 | 47.35 | 87.50 |
| 40 | 47.38 | 87.72 |
| 41 | 47.23 | 87.93 |
| 42 | 47.08 | 88.13 |

(Continued)

Table 1 (Continued)

| Station | Latitude, deg N | Longitude, deg W |
|---|---|---|
| 43 | 46.95 | 88.35 |
| 44 | 46.95 | 87.93 |
| 45 | 46.95 | 87.72 |
| 46 | 46.80 | 87.50 |
| 47 | 46.65 | 87.28 |
| 48 | 46.65 | 87.07 |
| 49 | 46.65 | 86.85 |
| 50 | 46.65 | 86.65 |
| 51 | 46.65 | 86.43 |
| 52 | 46.80 | 86.22 |
| 53 | 46.80 | 86.00 |
| 54 | 46.80 | 85.78 |
| 55 | 46.80 | 85.57 |
| 56 | 46.80 | 85.37 |
| 57 | 46.80 | 85.15 |
| 58 | 46.80 | 84.93 |
| 59 | 46.63 | 84.93 |
| 60 | 46.48 | 84.72 |
| 61 | 46.63 | 84.72 |
| 62 | 46.80 | 84.72 |
| 63 | 46.95 | 84.72 |
| 64 | 47.08 | 84.93 |
| 65 | 47.23 | 84.72 |
| 66 | 47.38 | 84.93 |
| 67 | 47.53 | 85.15 |
| 68 | 47.67 | 85.15 |
| 69 | 47.80 | 85.15 |
| 70 | 47.95 | 85.15 |
| 71 | 47.80 | 85.37 |
| 72 | 47.80 | 85.57 |
| 73 | 47.80 | 85.78 |
| 74 | 47.95 | 86.00 |
| 75 | 48.08 | 86.22 |
| 76 | 48.23 | 86.22 |
| 77 | 48.38 | 86.43 |
| 78 | 48.52 | 86.43 |
| 79 | 48.67 | 86.43 |
| 80 | 48.67 | 86.65 |
| 81 | 48.67 | 86.45 |
| 82 | 48.67 | 87.28 |
| 83 | 48.67 | 87.50 |
| 84 | 48.67 | 87.72 |

(Continued)

Table 1 (Concluded)

| Station | Latitude, deg N | Longitude, deg W |
|---|---|---|
| 85 | 48.67 | 87.93 |
| 86 | 48.52 | 88.13 |
| 87 | 48.38 | 88.35 |
| 88 | 48.23 | 88.57 |
| 89 | 48.23 | 88.78 |
| 90 | 48.08 | 89.00 |
| 91 | 48.08 | 89.22 |
| 92 | 47.38 | 89.45 |
| 93 | 47.67 | 88.78 |
| 94 | 47.95 | 87.50 |
| 95 | 47.23 | 86.43 |



Table 2

Lake Superior Input Wind Stations

and Period of Record

| Station | Period of Record |
|---|---|
| Duluth | 1956 - 1987 |
| Houghton | 1956 - 1964<br>1973 - 1987 |
| K. I. Sawyer | 1957 - 1958<br>1960 - 1970<br>1973 - 1987 |
| Sault St. Marie | 1956 - 1987 |
| Wawa | 1977 - 1986 |
| White River | 1956 - 1975 |
| Slate Island | 1967 - 1975<br>1979 - 1986 |
| Thunder Bay | 1956 - 1986 |

Table 3

Air-Sea Temperature Differences (°C)

| Dir. | Jan | Feb | Mar | Apr | May | June | July | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E | -12.7 | -5.4 | 2.0 | 0.1 | 1.3 | 3.2 | 3.2 | 1.2 | -1.9 | -3.0 | -5.5 | -9.8 |
| | -12.9 | -8.5 | -4.0 | 0.4 | 1.7 | 2.7 | 3.3 | 0.8 | -2.0 | -2.8 | -5.6 | -10.2 |
| | -14.2 | -9.4 | -4.5 | 0.3 | 1.7 | 3.3 | 3.4 | 1.3 | -1.4 | -2.1 | -5.1 | -10.2 |
| | -11.0 | -7.2 | -3.4 | 0.4 | 1.9 | 3.3 | 2.9 | 1.2 | -1.1 | -2.2 | -4.9 | -9.7 |
| | -11.0 | -7.1 | -3.3 | 0.6 | 1.9 | 3.4 | 3.7 | 1.1 | -0.6 | -2.0 | -4.9 | -9.4 |
| | -10.7 | -6.9 | -3.2 | 0.6 | 2.3 | 3.5 | 3.9 | 1.3 | -0.5 | -1.7 | -4.7 | -7.7 |
| | -11.4 | -9.0 | -13.0 | 0.8 | 2.6 | 3.6 | 3.4 | 1.7 | -0.4 | -1.8 | -3.8 | -7.3 |
| | -6.7 | -6.0 | -2.2 | 1.6 | 2.7 | 3.8 | 4.2 | 1.7 | -0.5 | -1.5 | -3.0 | -6.0 |
| | -6.0 | -3.7 | -1.4 | 0.9 | 3.0 | 4.5 | 5.0 | 2.6 | 0.1 | -0.3 | -3.2 | -6.0 |
| N | -9.6 | -5.8 | -2.0 | 1.8 | 2.8 | 4.5 | 4.5 | 2.6 | 0.5 | -0.4 | -3.1 | -6.4 |
| | -10.0 | -4.0 | -1.0 | 2.4 | 3.5 | 4.9 | 4.8 | 2.7 | 0.6 | 0.0 | -3.0 | -5.0 |
| | -9.3 | -3.0 | -5.0 | 2.6 | 4.2 | 5.5 | 5.4 | 2.6 | 1.4 | -0.1 | -2.9 | -4.8 |
| | -4.4 | -3.0 | 0.0 | 3.0 | 4.4 | 5.1 | 5.7 | 2.9 | 1.2 | 0.7 | -1.7 | -4.4 |
| | -4.6 | -5.0 | -1.2 | 2.7 | 4.5 | 5.3 | 5.7 | 2.7 | 0.9 | 0.6 | -2.1 | -5.0 |
| | -6.9 | -6.0 | -1.9 | 2.3 | 4.4 | 5.4 | 5.6 | 2.5 | 0.9 | 0.5 | -1.8 | -5.0 |
| | -4.3 | -6.0 | -1.0 | 2.3 | 4.0 | 5.8 | 5.9 | 3.1 | 1.4 | 0.7 | -2.3 | -5.2 |
| | -8.9 | -9.0 | -4.0 | 2.2 | 4.0 | 5.5 | 5.8 | 3.2 | 1.5 | 0.8 | -2.2 | -5.6 |
| | -10.1 | -5.9 | -1.6 | 2.6 | 4.0 | 6.1 | 6.3 | 3.3 | 2.0 | 1.0 | -2.4 | -6.2 |
| W | -8.4 | -7.2 | -6.0 | 2.2 | 4.4 | 6.5 | 6.0 | 3.7 | 1.6 | 1.2 | -2.6 | -6.0 |
| | -8.9 | -4.9 | -1.0 | 2.1 | 3.9 | 5.9 | 6.2 | 3.7 | 1.9 | 1.1 | -2.6 | -5.4 |
| | -7.1 | -3.0 | -0.5 | 2.0 | 4.2 | 5.7 | 6.4 | 3.6 | 1.5 | 0.2 | -3.0 | -5.6 |
| | -5.8 | -3.4 | -1.0 | 2.1 | 3.7 | 5.3 | 6.1 | 4.0 | 1.3 | 0.3 | -3.1 | -6.1 |
| | -8.4 | -4.6 | -0.7 | 3.1 | 4.1 | 5.6 | 6.1 | 3.5 | 1.1 | -0.3 | -3.1 | -6.7 |
| | -8.7 | -5.3 | -1.9 | 1.5 | 3.6 | 5.1 | 5.9 | 3.5 | 1.0 | -0.3 | -3.2 | -6.5 |
| | -8.1 | -5.0 | -10.0 | 2.0 | 3.5 | 5.3 | 5.6 | 3.6 | 1.0 | -0.3 | -2.7 | -7.3 |
| | -9.4 | -5.9 | -2.3 | 1.2 | 3.7 | 4.7 | 5.3 | 3.4 | 0.4 | -0.4 | -3.5 | -6.6 |
| | -9.2 | -8.0 | -2.9 | 2.1 | 2.7 | 4.4 | 5.1 | 2.8 | 0.3 | -0.7 | -3.5 | -7.5 |
| S | -12.0 | -4.0 | -1.5 | 1.0 | 2.4 | 4.1 | 4.9 | 2.1 | 0.3 | -0.9 | -4.0 | -8.7 |
| | -10.9 | -12.5 | -5.6 | 1.2 | 2.3 | 3.6 | 4.2 | 2.1 | 0.1 | -1.5 | -4.8 | -8.6 |
| | -13.3 | -10.3 | -4.4 | 1.4 | 2.1 | 3.7 | 4.6 | 1.9 | -0.7 | -2.1 | -5.5 | -8.2 |
| | -14.1 | -12.0 | -5.4 | 1.1 | 2.2 | 3.8 | 3.7 | 2.2 | -1.0 | -2.8 | -6.0 | -10.9 |
| | -14.0 | -8.0 | -3.7 | 0.6 | 1.9 | 3.8 | 3.5 | 1.7 | -1.0 | -2.7 | -6.4 | -10.3 |
| | -12.0 | -9.0 | -4.2 | 0.6 | 1.5 | 3.7 | 3.9 | 1.3 | -1.7 | -3.2 | -6.6 | -10.4 |
| | -12.9 | -5.0 | -2.4 | 0.1 | 1.5 | 3.9 | 3.6 | 1.4 | -1.4 | -2.9 | -6.1 | -10.2 |
| | -12.0 | -8.0 | -4.1 | -0.1 | 1.5 | 3.5 | 3.5 | 1.0 | -1.7 | -2.7 | -6.1 | -9.9 |
| | -13.0 | -7.0 | -3.3 | 0.5 | 1.2 | 3.5 | 3.5 | 1.0 | -1.2 | -3.2 | -6.0 | -10.2 |

Note: Columns represent averages of air-sea temperature differences by month. Rows represent averages of air-sea temperature differences by wind vector direction within 10-deg classes (Class 1 = due east, 10 = due north, 19 = due west, 28 = due south).

Table 4

Wave Height Statistics, Lake Superior, 1981-1986

| Statistical Parameters | Buoy 45006, m | WIS Sta 92, m |
|---|---|---|
| Mean | 0.64 | 0.68 |
| Std dev about mean | 0.57 | 0.53 |
| Maximum value | 5.00 | 4.50 |
| Rmse | 0.41 | |
| Correlation coefficient | 0.73 | |
| Scatter index | 0.64 | |
| Least squares (x = buoy, y = WIS) | | |
| Slope | 0.68 | |
| Intercept | 0.25 | |
| No. Observations | 7,232 | |

Table 5

Peak Period Statistics, Lake Superior, 1981-1986

| Statistical Parameters | Buoy 45006, sec | WIS Sta 92, sec |
|---|---|---|
| Mean | 3.84 | 3.83 |
| Std dev about mean | 1.19 | 1.17 |
| Maximum value | 10.00 | 9.00 |
| Rmse | 1.01 | |
| Correlation coefficient | 0.63 | |
| Scatter index | 0.26 | |
| Least squares (x = buoy, y = WIS) | | |
| Slope | 0.62 | |
| Intercept | 1.45 | |
| No. Observations | 7,232 | |

Table 6

Wave Height Statistics, Lake Superior, 1981-1986

| Statistical Parameters | Buoy 45001, m | WIS Sta 94, m |
|---|---|---|
| Mean | 0.87 | 0.94 |
| Std dev about mean | 0.70 | 0.74 |
| Maximum value | 5.70 | 5.80 |
| Rmse | 0.40 | |
| Correlation coefficient | 0.85 | |
| Scatter index | 0.46 | |
| Least squares (x = buoy, y = WIS) | | |
| Slope | 0.89 | |
| Intercept | 0.16 | |
| No. Observations | 7,827 | |

Table 7

Peak Period Statistics, Lake Superior, 1981-1986

| Statistical Parameters | Buoy 45001, sec | WIS Sta 94, sec |
|---|---|---|
| Mean | 4.27 | 4.41 |
| Std dev about mean | 1.40 | 1.31 |
| Maximum value | 11.10 | 10.00 |
| Rmse | 0.95 | |
| Correlation coefficient | 0.76 | |
| Scatter index | 0.22 | |
| Least squares (x = buoy, y = WIS) | | |
| Slope | 0.72 | |
| Intercept | 1.35 | |
| No. Observations | 7,827 | |

Table 8

Wave Height Statistics

Lake Superior 1981-1986

| Statistical Parameters | Buoy 45004, m | WIS Sta 95, m |
|---|---|---|
| Mean | 0.75 | 0.88 |
| Std dev about mean | 0.71 | 0.68 |
| Maximum value | 6.90 | 5.20 |
| Rmse | 0.44 | |
| Correlation coefficient | 0.82 | |
| Scatter index | 0.59 | |
| Least squares (x = buoy, y = WIS) | | |
| Slope | 0.77 | |
| Intercept | 0.30 | |
| No. Observations | 5,954 | |

Table 9

Peak Period Statistics, Lake Superior, 1981-1986

| Statistical Parameters | Buoy 45004, sec | WIS Sta 95, sec |
|---|---|---|
| Mean | 4.13 | 4.37 |
| Std dev about mean | 1.25 | 1.26 |
| Maximum value | 10.00 | 9.00 |
| Rmse | 1.00 | |
| Correlation coefficient | 0.70 | |
| Scatter index | 0.24 | |
| Least squares (x = buoy, y = WIS) | | |
| Slope | 0.71 | |
| Intercept | 1.45 | |
| No. Observations | 5,954 | |

Table 10

Ranges for Direction Intervals in Percent Occurrence Tables

| Midband deg | Range deg |
|---|---|
| 0.0 | 348.75 < D < 11.25 |
| 22.5 | 11.25 < D < 33.75 |
| 45.0 | 33.75 < D < 56.25 |
| 67.5 | 56.25 < D < 78.75 |
| 90.0 | 78.75 < D < 101.25 |
| 112.5 | 101.25 < D < 123.75 |
| 135.0 | 123.75 < D < 146.25 |
| 157.5 | 146.25 < D < 168.75 |
| 180.0 | 168.75 < D < 191.25 |
| 202.5 | 191.25 < D < 213.75 |
| 225.0 | 213.75 < D < 236.25 |
| 247.5 | 236.25 < D < 258.75 |
| 270.0 | 258.75 < D < 281.25 |
| 292.5 | 281.25 < D < 303.75 |
| 315.0 | 303.75 < D < 326.25 |
| 337.5 | 326.25 < D < 348.75 |

Table 11

Frequency Ranges Used in WIS Hindcast Model

| Midband Frequency Hz | Midband Period sec | Band Range Period sec | Grouping for Percent Occurrence Tables sec |
|---|---|---|---|
| 0.50 | 2.0 | 1.71 < T < 2.41 | < 3.0 |
| 0.33 | 3.0 | 2.41 < T < 3.45 | 3.0 - 3.9 |
| 0.25 | 4.0 | 3.45 < T < 4.26 | |
| 0.22 | 4.5 | 4.26 < T < 4.65 | 4.0 - 4.9 |
| 0.21 | 4.8 | 4.65 < T < 4.88 | |
| 0.20 | 5.0 | 4.88 < T < 5.13 | |
| 0.19 | 5.3 | 5.13 < T < 5.41 | 5.0 - 5.9 |
| 0.18 | 5.6 | 5.41 < T < 5.71 | |
| 0.17 | 5.9 | 5.71 < T < 6.06 | |
| 0.16 | 6.3 | 6.06 < T < 6.45 | 6.0 - 6.9 |
| 0.15 | 6.6 | 6.45 < T < 6.90 | |
| 0.14 | 7.1 | 6.90 < T < 7.41 | 7.0 - 7.9 |
| 0.13 | 7.7 | 7.41 < T < 8.00 | |
| 0.12 | 8.3 | 8.00 < T < 8.70 | 8.0 - 8.9 |
| 0.11 | 9.1 | 8.70 < T < 9.52 | 9.0 - 9.9 |
| 0.10 | 10.0 | 9.52 < T < 10.52 | 10.0 - 10.9 |
| 0.09 | 11.1 | 10.52 < T < 11.76 | |
| 0.08 | 12.5 | 11.76 < T < 13.24 | 11.0 - longer |
| 0.07 | 14.3 | 13.24 < T < 15.36 | |
| 0.06 | 16.7 | 15.36 < T < 18.15 | |

Table 12

Azimuth of Vectors Normal to the Shoreline

| Station Location | Azimuth | Station Location | Azimuth |
|---|---|---|---|
| 1 | 144 | 27 | 342 |
| 2 | 147 | 28 | 341 |
| 3 | 155 | 29 | 328 |
| 4 | 164 | 30 | 329 |
| 5 | 162 | 31 | 316 |
| 6 | 160 | 32 | 317 |
| 7 | 148 | 33 | 317 |
| 8 | 141 | 34 | 329 |
| 9 | 140 | 35 | 350 |
| 10 | 145 | 36 | 3 |
| 11 | 133 | 37 | 33 |
| 12 | 137 | 38 | 59 |
| 13 | 139 | 39 | 25 |
| 14 | 135 | 40 | 151 |
| 15 | 141 | 41 | 141 |
| 16 | 336 | 42 | 125 |
| 17 | 332 | 43 | 124 |
| 18 | 336 | 44 | 7 |
| 19 | 333 | 45 | 15 |
| 20 | 348 | 46 | 60 |
| 21 | 50 | 47 | 45 |
| 22 | 42 | 48 | 0 |
| 23 | 40 | 49 | 2 |
| 24 | 325 | 50 | 323 |
| 25 | 337 | 51 | 326 |
| 26 | 317 | 52 | 337 |

(Continued)

Table 12 (Concluded)

| Station Location | Azimuth | Station Location | Azimuth |
|---|---|---|---|
| 53 | 348 | 75 | 237 |
| 54 | 2 | 76 | 246 |
| 55 | 0 | 77 | 249 |
| 56 | 333 | 78 | 233 |
| 57 | 0 | 79 | 241 |
| 58 | 60 | 80 | 180 |
| 59 | 92 | 81 | 168 |
| 60 | 332 | 82 | 186 |
| 61 | 296 | 83 | 180 |
| 62 | 290 | 84 | 182 |
| 63 | 265 | 85 | 127 |
| 64 | 284 | 86 | 137 |
| 65 | 335 | 87 | 118 |
| 66 | 230 | 88 | 157 |
| 67 | 223 | 89 | 161 |
| 68 | 284 | 90 | 148 |
| 69 | 294 | 91 | 122 |
| 70 | 180 | 92 | 154 |
| 71 | 159 | 93 | 317 |
| 72 | 180 | 94 | 188 |
| 73 | 200 | 95 | 337 |
| 74 | 220 | | |

Table 13

Confidence Interval Bounds for Extreme Wave Heights

| Confidence Level | Bounds Around Wave Height | Probability of Exceeding Upper Bound, % |
|---|---|---|
| 80 | +/-1.28 | 10.0 |
| 85 | +/-1.44 | 7.5 |
| 90 | +/-1.65 | 5.0 |
| 95 | +/-1.96 | 2.5 |
| 99 | +/-2.58 | 0.5 |

Table 14

Probabilities of Extreme Wave Heights*

| Return Period years | Probability of Wave Height Being Equaled or Exceeded at Least Once in Given Number of Years | | | |
|---|---|---|---|---|
| | 1 | 10 | 25 | 50 |
| 5 | 0.20 | 0.89 | >0.99 | >0.99 |
| 10 | 0.10 | 0.65 | 0.94 | >0.99 |
| 20 | 0.05 | 0.40 | 0.71 | 0.90 |
| 50 | 0.02 | 0.18 | 0.40 | 0.61 |

* From Reich (1983).

Table 15

Return Period Wave Heights from RV and Present Study (WIS)

| Station No. | | Return Period, years | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 5 | | 10 | | 20 | | 50 | |
| RV | WIS | RV | WIS | RV | WIS | RV | WIS | RV | WIS |
| 1 | 1 | 5.3 | 5.7 | 5.5 | 6.1 | 5.8 | 6.4 | 6.1 | 6.8 |
| 2 | 2 | 5.8 | 5.6 | 6.3 | 5.9 | 6.7 | 6.2 | 7.3 | 6.6 |
| 3 | 3 | 5.8 | 5.6 | 6.3 | 5.9 | 6.7 | 6.2 | 7.3 | 6.6 |
| 4 | 4 | 5.9 | 7.9 | 6.3 | 8.4 | 6.8 | 9.0 | 7.4 | 9.7 |
| 5 | 5 | 5.9 | 8.1 | 6.3 | 8.7 | 6.8 | 9.3 | 7.2 | 10.1 |
| 6 | 6 | 5.9 | 8.0 | 6.3 | 8.5 | 6.8 | 9.1 | 7.4 | 9.8 |
| 7 | 7 | 6.2 | 7.8 | 6.5 | 8.3 | 6.9 | 8.9 | 7.3 | 9.6 |
| 8 | 8 | 6.0 | 7.8 | 6.4 | 8.3 | 6.8 | 8.8 | 7.3 | 9.5 |
| 9 | 10 | 6.0 | 6.8 | 6.3 | 7.2 | 6.6 | 7.6 | 7.0 | 8.1 |
| 10 | 12 | 6.0 | 7.5 | 6.3 | 8.0 | 6.7 | 8.5 | 7.2 | 9.1 |
| 11 | 13 | 5.6 | 7.1 | 5.9 | 7.4 | 6.2 | 7.8 | 6.6 | 8.3 |
| 12 | 14 | 5.5 | 6.5 | 5.7 | 7.1 | 6.0 | 7.6 | 6.5 | 8.3 |
| 13 | 15 | 5.8 | 5.5 | 6.0 | 6.0 | 6.3 | 6.5 | 6.7 | 7.2 |
| 14 | 16 | 4.4 | 5.8 | 4.6 | 6.4 | 4.8 | 6.9 | 5.1 | 7.7 |
| 15 | 17 | 3.9 | 6.2 | 4.2 | 6.8 | 4.4 | 7.4 | 4.7 | 8.2 |
| 16 | 18 | 4.2 | 6.4 | 4.5 | 7.0 | 4.8 | 7.6 | 5.2 | 8.3 |
| 17 | 19 | 3.8 | 5.8 | 4.2 | 6.3 | 4.5 | 6.8 | 4.8 | 7.5 |
| 18 | 20 | 4.0 | 6.6 | 4.2 | 6.9 | 4.4 | 7.3 | 4.8 | 7.8 |
| 19 | 21 | 4.1 | 6.0 | 4.3 | 6.3 | 4.6 | 6.6 | 4.9 | 7.0 |
| 20 | 23 | 4.6 | 5.5 | 5.0 | 5.8 | 5.3 | 6.2 | 5.8 | 6.6 |
| 21 | 24 | 3.9 | 5.4 | 4.1 | 5.7 | 4.2 | 6.0 | 4.5 | 6.5 |
| 22 | 25 | 4.2 | 5.3 | 4.5 | 5.6 | 4.7 | 5.9 | 5.1 | 6.3 |
| 23 | 26 | 4.1 | 5.5 | 4.3 | 5.8 | 4.6 | 6.2 | 5.0 | 6.6 |
| 24 | 27 | 4.9 | 6.0 | 5.2 | 6.3 | 5.5 | 6.6 | 5.9 | 7.1 |
| 25 | 28 | 5.0 | 6.0 | 5.3 | 6.3 | 5.5 | 6.6 | 6.0 | 7.0 |
| 26 | 29 | 5.3 | 6.2 | 5.5 | 6.5 | 5.8 | 6.8 | 6.1 | 7.2 |
| 27 | 30 | 5.2 | 6.5 | 5.5 | 6.8 | 5.7 | 7.1 | 6.0 | 7.5 |
| 28 | 31 | 5.4 | 6.6 | 5.6 | 6.9 | 5.9 | 7.2 | 6.3 | 7.7 |
| 29 | 32 | 5.3 | 6.7 | 5.5 | 7.0 | 5.8 | 7.3 | 6.2 | 7.7 |
| 30 | 33 | 5.3 | 6.9 | 5.5 | 7.2 | 5.7 | 7.6 | 6.0 | 8.0 |
| 31 | 34 | 4.9 | 7.3 | 5.1 | 7.6 | 5.3 | 8.0 | 5.7 | 8.5 |
| 32 | 35 | 4.7 | 7.0 | 5.0 | 7.4 | 5.3 | 7.7 | 5.7 | 8.1 |
| 33 | 36 | 4.5 | 6.8 | 4.8 | 7.1 | 5.1 | 7.4 | 5.6 | 7.9 |
| 34 | 37 | 4.3 | 6.6 | 4.7 | 6.9 | 5.0 | 7.2 | 5.5 | 7.6 |
| 35 | 39 | 5.4 | 5.8 | 5.8 | 6.0 | 6.1 | 6.2 | 6.1 | 6.5 |
| 36 | 40 | 5.5 | 5.9 | 5.9 | 6.2 | 6.2 | 6.5 | 6.7 | 7.0 |
| 37 | 41 | 5.4 | 6.1 | 5.8 | 6.5 | 6.2 | 6.9 | 6.7 | 7.4 |
| 38 | 42 | 5.5 | 6.4 | 5.9 | 6.8 | 6.3 | 7.2 | 6.9 | 7.8 |
| 39 | 43 | 4.7 | 3.5 | 5.0 | 3.7 | 5.3 | 3.9 | 5.7 | 4.2 |

(Continued)

Table 15 (Concluded)

| Station No. | | Return Period, years | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 5 | | 10 | | 20 | | 50 | |
| RV | WIS | RV | WIS | RV | WIS | RV | WIS | RV | WIS |
| 40 | 44 | 4.4 | 6.5 | 4.8 | 6.8 | 5.1 | 7.2 | 5.6 | 7.7 |
| 41 | 45 | 4.8 | 6.5 | 5.2 | 6.8 | 5.7 | 7.1 | 6.3 | 7.5 |
| 42 | 46 | 4.9 | 7.9 | 5.4 | 8.3 | 5.8 | 8.6 | 6.3 | 9.1 |
| 43 | 47 | 5.1 | 8.9 | 5.5 | 9.3 | 5.9 | 9.8 | 6.4 | 10.3 |
| 44 | 48 | 5.2 | 9.2 | 5.5 | 9.7 | 5.9 | 10.2 | 6.3 | 10.8 |
| 45 | 49 | 5.1 | 9.0 | 5.4 | 9.5 | 5.7 | 10.0 | 6.1 | 10.6 |
| 46 | 50 | 5.3 | 8.8 | 5.5 | 9.2 | 5.9 | 9.7 | 6.3 | 10.3 |
| 47 | 51 | 5.4 | 8.5 | 5.7 | 8.9 | 6.0 | 9.3 | 6.5 | 9.9 |
| 48 | 52 | 5.5 | 7.3 | 5.9 | 7.6 | 6.3 | 8.0 | 6.7 | 8.4 |
| 49 | 53 | 5.5 | 6.9 | 5.9 | 7.1 | 6.2 | 7.4 | 6.6 | 7.7 |
| 50 | 54 | 5.5 | 6.9 | 5.9 | 7.2 | 6.2 | 7.4 | 6.6 | 7.8 |
| 51 | 55 | 5.6 | 7.1 | 5.9 | 7.3 | 6.2 | 7.6 | 6.5 | 8.0 |
| 52 | 56 | 5.6 | 7.3 | 5.9 | 7.7 | 6.1 | 7.9 | 6.4 | 8.3 |
| 53 | 57 | 5.3 | 7.6 | 5.5 | 7.9 | 5.8 | 8.2 | 6.2 | 8.6 |
| 54 | 59 | 3.0 | 3.6 | 3.1 | 3.7 | 3.3 | 3.9 | 3.5 | 4.1 |
| 55 | 60 | 3.9 | 5.0 | 4.2 | 5.2 | 4.5 | 5.4 | 4.9 | 5.7 |
| 56 | 61 | 3.0 | 4.6 | 3.2 | 4.8 | 3.4 | 5.1 | 3.6 | 5.3 |
| 57 | 62 | 5.5 | 7.9 | 5.7 | 8.2 | 6.0 | 8.5 | 6.5 | 9.0 |

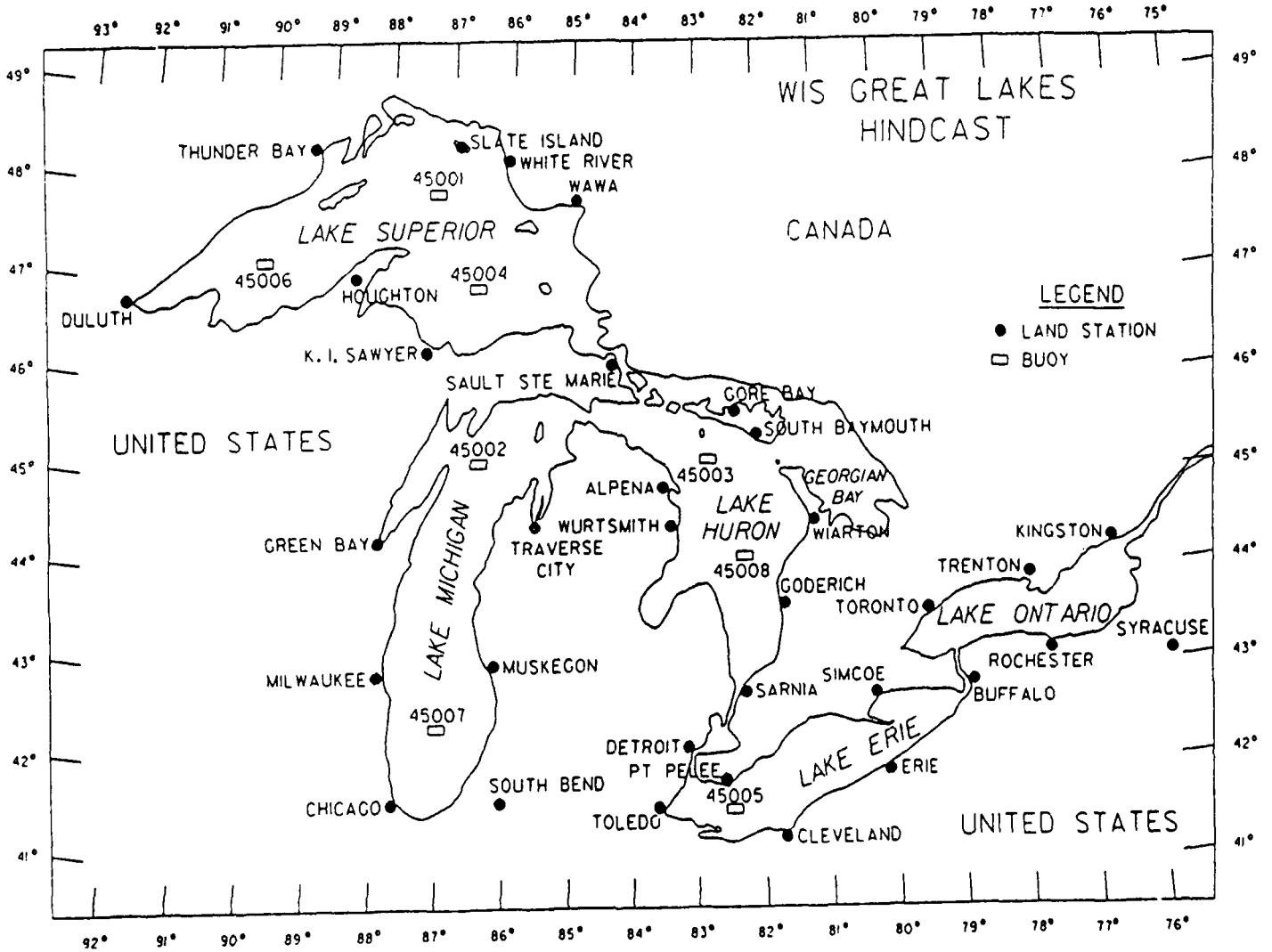



Figure 1. Location map showing placement of NOAA buoys

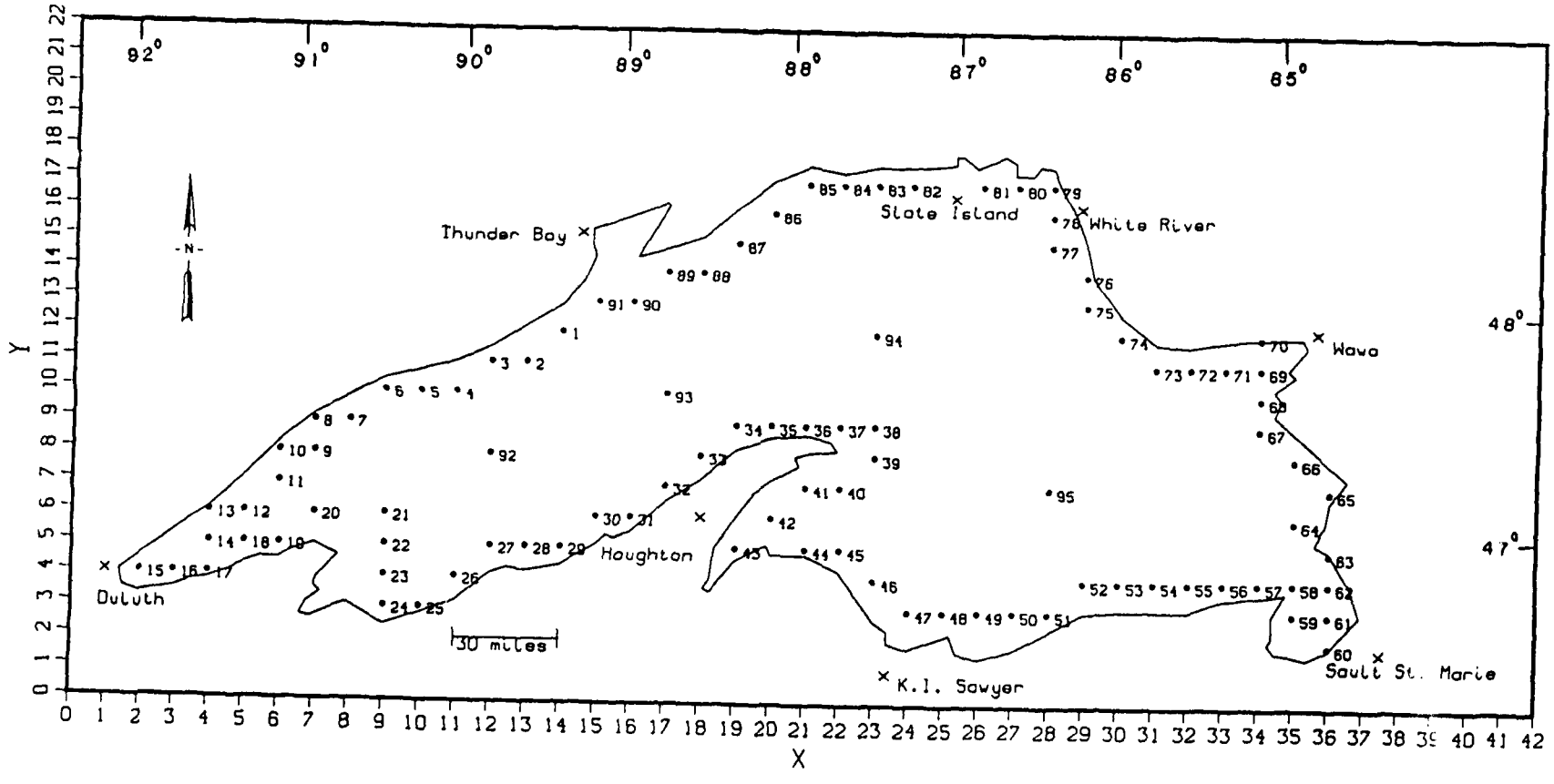



Figure 2. Station location map for Lake Superior

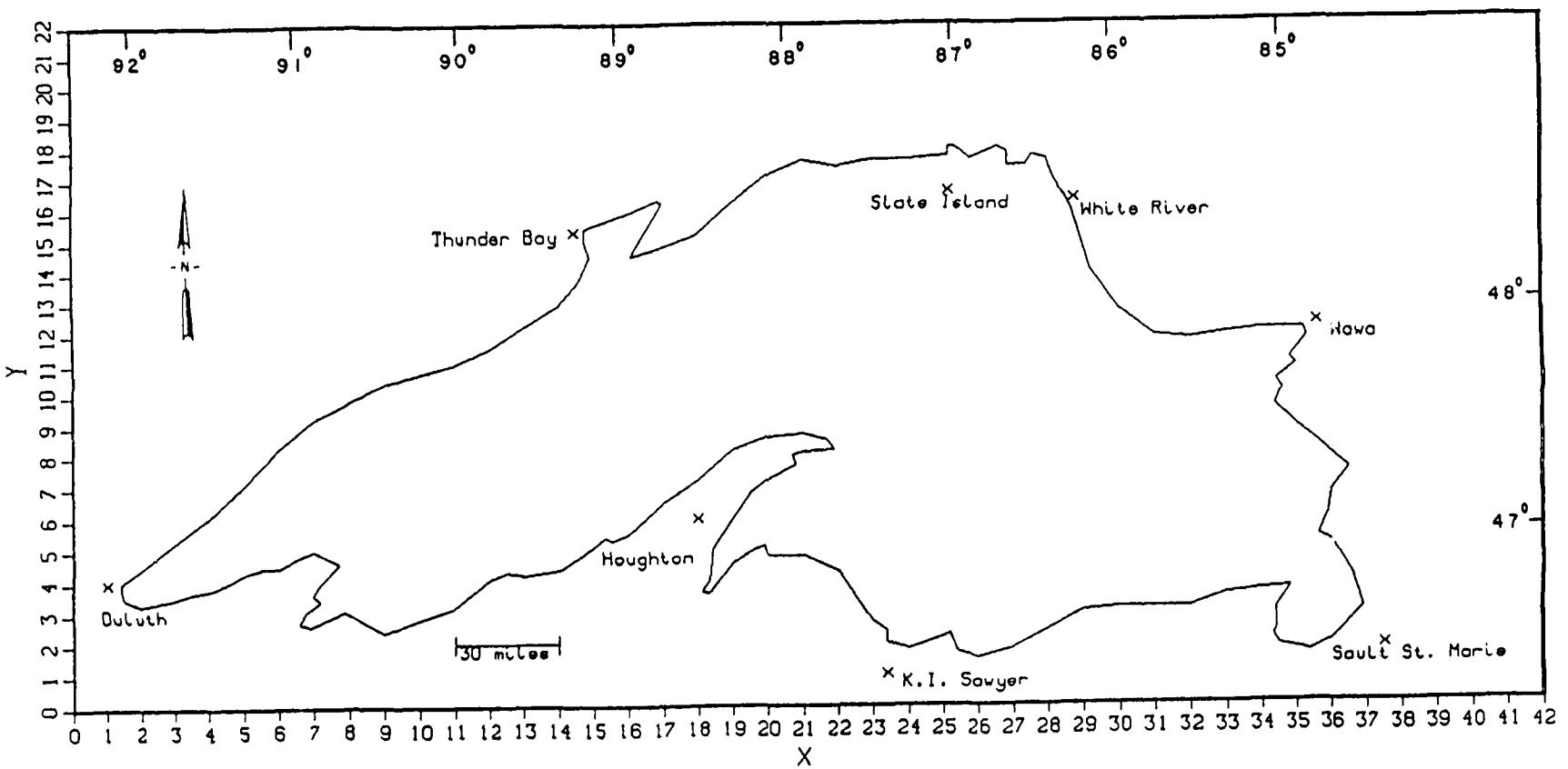



Figure 3. Location of input wind stations listed in Table 2

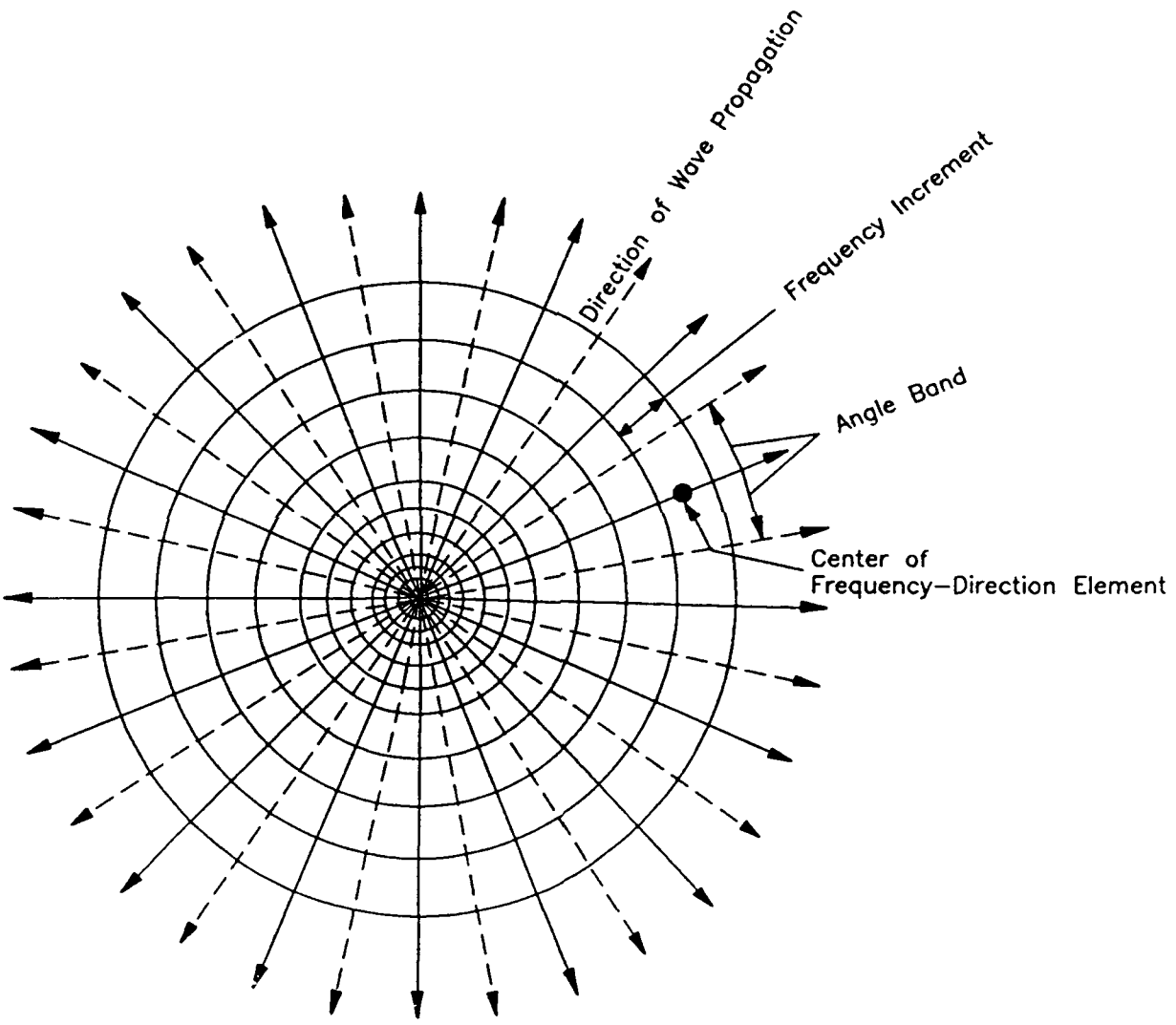



Figure 4. Schematic representation of directional spectrum

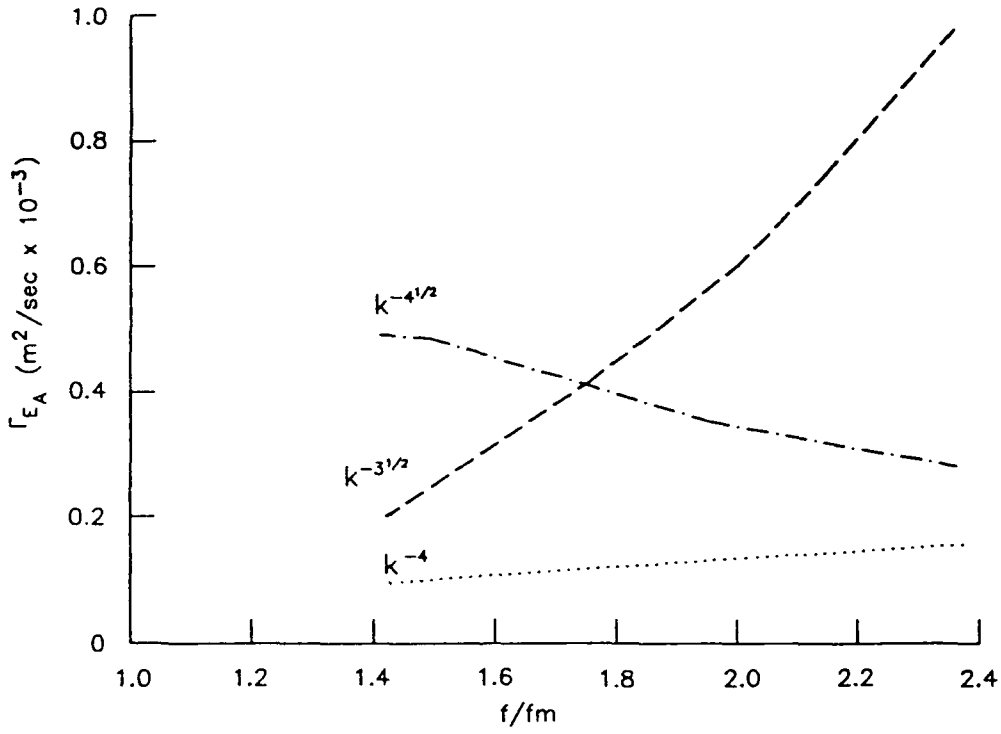



Figure 5. Calculated energy fluxes through the spectrum based on the complete Boltzmann integral

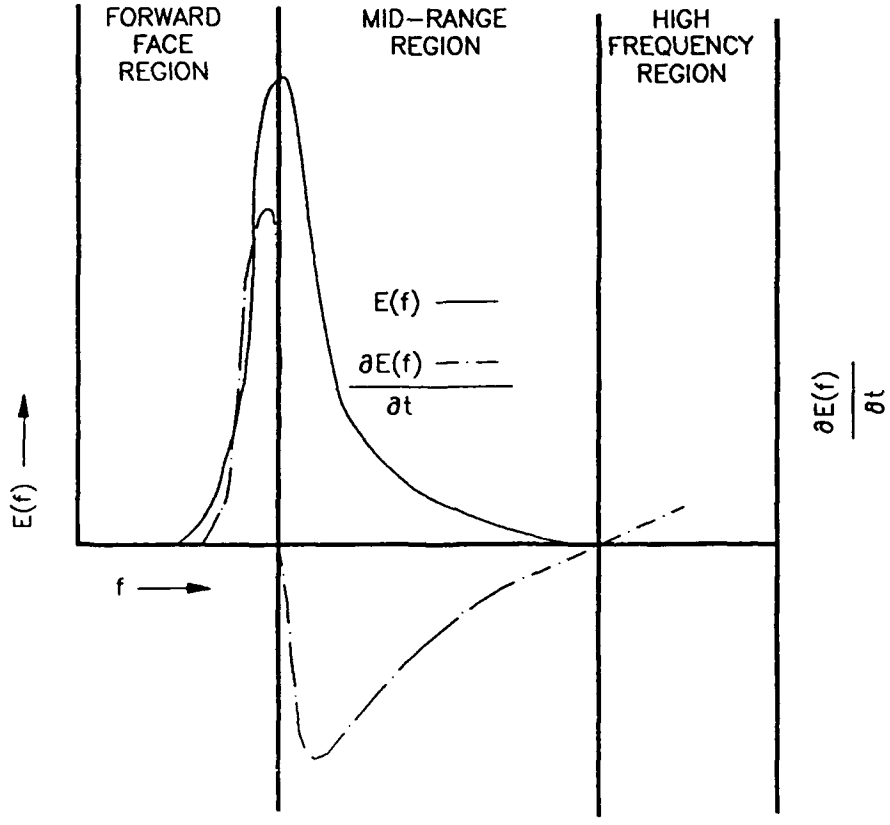



Figure 6. Nonlinear energy transfer as a function of frequency

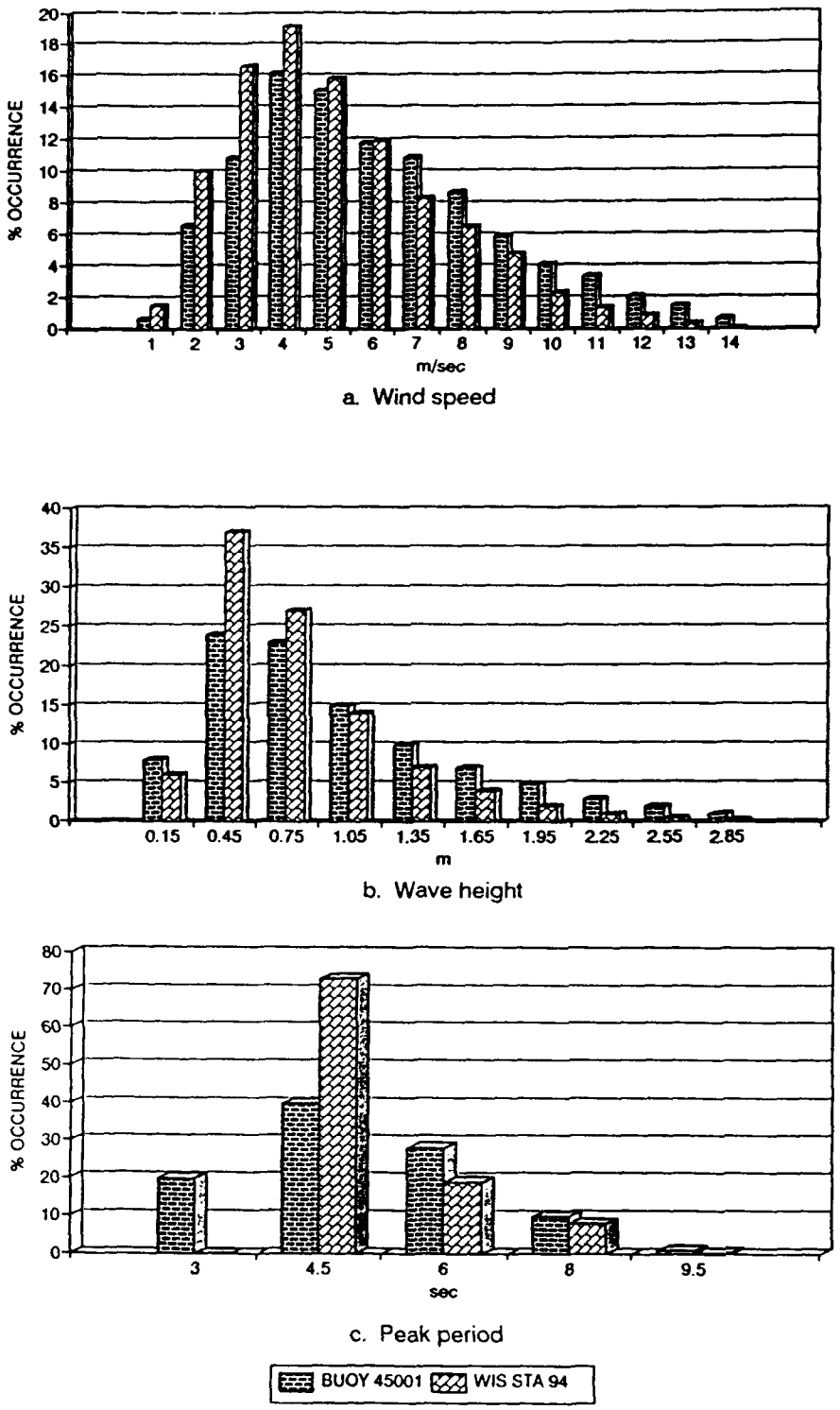



Figure 7. Percent distribution histograms for measured and initial wind speed, wave height, and peak period for the period 1981 to 1986, WIS Sta 94

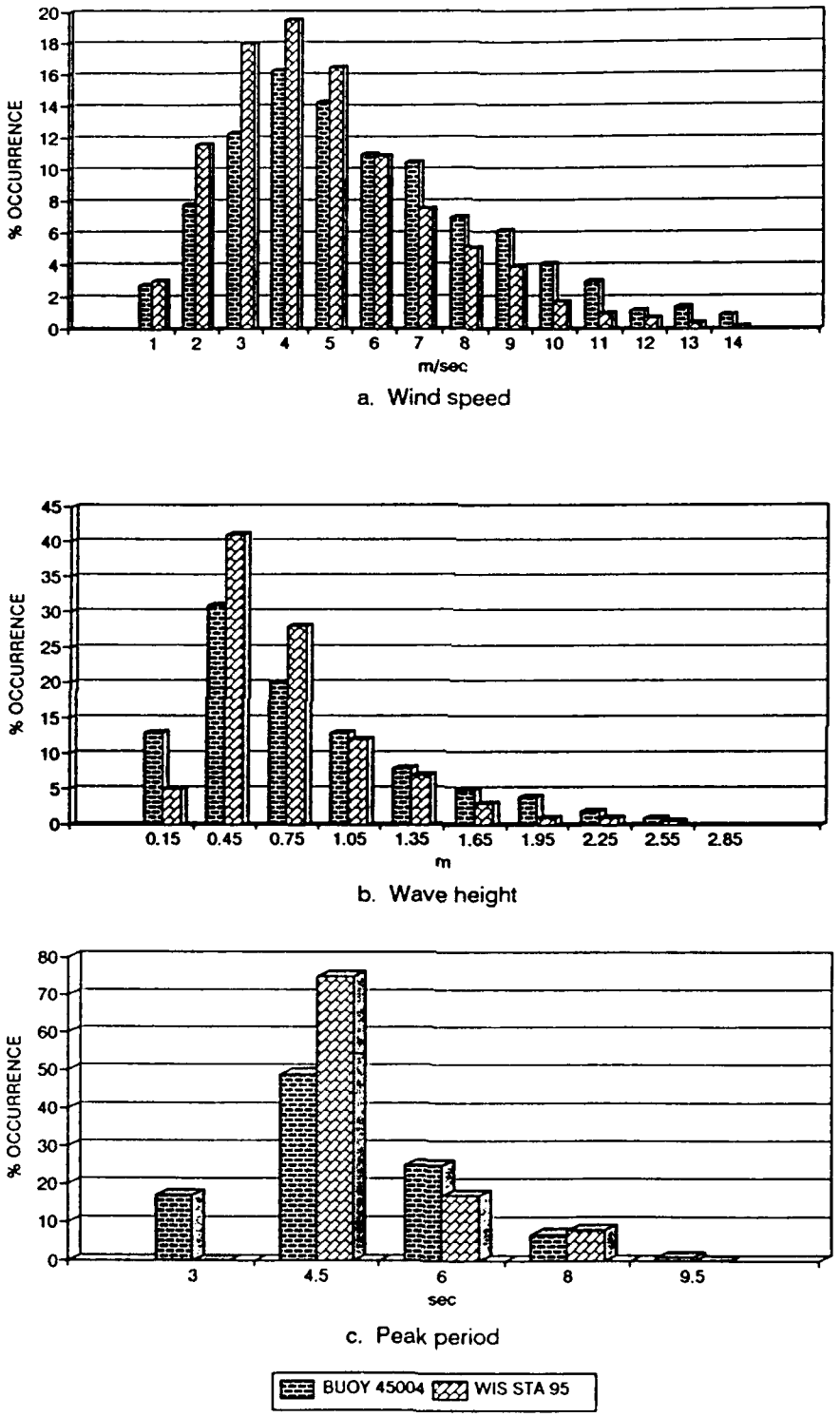



Figure 8. Percent distribution histograms for measured and initial wind speed, wave height, and peak period for the period 1981 to 1986, WIS Sta 95

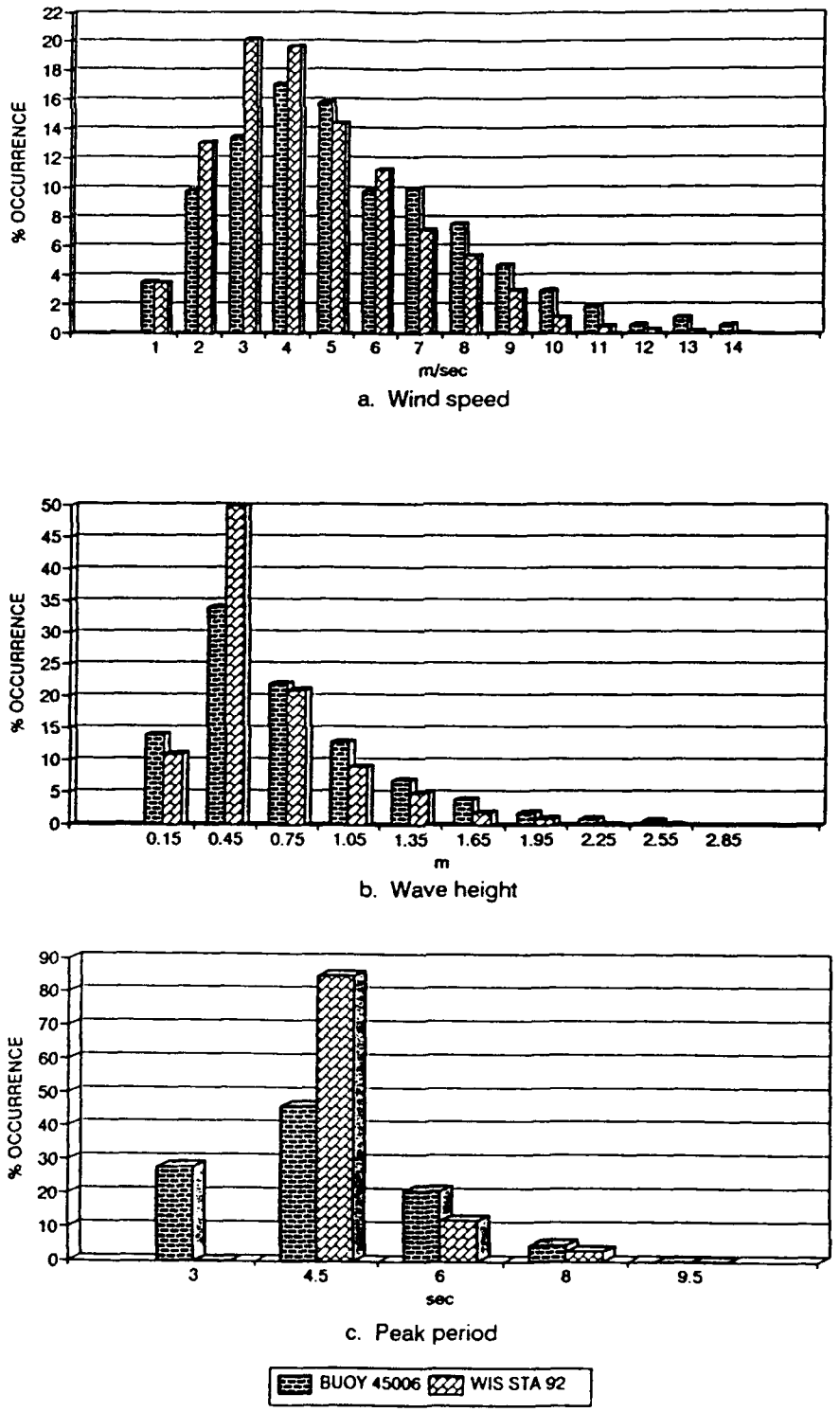



Figure 9. Percent distribution histograms for measured and initial wind speed, wave height, and peak period for the period 1981 to 1986, WIS Sta 92

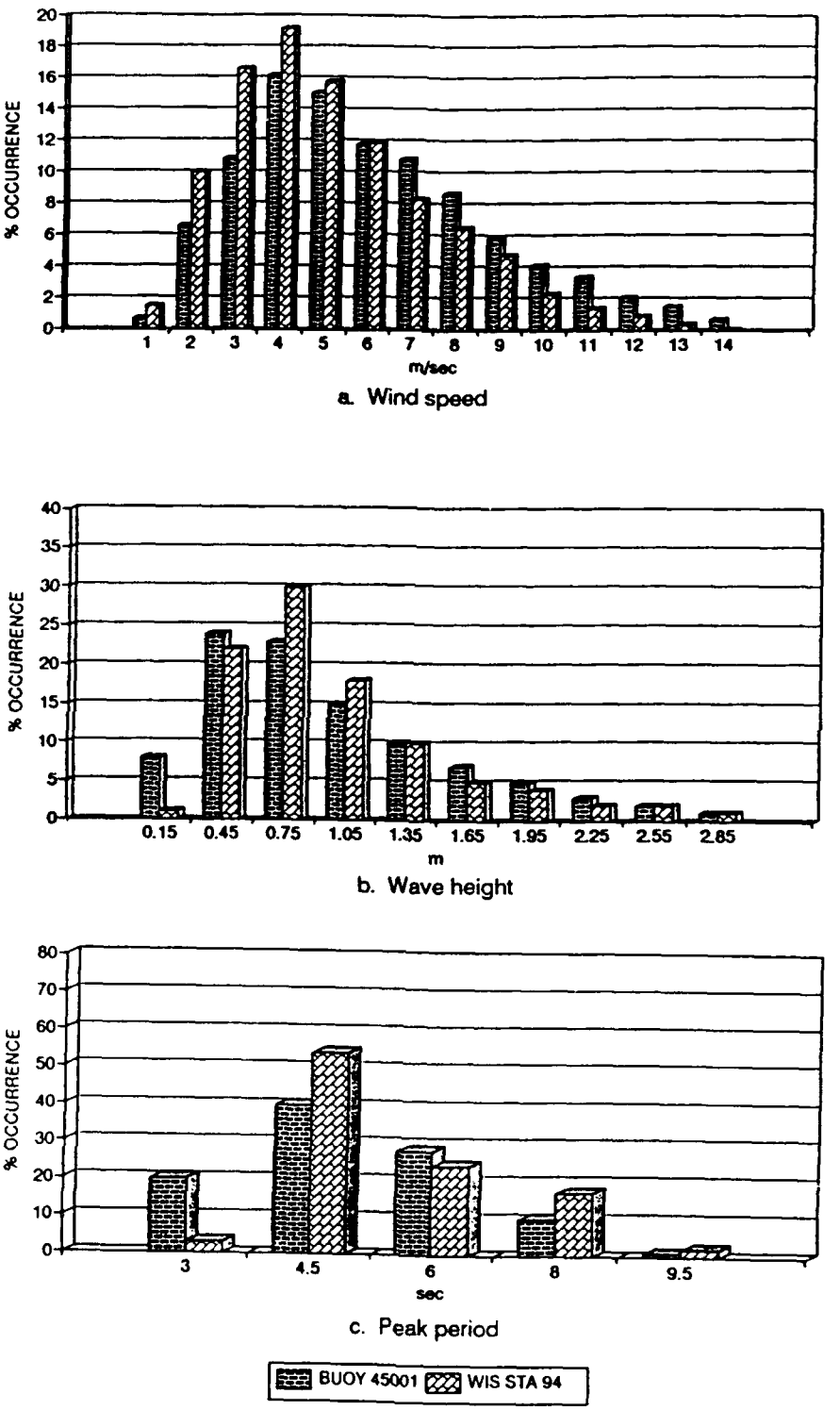



Figure 10. Percent distribution histograms for measured and adjusted wind speed, wave height, and peak period for the period 1981 to 1986, WIS Sta 94

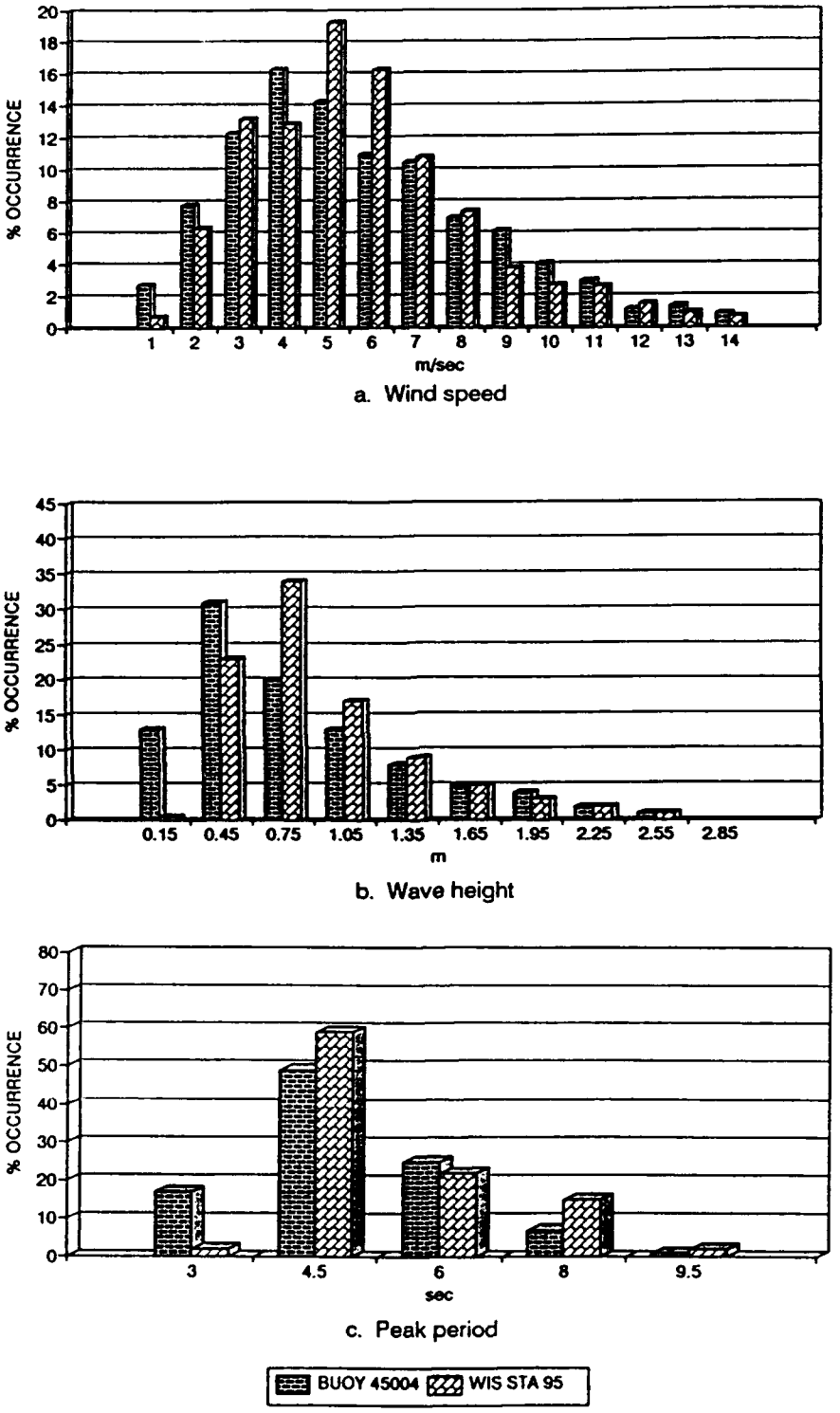



Figure 11. Percent distribution histograms for measured and adjusted wind speed, wave height, and peak period for the period 1981 to 1986, WIS Sta 95

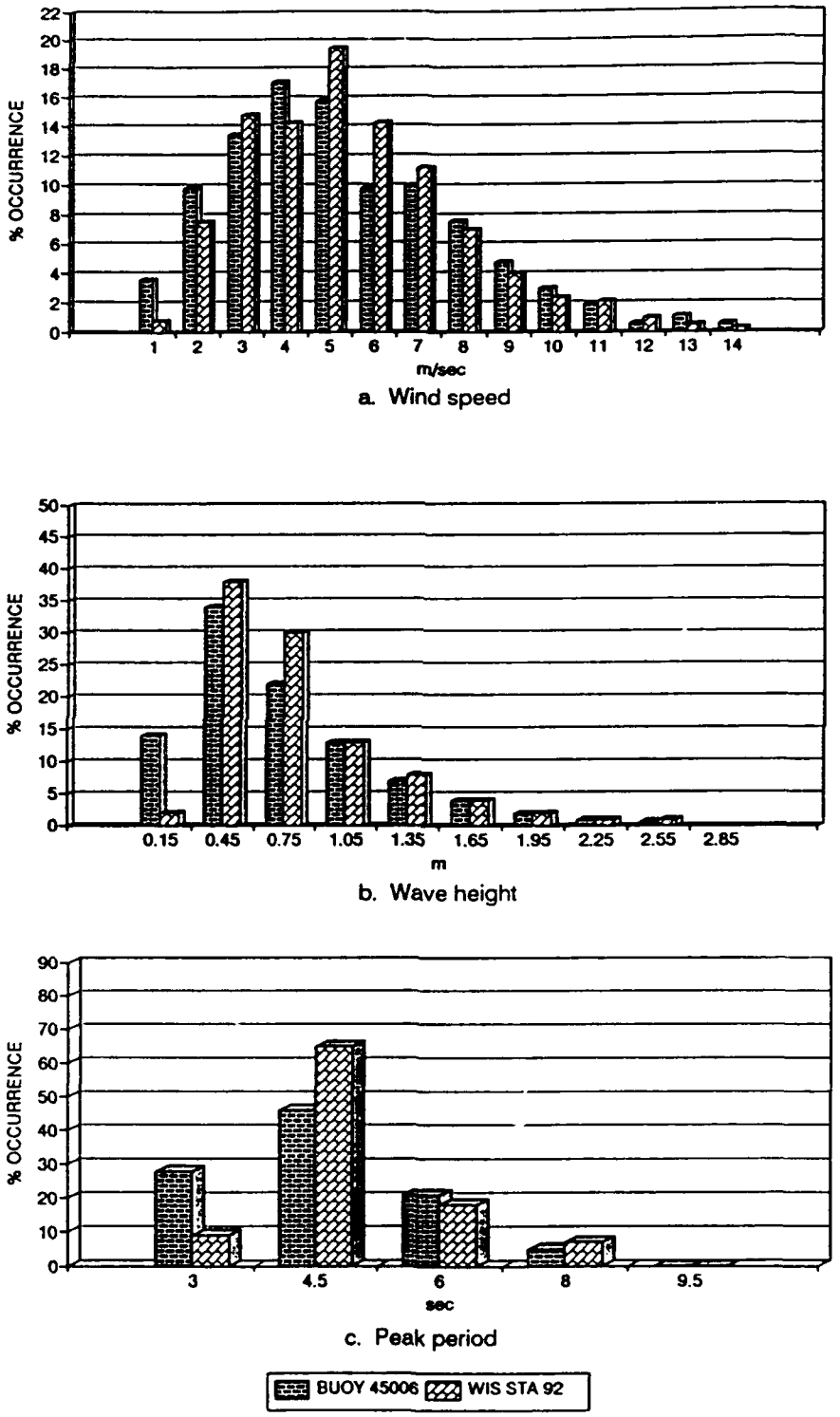



Figure 12. Percent distribution histograms for measured and adjusted wind speed, wave height, and peak period for the period 1981 to 1986, WIS Sta 92

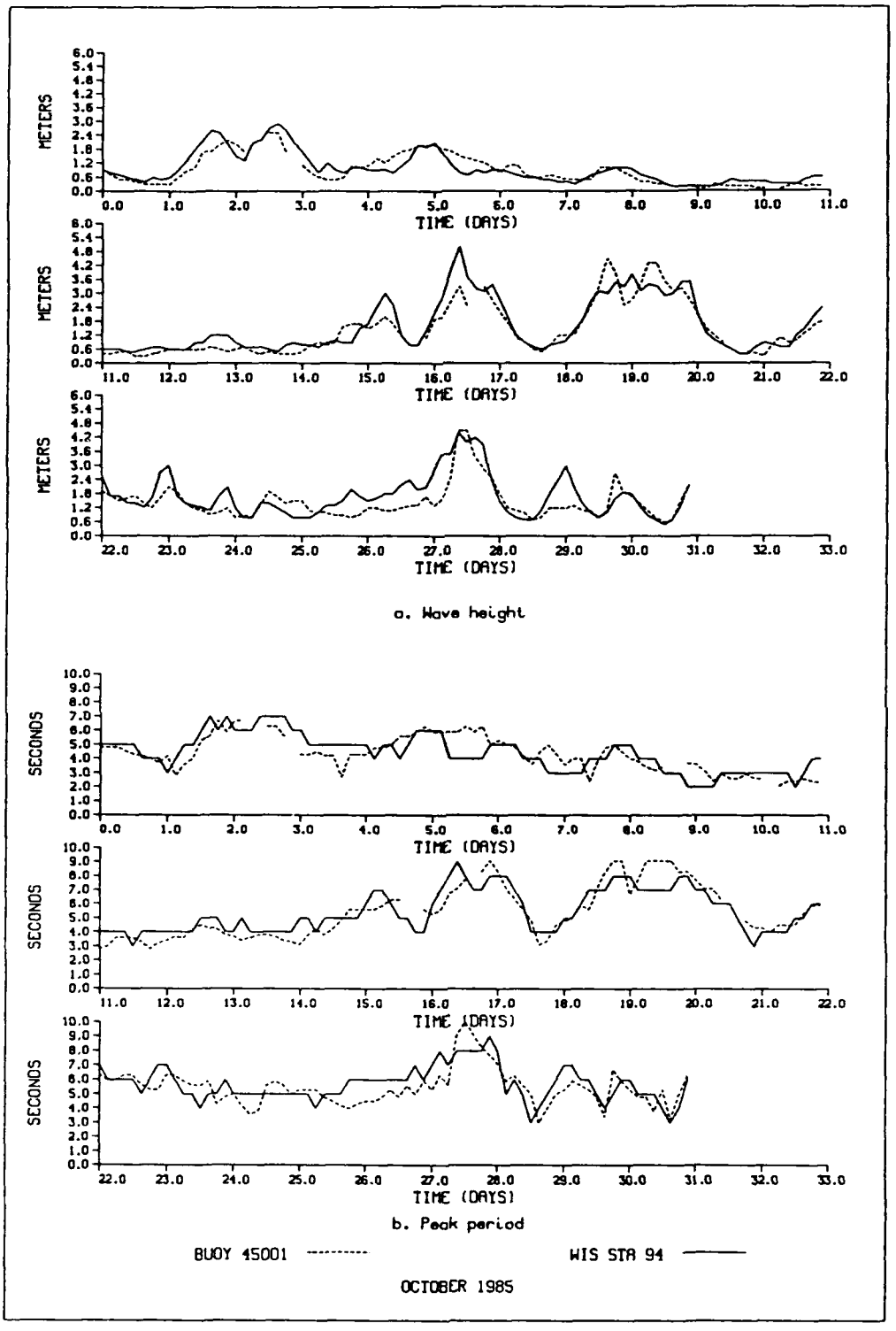



Figure 13. Time series comparison plots of measured versus modeled wave heights and peak periods for October 1985

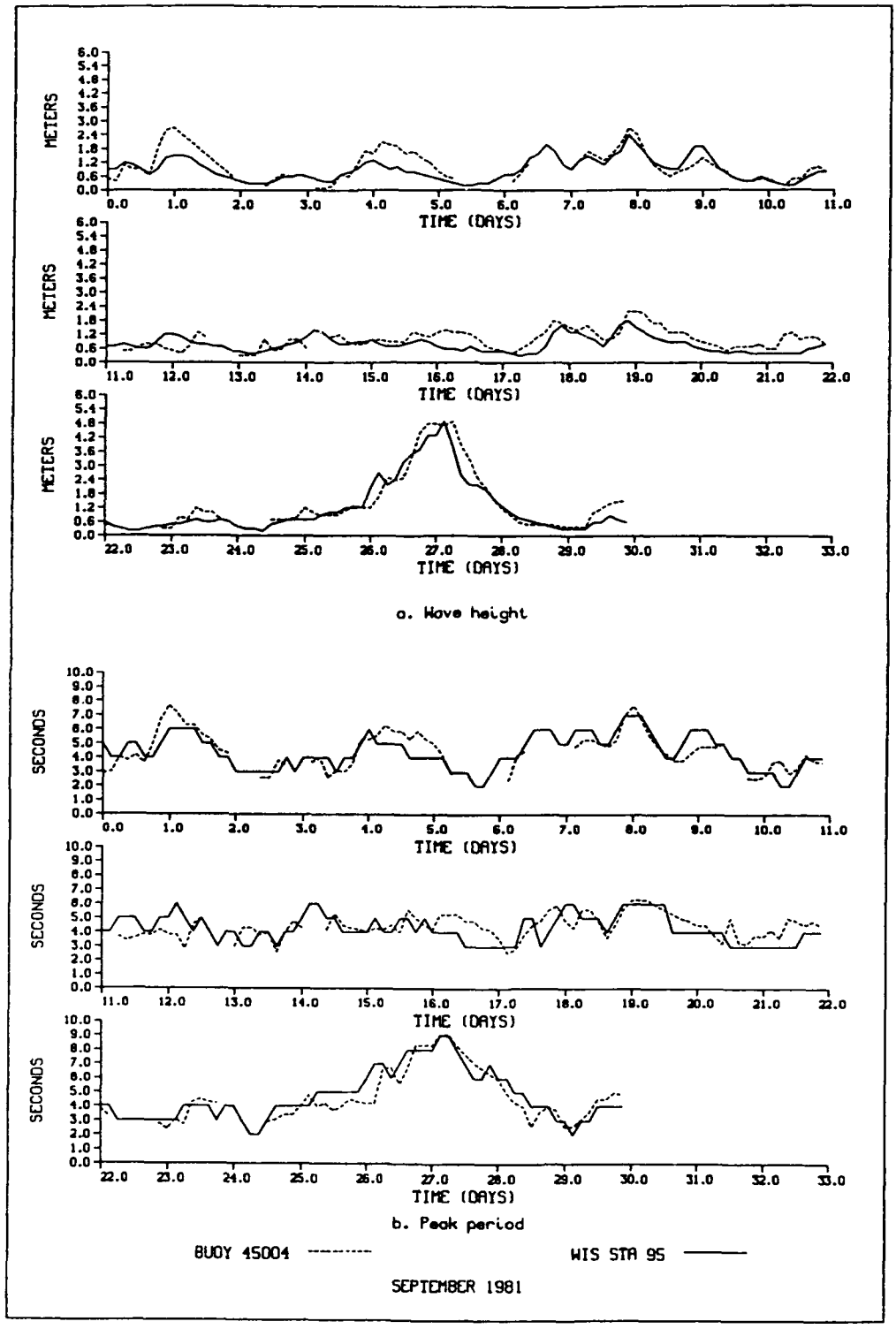



Figure 14. Time series comparison plots of measured versus modeled wave heights and peak periods for September 1981

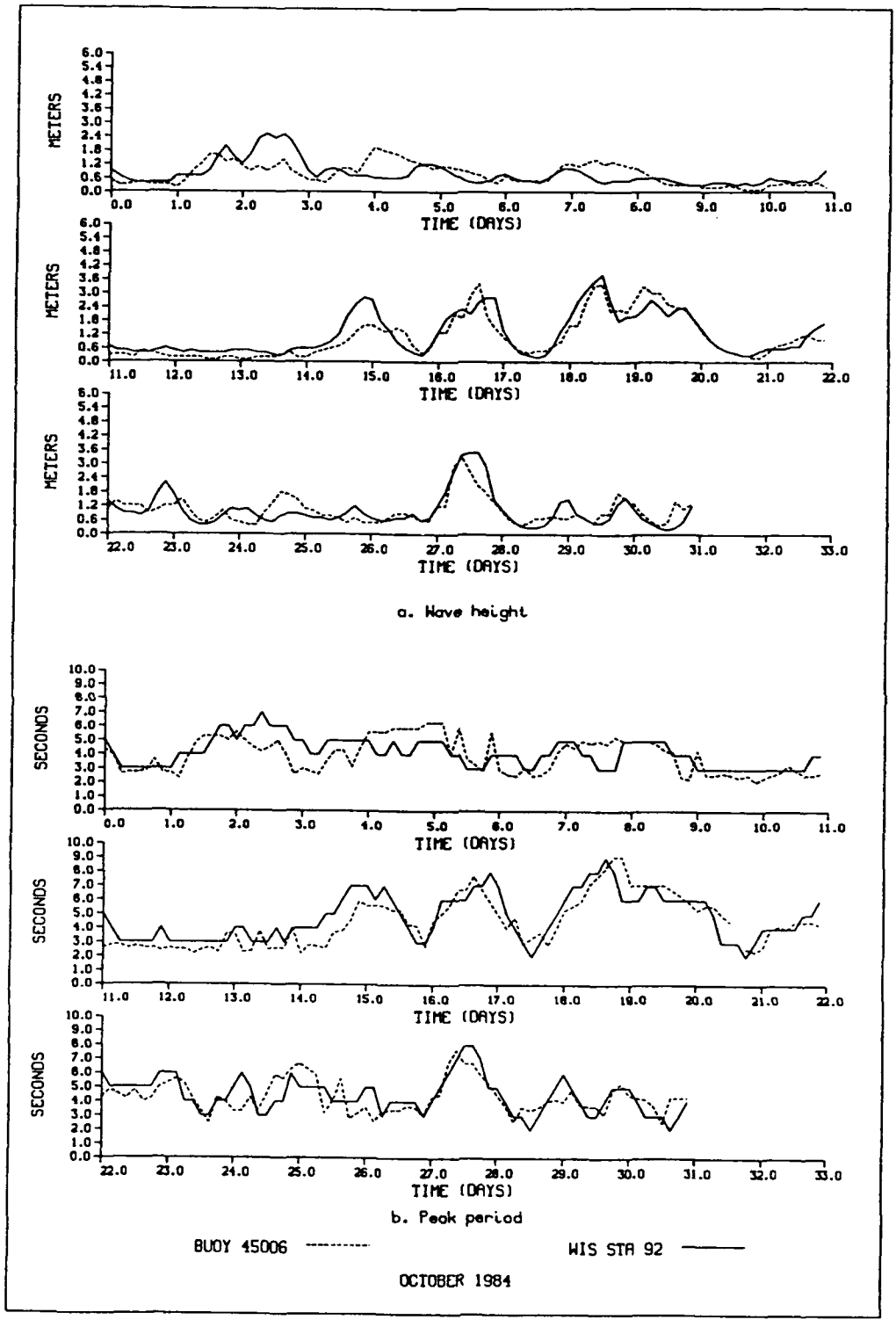
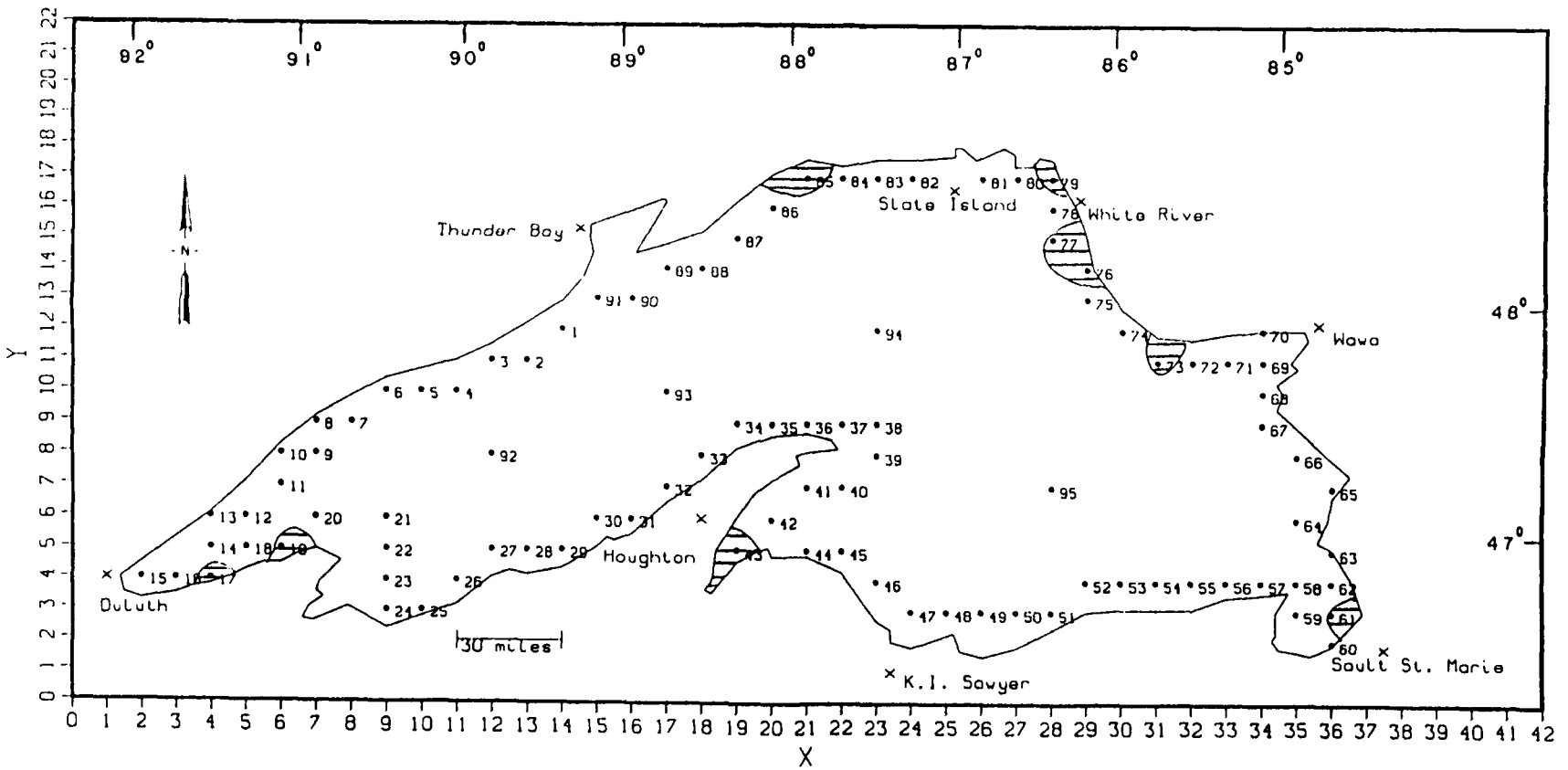
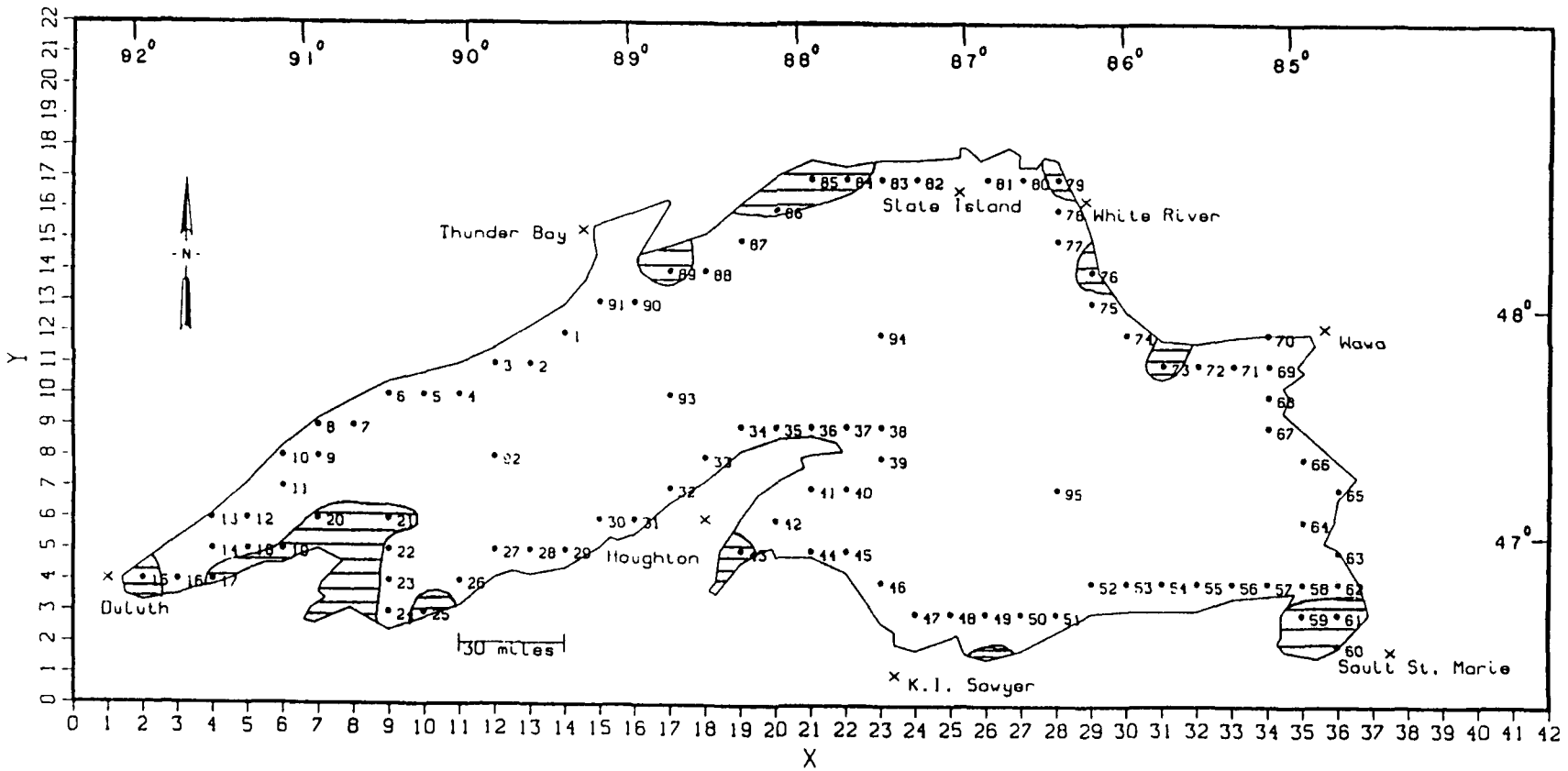



Figure 15. Time series comparison plots of measured versus modeled wave heights and peak periods for October 1984



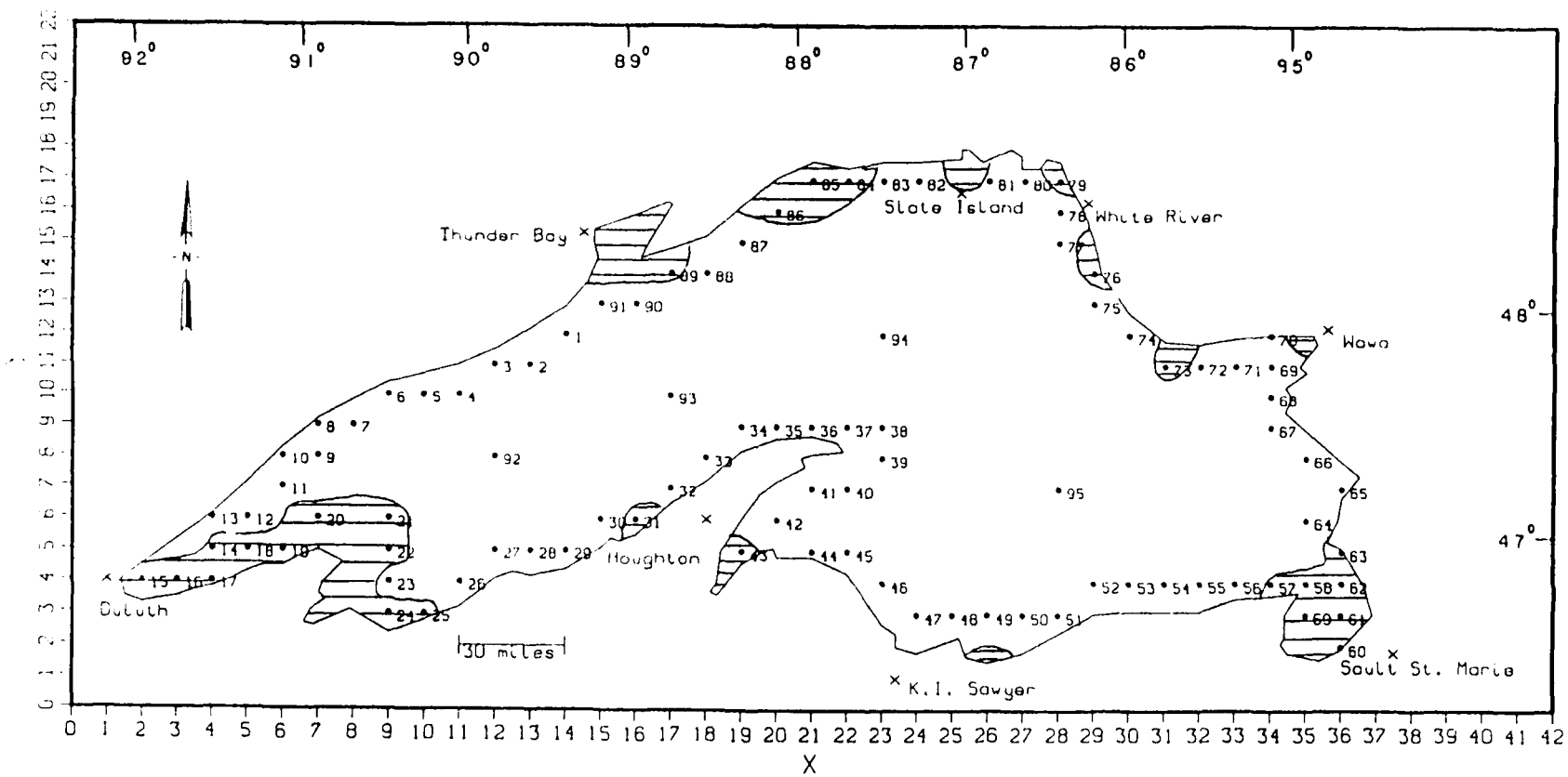

a. 16-31 December

Figure 16. Ice-cover (shaded region) development and decay on Lake Superior for nine half-month periods (Sheet 1 of 9)



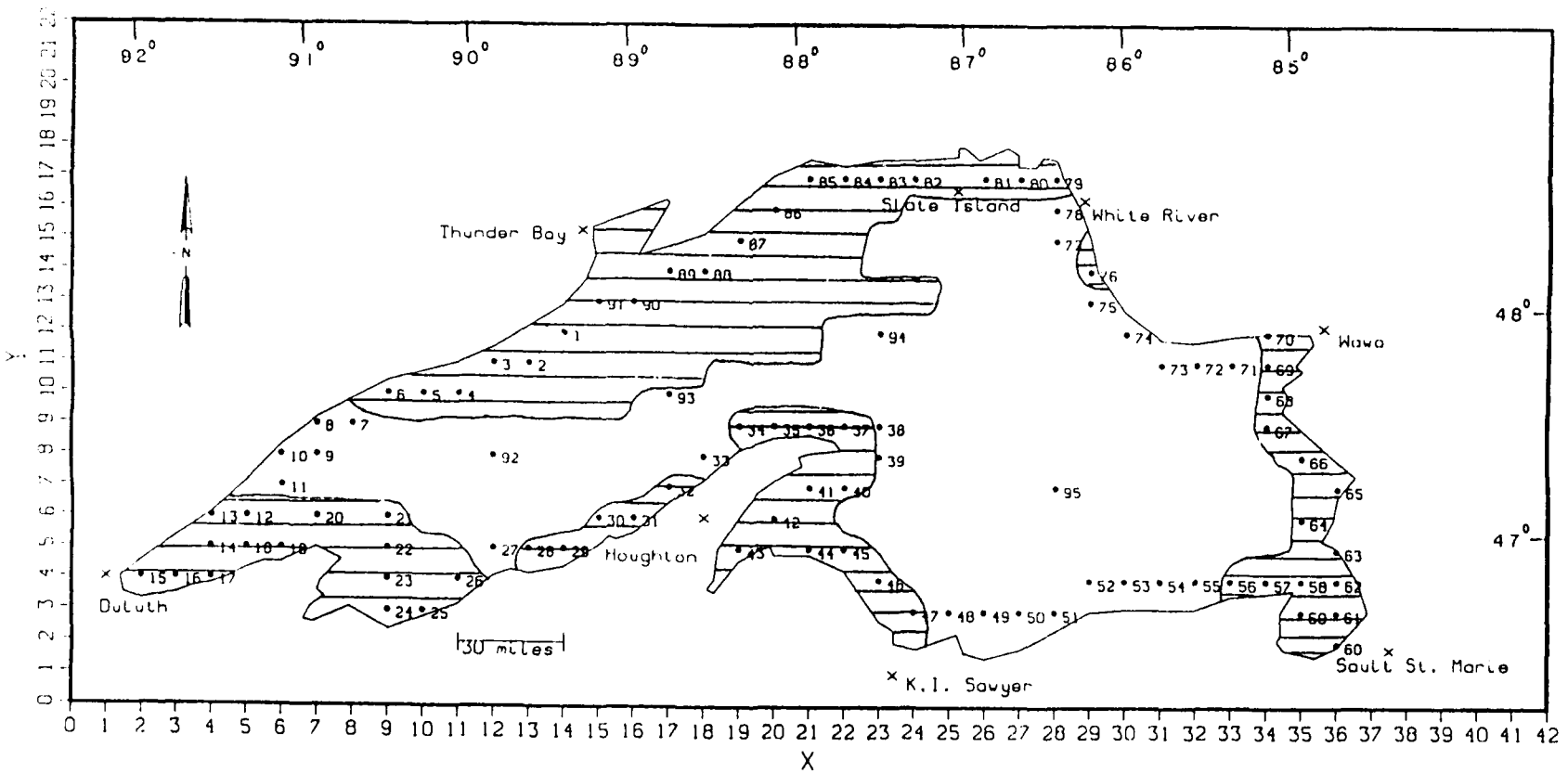

b. 1-15 January

Figure 16. (Sheet 2 of 9)



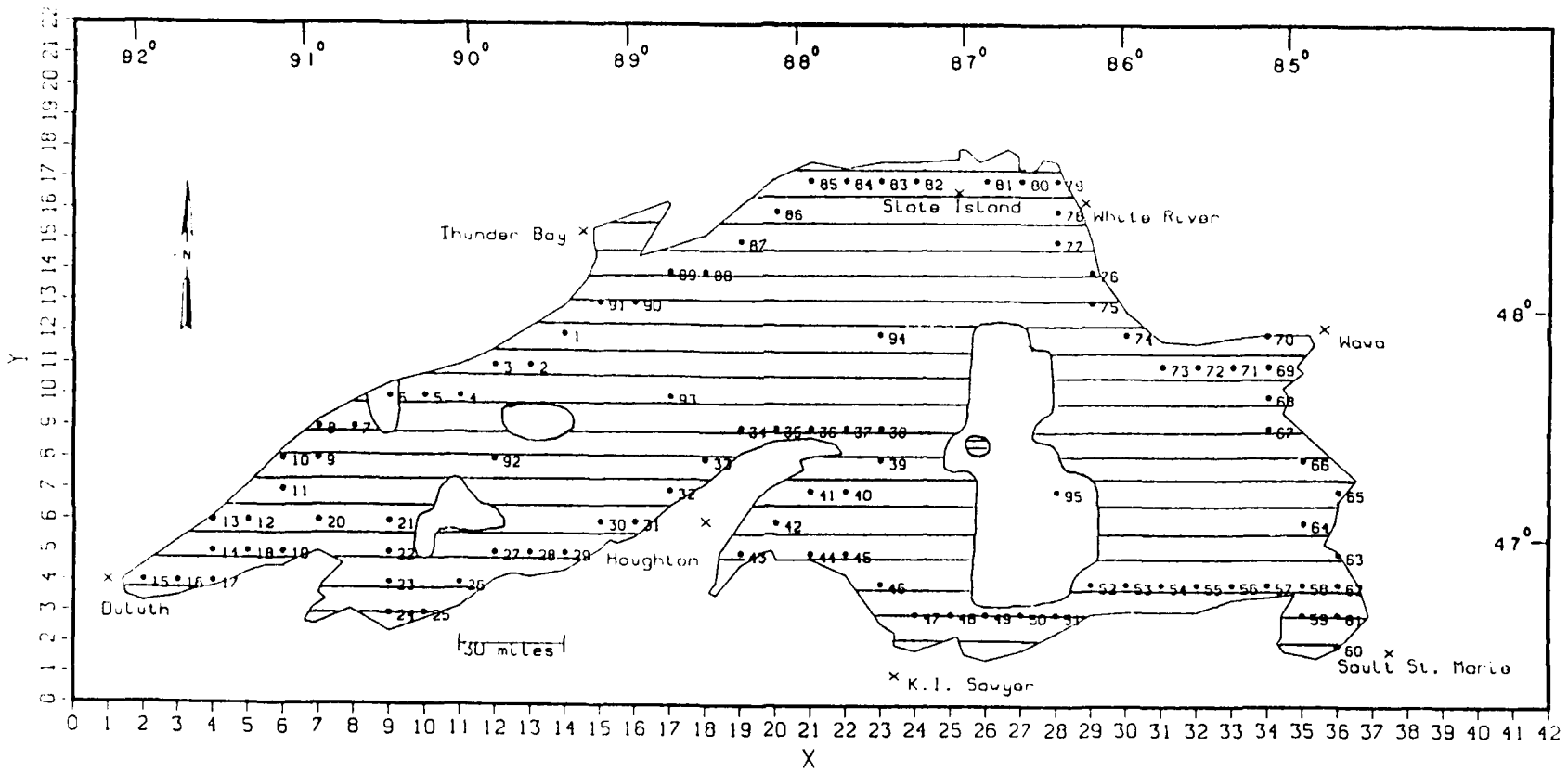

c. 16-31 January

Figure 16. (Sheet 3 of 9)



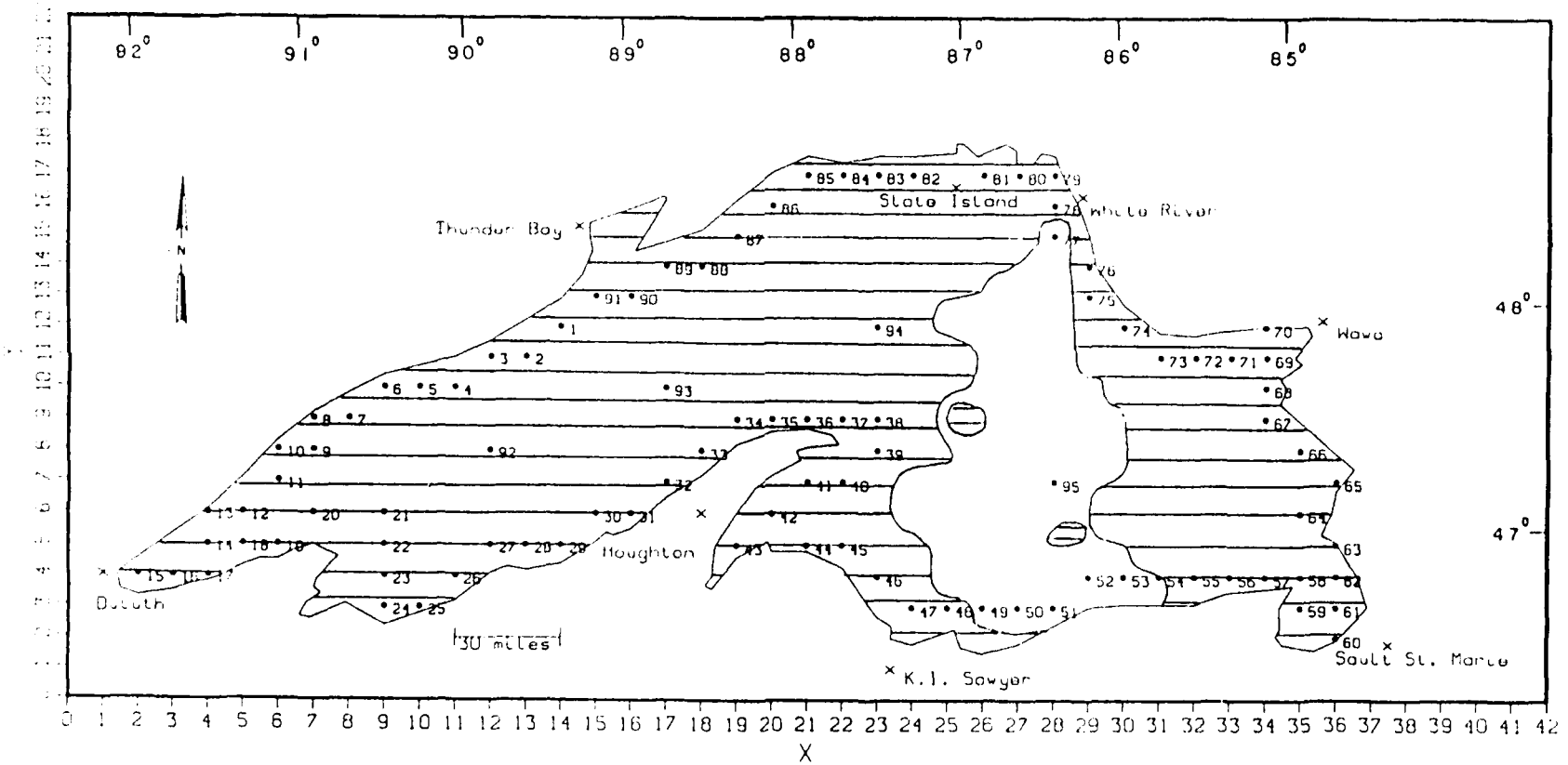

d. 1-15 February

Figure 16. (Sheet 4 of 9)



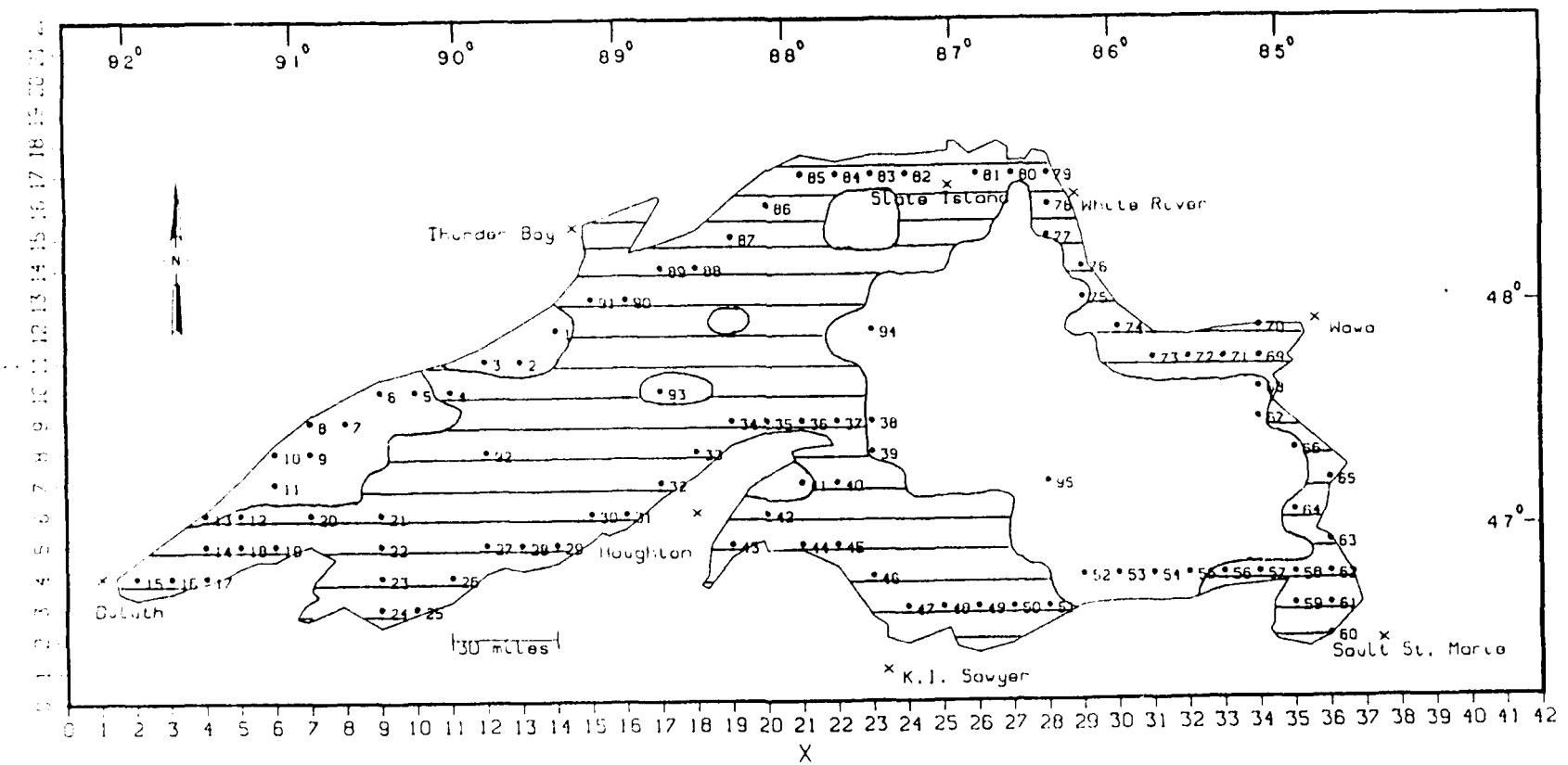

e. 16-28 February

Figure 16. (Sheet 5 of 9)



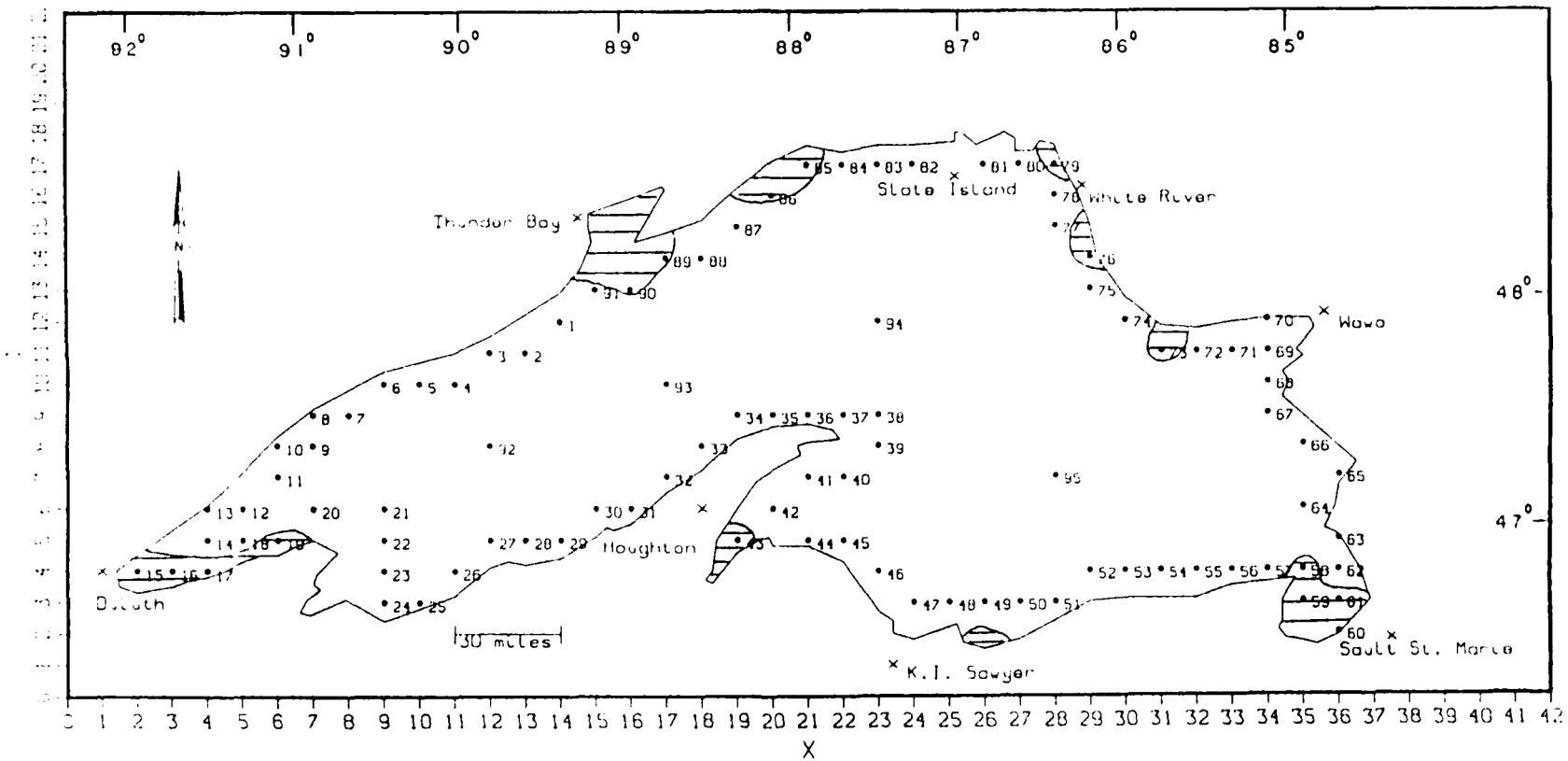

f. 1-15 March

Figure 16. (Sheet 6 of 9)



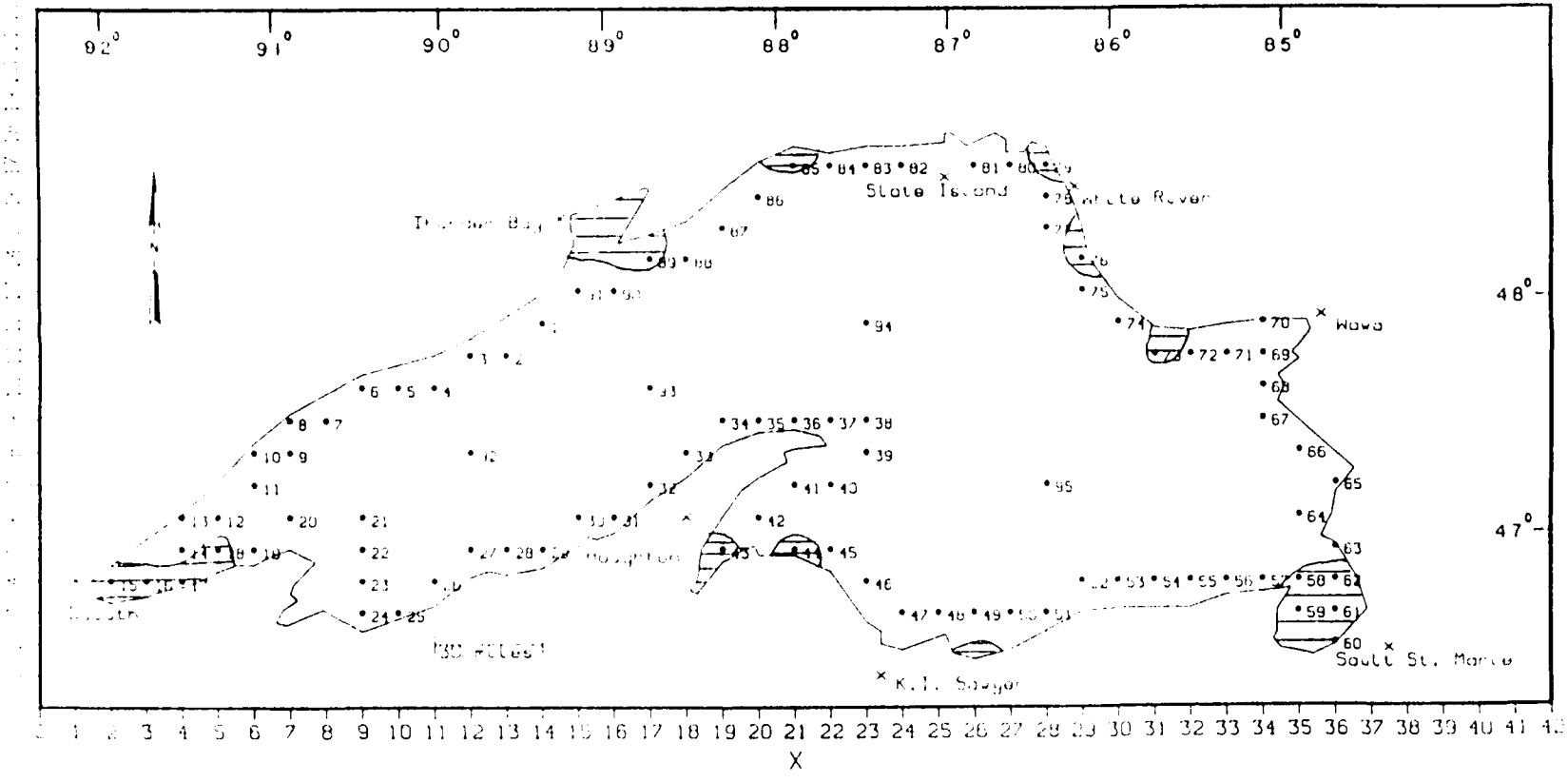

g. 16-31 March

Figure 16. (Sheet 7 of 9)




h. 1-15 April

Figure 16. (Sheet 8 of 9)




i. 16-30 April

Figure 16. (Sheet 9 of 9)

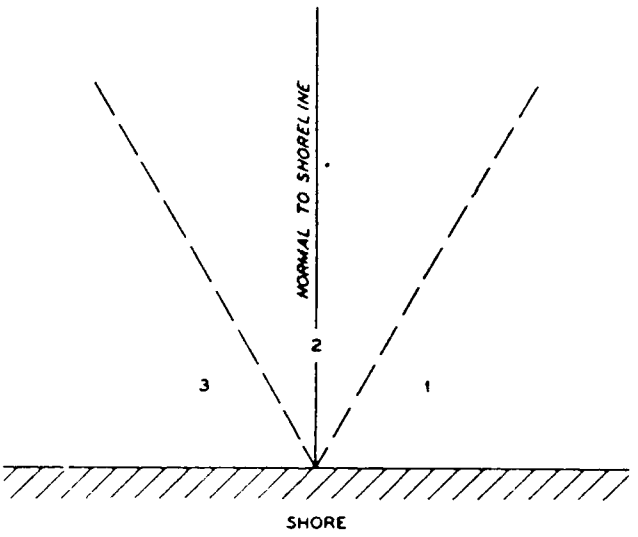
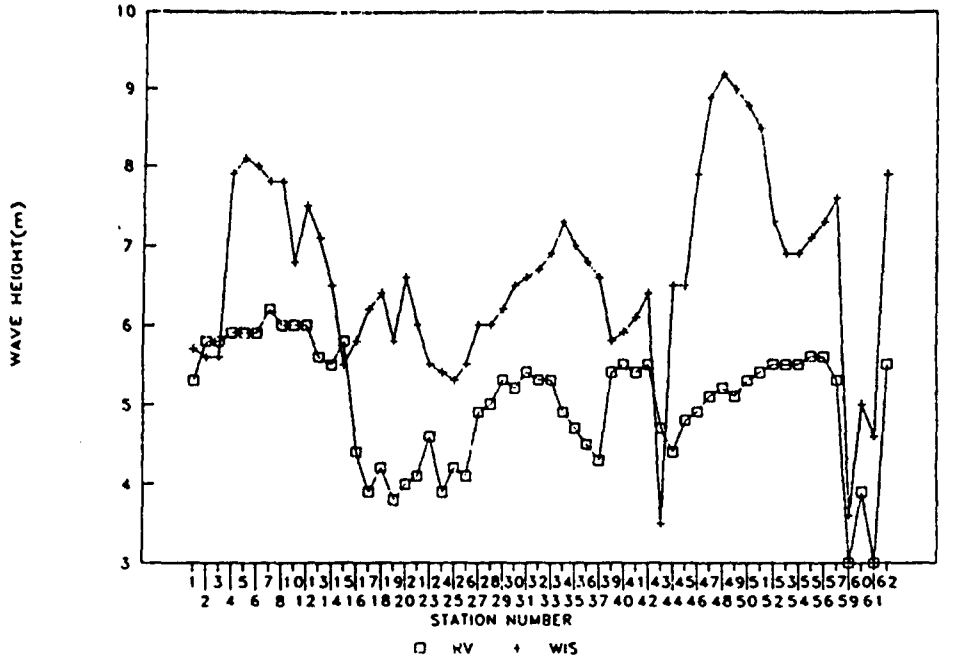
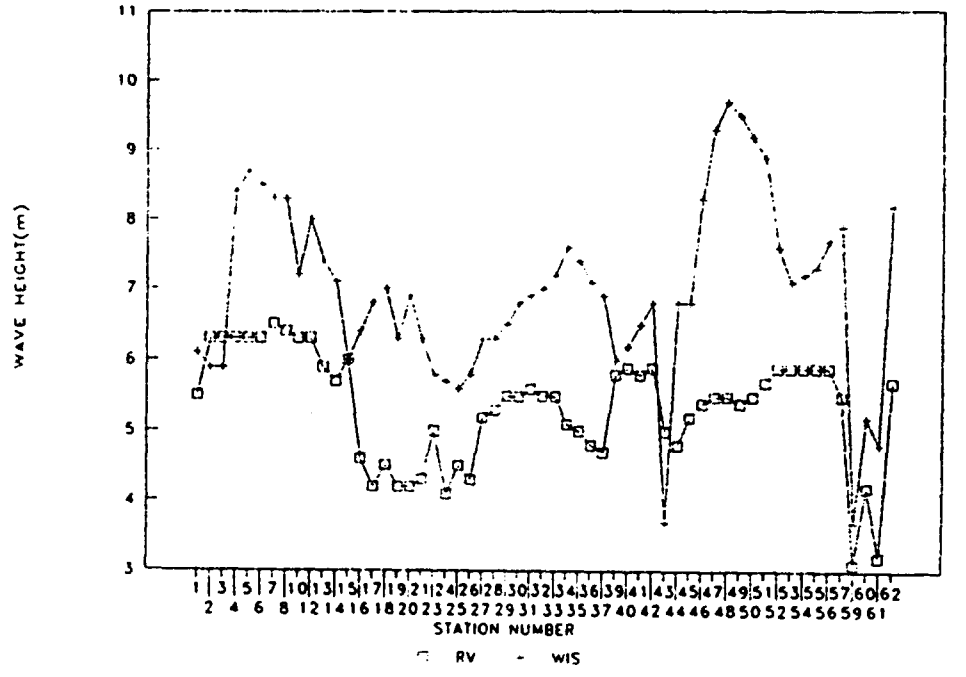



Figure 17. Definition sketch
of angle classes

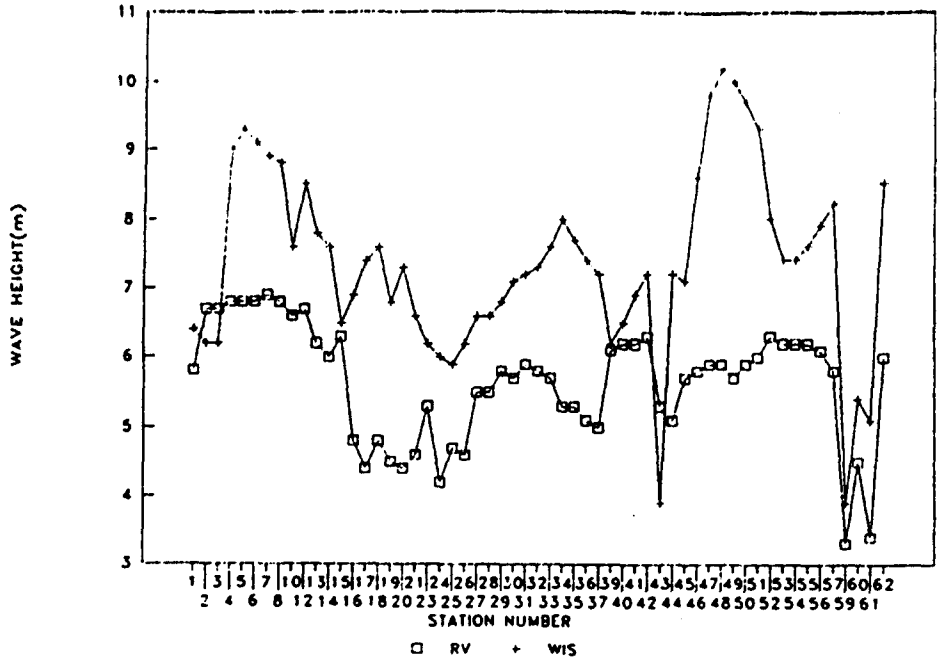



a. 5-year return period

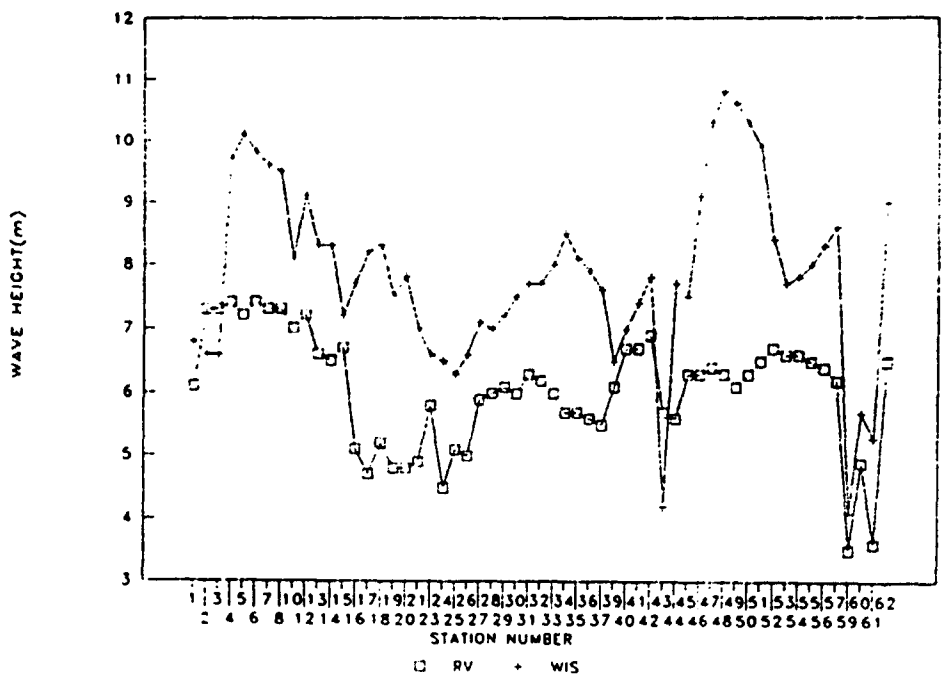



b. 10-year return period

Figure 18. Wave heights for colocated RV and WIS stations for 5-, 10-, 20-, and 50-year return periods (Continued)




c. 20-year return period




d. 50-year return period

Figure 18. (Concluded)

# APPENDIX A: SUMMARY TABLES

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 337 | 742 | 10 | 1 | . | . | . | . | . | . | 1090 |
| 0.50-0.99 | . | 1478 | 202 | 7 | 1 | . | . | . | . | . | 1688 |
| 1.00-1.49 | . | . | 709 | 5 | . | . | . | . | . | . | 714 |
| 1.50-1.99 | . | . | 160 | . | . | . | . | . | . | . | 160 |
| 2.00-2.49 | . | . | 3 | 16 | . | . | . | . | . | . | 19 |
| 2.50-2.99 | . | . | . | 3 | 1 | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 337 | 2220 | 1084 | 32 | 2 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.3 NO. OF CASES= 3440.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 399 | 776 | 17 | 1 | . | . | . | . | . | . | 1193 |
| 0.50-0.99 | . | 1074 | 495 | 12 | 2 | . | . | . | . | . | 1583 |
| 1.00-1.49 | . | . | 525 | 86 | 2 | . | . | . | . | . | 613 |
| 1.50-1.99 | . | . | 98 | 190 | 10 | . | . | . | . | . | 298 |
| 2.00-2.49 | . | . | 2 | 83 | 21 | . | . | . | . | . | 106 |
| 2.50-2.99 | . | . | . | 8 | 43 | 6 | . | . | . | . | 57 |
| 3.00-3.49 | . | . | . | . | 7 | 18 | . | . | . | . | 25 |
| 3.50-3.99 | . | . | . | . | 2 | 5 | . | . | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | 2 | 1 | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 399 | 1850 | 1137 | 380 | 87 | 31 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 3643.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 567 | 890 | 20 | 1 | . | . | . | . | . | . | 1478 |
| 0.50-0.99 | . | 1075 | 566 | 1 | . | . | . | . | . | . | 1642 |
| 1.00-1.49 | . | . | 353 | 48 | . | . | . | . | . | . | 401 |
| 1.50-1.99 | . | . | 39 | 128 | . | . | . | . | . | . | 167 |
| 2.00-2.49 | . | . | . | 62 | 27 | . | . | . | . | . | 89 |
| 2.50-2.99 | . | . | . | 2 | 62 | 2 | . | . | . | . | 66 |
| 3.00-3.49 | . | . | . | . | 5 | 27 | . | . | . | . | 32 |
| 3.50-3.99 | . | . | . | . | . | 9 | . | . | . | . | 9 |
| 4.00-4.49 | . | . | . | . | . | 3 | 2 | . | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 567 | 1965 | 978 | 242 | 94 | 42 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 3647.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 632 | 1378 | 42 | 10 | . | . | . | . | . | . | 2062 |
| 0.50-0.99 | . | 1952 | 483 | 5 | 3 | 1 | . | . | . | . | 2444 |
| 1.00-1.49 | . | . | 685 | 26 | 1 | . | . | . | . | . | 712 |
| 1.50-1.99 | . | . | 137 | 64 | 7 | 1 | . | . | . | . | 209 |
| 2.00-2.49 | . | . | 11 | 57 | 12 | . | . | . | . | . | 80 |
| 2.50-2.99 | . | . | . | 9 | 24 | 3 | . | . | . | . | 36 |
| 3.00-3.49 | . | . | . | . | 6 | 8 | . | . | . | . | 14 |
| 3.50-3.99 | . | . | . | . | . | 11 | 3 | . | . | . | 14 |
| 4.00-4.49 | . | . | . | . | . | 2 | 3 | 2 | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 632 | 3330 | 1358 | 171 | 53 | 26 | 7 | 4 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 3.3 NO. OF CASES= 5231.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 909 | 2396 | 78 | 11 | 1 | 1 | . | . | . | . | 3396 |
| 0.50-0.99 | . | 3783 | 273 | 4 | 7 | . | 1 | . | . | . | 4068 |
| 1.00-1.49 | . | . | 696 | 8 | . | . | . | . | . | . | 704 |
| 1.50-1.99 | . | . | 155 | . | 1 | . | . | . | . | . | 156 |
| 2.00-2.49 | . | . | 12 | 12 | . | . | . | 1 | . | . | 25 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 909 | 6179 | 1214 | 40 | 9 | 1 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 7818.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 353 | 756 | 10 | 3 | 1 | . | . | . | . | . | 1123 |
| 0.50-0.99 | . | 1288 | 125 | . | . | . | . | . | . | . | 1413 |
| 1.00-1.49 | . | . | 204 | 1 | 1 | . | . | . | . | . | 206 |
| 1.50-1.99 | . | . | 69 | 7 | . | . | . | . | . | . | 76 |
| 2.00-2.49 | . | . | 1 | 9 | . | . | . | . | . | . | 10 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 353 | 2044 | 409 | 21 | 2 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.1 NO. OF CASES= 2650.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 206 | 447 | 129 | 27 | 1 | 1 | . | . | . | . | 811 |
| 0.50-0.99 | . | 894 | 139 | 44 | 17 | 4 | . | . | . | . | 1098 |
| 1.00-1.49 | . | . | 125 | 20 | 6 | 2 | . | . | . | . | 153 |
| 1.50-1.99 | . | . | 35 | 2 | 5 | 1 | 1 | . | . | . | 44 |
| 2.00-2.49 | . | . | 1 | 4 | 1 | 3 | 3 | . | . | . | 12 |
| 2.50-2.99 | . | . | . | 4 | . | 1 | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 206 | 1341 | 429 | 101 | 30 | 12 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 1991.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 313 | 881 | 299 | 5 | . | . | . | . | . | . | 1498 |
| 0.50-0.99 | . | 1218 | 653 | 152 | 3 | . | . | . | . | . | 2026 |
| 1.00-1.49 | . | . | 162 | 116 | 26 | 1 | . | . | . | . | 305 |
| 1.50-1.99 | . | . | 32 | 43 | 33 | 3 | . | 1 | . | . | 112 |
| 2.00-2.49 | . | . | . | 6 | 23 | 11 | 2 | 1 | . | . | 43 |
| 2.50-2.99 | . | . | . | . | 5 | 6 | 1 | . | . | . | 12 |
| 3.00-3.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 313 | 2099 | 1146 | 322 | 90 | 23 | 3 | 2 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 3747.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 367 | 893 | 379 | 4 | . | . | . | . | . | . | 1643 |
| 0.50-0.99 | . | 849 | 1774 | 151 | . | . | . | . | . | . | 2774 |
| 1.00-1.49 | . | . | 500 | 269 | 17 | . | . | . | . | . | 786 |
| 1.50-1.99 | . | . | 52 | 179 | 56 | 5 | . | . | . | . | 292 |
| 2.00-2.49 | . | . | . | 57 | 34 | 10 | . | . | . | . | 101 |
| 2.50-2.99 | . | . | . | 6 | 38 | 13 | . | . | . | . | 57 |
| 3.00-3.49 | . | . | . | . | 3 | 17 | 1 | . | . | . | 21 |
| 3.50-3.99 | . | . | . | . | . | 5 | . | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 367 | 1742 | 2705 | 666 | 148 | 51 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 5321.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 467 | 1029 | 478 | 11 | . | . | . | . | . | . | 1985 |
| 0.50-0.99 | . | 922 | 2022 | 288 | 18 | 1 | . | . | . | . | 3251 |
| 1.00-1.49 | . | . | 597 | 327 | 59 | 2 | . | . | . | . | 985 |
| 1.50-1.99 | . | . | 70 | 244 | 68 | 14 | . | . | . | . | 396 |
| 2.00-2.49 | . | . | . | 119 | 40 | 12 | . | . | . | . | 171 |
| 2.50-2.99 | . | . | . | 5 | 62 | 6 | . | . | . | . | 73 |
| 3.00-3.49 | . | . | . | . | 8 | 41 | 1 | . | . | . | 50 |
| 3.50-3.99 | . | . | . | . | . | 24 | . | . | . | . | 24 |
| 4.00-4.49 | . | . | . | . | . | 1 | 5 | 1 | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 1 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 467 | 1951 | 3167 | 994 | 255 | 101 | 9 | 2 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.1 NO. OF CASES= 6509.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1001 | 2405 | 882 | 99 | 5 | . | . | . | . | . | 4392 |
| 0.50-0.99 | . | 3261 | 3424 | 773 | 140 | 6 | . | . | . | . | 7604 |
| 1.00-1.49 | . | . | 1299 | 539 | 410 | 69 | 1 | . | . | . | 2318 |
| 1.50-1.99 | . | . | 177 | 352 | 143 | 140 | 6 | . | . | . | 818 |
| 2.00-2.49 | . | . | 4 | 158 | 84 | 60 | 7 | 2 | . | . | 315 |
| 2.50-2.99 | . | . | . | 2 | 119 | 37 | 6 | 1 | 1 | . | 166 |
| 3.00-3.49 | . | . | . | . | 12 | 93 | 5 | . | . | . | 110 |
| 3.50-3.99 | . | . | . | . | . | 37 | 20 | 1 | . | . | 58 |
| 4.00-4.49 | . | . | . | . | . | 3 | 32 | 7 | 1 | . | 43 |
| 4.50-4.99 | . | . | . | . | . | 1 | 8 | 13 | . | . | 22 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 6 | 3 | . | 10 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | 8 | . | 13 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1001 | 5666 | 5786 | 1923 | 913 | 446 | 86 | 35 | 16 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 14858.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1515 | 3599 | 134 | 27 | . | . | . | . | . | . | 5275 |
| 0.50-0.99 | . | 4517 | 788 | 119 | 85 | 2 | . | . | . | . | 5511 |
| 1.00-1.49 | . | . | 1544 | 66 | 54 | 23 | . | . | . | . | 1687 |
| 1.50-1.99 | . | . | 727 | 81 | 35 | 71 | 1 | . | . | . | 915 |
| 2.00-2.49 | . | . | 79 | 48 | 19 | 12 | 7 | . | . | . | 165 |
| 2.50-2.99 | . | . | . | 10 | 19 | 6 | 1 | 3 | . | . | 39 |
| 3.00-3.49 | . | . | . | 2 | 2 | 20 | 2 | 1 | . | . | 27 |
| 3.50-3.99 | . | . | . | . | . | 3 | 2 | . | 1 | . | 6 |
| 4.00-4.49 | . | . | . | . | . | 2 | 4 | 2 | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 2 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1515 | 8116 | 3272 | 353 | 214 | 139 | 19 | 8 | 8 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 12771.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1034 | 1805 | 6 | 1 | . | . | . | . | . | . | 2846 |
| 0.50-0.99 | . | 2399 | 376 | . | . | . | . | . | . | . | 2775 |
| 1.00-1.49 | . | . | 1228 | . | . | . | . | . | . | . | 1228 |
| 1.50-1.99 | . | . | 655 | 1 | . | 2 | . | . | . | . | 658 |
| 2.00-2.49 | . | . | 101 | 96 | 1 | 1 | 1 | . | . | . | 200 |
| 2.50-2.99 | . | . | . | 25 | . | . | 1 | . | . | . | 26 |
| 3.00-3.49 | . | . | . | 5 | . | . | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1034 | 4204 | 2366 | 128 | 1 | 3 | 2 | 0 | 0 | 0 | 0 |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 7241.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 482 | 991 | 6 | . | . | . | . | . | . | . | 1479 |
| 0.50-0.99 | . | 1821 | 551 | . | . | . | . | . | . | . | 2372 |
| 1.00-1.49 | . | . | 909 | . | . | . | . | . | . | . | 909 |
| 1.50-1.99 | . | . | 716 | 86 | . | . | . | . | . | . | 802 |
| 2.00-2.49 | . | . | 16 | 167 | . | . | . | . | . | . | 183 |
| 2.50-2.99 | . | . | . | 28 | . | . | . | . | . | . | 28 |
| 3.00-3.49 | . | . | . | 4 | 4 | . | . | . | . | . | 8 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 482 | 2812 | 2198 | 285 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 5412.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 314 | 587 | 5 | 4 | . | 1 | . | . | . | . | 911 |
| 0.50-0.99 | . | 1750 | 840 | 4 | . | . | . | . | . | . | 2594 |
| 1.00-1.49 | . | . | 975 | . | . | . | . | . | . | . | 975 |
| 1.50-1.99 | . | . | 927 | 182 | . | . | . | . | . | . | 1109 |
| 2.00-2.49 | . | . | . | 209 | . | . | . | . | . | . | 209 |
| 2.50-2.99 | . | . | . | 47 | . | . | . | . | . | . | 47 |
| 3.00-3.49 | . | . | . | 1 | 9 | . | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 314 | 2337 | 2747 | 447 | 11 | 1 | 0 | 0 | 0 | 0 | 0 |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 5482.

STATION S01 47.95N 89.42W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

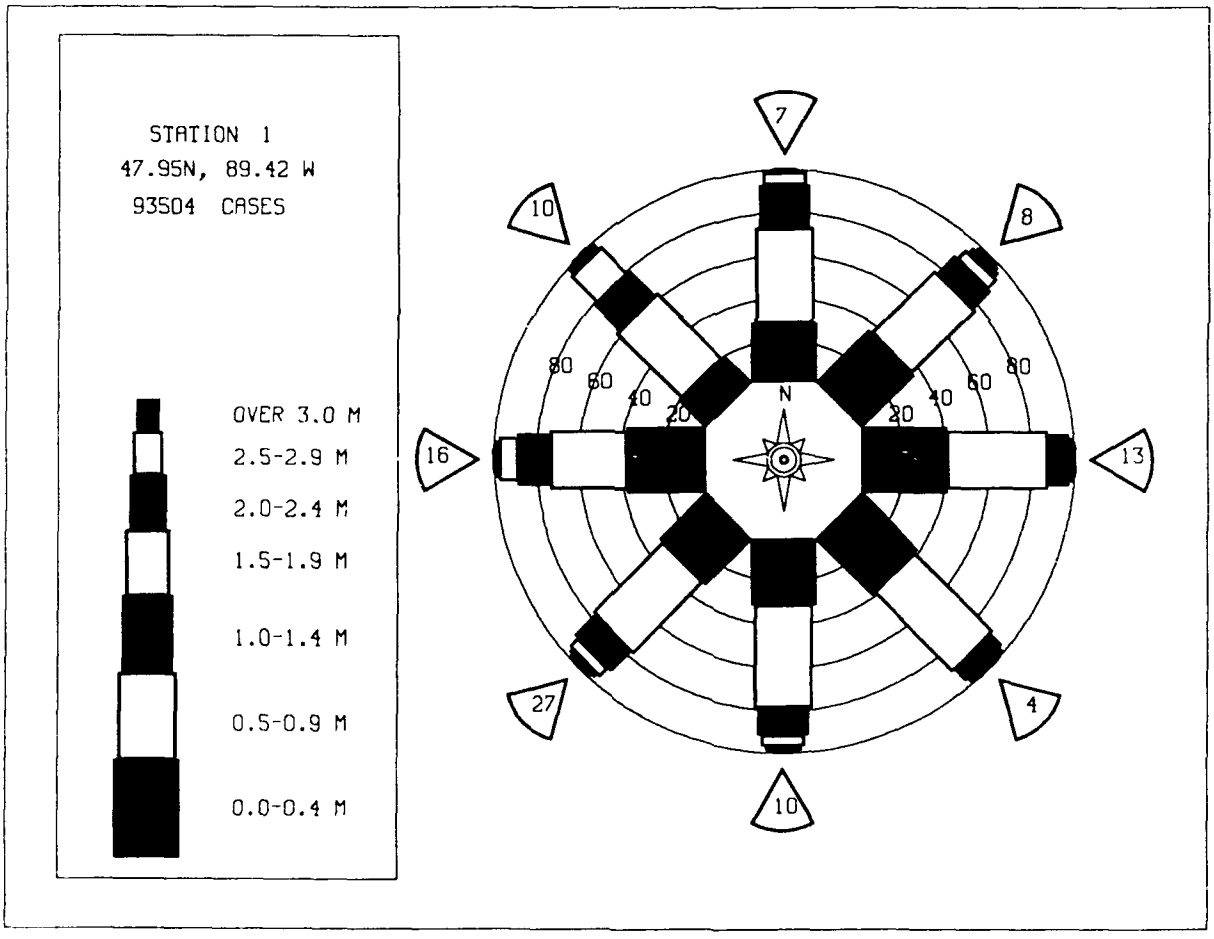
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 199 | 527 | 11 | 1 | . | . | . | . | . | . | 738 |
| 0.50-0.99 | . | 1412 | 392 | 1 | . | . | . | . | . | . | 1805 |
| 1.00-1.49 | . | . | 881 | 1 | . | . | . | . | . | . | 882 |
| 1.50-1.99 | . | . | 432 | 58 | . | . | . | . | . | . | 490 |
| 2.00-2.49 | . | . | 5 | 65 | . | . | . | . | . | . | 70 |
| 2.50-2.99 | . | . | . | 12 | . | . | . | . | . | . | 12 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 199 | 1939 | 1721 | 138 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

MEAN HS(M) = 0.9 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 3743.

STATION S01 47.95N 89.42W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 910 | 2010 | 251 | 21 | . | . | . | . | . | . | 3192 |
| 0.50-0.99 | . | 2970 | 1310 | 156 | 27 | 1 | . | . | . | . | 4464 |
| 1.00-1.49 | . | . | 1139 | 151 | 57 | 9 | . | . | . | . | 1356 |
| 1.50-1.99 | . | . | 448 | 162 | 36 | 23 | . | . | . | . | 669 |
| 2.00-2.49 | . | . | 23 | 117 | 26 | 11 | 2 | . | . | . | 179 |
| 2.50-2.99 | . | . | . | 17 | 37 | 8 | . | . | . | . | 62 |
| 3.00-3.49 | . | . | . | 1 | 5 | 22 | . | . | . | . | 28 |
| 3.50-3.99 | . | . | . | . | . | 9 | 2 | . | . | . | 11 |
| 4.00-4.49 | . | . | . | . | . | 1 | 4 | 1 | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 910 | 4980 | 3171 | 625 | 188 | 84 | 9 | 3 | 1 | 0 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S01 (47.95N 89.42W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.8 | 1.0 | 1.0 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1957 | 0.9 | 0.9 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.1 | 1.0 | 0.8 |
| 1958 | 0.7 | 0.9 | 0.6 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 0.7 | 1.1 | 0.9 | 0.8 |
| 1959 | 0.9 | 0.9 | 0.9 | 0.7 | 0.8 | 0.5 | 0.6 | 0.5 | 0.9 | 0.8 | 1.0 | 0.9 | 0.8 |
| 1960 | 0.8 | 0.8 | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.0 | 0.7 |
| 1961 | 0.7 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 0.9 | 0.9 | 0.7 |
| 1962 | 1.1 | 0.8 | 0.7 | 0.7 | 0.6 | 0.4 | 0.5 | 0.5 | 0.7 | 0.8 | 1.0 | 1.0 | 0.7 |
| 1963 | 1.0 | 1.0 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 0.9 | 1.1 | 0.7 |
| 1964 | 1.0 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.8 | 0.7 |
| 1965 | 1.1 | 1.1 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 0.9 | 1.3 | 1.3 | 0.8 |
| 1966 | 1.2 | 1.3 | 1.4 | 1.0 | 1.1 | 0.8 | 0.8 | 0.7 | 1.0 | 1.3 | 1.3 | 1.3 | 1.1 |
| 1967 | 1.3 | 1.2 | 1.3 | 1.1 | 0.9 | 0.8 | 0.8 | 0.8 | 0.9 | 1.3 | 1.2 | 1.5 | 1.1 |
| 1968 | 1.2 | 1.4 | 1.2 | 1.1 | 0.9 | 0.8 | 0.9 | 0.8 | 0.9 | 1.1 | 1.3 | 1.4 | 1.1 |
| 1969 | 1.2 | 0.8 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.7 | 0.7 | 0.8 | 0.9 | 0.8 | 0.8 |
| 1970 | 0.8 | 0.9 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 0.8 | 0.7 |
| 1971 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 0.9 | 0.8 | 0.7 |
| 1972 | 1.0 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.8 | 0.9 | 0.7 | 0.9 | 0.7 |
| 1973 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 1.0 | 0.8 | 0.7 |
| 1974 | 0.9 | 0.7 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | 0.9 | 0.8 | 0.7 |
| 1975 | 1.1 | 0.9 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.9 | 0.9 | 0.8 | 0.7 |
| 1976 | 0.8 | 0.9 | 1.0 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1977 | 1.0 | 1.0 | 1.0 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 1.0 | 0.7 |
| 1978 | 0.8 | 0.6 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.7 | 0.8 | 0.9 | 0.8 | 0.6 |
| 1979 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1980 | 0.8 | 0.6 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.8 | 0.8 | 0.6 | 1.0 | 0.6 |
| 1981 | 0.8 | 0.8 | 0.9 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.7 | 0.7 | 0.8 | 0.7 | 0.7 |
| 1982 | 1.1 | 0.8 | 0.9 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 0.9 | 1.0 | 0.7 |
| 1983 | 0.9 | 0.9 | 0.9 | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.7 | 0.7 | 1.3 | 1.1 | 0.8 |
| 1984 | 1.0 | 0.9 | 0.8 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 1.1 | 1.0 | 0.8 |
| 1985 | 1.0 | 0.9 | 1.0 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.8 | 0.9 | 0.8 | 1.0 | 0.8 |
| 1986 | 1.0 | 0.7 | 0.9 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.7 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1987 | 0.7 | 0.6 | 0.7 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.4 | 0.7 | 0.7 | 0.7 | 0.5 |
| MEAN | 0.9 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 1.0 | 1.0 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S01 (47.95N 89.42W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.6 | 2.8 | 4.7 | 2.9 | 2.5 | 1.3 | 1.3 | 1.5 | 2.5 | 2.7 | 3.6 | 2.6 |
| 1957 | 3.3 | 3.1 | 2.8 | 2.1 | 2.4 | 2.5 | 1.6 | 2.5 | 2.5 | 2.3 | 3.4 | 3.3 |
| 1958 | 3.0 | 2.7 | 2.2 | 3.0 | 2.0 | 3.4 | 2.0 | 2.6 | 3.3 | 2.5 | 5.7 | 2.4 |
| 1959 | 2.1 | 4.1 | 2.6 | 2.3 | 3.5 | 1.6 | 2.7 | 1.7 | 3.2 | 2.4 | 2.9 | 3.1 |
| 1960 | 2.5 | 2.6 | 2.8 | 2.4 | 2.7 | 1.9 | 1.6 | 2.2 | 2.0 | 3.0 | 3.5 | 3.8 |
| 1961 | 2.1 | 2.1 | 2.5 | 2.7 | 1.6 | 1.6 | 1.6 | 1.8 | 3.0 | 3.4 | 4.8 | 2.7 |
| 1962 | 3.1 | 2.3 | 3.2 | 1.8 | 1.9 | 1.6 | 1.5 | 1.5 | 2.1 | 6.2 | 3.8 | 4.2 |
| 1963 | 2.3 | 3.1 | 3.0 | 2.4 | 2.3 | 1.6 | 1.5 | 1.7 | 2.3 | 2.7 | 3.0 | 3.7 |
| 1964 | 3.6 | 3.8 | 3.0 | 2.3 | 3.8 | 1.8 | 1.4 | 2.9 | 2.7 | 3.0 | 2.8 | 3.1 |
| 1965 | 4.1 | 3.6 | 2.0 | 2.1 | 2.2 | 1.5 | 1.5 | 1.3 | 2.5 | 3.4 | 3.9 | 4.0 |
| 1966 | 4.3 | 4.6 | 4.8 | 5.6 | 3.1 | 3.3 | 3.1 | 2.5 | 3.0 | 6.2 | 3.5 | 3.8 |
| 1967 | 5.1 | 3.1 | 4.7 | 4.6 | 2.9 | 3.4 | 2.5 | 2.2 | 3.2 | 3.6 | 5.7 | 4.9 |
| 1968 | 4.3 | 4.1 | 3.5 | 3.6 | 3.0 | 2.7 | 4.5 | 3.6 | 3.2 | 3.1 | 4.0 | 4.4 |
| 1969 | 3.2 | 2.5 | 2.0 | 2.3 | 2.3 | 2.8 | 1.5 | 3.1 | 3.0 | 3.3 | 3.1 | 3.2 |
| 1970 | 2.4 | 2.3 | 2.8 | 2.5 | 2.0 | 2.3 | 1.6 | 1.4 | 2.6 | 4.9 | 2.5 | 2.5 |
| 1971 | 2.5 | 3.0 | 4.1 | 2.0 | 2.4 | 1.4 | 1.8 | 1.6 | 2.7 | 5.5 | 5.7 | 2.5 |
| 1972 | 4.6 | 2.8 | 2.8 | 2.1 | 1.3 | 1.8 | 1.4 | 2.5 | 3.2 | 3.0 | 2.9 | 4.9 |
| 1973 | 2.5 | 2.6 | 2.7 | 2.2 | 2.4 | 1.4 | 1.5 | 1.0 | 2.4 | 4.1 | 2.7 | 3.1 |
| 1974 | 3.4 | 1.8 | 2.5 | 1.5 | 1.4 | 1.9 | 1.7 | 2.9 | 1.5 | 2.7 | 2.8 | 2.7 |
| 1975 | 6.0 | 3.2 | 4.2 | 1.3 | 2.8 | 1.5 | 1.7 | 2.8 | 3.0 | 5.9 | 3.0 | 2.3 |
| 1976 | 3.0 | 2.9 | 3.7 | 1.8 | 1.6 | 1.7 | 1.8 | 1.6 | 2.5 | 3.2 | 2.2 | 3.9 |
| 1977 | 2.4 | 3.6 | 4.4 | 1.9 | 2.4 | 2.1 | 1.9 | 1.4 | 5.6 | 2.7 | 6.8 | 4.2 |
| 1978 | 2.0 | 1.8 | 2.7 | 2.1 | 1.8 | 2.0 | 1.4 | 1.6 | 1.9 | 2.7 | 3.6 | 2.7 |
| 1979 | 2.5 | 1.8 | 2.3 | 1.7 | 2.2 | 2.9 | 1.7 | 1.5 | 2.4 | 1.7 | 4.3 | 3.3 |
| 1980 | 2.4 | 1.7 | 2.3 | 2.0 | 1.9 | 1.2 | 1.5 | 2.9 | 4.5 | 4.2 | 2.1 | 4.2 |
| 1981 | 1.9 | 2.3 | 2.6 | 2.7 | 1.9 | 3.0 | 1.5 | 1.2 | 5.5 | 2.5 | 3.2 | 2.2 |
| 1982 | 4.1 | 2.6 | 4.3 | 2.4 | 1.4 | 2.0 | 1.7 | 1.3 | 2.2 | 3.7 | 6.2 | 4.5 |
| 1983 | 3.4 | 4.1 | 2.1 | 2.6 | 1.7 | 1.8 | 1.6 | 1.3 | 2.0 | 2.3 | 5.0 | 2.9 |
| 1984 | 4.4 | 3.7 | 4.1 | 4.5 | 1.9 | 2.9 | 1.5 | 1.9 | 2.8 | 3.9 | 3.9 | 3.0 |
| 1985 | 4.6 | 2.9 | 3.6 | 2.6 | 1.7 | 1.9 | 1.3 | 1.8 | 3.7 | 3.7 | 2.4 | 2.9 |
| 1986 | 3.5 | 2.4 | 4.3 | 1.9 | 3.1 | 1.6 | 1.6 | 1.4 | 2.1 | 4.1 | 5.2 | 2.7 |
| 1987 | 1.8 | 2.1 | 2.4 | 1.3 | 1.8 | 0.8 | 1.4 | 1.0 | 1.5 | 2.4 | 3.5 | 2.7 |

32 YR. STATISTICS FOR WIS STATION S01

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 225.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.0 |
| LARGEST WAVE HS | (METERS) | 6.8 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 234.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 77112112 |

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 327 | 686 | 47 | 23 | 1 | 1 | . | . | . | . | 1085 |
| 0.50-0.99 | . | 1227 | 271 | 17 | 9 | 16 | 5 | 1 | . | . | 1546 |
| 1.00-1.49 | . | . | 528 | 20 | 2 | . | . | 1 | . | . | 551 |
| 1.50-1.99 | . | . | 139 | 5 | 1 | . | . | . | . | . | 145 |
| 2.00-2.49 | . | . | 9 | 8 | . | . | . | . | . | 1 | 18 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 327 | 1913 | 994 | 74 | 13 | 17 | 5 | 2 | 0 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 3135.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 350 | 636 | 52 | 13 | 4 | 2 | . | . | . | . | 1057 |
| 0.50-0.99 | . | 797 | 453 | 13 | 11 | 8 | 1 | 1 | . | . | 1284 |
| 1.00-1.49 | . | . | 438 | 95 | 5 | . | 1 | 2 | 1 | . | 542 |
| 1.50-1.99 | . | . | 65 | 193 | 19 | 1 | . | . | . | . | 278 |
| 2.00-2.49 | . | . | 1 | 70 | 29 | 2 | . | . | . | . | 102 |
| 2.50-2.99 | . | . | . | 10 | 40 | 19 | . | . | . | . | 69 |
| 3.00-3.49 | . | . | . | . | 6 | 35 | 1 | . | . | . | 42 |
| 3.50-3.99 | . | . | . | . | 1 | 9 | 2 | . | . | . | 12 |
| 4.00-4.49 | . | . | . | . | . | 4 | 1 | . | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | 2 | 1 | 1 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 350 | 1433 | 1009 | 394 | 115 | 82 | 7 | 4 | 2 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 3189.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 612 | 814 | 79 | 25 | 4 | . | . | . | . | . | 1534 |
| 0.50-0.99 | . | 669 | 644 | 19 | 7 | 7 | . | . | . | . | 1346 |
| 1.00-1.49 | . | . | 321 | 77 | 3 | 1 | . | . | . | . | 402 |
| 1.50-1.99 | . | . | 24 | 145 | 13 | . | . | . | 1 | . | 183 |
| 2.00-2.49 | . | . | . | 47 | 33 | 1 | . | . | . | . | 81 |
| 2.50-2.99 | . | . | . | . | 42 | 22 | . | . | . | . | 64 |
| 3.00-3.49 | . | . | . | . | 5 | 40 | . | . | . | . | 45 |
| 3.50-3.99 | . | . | . | . | 1 | 20 | 3 | . | . | 1 | 25 |
| 4.00-4.49 | . | . | . | . | . | 1 | 6 | . | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 1 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 1 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 612 | 1483 | 1068 | 313 | 108 | 92 | 13 | 2 | 1 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 3465.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 486 | 837 | 75 | 21 | 3 | 2 | . | . | . | . | 1424 |
| 0.50-0.99 | . | 1241 | 1034 | 67 | 14 | 20 | 1 | . | . | . | 2377 |
| 1.00-1.49 | . | . | 576 | 39 | 9 | 17 | 1 | 1 | . | . | 643 |
| 1.50-1.99 | . | . | 162 | 130 | 10 | 5 | 2 | 3 | 1 | . | 313 |
| 2.00-2.49 | . | . | . | 115 | 20 | . | 3 | 4 | 3 | . | 145 |
| 2.50-2.99 | . | . | . | 26 | 13 | 6 | 2 | 2 | 7 | 1 | 57 |
| 3.00-3.49 | . | . | . | 4 | 6 | 14 | . | 2 | 6 | 2 | 34 |
| 3.50-3.99 | . | . | . | . | 7 | 5 | 2 | . | 1 | 2 | 17 |
| 4.00-4.49 | . | . | . | . | 1 | . | 6 | . | . | 1 | 8 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 486 | 2078 | 1847 | 402 | 83 | 70 | 17 | 16 | 18 | 6 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 4714.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 558 | 932 | 165 | 21 | 6 | . | . | . | . | . | 1682 |
| 0.50-0.99 | . | 2926 | 2405 | 201 | 36 | 18 | . | . | . | . | 5586 |
| 1.00-1.49 | . | . | 1070 | 80 | 52 | 42 | 9 | 2 | . | . | 1255 |
| 1.50-1.99 | . | . | 313 | 99 | 27 | 43 | 7 | 3 | 1 | . | 493 |
| 2.00-2.49 | . | . | 1 | 130 | 5 | 37 | 20 | 12 | 5 | . | 210 |
| 2.50-2.99 | . | . | . | 20 | 1 | 2 | 7 | 25 | 12 | 1 | 68 |
| 3.00-3.49 | . | . | . | 7 | 5 | 1 | 4 | 11 | 6 | 5 | 39 |
| 3.50-3.99 | . | . | . | . | 2 | . | . | 1 | 5 | 4 | 12 |
| 4.00-4.49 | . | . | . | . | 2 | . | . | . | . | 1 | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | 3 | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 558 | 3858 | 3954 | 558 | 136 | 143 | 47 | 54 | 30 | 15 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 8763.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 278 | 484 | 74 | 16 | 1 | . | . | . | . | . | 853 |
| 0.50-0.99 | . | 1017 | 1029 | 58 | 16 | 5 | . | . | . | . | 2125 |
| 1.00-1.49 | . | . | 406 | 78 | 10 | 5 | 1 | . | . | . | 500 |
| 1.50-1.99 | . | . | 79 | 91 | 22 | 11 | 3 | 1 | . | . | 207 |
| 2.00-2.49 | . | . | . | 62 | 9 | 17 | 6 | 1 | . | . | 95 |
| 2.50-2.99 | . | . | . | 4 | 22 | 4 | 8 | 4 | . | . | 42 |
| 3.00-3.49 | . | . | . | . | 2 | 4 | 1 | 2 | 2 | . | 11 |
| 3.50-3.99 | . | . | . | . | . | 5 | 1 | 2 | 3 | 1 | 12 |
| 4.00-4.49 | . | . | . | . | . | 2 | 2 | . | 1 | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 278 | 1501 | 1588 | 309 | 82 | 53 | 22 | 13 | 6 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 3615.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 300 | 551 | 102 | 20 | 4 | . | . | . | . | . | 977 |
| 0.50-0.99 | . | 499 | 778 | 21 | 4 | 7 | 1 | . | . | . | 1310 |
| 1.00-1.49 | . | 1 | 217 | 101 | 3 | 1 | 1 | . | . | . | 324 |
| 1.50-1.99 | . | . | 21 | 80 | 18 | 2 | 1 | . | . | . | 122 |
| 2.00-2.49 | . | . | . | 26 | 11 | 2 | . | 1 | . | . | 40 |
| 2.50-2.99 | . | . | . | . | 24 | 8 | . | . | . | . | 32 |
| 3.00-3.49 | . | . | . | . | 4 | 14 | 1 | 2 | . | . | 21 |
| 3.50-3.99 | . | . | . | . | . | 11 | . | . | . | . | 11 |
| 4.00-4.49 | . | . | . | . | . | 2 | 3 | . | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | 1 | 1 | 2 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 300 | 1051 | 1118 | 248 | 68 | 48 | 8 | 5 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 2673.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 391 | 1019 | 129 | 14 | 5 | 1 | . | . | . | . | 1559 |
| 0.50-0.99 | . | 585 | 1147 | 27 | 4 | 13 | . | . | . | . | 1776 |
| 1.00-1.49 | . | . | 220 | 130 | . | 3 | . | . | . | . | 353 |
| 1.50-1.99 | . | . | 18 | 93 | 17 | . | . | . | . | . | 128 |
| 2.00-2.49 | . | . | . | 23 | 17 | 3 | . | . | . | . | 43 |
| 2.50-2.99 | . | . | . | 1 | 23 | 4 | . | . | . | . | 28 |
| 3.00-3.49 | . | . | . | . | . | 12 | . | . | . | . | 12 |
| 3.50-3.99 | . | . | . | . | . | 3 | 1 | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 391 | 1604 | 1514 | 288 | 66 | 39 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.7 NO. OF CASES= 3658.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 504 | 1070 | 180 | 17 | 2 | 1 | . | . | . | . | 1774 |
| 0.50-0.99 | . | 553 | 1295 | 23 | 8 | 6 | 1 | . | . | . | 1886 |
| 1.00-1.49 | . | . | 325 | 195 | 2 | 2 | . | . | . | . | 524 |
| 1.50-1.99 | . | . | 29 | 143 | 40 | . | . | . | . | . | 212 |
| 2.00-2.49 | . | . | . | 57 | 24 | 4 | . | . | . | . | 85 |
| 2.50-2.99 | . | . | . | 2 | 33 | 3 | . | . | . | . | 38 |
| 3.00-3.49 | . | . | . | . | 2 | 18 | . | . | . | . | 20 |
| 3.50-3.99 | . | . | . | . | . | 6 | 1 | . | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 504 | 1623 | 1829 | 437 | 111 | 40 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 4261.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 556 | 1107 | 243 | 29 | 11 | . | . | . | . | . | 1946 |
| 0.50-0.99 | . | 607 | 1678 | 108 | 1 | 4 | . | . | . | . | 2398 |
| 1.00-1.49 | . | . | 424 | 279 | 9 | 1 | . | . | . | . | 713 |
| 1.50-1.99 | . | . | 44 | 217 | 50 | 2 | . | . | . | . | 313 |
| 2.00-2.49 | . | . | . | 69 | 28 | 11 | . | . | . | . | 108 |
| 2.50-2.99 | . | . | . | 3 | 47 | 4 | . | . | . | . | 54 |
| 3.00-3.49 | . | . | . | . | 3 | 31 | . | . | . | . | 34 |
| 3.50-3.99 | . | . | . | . | . | 10 | . | . | . | . | 10 |
| 4.00-4.49 | . | . | . | . | . | 1 | 3 | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 556 | 1714 | 2389 | 705 | 149 | 64 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 5228.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1082 | 1933 | 693 | 57 | 11 | 2 | . | . | . | . | 3778 |
| 0.50-0.99 | . | 1380 | 3568 | 537 | 24 | 5 | . | 1 | . | . | 5515 |
| 1.00-1.49 | . | . | 1037 | 546 | 122 | 3 | 1 | . | . | . | 1709 |
| 1.50-1.99 | . | . | 109 | 370 | 165 | 20 | 1 | . | . | . | 665 |
| 2.00-2.49 | . | . | 1 | 156 | 77 | 45 | . | . | . | . | 279 |
| 2.50-2.99 | . | . | . | 4 | 122 | 27 | 1 | . | . | . | 154 |
| 3.00-3.49 | . | . | . | . | 9 | 83 | . | 1 | . | . | 93 |
| 3.50-3.99 | . | . | . | . | . | 50 | 4 | . | . | . | 54 |
| 4.00-4.49 | . | . | . | . | . | 9 | 17 | 1 | . | . | 27 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 7 | 1 | . | 15 |
| 5.00-5.49 | . | . | . | . | . | . | . | 8 | 1 | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 2 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1082 | 3313 | 5408 | 1670 | 530 | 244 | 31 | 21 | 4 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 11520.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1575 | 1992 | 172 | 42 | 16 | 3 | . | . | . | . | 3800 |
| 0.50-0.99 | . | 3777 | 3411 | 78 | 19 | 7 | . | . | . | . | 7292 |
| 1.00-1.49 | . | . | 1973 | 208 | 67 | 4 | . | . | . | . | 2252 |
| 1.50-1.99 | . | . | 719 | 397 | 74 | 11 | 1 | . | . | . | 1202 |
| 2.00-2.49 | . | . | 2 | 456 | 48 | 34 | 3 | . | . | . | 543 |
| 2.50-2.99 | . | . | . | 86 | 62 | 26 | 2 | . | . | . | 176 |
| 3.00-3.49 | . | . | . | 11 | 8 | 37 | 2 | 2 | . | . | 60 |
| 3.50-3.99 | . | . | . | . | 2 | 21 | 4 | . | . | . | 27 |
| 4.00-4.49 | . | . | . | . | 1 | 4 | 10 | . | 1 | . | 16 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 2 | 1 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | 1 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | 6 | 1 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1575 | 5769 | 6277 | 1278 | 297 | 147 | 25 | 15 | 4 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 3.7 NO. OF CASES= 14403.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1156 | 1183 | 81 | 41 | 3 | 1 | . | . | . | . | 2465 |
| 0.50-0.99 | . | 2642 | 1635 | 1 | 6 | 10 | . | 1 | . | . | 4295 |
| 1.00-1.49 | . | . | 1473 | 3 | . | . | . | . | . | . | 1476 |
| 1.50-1.99 | . | . | 847 | 578 | 3 | . | . | . | . | . | 1428 |
| 2.00-2.49 | . | . | 11 | 596 | . | 2 | 1 | . | . | . | 610 |
| 2.50-2.99 | . | . | . | 152 | 22 | . | 1 | . | . | . | 175 |
| 3.00-3.49 | . | . | . | . | 45 | . | . | . | . | . | 45 |
| 3.50-3.99 | . | . | . | . | 10 | 1 | . | . | . | . | 11 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1156 | 3825 | 4047 | 1371 | 89 | 15 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.7 NO. OF CASES= 9834.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 517 | 917 | 65 | 16 | 6 | 2 | . | . | . | . | 1523 |
| 0.50-0.99 | . | 1943 | 959 | 4 | 7 | 8 | 1 | . | . | . | 2922 |
| 1.00-1.49 | . | . | 1186 | . | 1 | 1 | . | . | . | . | 1188 |
| 1.50-1.99 | . | . | 850 | 303 | . | . | . | . | . | . | 1153 |
| 2.00-2.49 | . | . | 2 | 295 | 1 | . | . | . | . | . | 298 |
| 2.50-2.99 | . | . | . | 51 | 17 | . | . | . | . | . | 68 |
| 3.00-3.49 | . | . | . | 2 | 17 | . | . | . | . | . | 19 |
| 3.50-3.99 | . | . | . | . | 3 | 4 | . | . | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 517 | 2860 | 3062 | 671 | 52 | 19 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 6722.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 306 | 585 | 48 | 19 | 6 | 3 | . | . | . | . | 967 |
| 0.50-0.99 | . | 1598 | 732 | 8 | 10 | 14 | . | 1 | . | . | 2363 |
| 1.00-1.49 | . | . | 855 | 3 | . | 1 | 1 | . | . | . | 860 |
| 1.50-1.99 | . | . | 665 | 132 | . | . | . | . | . | . | 797 |
| 2.00-2.49 | . | . | . | 116 | . | . | . | . | . | . | 116 |
| 2.50-2.99 | . | . | . | 23 | . | . | . | . | . | . | 23 |
| 3.00-3.49 | . | . | . | 2 | 4 | . | . | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 306 | 2183 | 2300 | 303 | 22 | 18 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 4809.

STATION S02 47.80N 89.63W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

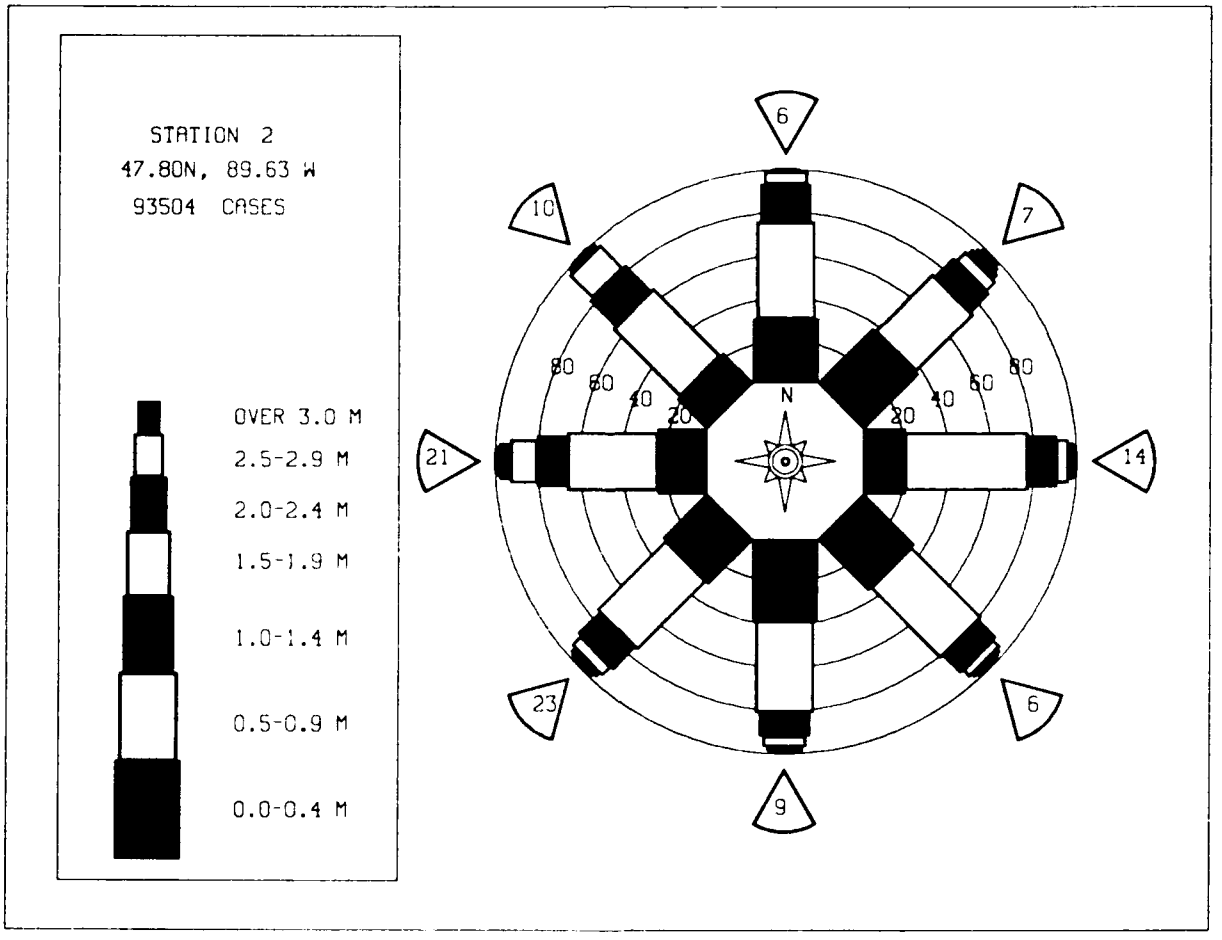
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 217 | 535 | 24 | 18 | 7 | 1 | . | . | . | . | 802 |
| 0.50-0.99 | . | 1325 | 406 | 7 | 6 | 10 | 1 | 1 | . | . | 1756 |
| 1.00-1.49 | . | . | 737 | 1 | 1 | 1 | 1 | . | . | . | 741 |
| 1.50-1.99 | . | . | 358 | 35 | 1 | . | . | . | . | . | 394 |
| 2.00-2.49 | . | . | 5 | 50 | . | . | . | . | . | . | 55 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 217 | 1860 | 1530 | 115 | 15 | 12 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 3515.

STATION S02 47.80N 89.63W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 922 | 1529 | 223 | 39 | 9 | 2 | . | . | . | . | 2724 |
| 0.50-0.99 | . | 2279 | 2145 | 119 | 18 | 16 | 1 | . | . | . | 4578 |
| 1.00-1.49 | . | . | 1179 | 185 | 29 | 8 | 1 | . | . | . | 1402 |
| 1.50-1.99 | . | . | 444 | 301 | 46 | 9 | 1 | . | . | . | 801 |
| 2.00-2.49 | . | . | 3 | 228 | 30 | 16 | 3 | 1 | . | . | 281 |
| 2.50-2.99 | . | . | . | 39 | 47 | 12 | 2 | 3 | 2 | . | 105 |
| 3.00-3.49 | . | . | . | 2 | 12 | 29 | . | 2 | 1 | . | 46 |
| 3.50-3.99 | . | . | . | . | 2 | 14 | 1 | . | . | . | 17 |
| 4.00-4.49 | . | . | . | . | . | 2 | 5 | . | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 922 | 3808 | 3994 | 913 | 193 | 108 | 15 | 9 | 3 | 0 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S02 (47.80N 89.63W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.8 | 1.1 | 1.1 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 1.1 | 1.1 | 1.0 | 0.8 |
| 1957 | 1.0 | 1.0 | 0.8 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.1 | 1.1 | 0.8 |
| 1958 | 0.8 | 1.0 | 0.6 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 | 1.3 | 1.0 | 0.8 |
| 1959 | 0.9 | 1.0 | 0.9 | 0.8 | 0.9 | 0.6 | 0.6 | 0.5 | 0.9 | 0.8 | 1.1 | 1.1 | 0.8 |
| 1960 | 0.9 | 0.8 | 0.7 | 0.8 | 0.7 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 1.1 | 1.0 | 0.8 |
| 1961 | 0.8 | 0.8 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 0.9 | 1.0 | 0.7 |
| 1962 | 1.1 | 0.8 | 0.8 | 0.7 | 0.7 | 0.4 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.0 | 0.7 |
| 1963 | 1.0 | 1.0 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 1.0 | 1.1 | 0.8 |
| 1964 | 1.1 | 0.9 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.6 | 0.7 | 0.7 | 0.9 | 0.9 | 0.8 |
| 1965 | 1.3 | 1.3 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 1.0 | 1.5 | 1.4 | 0.9 |
| 1966 | 1.4 | 1.4 | 1.6 | 1.2 | 1.2 | 0.9 | 0.8 | 0.8 | 1.1 | 1.4 | 1.3 | 1.4 | 1.2 |
| 1967 | 1.4 | 1.3 | 1.4 | 1.2 | 1.1 | 0.9 | 0.8 | 0.8 | 1.0 | 1.5 | 1.3 | 1.8 | 1.2 |
| 1968 | 1.3 | 1.5 | 1.4 | 1.2 | 1.0 | 0.9 | 1.0 | 0.9 | 1.0 | 1.3 | 1.4 | 1.5 | 1.2 |
| 1969 | 1.4 | 0.9 | 1.0 | 0.8 | 0.8 | 0.6 | 0.5 | 0.7 | 0.7 | 0.9 | 1.0 | 0.9 | 0.9 |
| 1970 | 0.9 | 1.0 | 0.9 | 0.9 | 0.8 | 0.6 | 0.6 | 0.6 | 0.8 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1971 | 1.1 | 1.0 | 0.9 | 0.8 | 0.7 | 0.5 | 0.6 | 0.6 | 0.7 | 1.0 | 1.0 | 0.9 | 0.8 |
| 1972 | 1.2 | 1.0 | 0.9 | 0.7 | 0.5 | 0.6 | 0.5 | 0.5 | 0.8 | 0.9 | 0.8 | 1.0 | 0.8 |
| 1973 | 1.0 | 0.8 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.7 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1974 | 0.9 | 0.7 | 0.9 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 1.0 | 0.8 | 0.7 |
| 1975 | 1.1 | 0.9 | 1.1 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | 1.0 | 1.0 | 0.9 | 0.8 |
| 1976 | 1.0 | 1.0 | 1.1 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.6 | 0.7 | 1.0 | 0.9 | 0.8 |
| 1977 | 1.1 | 1.1 | 1.2 | 0.5 | 0.6 | 0.4 | 0.5 | 0.5 | 0.7 | 0.7 | 0.9 | 1.1 | 0.8 |
| 1978 | 0.8 | 0.6 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.8 | 0.8 | 0.9 | 0.9 | 0.7 |
| 1979 | 0.8 | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.6 | 0.9 | 0.9 | 0.6 |
| 1980 | 0.9 | 0.7 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.8 | 0.9 | 0.7 | 1.1 | 0.7 |
| 1981 | 0.8 | 0.9 | 0.9 | 0.7 | 0.5 | 0.6 | 0.4 | 0.4 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 |
| 1982 | 1.2 | 0.9 | 1.1 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.1 | 0.8 |
| 1983 | 0.9 | 0.9 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.7 | 0.7 | 1.3 | 1.2 | 0.8 |
| 1984 | 1.0 | 0.9 | 0.9 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.7 | 1.0 | 1.1 | 1.1 | 0.8 |
| 1985 | 1.1 | 0.9 | 1.1 | 0.7 | 0.6 | 0.7 | 0.4 | 0.5 | 0.7 | 0.9 | 0.9 | 1.1 | 0.8 |
| 1986 | 1.1 | 0.8 | 1.0 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.1 | 1.0 | 0.8 |
| 1987 | 0.7 | 0.8 | 0.9 | 0.5 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.7 | 0.8 | 0.7 | 0.6 |
| MEAN | 1.0 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 1.0 | 1.1 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S02 (47.80N 89.63W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.5 | 3.4 | 5.0 | 3.2 | 2.2 | 1.7 | 1.6 | 1.7 | 2.6 | 3.1 | 3.9 | 3.3 |
| 1957 | 3.1 | 3.0 | 2.7 | 3.1 | 2.7 | 2.4 | 1.9 | 2.1 | 2.6 | 2.5 | 3.6 | 2.9 |
| 1958 | 3.0 | 2.8 | 2.2 | 3.3 | 2.5 | 3.0 | 2.0 | 2.1 | 2.9 | 2.6 | 5.5 | 2.9 |
| 1959 | 2.4 | 4.0 | 2.9 | 2.9 | 3.9 | 1.7 | 2.4 | 2.1 | 3.0 | 3.0 | 3.1 | 4.2 |
| 1960 | 2.7 | 3.2 | 2.6 | 3.0 | 2.9 | 1.8 | 1.5 | 2.8 | 1.9 | 2.8 | 3.0 | 3.7 |
| 1961 | 2.1 | 3.0 | 2.8 | 3.1 | 1.8 | 1.5 | 1.6 | 1.6 | 2.7 | 3.0 | 4.8 | 3.1 |
| 1962 | 3.7 | 3.2 | 3.6 | 2.3 | 1.9 | 1.7 | 1.6 | 1.7 | 2.1 | 5.7 | 4.1 | 3.8 |
| 1963 | 2.6 | 2.8 | 2.9 | 2.4 | 2.5 | 2.1 | 1.8 | 1.6 | 2.4 | 2.4 | 2.7 | 3.4 |
| 1964 | 3.4 | 3.4 | 2.6 | 2.8 | 3.3 | 1.7 | 1.3 | 3.3 | 2.8 | 3.6 | 3.0 | 3.3 |
| 1965 | 3.8 | 3.5 | 3.0 | 2.6 | 2.4 | 2.0 | 1.8 | 1.6 | 3.1 | 3.4 | 5.3 | 4.0 |
| 1966 | 4.5 | 4.2 | 5.5 | 5.7 | 3.0 | 3.0 | 2.8 | 2.4 | 2.9 | 5.7 | 3.5 | 4.9 |
| 1967 | 5.9 | 3.2 | 4.6 | 4.3 | 3.1 | 3.3 | 2.3 | 2.3 | 3.1 | 3.6 | 5.3 | 4.6 |
| 1968 | 3.9 | 4.0 | 4.1 | 3.9 | 3.0 | 2.6 | 4.3 | 3.3 | 2.9 | 4.2 | 4.5 | 4.9 |
| 1969 | 3.7 | 2.3 | 2.8 | 2.6 | 2.3 | 2.8 | 1.5 | 2.9 | 2.8 | 2.8 | 3.1 | 3.8 |
| 1970 | 2.3 | 2.3 | 3.1 | 3.0 | 2.3 | 1.9 | 1.7 | 1.8 | 3.0 | 4.6 | 3.1 | 3.9 |
| 1971 | 2.6 | 3.1 | 4.6 | 2.1 | 2.6 | 1.5 | 1.8 | 1.8 | 2.7 | 5.8 | 5.3 | 2.6 |
| 1972 | 4.4 | 3.1 | 3.2 | 2.3 | 1.4 | 2.0 | 1.8 | 2.2 | 2.9 | 3.1 | 3.2 | 5.0 |
| 1973 | 2.9 | 2.8 | 2.6 | 2.3 | 2.8 | 1.3 | 1.9 | 1.2 | 2.4 | 3.7 | 2.8 | 3.4 |
| 1974 | 4.5 | 1.9 | 2.4 | 2.0 | 2.0 | 1.6 | 2.1 | 2.8 | 1.6 | 2.7 | 3.2 | 3.0 |
| 1975 | 5.7 | 3.5 | 4.6 | 1.8 | 2.3 | 1.8 | 1.9 | 2.4 | 3.1 | 5.6 | 3.5 | 3.2 |
| 1976 | 2.9 | 2.6 | 4.3 | 2.1 | 1.9 | 1.8 | 1.4 | 1.6 | 2.6 | 3.0 | 2.5 | 3.5 |
| 1977 | 2.9 | 3.6 | 4.6 | 1.6 | 2.0 | 1.6 | 1.9 | 1.7 | 5.2 | 2.4 | 6.0 | 3.8 |
| 1978 | 2.1 | 1.7 | 2.8 | 2.0 | 1.7 | 2.2 | 1.2 | 1.7 | 2.5 | 2.9 | 3.7 | 4.6 |
| 1979 | 3.0 | 2.3 | 2.6 | 2.5 | 2.3 | 2.5 | 1.9 | 1.7 | 2.5 | 1.7 | 4.1 | 3.1 |
| 1980 | 3.1 | 1.9 | 2.6 | 1.9 | 1.7 | 1.3 | 1.2 | 2.5 | 4.2 | 3.5 | 2.2 | 3.7 |
| 1981 | 2.1 | 1.9 | 2.9 | 2.9 | 1.5 | 2.8 | 1.1 | 1.1 | 4.8 | 2.5 | 3.1 | 2.6 |
| 1982 | 3.6 | 2.3 | 6.2 | 2.7 | 1.7 | 2.1 | 2.0 | 1.5 | 1.9 | 3.3 | 5.8 | 4.0 |
| 1983 | 4.1 | 3.7 | 3.1 | 2.9 | 1.7 | 1.8 | 1.8 | 1.6 | 2.2 | 2.2 | 4.9 | 3.6 |
| 1984 | 3.7 | 2.4 | 3.9 | 4.2 | 2.2 | 2.9 | 1.7 | 1.8 | 2.4 | 3.8 | 3.6 | 3.2 |
| 1985 | 4.3 | 2.9 | 4.4 | 2.4 | 2.0 | 2.4 | 1.5 | 1.8 | 3.7 | 3.9 | 2.4 | 3.3 |
| 1986 | 4.1 | 2.5 | 3.9 | 2.5 | 2.6 | 1.5 | 1.8 | 1.6 | 2.0 | 3.8 | 5.5 | 2.7 |
| 1987 | 2.1 | 2.8 | 2.8 | 1.6 | 1.8 | 1.1 | 1.5 | 1.4 | 1.5 | 2.3 | 3.3 | 2.6 |

32 YR. STATISTICS FOR WIS STATION S02

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.7 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 247.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.1 |
| LARGEST WAVE HS | (METERS) | 6.2 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 9.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 246.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 82031318 |

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 360 | 787 | 59 | 27 | 4 | 1 | . | . | . | . | 1238 |
| 0.50-0.99 | . | 1362 | 194 | 21 | 9 | 20 | 5 | 3 | . | . | 1614 |
| 1.00-1.49 | . | . | 565 | 13 | 6 | 1 | 1 | 1 | . | . | 587 |
| 1.50-1.99 | . | . | 132 | 3 | 1 | 1 | . | . | . | . | 137 |
| 2.00-2.49 | . | . | 5 | 8 | . | . | . | . | . | 1 | 14 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | 1 | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 360 | 2149 | 955 | 74 | 20 | 23 | 6 | 4 | 1 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 3369.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 421 | 719 | 68 | 21 | 4 | 3 | . | . | . | . | 1236 |
| 0.50-0.99 | . | 1052 | 382 | 55 | 13 | 10 | 3 | . | . | . | 1515 |
| 1.00-1.49 | . | . | 312 | 109 | 21 | 4 | 2 | 2 | 1 | . | 451 |
| 1.50-1.99 | . | . | 116 | 33 | 33 | 12 | . | 3 | . | . | 197 |
| 2.00-2.49 | . | . | 9 | 23 | 3 | 22 | . | . | . | . | 57 |
| 2.50-2.99 | . | . | . | 8 | . | 4 | . | . | . | . | 12 |
| 3.00-3.49 | . | . | . | 1 | 3 | . | . | 1 | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 421 | 1771 | 887 | 250 | 77 | 55 | 5 | 6 | 2 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 3260.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 660 | 947 | 82 | 25 | 5 | . | . | . | . | . | 1719 |
| 0.50-0.99 | . | 916 | 483 | 45 | 9 | 8 | . | . | . | . | 1461 |
| 1.00-1.49 | . | . | 205 | 139 | 17 | 4 | 2 | 2 | . | . | 369 |
| 1.50-1.99 | . | . | 21 | 68 | 45 | 7 | 1 | 1 | 2 | . | 145 |
| 2.00-2.49 | . | . | . | 11 | 22 | 53 | . | . | 1 | . | 87 |
| 2.50-2.99 | . | . | . | . | 3 | 22 | 4 | 1 | 1 | . | 31 |
| 3.00-3.49 | . | . | . | . | 4 | 1 | 6 | . | . | . | 11 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | 1 | 3 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | 1 | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 660 | 1863 | 791 | 288 | 105 | 97 | 14 | 4 | 4 | 2 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 3592.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 474 | 1021 | 73 | 22 | 3 | . | . | . | . | . | 1593 |
| 0.50-0.99 | . | 918 | 946 | 49 | 14 | 12 | 1 | . | . | . | 1940 |
| 1.00-1.49 | . | . | 533 | 79 | 9 | 6 | 2 | 1 | . | . | 630 |
| 1.50-1.99 | . | . | 45 | 155 | 22 | 6 | 1 | 1 | . | . | 230 |
| 2.00-2.49 | . | . | . | 126 | 23 | 10 | . | . | . | . | 159 |
| 2.50-2.99 | . | . | . | 33 | 28 | 18 | 2 | 2 | 1 | 1 | 85 |
| 3.00-3.49 | . | . | . | . | 17 | 7 | 4 | 2 | 4 | 1 | 35 |
| 3.50-3.99 | . | . | . | . | 2 | 3 | 2 | 3 | 3 | 2 | 15 |
| 4.00-4.49 | . | . | . | . | . | 8 | 3 | 1 | . | 1 | 13 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | 2 | . | 1 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 474 | 1939 | 1597 | 464 | 118 | 73 | 15 | 12 | 8 | 5 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 4415.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 534 | 1309 | 111 | 25 | 2 | 1 | . | . | . | . | 1982 |
| 0.50-0.99 | . | 1625 | 3014 | 116 | 23 | 11 | . | . | . | . | 4789 |
| 1.00-1.49 | . | . | 1796 | 59 | 17 | 11 | 8 | 2 | . | . | 1893 |
| 1.50-1.99 | . | . | 182 | 408 | 20 | 34 | 6 | 3 | 1 | . | 654 |
| 2.00-2.49 | . | . | . | 287 | 4 | 14 | 5 | 5 | . | . | 315 |
| 2.50-2.99 | . | . | . | 84 | 21 | 5 | 8 | 12 | 8 | . | 138 |
| 3.00-3.49 | . | . | . | 3 | 26 | . | . | 12 | 9 | 1 | 51 |
| 3.50-3.99 | . | . | . | . | 17 | 2 | 1 | 3 | 7 | 7 | 37 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | 1 | 4 | 2 | 8 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | 1 | 2 |
| 5.00-5.49 | . | . | . | . | . | 1 | . | . | 1 | 1 | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 534 | 2934 | 5103 | 982 | 130 | 81 | 28 | 38 | 30 | 15 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 9254.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 269 | 625 | 54 | 12 | 1 | . | . | . | . | . | 961 |
| 0.50-0.99 | . | 591 | 1330 | 34 | 7 | 6 | . | . | . | . | 1968 |
| 1.00-1.49 | . | . | 622 | 125 | 13 | 2 | . | . | . | . | 762 |
| 1.50-1.99 | . | . | 38 | 183 | 29 | 8 | . | . | . | . | 258 |
| 2.00-2.49 | . | . | . | 77 | 17 | 9 | 3 | 1 | . | . | 107 |
| 2.50-2.99 | . | . | . | 19 | 31 | 6 | 8 | 6 | . | . | 70 |
| 3.00-3.49 | . | . | . | . | 6 | 10 | 4 | 3 | 1 | . | 24 |
| 3.50-3.99 | . | . | . | . | 2 | 10 | 1 | 3 | 1 | . | 17 |
| 4.00-4.49 | . | . | . | . | . | 2 | 3 | 1 | 5 | 1 | 12 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 269 | 1216 | 2044 | 450 | 106 | 53 | 19 | 17 | 8 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.0 NO. OF CASES= 3926.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 298 | 627 | 96 | 18 | 8 | 1 | . | . | . | . | 1048 |
| 0.50-0.99 | . | 494 | 897 | 26 | 5 | 8 | . | . | . | . | 1430 |
| 1.00-1.49 | . | . | 225 | 120 | 3 | 4 | 1 | . | . | . | 353 |
| 1.50-1.99 | . | . | 18 | 84 | 25 | 1 | . | . | . | . | 128 |
| 2.00-2.49 | . | . | . | 34 | 17 | 3 | . | . | . | . | 54 |
| 2.50-2.99 | . | . | . | . | 26 | 6 | 1 | 2 | . | . | 35 |
| 3.00-3.49 | . | . | . | . | 4 | 11 | . | 1 | . | . | 16 |
| 3.50-3.99 | . | . | . | . | . | 10 | 1 | . | . | . | 11 |
| 4.00-4.49 | . | . | . | . | . | 3 | 1 | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 298 | 1121 | 1236 | 282 | 88 | 47 | 6 | 4 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 2893.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERICD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 459 | 1170 | 155 | 22 | 5 | 1 | . | . | . | . | 1812 |
| 0.50-0.99 | . | 607 | 1234 | 23 | 7 | 13 | . | . | . | . | 1884 |
| 1.00-1.49 | . | . | 207 | 151 | 2 | 5 | . | . | . | . | 365 |
| 1.50-1.99 | . | . | 17 | 89 | 22 | . | . | . | . | . | 128 |
| 2.00-2.49 | . | . | . | 21 | 16 | 6 | . | . | . | . | 43 |
| 2.50-2.99 | . | . | . | . | 19 | 6 | . | . | . | . | 25 |
| 3.00-3.49 | . | . | . | . | . | 11 | . | . | . | . | 11 |
| 3.50-3.99 | . | . | . | . | . | 7 | 1 | . | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 459 | 1777 | 1613 | 306 | 71 | 49 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 4008.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 566 | 1233 | 235 | 17 | 2 | . | . | . | . | . | 2053 |
| 0.50-0.99 | . | 585 | 1411 | 54 | 11 | 7 | 1 | . | . | . | 2069 |
| 1.00-1.49 | . | . | 322 | 219 | 8 | 3 | . | . | . | . | 552 |
| 1.50-1.99 | . | . | 32 | 171 | 33 | 1 | . | . | . | . | 237 |
| 2.00-2.49 | . | . | . | 55 | 25 | 6 | . | . | . | . | 86 |
| 2.50-2.99 | . | . | . | 3 | 41 | 2 | . | . | . | . | 46 |
| 3.00-3.49 | . | . | . | . | 1 | 21 | . | . | . | . | 22 |
| 3.50-3.99 | . | . | . | . | . | 3 | 1 | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 566 | 1818 | 2000 | 519 | 121 | 43 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 4749.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 638 | 1287 | 417 | 42 | 9 | 1 | . | . | . | . | 2394 |
| 0.50-0.99 | . | 770 | 1605 | 187 | 9 | 6 | . | . | . | . | 2577 |
| 1.00-1.49 | . | . | 425 | 272 | 37 | 2 | . | . | . | . | 736 |
| 1.50-1.99 | . | . | 48 | 202 | 50 | 4 | . | . | . | . | 304 |
| 2.00-2.49 | . | . | . | 85 | 23 | 9 | . | . | . | . | 117 |
| 2.50-2.99 | . | . | . | 4 | 57 | 7 | . | . | . | . | 68 |
| 3.00-3.49 | . | . | . | . | 4 | 33 | . | . | . | . | 37 |
| 3.50-3.99 | . | . | . | . | . | 11 | 3 | . | . | . | 14 |
| 4.00-4.49 | . | . | . | . | . | 2 | 4 | . | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 638 | 2057 | 2495 | 792 | 189 | 75 | 10 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 5861.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1353 | 2283 | 1078 | 118 | 19 | 3 | . | . | . | . | 4854 |
| 0.50-0.99 | . | 2430 | 2776 | 768 | 74 | 5 | 1 | . | . | . | 6054 |
| 1.00-1.49 | . | . | 886 | 633 | 182 | 26 | 1 | . | . | . | 1728 |
| 1.50-1.99 | . | . | 102 | 303 | 183 | 48 | 4 | . | . | . | 640 |
| 2.00-2.49 | . | . | 2 | 119 | 74 | 43 | 5 | . | . | . | 243 |
| 2.50-2.99 | . | . | . | 4 | 84 | 37 | 4 | 1 | . | . | 130 |
| 3.00-3.49 | . | . | . | . | 10 | 72 | 1 | 2 | . | . | 85 |
| 3.50-3.99 | . | . | . | . | . | 33 | 20 | . | . | . | 53 |
| 4.00-4.49 | . | . | . | . | . | 5 | 20 | 3 | . | . | 28 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 6 | 2 | . | 14 |
| 5.00-5.49 | . | . | . | . | . | . | . | 10 | 4 | . | 14 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 4 | . | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1353 | 4713 | 4844 | 1945 | 626 | 272 | 61 | 25 | 10 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 12969.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 2090 | 3611 | 237 | 68 | 21 | 4 | . | . | . | . | 6031 |
| 0.50-0.99 | . | 4007 | 623 | 233 | 29 | 6 | 2 | . | . | . | 4900 |
| 1.00-1.49 | . | . | 1299 | 73 | 53 | 3 | . | . | . | . | 1428 |
| 1.50-1.99 | . | . | 572 | 65 | 147 | 10 | . | . | . | . | 794 |
| 2.00-2.49 | . | . | 56 | 40 | 12 | 22 | 1 | . | . | . | 131 |
| 2.50-2.99 | . | . | . | 6 | 13 | 8 | 1 | . | . | . | 28 |
| 3.00-3.49 | . | . | . | 1 | 2 | 11 | 1 | . | . | . | 15 |
| 3.50-3.99 | . | . | . | . | . | 3 | 2 | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | 2 | 4 | . | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 2090 | 7618 | 2787 | 486 | 277 | 69 | 11 | 5 | 3 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 12494.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1484 | 1958 | 118 | 83 | 14 | 7 | | | | | 3664 |
| 0.50-0.99 | . | 2187 | 312 | 5 | 16 | 22 | 1 | 1 | . | . | 2544 |
| 1.00-1.49 | . | 1 | 1047 | . | . | 2 | . | . | . | . | 1050 |
| 1.50-1.99 | . | . | 504 | 1 | . | . | . | . | . | . | 505 |
| 2.00-2.49 | . | . | 68 | 52 | . | . | . | . | . | . | 120 |
| 2.50-2.99 | . | . | . | 18 | . | . | . | . | . | . | 18 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1484 | 4146 | 2049 | 160 | 30 | 31 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 7395.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 654 | 1136 | 80 | 32 | 6 | 3 | | | | | 1911 |
| 0.50-0.99 | . | 1849 | 586 | 7 | 11 | 10 | 1 | . | . | . | 2464 |
| 1.00-1.49 | . | . | 856 | 1 | 1 | . | 1 | . | . | . | 859 |
| 1.50-1.99 | . | . | 612 | 96 | . | . | . | . | . | . | 708 |
| 2.00-2.49 | . | . | 9 | 134 | . | . | . | . | . | . | 143 |
| 2.50-2.99 | . | . | . | 31 | . | . | . | . | . | . | 31 |
| 3.00-3.49 | . | . | . | 4 | 1 | . | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 654 | 2985 | 2143 | 305 | 20 | 13 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 5732.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 361 | 651 | 56 | 25 | 4 | 3 | . | . | . | . | 1100 |
| 0.50-0.99 | . | 1842 | 926 | 10 | 18 | 20 | . | 2 | . | . | 2818 |
| 1.00-1.49 | . | . | 906 | 3 | 2 | 1 | 1 | . | . | . | 913 |
| 1.50-1.99 | . | . | 823 | 146 | . | . | . | . | . | . | 969 |
| 2.00-2.49 | . | . | . | 139 | . | . | . | . | . | . | 139 |
| 2.50-2.99 | . | . | . | 26 | . | . | . | . | . | . | 26 |
| 3.00-3.49 | . | . | . | 4 | 3 | . | . | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 361 | 2493 | 2711 | 353 | 28 | 24 | 1 | 2 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.7 NO. OF CASES= 5593.

STATION S03 47.80N 89.45W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

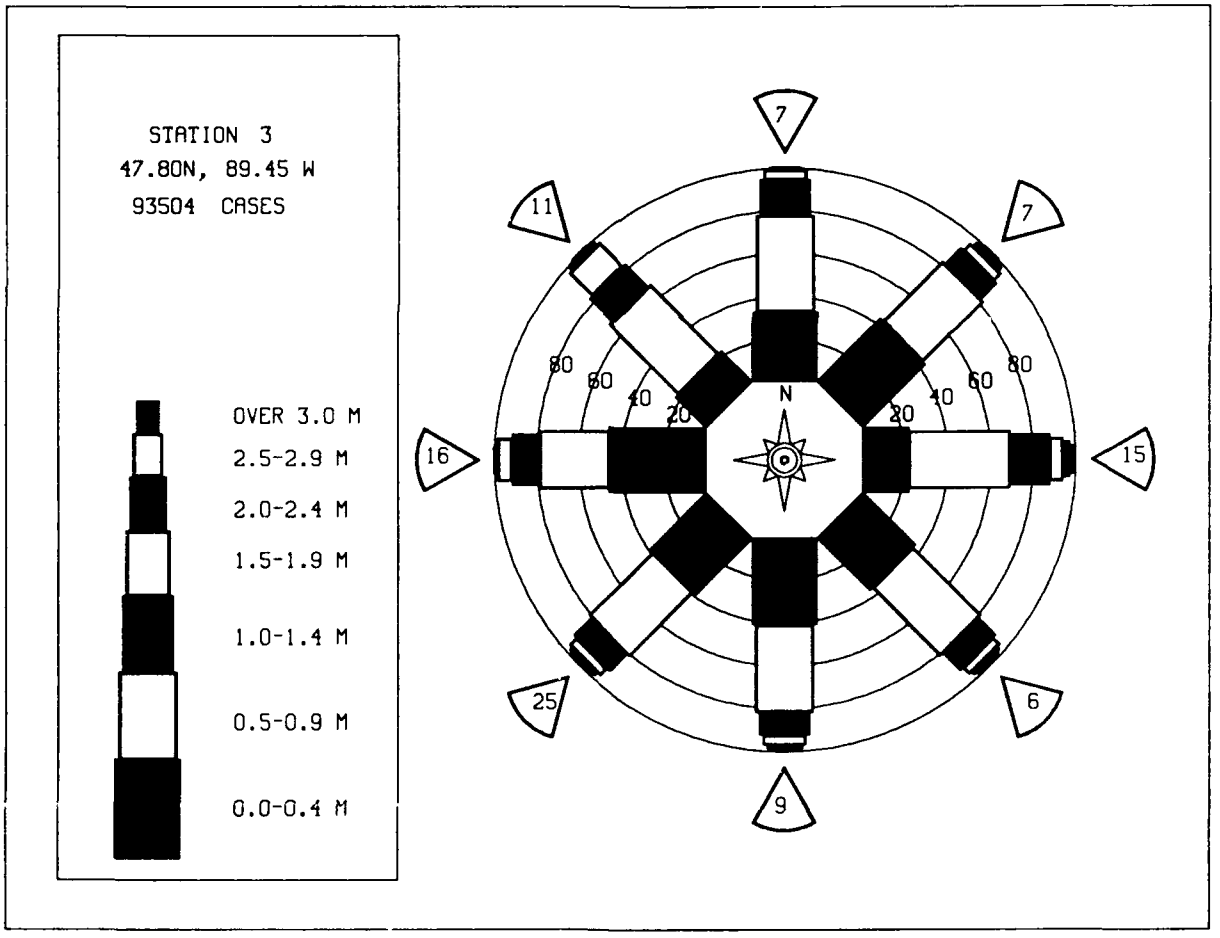
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 264 | 581 | 38 | 23 | 8 | 1 | . | . | . | . | 915 |
| 0.50-0.99 | . | 1563 | 448 | 7 | 13 | 13 | 3 | . | . | . | 2047 |
| 1.00-1.49 | . | . | 793 | 2 | 1 | 2 | 1 | . | . | . | 799 |
| 1.50-1.99 | . | . | 401 | 42 | 1 | . | . | . | . | . | 444 |
| 2.00-2.49 | . | . | 2 | 52 | . | . | . | . | . | . | 54 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 264 | 2144 | 1682 | 130 | 23 | 16 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.5 NO. OF CASES= 3994.

STATION S03 47.80N 89.45W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1089 | 1995 | 296 | 58 | 12 | 3 | . | . | . | . | 3453 |
| 0.50-0.99 | . | 2280 | 1717 | 164 | 27 | 18 | 1 | . | . | . | 4207 |
| 1.00-1.49 | . | . | 1100 | 200 | 37 | 8 | 2 | . | . | . | 1347 |
| 1.50-1.99 | . | . | 367 | 205 | 61 | 13 | 1 | . | . | . | 647 |
| 2.00-2.49 | . | . | 15 | 127 | 24 | 20 | 1 | . | . | . | 187 |
| 2.50-2.99 | . | . | . | 24 | 32 | 12 | 2 | 2 | 1 | . | 73 |
| 3.00-3.49 | . | . | . | 1 | 8 | 18 | 1 | 2 | 1 | . | 31 |
| 3.50-3.99 | . | . | . | . | 2 | 8 | 3 | . | 1 | 1 | 15 |
| 4.00-4.49 | . | . | . | . | . | 2 | 3 | . | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1089 | 4275 | 3495 | 779 | 203 | 102 | 15 | 6 | 3 | 1 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S03 (47.80N 89.45W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.8 | 0.9 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 1.0 | 1.0 | 0.9 | 0.8 |
| 1957 | 0.9 | 0.9 | 0.7 | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 1.0 | 0.9 | 0.7 |
| 1958 | 0.7 | 0.9 | 0.6 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 0.7 | 1.2 | 0.8 | 0.7 |
| 1959 | 0.8 | 0.8 | 0.8 | 0.7 | 0.9 | 0.5 | 0.5 | 0.5 | 0.8 | 0.8 | 0.9 | 1.0 | 0.8 |
| 1960 | 0.8 | 0.7 | 0.7 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1961 | 0.7 | 0.8 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 0.9 | 0.9 | 0.7 |
| 1962 | 1.0 | 0.8 | 0.8 | 0.7 | 0.7 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1963 | 0.9 | 0.9 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 0.9 | 0.9 | 0.7 |
| 1964 | 1.0 | 0.8 | 0.8 | 0.8 | 0.7 | 0.5 | 0.4 | 0.6 | 0.6 | 0.7 | 0.8 | 0.8 | 0.7 |
| 1965 | 1.1 | 1.1 | 0.9 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.7 | 0.9 | 1.3 | 1.3 | 0.8 |
| 1966 | 1.2 | 1.3 | 1.6 | 1.1 | 1.1 | 0.8 | 0.8 | 0.8 | 1.0 | 1.3 | 1.2 | 1.2 | 1.1 |
| 1967 | 1.3 | 1.2 | 1.4 | 1.1 | 1.0 | 0.9 | 0.7 | 0.7 | 0.9 | 1.4 | 1.1 | 1.6 | 1.1 |
| 1968 | 1.2 | 1.4 | 1.3 | 1.2 | 1.0 | 0.8 | 0.9 | 0.8 | 0.9 | 1.2 | 1.3 | 1.3 | 1.1 |
| 1969 | 1.2 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.6 | 0.7 | 0.9 | 0.8 | 0.8 | 0.8 |
| 1970 | 0.8 | 0.9 | 0.8 | 0.9 | 0.8 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 0.9 | 0.8 | 0.8 |
| 1971 | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 0.9 | 0.8 | 0.7 |
| 1972 | 1.0 | 0.9 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.8 | 0.9 | 0.7 | 0.9 | 0.7 |
| 1973 | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 1.0 | 0.8 | 0.7 |
| 1974 | 0.8 | 0.6 | 0.9 | 0.6 | 0.6 | 0.5 | 0.4 | 0.6 | 0.5 | 0.7 | 0.9 | 0.8 | 0.7 |
| 1975 | 1.1 | 0.8 | 1.0 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.9 | 0.9 | 0.8 | 0.7 |
| 1976 | 0.9 | 0.9 | 1.0 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 0.8 | 0.8 | 0.7 |
| 1977 | 0.9 | 1.0 | 1.1 | 0.5 | 0.6 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.8 | 1.0 | 0.7 |
| 1978 | 0.7 | 0.6 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.8 | 0.7 | 0.8 | 0.8 | 0.6 |
| 1979 | 0.7 | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.5 | 0.8 | 0.8 | 0.6 |
| 1980 | 0.8 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.7 | 0.8 | 0.6 | 0.9 | 0.6 |
| 1981 | 0.7 | 0.8 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 0.7 | 0.7 | 0.6 |
| 1982 | 1.0 | 0.8 | 1.0 | 0.7 | 0.7 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 0.9 | 1.0 | 0.7 |
| 1983 | 0.9 | 0.8 | 1.0 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 1.1 | 1.0 | 0.7 |
| 1984 | 0.9 | 0.8 | 0.9 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.7 | 1.0 | 1.0 | 1.0 | 0.8 |
| 1985 | 1.0 | 0.8 | 1.1 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.7 | 0.8 | 0.8 | 0.9 | 0.7 |
| 1986 | 1.0 | 0.7 | 0.9 | 0.8 | 0.5 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 | 1.0 | 0.9 | 0.7 |
| 1987 | 0.7 | 0.7 | 0.9 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.7 | 0.7 | 0.6 | 0.5 |
| MEAN | 0.9 | 0.9 | 0.9 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 0.9 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S03 (47.80N 89.45W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.6 | 3.8 | 5.4 | 2.7 | 2.3 | 1.6 | 1.3 | 1.4 | 2.6 | 2.9 | 3.2 | 3.7 |
| 1957 | 2.9 | 3.0 | 2.5 | 3.3 | 2.3 | 2.3 | 1.5 | 2.1 | 1.9 | 1.7 | 2.6 | 3.0 |
| 1958 | 3.0 | 2.5 | 1.6 | 2.9 | 2.2 | 3.0 | 1.7 | 2.1 | 2.8 | 2.3 | 5.8 | 2.1 |
| 1959 | 2.0 | 4.0 | 2.5 | 2.1 | 3.3 | 1.5 | 2.4 | 1.6 | 2.9 | 2.7 | 2.8 | 4.3 |
| 1960 | 2.4 | 3.2 | 2.6 | 2.4 | 2.0 | 1.6 | 1.5 | 2.7 | 1.8 | 2.6 | 3.5 | 3.7 |
| 1961 | 2.0 | 3.1 | 2.6 | 2.4 | 1.8 | 1.5 | 1.5 | 1.6 | 2.5 | 2.8 | 4.4 | 2.5 |
| 1962 | 2.8 | 3.4 | 3.2 | 1.8 | 2.1 | 1.2 | 1.6 | 1.4 | 2.0 | 5.7 | 3.6 | 3.8 |
| 1963 | 2.5 | 2.9 | 2.5 | 2.4 | 2.2 | 2.4 | 1.5 | 1.6 | 1.8 | 2.5 | 2.6 | 3.4 |
| 1964 | 3.5 | 3.7 | 2.7 | 2.8 | 3.5 | 1.7 | 1.2 | 3.1 | 2.3 | 2.8 | 2.6 | 3.6 |
| 1965 | 3.6 | 3.5 | 3.2 | 2.5 | 2.2 | 1.6 | 1.3 | 1.3 | 2.4 | 3.4 | 6.0 | 4.6 |
| 1966 | 3.8 | 4.5 | 5.3 | 5.5 | 3.0 | 2.8 | 2.7 | 2.2 | 2.8 | 5.3 | 3.4 | 4.5 |
| 1967 | 4.4 | 2.9 | 4.6 | 4.0 | 2.9 | 3.3 | 2.2 | 1.9 | 3.1 | 3.5 | 4.8 | 4.7 |
| 1968 | 3.9 | 3.7 | 3.9 | 2.9 | 3.1 | 2.1 | 4.3 | 2.9 | 2.8 | 4.1 | 3.3 | 4.2 |
| 1969 | 3.8 | 2.3 | 2.0 | 2.0 | 2.2 | 2.6 | 1.5 | 2.6 | 2.7 | 2.6 | 3.0 | 2.9 |
| 1970 | 1.9 | 2.3 | 3.6 | 2.8 | 2.1 | 1.6 | 1.6 | 1.4 | 2.4 | 4.2 | 2.6 | 3.9 |
| 1971 | 2.5 | 3.2 | 2.9 | 1.8 | 2.4 | 1.8 | 1.8 | 1.4 | 2.5 | 5.9 | 5.1 | 2.6 |
| 1972 | 4.5 | 3.9 | 2.9 | 2.3 | 1.3 | 1.5 | 1.3 | 2.0 | 2.9 | 3.0 | 2.3 | 5.1 |
| 1973 | 3.0 | 2.7 | 2.5 | 2.0 | 1.9 | 1.4 | 1.5 | 1.1 | 2.1 | 3.8 | 3.0 | 2.8 |
| 1974 | 3.1 | 1.8 | 2.7 | 2.2 | 2.2 | 1.6 | 1.6 | 2.8 | 1.4 | 2.6 | 3.1 | 3.3 |
| 1975 | 5.4 | 2.9 | 5.0 | 2.0 | 2.2 | 1.3 | 1.7 | 2.3 | 2.9 | 5.8 | 2.7 | 3.0 |
| 1976 | 2.9 | 2.6 | 3.1 | 1.7 | 1.5 | 1.8 | 1.4 | 1.5 | 2.4 | 3.1 | 1.9 | 3.6 |
| 1977 | 2.2 | 3.9 | 4.7 | 1.5 | 1.9 | 1.6 | 1.8 | 1.3 | 5.2 | 2.3 | 5.9 | 4.4 |
| 1978 | 2.0 | 1.6 | 2.8 | 2.2 | 1.4 | 1.9 | 1.1 | 1.5 | 2.8 | 2.8 | 3.7 | 4.8 |
| 1979 | 2.8 | 2.5 | 2.3 | 2.8 | 2.3 | 1.8 | 1.5 | 1.4 | 2.5 | 1.8 | 4.2 | 2.9 |
| 1980 | 2.7 | 1.8 | 2.8 | 1.7 | 1.7 | 1.3 | 1.2 | 2.3 | 4.0 | 3.3 | 2.2 | 3.9 |
| 1981 | 1.6 | 1.9 | 2.4 | 2.3 | 1.6 | 2.8 | 1.2 | 1.2 | 4.6 | 2.4 | 2.9 | 2.5 |
| 1982 | 3.7 | 2.3 | 5.3 | 2.7 | 1.8 | 1.6 | 1.5 | 1.2 | 2.0 | 3.5 | 5.6 | 4.0 |
| 1983 | 4.2 | 4.0 | 3.6 | 2.1 | 1.4 | 1.8 | 1.5 | 1.3 | 2.1 | 2.3 | 4.5 | 3.2 |
| 1984 | 3.9 | 2.7 | 3.9 | 4.0 | 1.7 | 2.7 | 1.4 | 1.5 | 2.4 | 4.1 | 3.4 | 2.8 |
| 1985 | 3.3 | 3.0 | 4.9 | 2.4 | 2.0 | 1.9 | 1.3 | 2.1 | 3.3 | 3.7 | 2.3 | 2.5 |
| 1986 | 4.2 | 2.5 | 3.8 | 2.5 | 2.4 | 1.5 | 1.4 | 1.3 | 2.3 | 4.0 | 5.7 | 2.6 |
| 1987 | 1.8 | 3.2 | 3.2 | 1.4 | 1.8 | 0.8 | 1.5 | 1.1 | 1.5 | 1.9 | 3.5 | 2.6 |

32 YR. STATISTICS FOR WIS STATION S03

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 225.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.1 |
| LARGEST WAVE HS | (METERS) | 6.0 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 96.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 65112700 |

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 306 | 705 | 157 | 36 | 11 | 6 | . | . | . | . | 1221 |
| 0.50-0.99 | . | 1001 | 351 | 103 | 58 | 22 | 8 | 1 | . | . | 1544 |
| 1.00-1.49 | . | . | 381 | 48 | 38 | 34 | 10 | 5 | . | . | 516 |
| 1.50-1.99 | . | . | 103 | 1 | 14 | 18 | 12 | 13 | . | . | 161 |
| 2.00-2.49 | . | . | 4 | 1 | 2 | 4 | 1 | 9 | 1 | . | 22 |
| 2.50-2.99 | . | . | . | 1 | . | 3 | 1 | 1 | 1 | 2 | 9 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 306 | 1706 | 996 | 190 | 123 | 87 | 32 | 29 | 3 | 4 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 3265.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 312 | 560 | 124 | 36 | 6 | 1 | . | . | . | . | 1039 |
| 0.50-0.99 | . | 578 | 485 | 98 | 24 | 20 | . | . | . | . | 1205 |
| 1.00-1.49 | . | . | 321 | 68 | 26 | 24 | 11 | 2 | . | . | 452 |
| 1.50-1.99 | . | . | 64 | 68 | 33 | 18 | 4 | 2 | . | . | 189 |
| 2.00-2.49 | . | . | 1 | 57 | 13 | 13 | 1 | 4 | 1 | . | 90 |
| 2.50-2.99 | . | . | . | 14 | 4 | 8 | 5 | 5 | 2 | . | 38 |
| 3.00-3.49 | . | . | . | . | 6 | 1 | 7 | 4 | 2 | . | 20 |
| 3.50-3.99 | . | . | . | . | 2 | 1 | 1 | 4 | . | 1 | 9 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | 1 | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 312 | 1138 | 995 | 341 | 114 | 88 | 29 | 22 | 7 | 2 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 2866.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 502 | 759 | 189 | 43 | 4 | 1 | . | . | . | . | 1498 |
| 0.50-0.99 | . | 466 | 685 | 100 | 18 | 1 | . | . | . | . | 1270 |
| 1.00-1.49 | . | . | 359 | 88 | 24 | 10 | . | . | . | . | 481 |
| 1.50-1.99 | . | . | 40 | 95 | 35 | 19 | 4 | . | . | . | 193 |
| 2.00-2.49 | . | . | . | 34 | 20 | 19 | 12 | 2 | . | . | 87 |
| 2.50-2.99 | . | . | . | 3 | 2 | 38 | 5 | 3 | 1 | . | 52 |
| 3.00-3.49 | . | . | . | . | . | 12 | 5 | 2 | 1 | . | 20 |
| 3.50-3.99 | . | . | . | . | . | 2 | 10 | 7 | 7 | . | 26 |
| 4.00-4.49 | . | . | . | . | . | . | . | 1 | 3 | 1 | 5 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 502 | 1225 | 1273 | 363 | 103 | 102 | 36 | 15 | 15 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 3413.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 390 | 829 | 134 | 26 | 3 | . | . | . | . | . | 1382 |
| 0.50-0.99 | . | 501 | 1162 | 112 | 19 | 1 | . | . | . | . | 1795 |
| 1.00-1.49 | . | . | 306 | 202 | 32 | 8 | 1 | . | . | . | 549 |
| 1.50-1.99 | . | . | 29 | 120 | 43 | 18 | . | . | . | . | 210 |
| 2.00-2.49 | . | . | . | 55 | 37 | 19 | 6 | . | . | . | 117 |
| 2.50-2.99 | . | . | . | 2 | 41 | 19 | 4 | 4 | . | . | 70 |
| 3.00-3.49 | . | . | . | . | 1 | 20 | 4 | 3 | 4 | . | 32 |
| 3.50-3.99 | . | . | . | . | . | 13 | 10 | 6 | 4 | . | 33 |
| 4.00-4.49 | . | . | . | . | . | 1 | 11 | 4 | 6 | . | 22 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 4 | 4 | 1 | 13 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 1 | 1 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | 1 | . | 4 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 7.00+ | | | | | | | | | | 3 | 3 |
| TOTAL | 390 | 1330 | 1631 | 517 | 176 | 99 | 43 | 22 | 28 | 5 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 9.3 MEAN TP(SEC)= 4.1 NO. OF CASES= 3984.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 499 | 1251 | 118 | 14 | 3 | . | . | . | . | . | 1885 |
| 0.50-0.99 | . | 1070 | 3161 | 160 | 12 | 7 | . | . | . | . | 4410 |
| 1.00-1.49 | . | . | 890 | 928 | 64 | 7 | 2 | . | . | . | 1891 |
| 1.50-1.99 | . | . | 37 | 429 | 202 | 38 | 2 | . | . | . | 708 |
| 2.00-2.49 | . | . | . | 126 | 98 | 96 | 7 | 1 | . | . | 328 |
| 2.50-2.99 | . | . | . | 2 | 134 | 50 | 24 | 8 | . | . | 218 |
| 3.00-3.49 | . | . | . | . | 4 | 90 | 19 | 13 | 1 | . | 127 |
| 3.50-3.99 | . | . | . | . | . | 56 | 29 | 12 | 8 | . | 105 |
| 4.00-4.49 | . | . | . | . | . | 6 | 41 | 25 | 13 | . | 85 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 35 | 12 | 1 | 53 |
| 5.00-5.49 | . | . | . | . | . | . | . | 21 | 17 | 4 | 42 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | 14 | 1 | 20 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 13 | 11 | 24 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 4 | 10 | 14 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 19 | 20 |
| TOTAL | 499 | 2321 | 4206 | 1659 | 517 | 350 | 129 | 120 | 83 | 46 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 9.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 9311.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 300 | 745 | 84 | 14 | 2 | . | . | . | . | . | 1145 |
| 0.50-0.99 | . | 557 | 1540 | 78 | 9 | 4 | . | . | . | . | 2188 |
| 1.00-1.49 | . | . | 339 | 389 | 22 | 2 | 1 | . | . | . | 753 |
| 1.50-1.99 | . | . | 16 | 171 | 70 | 11 | 1 | . | . | . | 269 |
| 2.00-2.49 | . | . | . | 44 | 35 | 23 | 5 | 1 | . | . | 108 |
| 2.50-2.99 | . | . | . | . | 55 | 16 | 8 | 3 | . | . | 82 |
| 3.00-3.49 | . | . | . | . | 1 | 23 | 2 | 2 | . | . | 28 |
| 3.50-3.99 | . | . | . | . | . | 20 | 5 | 6 | . | . | 31 |
| 4.00-4.49 | . | . | . | . | . | . | 7 | 4 | . | . | 11 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 4 | 1 | 1 | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 300 | 1302 | 1979 | 696 | 194 | 99 | 30 | 21 | 8 | 2 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 4343.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 407 | 770 | 134 | 13 | 3 | 2 | . | . | . | . | 1329 |
| 0.50-0.99 | . | 377 | 910 | 29 | 7 | 5 | . | . | . | . | 1328 |
| 1.00-1.49 | . | . | 180 | 140 | 9 | 4 | . | . | . | . | 333 |
| 1.50-1.99 | . | . | 10 | 77 | 33 | 1 | 1 | . | . | . | 122 |
| 2.00-2.49 | . | . | . | 12 | 22 | 4 | 1 | 2 | . | . | 41 |
| 2.50-2.99 | . | . | . | . | 25 | 4 | . | 1 | . | . | 30 |
| 3.00-3.49 | . | . | . | . | 2 | 10 | . | 2 | 1 | . | 15 |
| 3.50-3.99 | . | . | . | . | . | 6 | . | 1 | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | 1 | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 407 | 1147 | 1234 | 271 | 101 | 37 | 3 | 8 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 3012.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 422 | 1080 | 157 | 20 | 4 | . | . | . | . | . | 1683 |
| 0.50-0.99 | . | 503 | 973 | 32 | 6 | 3 | . | . | . | . | 1517 |
| 1.00-1.49 | . | . | 198 | 128 | 7 | 6 | 1 | . | . | . | 340 |
| 1.50-1.99 | . | . | 12 | 78 | 14 | 1 | 4 | . | . | . | 109 |
| 2.00-2.49 | . | . | . | 9 | 17 | 1 | . | 2 | . | . | 29 |
| 2.50-2.99 | . | . | . | . | 18 | 5 | . | . | . | . | 23 |
| 3.00-3.49 | . | . | . | . | 1 | 8 | . | . | . | . | 9 |
| 3.50-3.99 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 422 | 1583 | 1340 | 267 | 67 | 27 | 5 | 2 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 3481.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 514 | 1144 | 220 | 34 | 3 | 1 | . | . | . | . | 1916 |
| 0.50-0.99 | . | 449 | 1228 | 47 | 8 | 2 | . | . | . | . | 1734 |
| 1.00-1.49 | . | . | 231 | 173 | 11 | 5 | 2 | . | . | . | 422 |
| 1.50-1.99 | . | . | 23 | 134 | 26 | 3 | . | . | . | . | 186 |
| 2.00-2.49 | . | . | . | 40 | 24 | 6 | . | . | . | . | 70 |
| 2.50-2.99 | . | . | . | 1 | 40 | 4 | . | . | . | . | 45 |
| 3.00-3.49 | . | . | . | . | . | 7 | . | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 514 | 1593 | 1702 | 429 | 112 | 29 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 4107.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 557 | 1298 | 329 | 42 | 4 | . | . | . | . | . | 2230 |
| 0.50-0.99 | . | 506 | 1526 | 84 | 8 | 4 | . | . | . | . | 2128 |
| 1.00-1.49 | . | . | 330 | 262 | 20 | 4 | . | . | . | . | 616 |
| 1.50-1.99 | . | . | 27 | 168 | 36 | 1 | 1 | . | . | . | 233 |
| 2.00-2.49 | . | . | . | 52 | 20 | 6 | . | . | . | . | 78 |
| 2.50-2.99 | . | . | . | . | 33 | 5 | . | . | . | . | 38 |
| 3.00-3.49 | . | . | . | . | 2 | 21 | . | . | . | . | 23 |
| 3.50-3.99 | . | . | . | . | . | 5 | . | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 557 | 1804 | 2212 | 608 | 123 | 47 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 5015.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 960 | 2074 | 757 | 84 | 17 | 1 | . | . | . | . | 3893 |
| 0.50-0.99 | . | 851 | 2734 | 401 | 21 | 10 | . | . | . | . | 4018 |
| 1.00-1.49 | . | 3 | 662 | 498 | 63 | 1 | 1 | . | . | . | 1228 |
| 1.50-1.99 | . | . | 62 | 290 | 113 | 5 | . | 1 | . | . | 471 |
| 2.00-2.49 | . | . | 1 | 106 | 60 | 28 | . | 1 | . | . | 196 |
| 2.50-2.99 | . | . | . | 1 | 102 | 27 | 1 | . | . | . | 131 |
| 3.00-3.49 | . | . | . | . | 3 | 78 | 1 | . | . | . | 82 |
| 3.50-3.99 | . | . | . | . | . | 36 | 5 | . | . | . | 41 |
| 4.00-4.49 | . | . | . | . | . | 7 | 10 | . | . | . | 17 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 3 | . | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 960 | 2928 | 4216 | 1380 | 379 | 193 | 24 | 10 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 9449.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1419 | 2525 | 377 | 110 | 20 | 3 | . | . | . | . | 4454 |
| 0.50-0.99 | . | 1551 | 3020 | 89 | 25 | 6 | 1 | . | . | . | 4692 |
| 1.00-1.49 | . | . | 2051 | 97 | 14 | 4 | . | 1 | . | . | 2167 |
| 1.50-1.99 | . | . | 219 | 568 | 37 | 3 | . | . | . | . | 827 |
| 2.00-2.49 | . | . | . | 401 | 34 | 8 | . | . | . | . | 443 |
| 2.50-2.99 | . | . | . | 45 | 90 | 17 | 1 | . | . | . | 153 |
| 3.00-3.49 | . | . | . | . | 23 | 36 | 2 | 1 | . | . | 62 |
| 3.50-3.99 | . | . | . | . | . | 24 | 6 | . | . | . | 30 |
| 4.00-4.49 | . | . | . | . | . | 5 | 2 | . | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 1 | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 6 | 1 | . | 7 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1419 | 4076 | 5667 | 1310 | 243 | 106 | 16 | 11 | 1 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 12028.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1435 | 2156 | 383 | 129 | 32 | 8 | 1 | . | . | . | 4145 |
| 0.50-0.99 | . | 1598 | 2414 | 100 | 28 | 20 | 1 | . | . | . | 4161 |
| 1.00-1.49 | . | . | 2207 | 16 | 5 | 3 | 2 | . | . | . | 2233 |
| 1.50-1.99 | . | . | 310 | 952 | . | 3 | 1 | . | . | . | 1266 |
| 2.00-2.49 | . | . | 3 | 810 | 2 | . | . | 1 | . | . | 816 |
| 2.50-2.99 | . | . | . | 58 | 155 | . | . | . | . | . | 213 |
| 3.00-3.49 | . | . | . | . | 56 | 3 | 1 | . | . | . | 60 |
| 3.50-3.99 | . | . | . | . | 2 | 10 | . | . | . | . | 12 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1435 | 3754 | 5317 | 2065 | 280 | 50 | 6 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 12081.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 637 | 1305 | 206 | 57 | 10 | 2 | . | . | . | . | 2217 |
| 0.50-0.99 | . | 1921 | 1338 | 70 | 36 | 21 | . | . | . | . | 3386 |
| 1.00-1.49 | . | . | 1465 | 12 | 9 | 4 | 3 | 1 | . | . | 1494 |
| 1.50-1.99 | . | . | 799 | 385 | 2 | 1 | . | . | . | . | 1187 |
| 2.00-2.49 | . | . | 10 | 370 | 1 | . | . | . | . | . | 381 |
| 2.50-2.99 | . | . | . | 41 | 47 | . | . | . | 1 | . | 89 |
| 3.00-3.49 | . | . | . | . | 24 | . | . | . | . | . | 24 |
| 3.50-3.99 | . | . | . | . | 4 | 7 | . | . | . | . | 11 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 637 | 3226 | 3818 | 935 | 133 | 39 | 3 | 1 | 1 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 8234.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 330 | 714 | 170 | 33 | 9 | 6 | . | . | . | . | 1262 |
| 0.50-0.99 | . | 1735 | 840 | 67 | 33 | 24 | 3 | . | . | . | 2702 |
| 1.00-1.49 | . | . | 791 | 9 | 14 | 6 | 4 | . | . | . | 824 |
| 1.50-1.99 | . | . | 539 | 87 | 4 | 5 | 2 | . | . | . | 637 |
| 2.00-2.49 | . | . | 1 | 71 | . | . | . | . | . | . | 72 |
| 2.50-2.99 | . | . | . | 9 | . | . | . | 1 | . | . | 10 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 330 | 2449 | 2341 | 276 | 61 | 41 | 9 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 5160.

STATION S04 47.67N 90.07W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

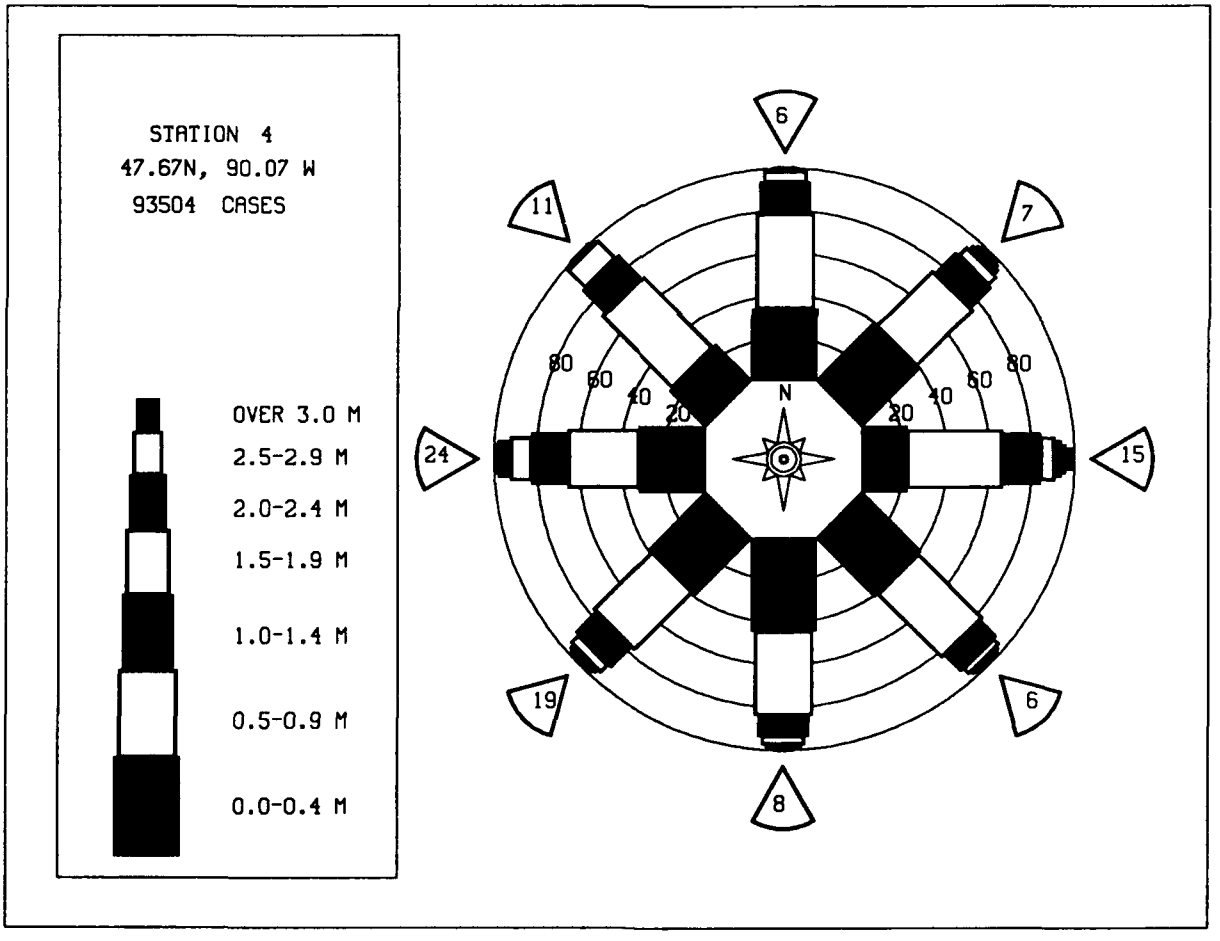
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 235 | 559 | 127 | 36 | 11 | 5 | . | . | . | . | 973 |
| 0.50-0.99 | . | 1356 | 485 | 77 | 34 | 22 | 5 | . | . | . | 1979 |
| 1.00-1.49 | . | . | 602 | 12 | 18 | 13 | 3 | 2 | . | . | 650 |
| 1.50-1.99 | . | . | 329 | 32 | . | 6 | 3 | 1 | . | . | 371 |
| 2.00-2.49 | . | . | 4 | 25 | . | . | . | 1 | . | . | 30 |
| 2.50-2.99 | . | . | . | 3 | . | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 235 | 1915 | 1547 | 185 | 63 | 46 | 11 | 4 | 0 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 3755.

STATION S04 47.67N 90.07W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 923 | 1848 | 367 | 73 | 14 | 3 | . | . | . | . | 3228 |
| 0.50-0.99 | . | 1502 | 2285 | 165 | 35 | 17 | 2 | . | . | . | 4006 |
| 1.00-1.49 | . | . | 1132 | 307 | 38 | 14 | 4 | 1 | . | . | 1496 |
| 1.50-1.99 | . | . | 262 | 366 | 66 | 15 | 3 | 1 | . | . | 713 |
| 2.00-2.49 | . | . | 2 | 222 | 39 | 23 | 3 | 2 | . | . | 291 |
| 2.50-2.99 | . | . | . | 18 | 75 | 19 | 5 | 2 | . | . | 119 |
| 3.00-3.49 | . | . | . | . | 12 | 31 | 4 | 2 | 1 | . | 50 |
| 3.50-3.99 | . | . | . | . | . | 18 | 6 | 3 | 2 | . | 29 |
| 4.00-4.49 | . | . | . | . | . | 2 | 7 | 3 | 2 | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 4 | 1 | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | 2 | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 923 | 3350 | 4048 | 1151 | 279 | 142 | 36 | 22 | 12 | 4 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 9.9 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S04 (47.67N 90.07W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.8 | 1.1 | 1.1 | 0.9 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 1.1 | 1.1 | 1.0 | 0.8 |
| 1957 | 1.0 | 1.0 | 0.8 | 0.8 | 0.9 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.1 | 1.0 | 0.8 |
| 1958 | 0.7 | 1.0 | 0.5 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 0.8 | 1.3 | 0.9 | 0.8 |
| 1959 | 0.9 | 0.9 | 0.8 | 0.8 | 0.9 | 0.5 | 0.5 | 0.5 | 0.8 | 0.8 | 1.1 | 1.3 | 0.8 |
| 1960 | 0.9 | 0.8 | 0.7 | 0.9 | 0.7 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 1.1 | 1.0 | 0.7 |
| 1961 | 0.8 | 0.9 | 1.0 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 0.9 | 0.9 | 0.7 |
| 1962 | 1.1 | 0.8 | 0.9 | 0.7 | 0.7 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1963 | 1.0 | 1.0 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 1.1 | 0.7 |
| 1964 | 1.1 | 0.9 | 0.9 | 0.9 | 0.7 | 0.5 | 0.4 | 0.6 | 0.7 | 0.7 | 1.0 | 0.8 | 0.8 |
| 1965 | 1.3 | 1.3 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.7 | 0.9 | 1.5 | 1.5 | 0.9 |
| 1966 | 1.4 | 1.4 | 2.0 | 1.2 | 1.1 | 0.8 | 0.7 | 0.8 | 1.0 | 1.4 | 1.3 | 1.3 | 1.2 |
| 1967 | 1.4 | 1.2 | 1.6 | 1.1 | 1.1 | 0.9 | 0.7 | 0.7 | 0.9 | 1.4 | 1.2 | 1.9 | 1.2 |
| 1968 | 1.3 | 1.5 | 1.4 | 1.3 | 1.0 | 0.8 | 0.9 | 0.8 | 0.9 | 1.2 | 1.4 | 1.4 | 1.2 |
| 1969 | 1.4 | 0.8 | 0.9 | 0.8 | 0.7 | 0.7 | 0.5 | 0.7 | 0.7 | 1.0 | 0.9 | 0.9 | 0.8 |
| 1970 | 0.9 | 1.0 | 1.0 | 1.0 | 0.9 | 0.6 | 0.6 | 0.5 | 0.8 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1971 | 1.1 | 1.1 | 1.0 | 0.8 | 0.8 | 0.5 | 0.5 | 0.5 | 0.6 | 1.0 | 1.0 | 0.9 | 0.8 |
| 1972 | 1.2 | 1.0 | 1.0 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.8 | 0.9 | 0.8 | 1.0 | 0.8 |
| 1973 | 1.0 | 0.9 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1974 | 0.9 | 0.7 | 1.0 | 0.7 | 0.7 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | 1.0 | 0.9 | 0.7 |
| 1975 | 1.2 | 0.9 | 1.1 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.9 | 1.0 | 0.8 | 0.8 |
| 1976 | 1.0 | 1.0 | 1.2 | 0.7 | 0.6 | 0.6 | 0.4 | 0.4 | 0.6 | 0.6 | 0.9 | 0.9 | 0.7 |
| 1977 | 1.0 | 1.2 | 1.4 | 0.5 | 0.6 | 0.4 | 0.4 | 0.5 | 0.7 | 0.7 | 0.9 | 1.3 | 0.8 |
| 1978 | 0.8 | 0.6 | 0.7 | 0.8 | 0.5 | 0.5 | 0.4 | 0.5 | 0.9 | 0.7 | 0.9 | 1.0 | 0.7 |
| 1979 | 0.8 | 0.7 | 0.9 | 0.7 | 0.6 | 0.5 | 0.3 | 0.5 | 0.6 | 0.6 | 0.9 | 0.9 | 0.7 |
| 1980 | 0.9 | 0.7 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.8 | 0.9 | 0.7 | 1.1 | 0.7 |
| 1981 | 0.8 | 0.9 | 0.9 | 0.8 | 0.5 | 0.6 | 0.4 | 0.4 | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 |
| 1982 | 1.2 | 0.9 | 1.2 | 0.8 | 0.7 | 0.4 | 0.4 | 0.4 | 0.7 | 0.8 | 0.9 | 1.1 | 0.8 |
| 1983 | 0.9 | 0.9 | 1.3 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.7 | 1.3 | 1.2 | 0.8 |
| 1984 | 0.9 | 0.9 | 0.9 | 0.9 | 0.6 | 0.5 | 0.5 | 0.4 | 0.7 | 1.1 | 1.1 | 1.1 | 0.8 |
| 1985 | 1.1 | 0.9 | 1.3 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.7 | 0.8 | 0.8 | 1.1 | 0.8 |
| 1986 | 1.0 | 0.8 | 1.0 | 0.9 | 0.6 | 0.5 | 0.4 | 0.5 | 0.8 | 0.7 | 1.1 | 1.0 | 0.8 |
| 1987 | 0.7 | 0.9 | 1.1 | 0.5 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.7 | 0.8 | 0.7 | 0.6 |
| MEAN | 1.0 | 0.9 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 1.0 | 1.0 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S04 (47.67N 90.07W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 4.3 | 5.6 | 7.6 | 3.9 | 3.0 | 1.8 | 1.6 | 1.7 | 2.3 | 3.2 | 3.8 | 4.6 |
| 1957 | 3.0 | 3.2 | 2.7 | 4.3 | 2.9 | 2.2 | 1.9 | 1.6 | 2.1 | 1.9 | 2.8 | 3.0 |
| 1958 | 2.8 | 2.9 | 2.0 | 5.4 | 2.6 | 2.5 | 2.1 | 1.9 | 2.4 | 3.1 | 5.6 | 3.2 |
| 1959 | 2.5 | 4.4 | 2.9 | 3.0 | 3.6 | 1.8 | 2.1 | 2.2 | 2.7 | 2.5 | 3.4 | 6.8 |
| 1960 | 2.9 | 3.2 | 3.1 | 3.0 | 2.7 | 2.1 | 1.5 | 2.3 | 2.0 | 2.6 | 6.1 | 3.7 |
| 1961 | 2.2 | 3.0 | 3.3 | 3.3 | 2.0 | 1.4 | 1.6 | 1.5 | 2.4 | 2.5 | 4.5 | 3.2 |
| 1962 | 3.5 | 4.1 | 4.3 | 2.5 | 2.2 | 1.4 | 1.7 | 1.7 | 2.4 | 5.2 | 3.9 | 3.5 |
| 1963 | 2.5 | 3.3 | 3.5 | 2.2 | 2.7 | 3.1 | 1.9 | 1.4 | 2.0 | 2.4 | 2.8 | 5.5 |
| 1964 | 5.0 | 3.9 | 2.6 | 3.0 | 3.2 | 1.8 | 1.3 | 2.8 | 2.8 | 3.1 | 4.1 | 3.1 |
| 1965 | 3.7 | 5.4 | 5.0 | 3.3 | 2.5 | 2.0 | 1.4 | 1.6 | 3.0 | 3.4 | 9.4 | 7.4 |
| 1966 | 4.8 | 3.9 | 9.9 | 6.3 | 3.2 | 3.0 | 2.6 | 3.3 | 2.3 | 4.0 | 5.5 | 5.0 |
| 1967 | 6.6 | 3.8 | 5.4 | 3.9 | 4.3 | 3.5 | 2.5 | 1.9 | 2.7 | 5.7 | 4.2 | 4.9 |
| 1968 | 3.6 | 3.7 | 3.8 | 4.4 | 3.2 | 2.4 | 3.9 | 2.9 | 2.8 | 3.8 | 5.5 | 6.0 |
| 1969 | 6.3 | 3.6 | 2.8 | 2.9 | 2.8 | 3.5 | 1.2 | 2.6 | 2.3 | 3.4 | 2.9 | 4.2 |
| 1970 | 2.4 | 2.4 | 6.0 | 4.4 | 2.6 | 1.7 | 1.6 | 2.0 | 2.9 | 3.8 | 3.0 | 3.8 |
| 1971 | 2.5 | 4.3 | 3.9 | 2.6 | 4.0 | 1.7 | 1.8 | 2.0 | 2.3 | 5.4 | 4.7 | 3.6 |
| 1972 | 4.0 | 4.9 | 3.7 | 2.9 | 1.6 | 1.6 | 1.8 | 1.7 | 2.6 | 3.0 | 2.9 | 5.7 |
| 1973 | 3.5 | 2.6 | 3.8 | 2.2 | 2.5 | 1.8 | 1.9 | 0.9 | 2.4 | 3.4 | 3.2 | 3.0 |
| 1974 | 4.2 | 2.1 | 4.3 | 3.4 | 2.8 | 1.6 | 2.2 | 2.4 | 1.6 | 2.5 | 3.6 | 5.0 |
| 1975 | 5.7 | 3.1 | 6.2 | 2.5 | 1.7 | 1.7 | 2.1 | 3.1 | 2.8 | 5.4 | 4.2 | 3.0 |
| 1976 | 4.0 | 2.9 | 4.5 | 2.1 | 2.1 | 1.9 | 1.2 | 1.6 | 2.6 | 3.2 | 2.5 | 3.3 |
| 1977 | 3.0 | 6.8 | 5.8 | 1.9 | 1.9 | 1.5 | 2.0 | 1.7 | 5.1 | 3.1 | 5.5 | 7.6 |
| 1978 | 2.4 | 1.9 | 3.2 | 2.8 | 1.7 | 2.0 | 1.2 | 1.5 | 3.7 | 3.1 | 3.5 | 4.6 |
| 1979 | 2.5 | 3.4 | 3.0 | 4.5 | 2.1 | 2.1 | 1.7 | 1.7 | 2.3 | 2.4 | 3.9 | 3.0 |
| 1980 | 3.3 | 2.7 | 3.7 | 1.7 | 1.7 | 1.6 | 1.1 | 2.4 | 3.9 | 3.1 | 2.3 | 3.7 |
| 1981 | 2.2 | 2.6 | 3.1 | 3.3 | 1.6 | 2.7 | 1.2 | 1.3 | 4.0 | 3.3 | 2.9 | 2.3 |
| 1982 | 5.6 | 2.8 | 4.0 | 4.2 | 2.5 | 2.3 | 2.1 | 1.6 | 2.6 | 3.1 | 5.5 | 3.8 |
| 1983 | 3.8 | 3.8 | 6.1 | 2.9 | 1.7 | 1.9 | 1.7 | 1.7 | 2.3 | 2.2 | 5.2 | 4.7 |
| 1984 | 3.6 | 4.0 | 3.9 | 3.8 | 2.3 | 2.4 | 1.9 | 1.7 | 2.3 | 4.8 | 3.3 | 3.4 |
| 1985 | 3.4 | 3.3 | 9.0 | 3.2 | 2.0 | 2.6 | 1.5 | 2.4 | 3.0 | 3.6 | 2.5 | 3.2 |
| 1986 | 4.4 | 4.0 | 3.0 | 3.2 | 2.2 | 1.5 | 1.8 | 1.6 | 3.5 | 3.7 | 5.5 | 2.9 |
| 1987 | 2.0 | 5.3 | 5.6 | 2.1 | 2.3 | 1.2 | 1.5 | 1.3 | 1.5 | 1.9 | 3.1 | 3.0 |

32 YR. STATISTICS FOR WIS STATION S04

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 3.9 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.3 |
| LARGEST WAVE HS . . . . . | (METERS) | 9.9 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 81.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66030418 |

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 359 | 760 | 172 | 47 | 12 | 6 | . | . | . | . | 1356 |
| 0.50-0.99 | . | 1074 | 267 | 136 | 55 | 25 | 10 | 1 | . | . | 1568 |
| 1.00-1.49 | . | . | 366 | 35 | 38 | 32 | 13 | 6 | 1 | . | 491 |
| 1.50-1.99 | . | . | 66 | . | 6 | 23 | 11 | 11 | 1 | . | 118 |
| 2.00-2.49 | . | . | 2 | 1 | 1 | 3 | 1 | 7 | 2 | 2 | 19 |
| 2.50-2.99 | . | . | . | . | . | 1 | 1 | 1 | 3 | . | 6 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | . | 1 | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 359 | 1834 | 873 | 219 | 112 | 90 | 36 | 27 | 7 | 4 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.7 NO. OF CASES= 3343.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 393 | 582 | 167 | 31 | 10 | 4 | . | . | . | . | 1187 |
| 0.50-0.99 | . | 674 | 424 | 122 | 35 | 19 | 2 | . | . | . | 1276 |
| 1.00-1.49 | . | . | 176 | 127 | 72 | 32 | 9 | 4 | . | . | 420 |
| 1.50-1.99 | . | . | 42 | 36 | 38 | 37 | 7 | 7 | . | . | 167 |
| 2.00-2.49 | . | . | 1 | 7 | 2 | 21 | 6 | 7 | 1 | . | 45 |
| 2.50-2.99 | . | . | . | 4 | . | 5 | 11 | 7 | 3 | . | 30 |
| 3.00-3.49 | . | . | . | 2 | . | . | . | 5 | 1 | 2 | 10 |
| 3.50-3.99 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 393 | 1256 | 810 | 329 | 157 | 118 | 35 | 31 | 8 | 5 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 2954.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 531 | 827 | 216 | 50 | 5 | 2 | . | . | . | . | 1631 |
| 0.50-0.99 | . | 557 | 630 | 124 | 17 | 11 | . | . | . | . | 1339 |
| 1.00-1.49 | . | . | 188 | 145 | 50 | 17 | 4 | . | . | . | 404 |
| 1.50-1.99 | . | . | 6 | 53 | 47 | 26 | 6 | 3 | . | . | 141 |
| 2.00-2.49 | . | . | . | 8 | 12 | 26 | 9 | 6 | . | . | 61 |
| 2.50-2.99 | . | . | . | . | 1 | 17 | 9 | 7 | 1 | . | 35 |
| 3.00-3.49 | . | . | . | . | . | 2 | 8 | 10 | 1 | . | 21 |
| 3.50-3.99 | . | . | . | . | . | . | 3 | 7 | 5 | 1 | 16 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 2 | 2 | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 531 | 1384 | 1040 | 380 | 132 | 101 | 39 | 33 | 11 | 4 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 3432.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 460 | 857 | 149 | 28 | 4 | . | . | . | . | . | 1498 |
| 0.50-0.99 | . | 556 | 951 | 121 | 11 | 3 | . | . | . | . | 1642 |
| 1.00-1.49 | . | . | 238 | 194 | 37 | 8 | . | . | . | . | 477 |
| 1.50-1.99 | . | . | 17 | 90 | 40 | 20 | 1 | . | . | . | 168 |
| 2.00-2.49 | . | . | . | 37 | 17 | 20 | 7 | 2 | . | . | 83 |
| 2.50-2.99 | . | . | . | 1 | 28 | 23 | 2 | 4 | . | . | 58 |
| 3.00-3.49 | . | . | . | . | 4 | 17 | 5 | 5 | 2 | . | 33 |
| 3.50-3.99 | . | . | . | . | . | 5 | 8 | 8 | 7 | . | 28 |
| 4.00-4.49 | . | . | . | . | . | 2 | 7 | 2 | 6 | 1 | 18 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 2 | 3 | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 4 | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | 1 | 1 | 1 | 1 | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 460 | 1413 | 1355 | 471 | 141 | 98 | 34 | 25 | 26 | 5 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 7.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 3785.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 516 | 1252 | 158 | 17 | 4 | 2 | . | . | . | . | 1949 |
| 0.50-0.99 | . | 1085 | 3057 | 194 | 12 | 4 | . | . | . | . | 4352 |
| 1.00-1.49 | . | . | 866 | 910 | 68 | 7 | 2 | . | . | . | 1853 |
| 1.50-1.99 | . | . | 35 | 416 | 218 | 43 | 2 | . | . | . | 714 |
| 2.00-2.49 | . | . | . | 103 | 101 | 104 | 11 | 3 | . | . | 322 |
| 2.50-2.99 | . | . | . | 1 | 115 | 55 | 25 | 9 | 1 | . | 206 |
| 3.00-3.49 | . | . | . | . | 8 | 90 | 20 | 17 | 2 | . | 137 |
| 3.50-3.99 | . | . | . | . | . | 45 | 21 | 10 | 8 | . | 84 |
| 4.00-4.49 | . | . | . | . | . | 2 | 37 | 25 | 16 | . | 80 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 27 | 18 | 4 | 56 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 23 | 14 | 5 | 44 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 11 | 5 | 18 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 12 | 7 | 19 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 4 | 9 | 13 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 22 | 22 |
| TOTAL | 516 | 2337 | 4116 | 1641 | 526 | 352 | 127 | 116 | 86 | 52 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 9.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 9253.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 380 | 811 | 121 | 11 | 3 | . | . | . | . | . | 1326 |
| 0.50-0.99 | . | 578 | 1607 | 90 | 8 | 3 | . | . | . | . | 2286 |
| 1.00-1.49 | . | . | 327 | 422 | 27 | . | 1 | . | . | . | 777 |
| 1.50-1.99 | . | . | 22 | 152 | 80 | 10 | 2 | . | . | . | 266 |
| 2.00-2.49 | . | . | . | 39 | 34 | 22 | 5 | 1 | . | . | 101 |
| 2.50-2.99 | . | . | . | 2 | 39 | 20 | 8 | 2 | . | . | 71 |
| 3.00-3.49 | . | . | . | . | 2 | 22 | 4 | 4 | 1 | . | 33 |
| 3.50-3.99 | . | . | . | . | . | 14 | 5 | 6 | 1 | . | 26 |
| 4.00-4.49 | . | . | . | . | . | . | 8 | 5 | . | . | 13 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | 1 | 1 | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 380 | 1389 | 2077 | 716 | 193 | 91 | 34 | 19 | 10 | 4 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 4611.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 450 | 832 | 179 | 24 | 5 | . | . | . | . | . | 1490 |
| 0.50-0.99 | . | 362 | 927 | 43 | 6 | 4 | . | . | . | . | 1342 |
| 1.00-1.49 | . | . | 190 | 145 | 13 | 3 | . | . | . | . | 351 |
| 1.50-1.99 | . | . | 8 | 67 | 28 | 2 | 2 | . | . | . | 107 |
| 2.00-2.49 | . | . | . | 21 | 29 | 5 | . | 2 | . | . | 57 |
| 2.50-2.99 | . | . | . | . | 20 | 6 | . | . | . | . | 26 |
| 3.00-3.49 | . | . | . | . | 2 | 18 | . | 2 | 1 | . | 23 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | 1 | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | 2 | 2 | 1 | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 450 | 1194 | 1304 | 300 | 103 | 42 | 4 | 6 | 1 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 3194.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 533 | 1150 | 189 | 27 | 5 | . | . | . | . | . | 1904 |
| 0.50-0.99 | . | 486 | 1018 | 42 | 7 | 2 | . | . | . | . | 1555 |
| 1.00-1.49 | . | . | 182 | 124 | 6 | 4 | 2 | . | . | . | 318 |
| 1.50-1.99 | . | . | 12 | 63 | 20 | 3 | 2 | 1 | . | . | 101 |
| 2.00-2.49 | . | . | . | 16 | 9 | . | . | 3 | . | . | 28 |
| 2.50-2.99 | . | . | . | 1 | 16 | 5 | . | . | 1 | . | 23 |
| 3.00-3.49 | . | . | . | . | 1 | 5 | . | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 533 | 1636 | 1401 | 273 | 64 | 21 | 4 | 4 | 1 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 3691.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 599 | 1268 | 325 | 31 | 5 | 1 | . | . | . | . | 2229 |
| 0.50-0.99 | . | 419 | 1322 | 63 | 6 | 3 | . | . | . | . | 1813 |
| 1.00-1.49 | . | 1 | 228 | 203 | 18 | 5 | 1 | . | . | . | 456 |
| 1.50-1.99 | . | . | 22 | 136 | 39 | 4 | . | . | . | . | 201 |
| 2.00-2.49 | . | . | . | 31 | 22 | 16 | . | 1 | . | . | 70 |
| 2.50-2.99 | . | . | . | 1 | 24 | 6 | . | . | . | . | 31 |
| 3.00-3.49 | . | . | . | . | 1 | 13 | . | . | . | . | 14 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 599 | 1688 | 1897 | 465 | 115 | 48 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 4512.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 658 | 1440 | 497 | 48 | 9 | 1 | . | . | . | . | 2653 |
| 0.50-0.99 | . | 541 | 1661 | 149 | 12 | 4 | . | . | . | . | 2367 |
| 1.00-1.49 | . | . | 362 | 284 | 22 | 2 | 1 | . | . | . | 671 |
| 1.50-1.99 | . | . | 18 | 146 | 40 | . | . | . | . | . | 204 |
| 2.00-2.49 | . | . | . | 43 | 22 | 8 | . | . | . | . | 73 |
| 2.50-2.99 | . | . | . | . | 29 | 7 | . | . | . | . | 36 |
| 3.00-3.49 | . | . | . | . | 5 | 14 | . | . | . | . | 19 |
| 3.50-3.99 | . | . | . | . | . | 6 | 1 | . | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | 1 | 2 | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 658 | 1981 | 2538 | 670 | 139 | 43 | 5 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 5656.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1070 | 1950 | 821 | 104 | 18 | 2 | . | . | . | . | 3965 |
| 0.50-0.99 | . | 1061 | 2516 | 373 | 19 | 8 | 1 | . | . | . | 3978 |
| 1.00-1.49 | . | 3 | 715 | 397 | 75 | 1 | 1 | . | . | . | 1192 |
| 1.50-1.99 | . | . | 78 | 270 | 126 | 18 | 1 | 1 | . | . | 494 |
| 2.00-2.49 | . | . | . | 118 | 54 | 26 | 2 | . | . | . | 200 |
| 2.50-2.99 | . | . | . | 2 | 105 | 17 | 3 | . | . | . | 127 |
| 3.00-3.49 | . | . | . | . | 6 | 70 | 3 | . | . | . | 79 |
| 3.50-3.99 | . | . | . | . | . | 38 | 6 | . | . | . | 44 |
| 4.00-4.49 | . | . | . | . | . | 5 | 17 | . | . | . | 22 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 4 | 1 | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1070 | 3014 | 4130 | 1264 | 403 | 185 | 38 | 7 | 3 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 9472.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1650 | 1992 | 375 | 119 | 18 | 1 | . | . | . | . | 4155 |
| 0.50-0.99 | . | 2844 | 2087 | 73 | 33 | 8 | . | . | . | . | 5045 |
| 1.00-1.49 | . | 1 | 1174 | 50 | 8 | 2 | . | 1 | . | . | 1236 |
| 1.50-1.99 | . | . | 351 | 271 | 17 | 2 | 1 | . | . | . | 642 |
| 2.00-2.49 | . | . | . | 170 | 25 | 11 | . | 1 | . | . | 207 |
| 2.50-2.99 | . | . | . | 17 | 32 | 10 | 1 | . | . | . | 60 |
| 3.00-3.49 | . | . | . | . | 10 | 19 | . | . | . | . | 29 |
| 3.50-3.99 | . | . | . | . | . | 10 | 1 | . | . | . | 11 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 2 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1650 | 4837 | 3987 | 700 | 143 | 65 | 5 | 6 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 10665.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1732 | 1622 | 417 | 145 | 29 | 10 | 1 | . | . | . | 3956 |
| 0.50-0.99 | . | 2744 | 1696 | 102 | 32 | 21 | 2 | . | . | . | 4597 |
| 1.00-1.49 | . | . | 1444 | 9 | 6 | 5 | 3 | . | . | . | 1467 |
| 1.50-1.99 | . | . | 597 | 504 | . | 1 | 1 | . | . | . | 1103 |
| 2.00-2.49 | . | . | . | 253 | . | . | . | . | . | . | 253 |
| 2.50-2.99 | . | . | . | 42 | 7 | . | . | . | 1 | . | 50 |
| 3.00-3.49 | . | . | . | . | 5 | . | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1732 | 4366 | 4154 | 1055 | 80 | 37 | 7 | 0 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 10700.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 810 | 1284 | 257 | 69 | 19 | 8 | . | . | . | . | 2447 |
| 0.50-0.99 | . | 2225 | 1341 | 72 | 33 | 19 | . | 1 | . | . | 3691 |
| 1.00-1.49 | . | . | 1392 | 8 | 9 | 7 | 3 | 1 | . | . | 1420 |
| 1.50-1.99 | . | . | 803 | 310 | . | 2 | . | . | . | . | 1115 |
| 2.00-2.49 | . | . | . | 255 | . | . | . | . | . | . | 255 |
| 2.50-2.99 | . | . | . | 36 | 7 | . | . | . | . | . | 43 |
| 3.00-3.49 | . | . | . | . | 11 | . | . | . | 1 | . | 12 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 810 | 3509 | 3793 | 750 | 79 | 38 | 3 | 2 | 1 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 8411.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 453 | 781 | 207 | 43 | 4 | 6 | . | . | . | . | 1494 |
| 0.50-0.99 | . | 1935 | 941 | 78 | 32 | 27 | 4 | . | . | . | 3017 |
| 1.00-1.49 | . | . | 865 | 6 | 14 | 7 | 3 | . | . | . | 895 |
| 1.50-1.99 | . | . | 588 | 89 | 4 | 4 | 1 | . | . | . | 686 |
| 2.00-2.49 | . | . | . | 68 | . | 1 | 1 | . | . | . | 70 |
| 2.50-2.99 | . | . | . | 9 | . | . | . | 1 | . | . | 10 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 453 | 2716 | 2601 | 293 | 55 | 45 | 9 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 5782.

STATION S05 47.67N 90.28W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

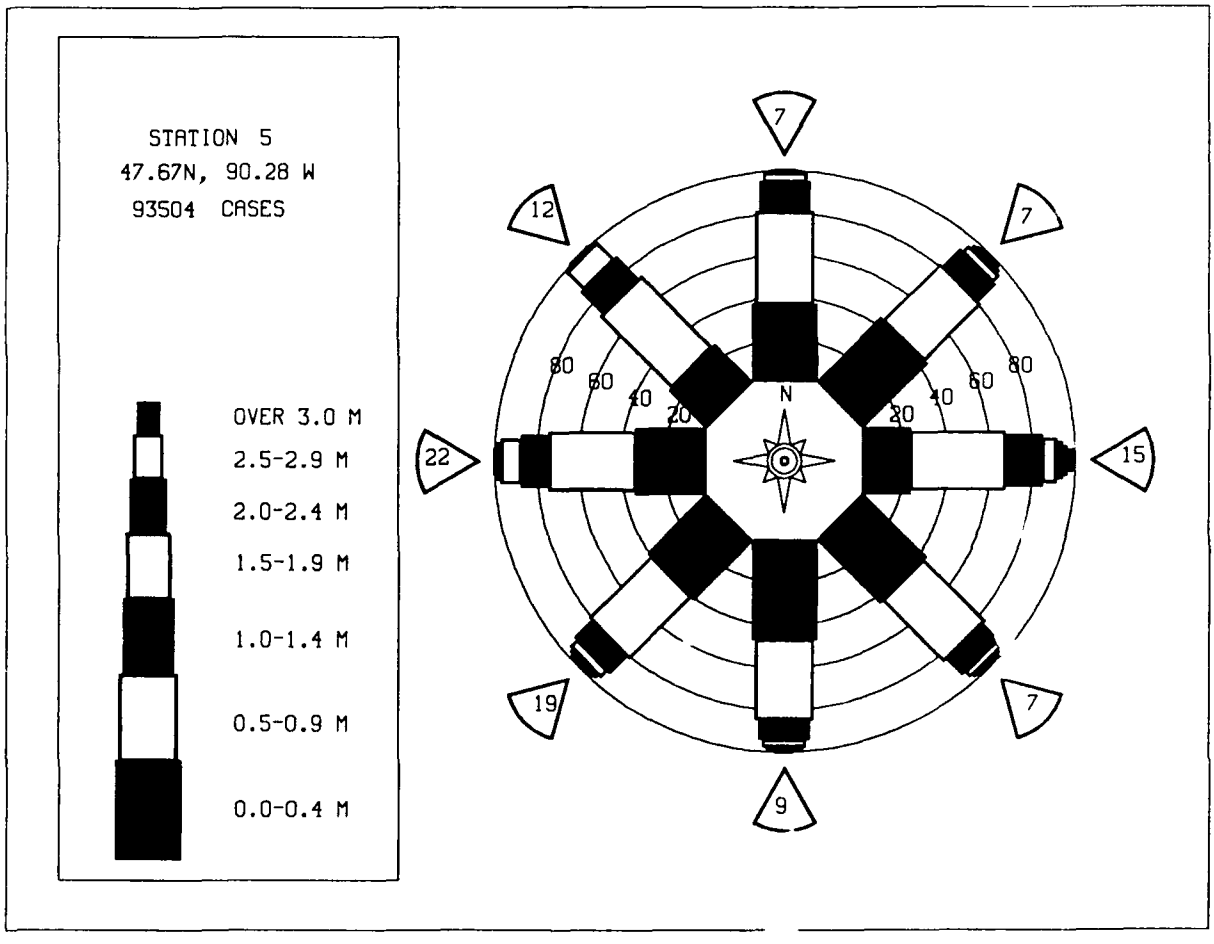
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 299 | 652 | 133 | 41 | 21 | 5 | . | . | . | . | 1151 |
| 0.50-0.99 | . | 1492 | 493 | 80 | 38 | 20 | 4 | 3 | . | . | 2130 |
| 1.00-1.49 | . | . | 614 | 14 | 14 | 13 | 6 | 2 | . | . | 663 |
| 1.50-1.99 | . | . | 305 | 31 | . | 6 | 3 | 2 | . | . | 347 |
| 2.00-2.49 | . | . | 2 | 14 | . | . | . | . | . | . | 16 |
| 2.50-2.99 | . | . | . | 3 | . | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 299 | 2144 | 1547 | 183 | 73 | 44 | 13 | 7 | 0 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 4043.

STATION S05 47.67N 90.28W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1090 | 1806 | 439 | 84 | 17 | 5 | . | . | . | . | 3441 |
| 0.50-0.99 | . | 1864 | 2094 | 187 | 36 | 18 | 2 | . | . | . | 4201 |
| 1.00-1.49 | . | . | 933 | 308 | 48 | 14 | 5 | 1 | . | . | 1309 |
| 1.50-1.99 | . | . | 297 | 264 | 70 | 20 | 4 | 2 | . | . | 657 |
| 2.00-2.49 | . | . | . | 119 | 33 | 26 | 4 | 3 | . | . | 185 |
| 2.50-2.99 | . | . | . | 12 | 42 | 17 | 6 | 3 | 1 | . | 81 |
| 3.00-3.49 | . | . | . | . | 5 | 27 | 4 | 4 | . | . | 40 |
| 3.50-3.99 | . | . | . | . | . | 12 | 4 | 3 | 2 | . | 21 |
| 4.00-4.49 | . | . | . | . | . | 1 | 7 | 3 | 2 | . | 13 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 3 | 2 | 1 | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 2 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 1090 | 3670 | 3763 | 974 | 251 | 140 | 37 | 24 | 11 | 4 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 9.7 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S05 (47.67N 90.28W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.7 | 1.0 | 1.1 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 1.0 | 1.1 | 1.0 | 0.8 |
| 1957 | 0.9 | 0.9 | 0.7 | 0.8 | 0.8 | 0.6 | 0.4 | 0.5 | 0.6 | 0.6 | 1.0 | 0.9 | 0.7 |
| 1958 | 0.7 | 0.9 | 0.5 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.2 | 0.8 | 0.7 |
| 1959 | 0.8 | 0.9 | 0.8 | 0.7 | 0.9 | 0.5 | 0.5 | 0.5 | 0.8 | 0.8 | 1.0 | 1.2 | 0.8 |
| 1960 | 0.8 | 0.7 | 0.7 | 0.8 | 0.7 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 1.0 | 0.9 | 0.7 |
| 1961 | 0.7 | 0.8 | 0.9 | 0.7 | 0.6 | 0.5 | 0.3 | 0.3 | 0.6 | 0.7 | 0.8 | 0.8 | 0.7 |
| 1962 | 1.0 | 0.8 | 0.8 | 0.7 | 0.7 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1963 | 0.9 | 0.9 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 1.0 | 0.7 |
| 1964 | 1.0 | 0.8 | 0.9 | 0.8 | 0.7 | 0.4 | 0.4 | 0.6 | 0.6 | 0.7 | 0.9 | 0.8 | 0.7 |
| 1965 | 1.1 | 1.1 | 0.9 | 0.8 | 0.6 | 0.6 | 0.4 | 0.4 | 0.6 | 0.9 | 1.4 | 1.3 | 0.8 |
| 1966 | 1.2 | 1.2 | 1.9 | 1.2 | 1.0 | 0.7 | 0.7 | 0.7 | 0.9 | 1.3 | 1.1 | 1.1 | 1.1 |
| 1967 | 1.3 | 1.1 | 1.4 | 1.0 | 1.0 | 0.9 | 0.6 | 0.7 | 0.8 | 1.3 | 1.1 | 1.7 | 1.1 |
| 1968 | 1.1 | 1.3 | 1.3 | 1.2 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 1.1 | 1.3 | 1.3 | 1.1 |
| 1969 | 1.3 | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.6 | 0.9 | 0.8 | 0.8 | 0.8 |
| 1970 | 0.8 | 0.9 | 0.9 | 1.0 | 0.8 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 0.9 | 0.8 | 0.8 |
| 1971 | 0.9 | 1.0 | 0.9 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.9 | 0.9 | 0.8 | 0.8 |
| 1972 | 1.1 | 0.9 | 0.9 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.7 | 0.9 | 0.7 | 0.9 | 0.7 |
| 1973 | 0.9 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.6 | 0.8 | 1.0 | 0.8 | 0.7 |
| 1974 | 0.9 | 0.6 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 0.8 | 0.7 |
| 1975 | 1.1 | 0.8 | 1.1 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.9 | 1.0 | 0.8 | 0.7 |
| 1976 | 0.9 | 0.9 | 1.1 | 0.7 | 0.6 | 0.6 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.8 | 0.7 |
| 1977 | 0.9 | 1.1 | 1.3 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.7 | 0.7 | 0.9 | 1.2 | 0.7 |
| 1978 | 0.8 | 0.6 | 0.7 | 0.8 | 0.5 | 0.4 | 0.4 | 0.5 | 0.8 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1979 | 0.7 | 0.7 | 0.8 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.6 | 0.8 | 0.9 | 0.6 |
| 1980 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.3 | 0.5 | 0.7 | 0.8 | 0.6 | 1.0 | 0.6 |
| 1981 | 0.7 | 0.8 | 0.8 | 0.7 | 0.4 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 0.7 | 0.7 | 0.6 |
| 1982 | 1.0 | 0.8 | 1.1 | 0.8 | 0.7 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 0.9 | 1.0 | 0.7 |
| 1983 | 0.9 | 0.9 | 1.2 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 1.2 | 1.0 | 0.7 |
| 1984 | 0.9 | 0.8 | 0.9 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 1.0 | 1.0 | 1.0 | 0.8 |
| 1985 | 1.0 | 0.8 | 1.3 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.6 | 0.8 | 0.8 | 1.0 | 0.7 |
| 1986 | 0.9 | 0.7 | 1.0 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.7 | 1.0 | 0.9 | 0.7 |
| 1987 | 0.7 | 0.8 | 1.1 | 0.5 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.7 | 0.8 | 0.7 | 0.6 |
| MEAN | 0.9 | 0.9 | 1.0 | 0.8 | 0.7 | 0.5 | 0.4 | 0.5 | 0.7 | 0.8 | 0.9 | 1.0 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S05 (47.67N 90.28W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 4.0 | 5.1 | 7.5 | 3.7 | 3.0 | 1.8 | 1.3 | 1.7 | 1.8 | 2.9 | 3.5 | 4.6 |
| 1957 | 2.6 | 3.4 | 2.7 | 4.2 | 2.9 | 1.9 | 1.7 | 1.6 | 1.7 | 1.6 | 2.7 | 2.6 |
| 1958 | 2.8 | 2.8 | 1.5 | 5.4 | 2.2 | 2.5 | 1.7 | 1.6 | 2.4 | 2.3 | 5.7 | 2.7 |
| 1959 | 2.1 | 4.5 | 2.4 | 2.5 | 3.4 | 1.5 | 1.9 | 1.9 | 2.7 | 2.1 | 2.7 | 7.0 |
| 1960 | 2.4 | 3.4 | 3.0 | 2.8 | 2.2 | 1.7 | 1.4 | 2.3 | 1.8 | 2.5 | 6.3 | 3.6 |
| 1961 | 1.9 | 2.9 | 3.1 | 2.7 | 1.9 | 1.3 | 1.4 | 1.4 | 2.3 | 2.2 | 4.4 | 2.6 |
| 1962 | 3.0 | 3.6 | 4.8 | 2.1 | 2.1 | 1.1 | 1.5 | 1.5 | 1.7 | 5.1 | 3.5 | 3.0 |
| 1963 | 2.1 | 3.3 | 3.2 | 2.1 | 2.2 | 3.1 | 1.6 | 1.4 | 1.7 | 2.2 | 2.7 | 5.2 |
| 1964 | 4.9 | 3.7 | 2.6 | 3.0 | 3.4 | 1.8 | 1.0 | 2.6 | 2.4 | 2.7 | 3.8 | 3.1 |
| 1965 | 3.7 | 5.3 | 5.1 | 3.1 | 2.1 | 1.7 | 1.2 | 1.4 | 2.8 | 3.3 | 9.6 | 7.5 |
| 1966 | 4.6 | 3.9 | 9.7 | 6.5 | 2.9 | 2.6 | 2.3 | 3.2 | 2.2 | 4.0 | 5.2 | 4.2 |
| 1967 | 6.8 | 3.6 | 5.3 | 3.3 | 4.2 | 3.5 | 2.0 | 1.7 | 2.6 | 5.7 | 4.0 | 4.8 |
| 1968 | 3.4 | 3.3 | 3.4 | 4.4 | 3.0 | 2.3 | 3.9 | 2.5 | 2.2 | 3.5 | 5.3 | 5.4 |
| 1969 | 6.0 | 3.3 | 2.3 | 2.9 | 2.6 | 3.3 | 1.2 | 2.3 | 2.0 | 3.3 | 2.7 | 4.2 |
| 1970 | 1.9 | 2.3 | 5.9 | 4.3 | 2.6 | 1.7 | 1.4 | 1.6 | 2.8 | 3.5 | 3.1 | 3.7 |
| 1971 | 2.5 | 4.2 | 3.7 | 2.7 | 3.9 | 1.7 | 1.7 | 1.6 | 1.9 | 5.6 | 4.5 | 3.4 |
| 1972 | 3.8 | 4.8 | 3.7 | 2.7 | 1.8 | 1.3 | 1.4 | 1.5 | 2.6 | 3.0 | 2.7 | 5.7 |
| 1973 | 3.4 | 2.7 | 3.6 | 2.1 | 2.1 | 1.6 | 1.6 | 0.9 | 1.9 | 3.5 | 3.1 | 2.8 |
| 1974 | 4.1 | 2.1 | 4.3 | 3.4 | 2.6 | 1.3 | 1.8 | 1.8 | 1.4 | 2.5 | 3.6 | 4.8 |
| 1975 | 5.7 | 2.9 | 6.4 | 2.5 | 1.4 | 1.5 | 1.7 | 2.8 | 2.6 | 4.5 | 4.2 | 3.0 |
| 1976 | 3.8 | 3.0 | 4.4 | 1.8 | 1.8 | 1.9 | 1.2 | 1.5 | 2.5 | 3.2 | 2.0 | 3.0 |
| 1977 | 2.5 | 6.4 | 5.4 | 1.8 | 1.5 | 1.3 | 1.8 | 1.5 | 4.9 | 3.1 | 4.6 | 7.8 |
| 1978 | 2.1 | 1.6 | 3.0 | 2.6 | 1.4 | 2.0 | 1.2 | 1.5 | 3.7 | 3.0 | 3.2 | 4.3 |
| 1979 | 2.0 | 3.4 | 2.9 | 4.6 | 2.1 | 1.9 | 1.7 | 1.5 | 2.6 | 2.4 | 4.0 | 2.7 |
| 1980 | 2.8 | 2.7 | 3.6 | 1.5 | 1.6 | 1.5 | 1.1 | 2.2 | 3.7 | 3.1 | 2.4 | 3.7 |
| 1981 | 1.8 | 2.1 | 3.0 | 3.3 | 1.3 | 2.7 | 1.1 | 1.3 | 3.7 | 3.2 | 3.1 | 2.2 |
| 1982 | 5.6 | 2.5 | 4.0 | 4.2 | 2.1 | 1.9 | 1.8 | 1.3 | 2.6 | 3.2 | 5.4 | 3.6 |
| 1983 | 3.3 | 4.2 | 6.3 | 2.9 | 1.4 | 1.6 | 1.5 | 1.5 | 1.9 | 2.1 | 5.2 | 4.6 |
| 1984 | 3.7 | 4.0 | 3.6 | 3.3 | 2.0 | 2.3 | 1.6 | 1.4 | 2.3 | 4.9 | 2.8 | 2.8 |
| 1985 | 3.2 | 3.4 | 9.3 | 3.1 | 1.9 | 2.1 | 1.2 | 2.2 | 2.7 | 3.3 | 2.3 | 2.6 |
| 1986 | 4.2 | 3.8 | 3.2 | 3.2 | 2.0 | 1.5 | 1.5 | 1.6 | 3.5 | 3.8 | 5.9 | 3.1 |
| 1987 | 1.8 | 5.3 | 5.6 | 1.8 | 2.5 | 0.9 | 1.5 | 1.1 | 1.5 | 1.9 | 3.3 | 2.7 |

32 YR. STATISTICS FOR WIS STATION S05

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.8 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 9.7 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 84.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66030418 |

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 448 | 863 | 210 | 54 | 16 | 9 | . | . | . | . | 1600 |
| 0.50-0.99 | . | 1132 | 244 | 141 | 69 | 27 | 9 | 2 | . | . | 1624 |
| 1.00-1.49 | . | . | 361 | 23 | 27 | 35 | 11 | 6 | 1 | . | 464 |
| 1.50-1.99 | . | . | 66 | 1 | 7 | 17 | 11 | 12 | 1 | . | 115 |
| 2.00-2.49 | . | . | . | . | 1 | 5 | 4 | 7 | 3 | 1 | 21 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | 1 | 2 | 1 | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | . | 1 | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 448 | 1995 | 881 | 220 | 120 | 93 | 35 | 29 | 7 | 4 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 3596.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 470 | 632 | 186 | 41 | 16 | 8 | . | . | . | . | 1353 |
| 0.50-0.99 | . | 717 | 357 | 151 | 45 | 20 | 6 | 1 | . | . | 1297 |
| 1.00-1.49 | . | . | 133 | 97 | 70 | 35 | 8 | 4 | . | . | 347 |
| 1.50-1.99 | . | . | 53 | 9 | 24 | 31 | 8 | 5 | . | . | 130 |
| 2.00-2.49 | . | . | 5 | 4 | 1 | 13 | 10 | 14 | 1 | . | 48 |
| 2.50-2.99 | . | . | . | 2 | . | 1 | 2 | 10 | 2 | 2 | 19 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | 5 | 2 | 2 | 8 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 470 | 1349 | 734 | 305 | 156 | 108 | 34 | 39 | 7 | 6 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 3015.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 608 | 799 | 253 | 54 | 11 | 4 | . | . | . | . | 1729 |
| 0.50-0.99 | . | 614 | 548 | 163 | 24 | 14 | . | . | . | . | 1363 |
| 1.00-1.49 | . | . | 116 | 130 | 66 | 26 | 4 | 1 | . | . | 343 |
| 1.50-1.99 | . | . | 17 | 29 | 37 | 27 | 4 | 2 | . | . | 116 |
| 2.00-2.49 | . | . | 1 | 3 | 10 | 26 | 9 | 3 | . | . | 52 |
| 2.50-2.99 | . | . | . | . | . | 7 | 7 | 12 | 2 | . | 28 |
| 3.00-3.49 | . | . | . | . | . | 2 | 5 | 6 | 4 | . | 17 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | 2 | 3 | 1 | 7 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 608 | 1413 | 935 | 379 | 148 | 106 | 30 | 27 | 12 | 4 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 3442.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 490 | 801 | 192 | 29 | 5 | 1 | . | . | . | . | 1518 |
| 0.50-0.99 | . | 585 | 935 | 132 | 10 | 2 | . | . | . | . | 1664 |
| 1.00-1.49 | . | . | 188 | 204 | 41 | 9 | 1 | . | . | . | 443 |
| 1.50-1.99 | . | . | 16 | 64 | 45 | 19 | 2 | . | . | . | 146 |
| 2.00-2.49 | . | . | . | 18 | 21 | 28 | 7 | 7 | . | . | 81 |
| 2.50-2.99 | . | . | . | . | 23 | 10 | 8 | 4 | . | . | 45 |
| 3.00-3.49 | . | . | . | . | 2 | 13 | 8 | 7 | 4 | . | 34 |
| 3.50-3.99 | . | . | . | . | . | 5 | 6 | 7 | 8 | 1 | 27 |
| 4.00-4.49 | . | . | . | . | . | 1 | 6 | . | 9 | . | 16 |
| 4.50-4.99 | . | . | . | . | . | . | . | 3 | 2 | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 2 | 2 | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 490 | 1386 | 1331 | 447 | 147 | 88 | 38 | 29 | 30 | 6 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 3751.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 580 | 1267 | 212 | 35 | 5 | 2 | . | . | . | . | 2101 |
| 0.50-0.99 | . | 1037 | 3041 | 227 | 7 | 3 | . | . | . | . | 4315 |
| 1.00-1.49 | . | . | 787 | 889 | 77 | 6 | 2 | . | . | . | 1761 |
| 1.50-1.99 | . | . | 37 | 409 | 197 | 52 | . | . | . | . | 695 |
| 2.00-2.49 | . | . | . | 112 | 90 | 95 | 18 | 2 | . | . | 317 |
| 2.50-2.99 | . | . | . | . | 112 | 54 | 23 | 9 | 1 | . | 199 |
| 3.00-3.49 | . | . | . | . | 5 | 89 | 21 | 16 | 3 | . | 134 |
| 3.50-3.99 | . | . | . | . | . | 38 | 22 | 21 | 13 | . | 94 |
| 4.00-4.49 | . | . | . | . | . | 2 | 38 | 22 | 18 | 2 | 82 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 26 | 16 | 4 | 51 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 16 | 11 | 6 | 34 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 10 | 7 | 19 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 11 | 8 | 19 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | 7 | 10 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 25 | 25 |
| TOTAL | 580 | 2304 | 4077 | 1672 | 493 | 341 | 130 | 114 | 86 | 59 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 9.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 9239.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 480 | 890 | 182 | 17 | 6 | . | . | . | . | . | 1575 |
| 0.50-0.99 | . | 578 | 1603 | 91 | 12 | 5 | . | . | . | . | 2289 |
| 1.00-1.49 | . | . | 336 | 402 | 41 | . | 1 | . | . | . | 780 |
| 1.50-1.99 | . | . | 11 | 158 | 80 | 13 | 2 | . | . | . | 264 |
| 2.00-2.49 | . | . | . | 32 | 40 | 29 | 3 | . | . | . | 104 |
| 2.50-2.99 | . | . | . | . | 32 | 21 | 9 | 6 | . | . | 68 |
| 3.00-3.49 | . | . | . | . | 2 | 21 | 8 | 3 | 1 | . | 35 |
| 3.50-3.99 | . | . | . | . | . | 9 | 6 | 4 | 4 | . | 23 |
| 4.00-4.49 | . | . | . | . | . | . | 8 | . | . | 1 | 9 |
| 4.50-4.99 | . | . | . | . | . | . | . | 4 | 1 | 1 | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 480 | 1468 | 2132 | 700 | 213 | 98 | 37 | 17 | 10 | 7 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.1 NO. OF CASES= 4843.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 544 | 951 | 238 | 33 | 4 | 1 | . | . | . | . | 1771 |
| 0.50-0.99 | . | 358 | 1011 | 74 | 7 | 1 | . | . | . | . | 1451 |
| 1.00-1.49 | . | . | 174 | 172 | 17 | 3 | 1 | . | . | . | 367 |
| 1.50-1.99 | . | . | 2 | 60 | 34 | 6 | 1 | . | . | . | 103 |
| 2.00-2.49 | . | . | . | 11 | 26 | 8 | 2 | 1 | . | . | 48 |
| 2.50-2.99 | . | . | . | 1 | 12 | 10 | . | 1 | . | . | 24 |
| 3.00-3.49 | . | . | . | . | 1 | 11 | 1 | 1 | 1 | . | 15 |
| 3.50-3.99 | . | . | . | . | . | 4 | 1 | 1 | 1 | . | 7 |
| 4.00-4.49 | . | . | . | . | . | 1 | 3 | 1 | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 544 | 1309 | 1425 | 351 | 101 | 45 | 9 | 5 | 2 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 3557.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 634 | 1399 | 258 | 25 | 7 | 3 | . | . | . | . | 2326 |
| 0.50-0.99 | . | 471 | 1034 | 53 | 6 | 2 | . | . | . | . | 1566 |
| 1.00-1.49 | . | . | 163 | 118 | 10 | 3 | 2 | . | . | . | 296 |
| 1.50-1.99 | . | . | 8 | 57 | 26 | 5 | 2 | 1 | . | . | 99 |
| 2.00-2.49 | . | . | . | 24 | 8 | 4 | . | . | . | . | 36 |
| 2.50-2.99 | . | . | . | 1 | 13 | 3 | . | 1 | . | . | 18 |
| 3.00-3.49 | . | . | . | . | 1 | 8 | . | . | 1 | . | 10 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | 1 | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 634 | 1870 | 1463 | 278 | 71 | 30 | 4 | 2 | 2 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 4084.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 739 | 1506 | 457 | 42 | 10 | 1 | . | . | . | . | 2755 |
| 0.50-0.99 | . | 479 | 1312 | 98 | 7 | 4 | . | . | . | . | 1900 |
| 1.00-1.49 | . | . | 256 | 225 | 14 | 5 | . | . | . | . | 500 |
| 1.50-1.99 | . | . | 21 | 134 | 48 | 3 | . | . | . | . | 206 |
| 2.00-2.49 | . | . | . | 40 | 18 | 16 | 1 | 1 | . | . | 76 |
| 2.50-2.99 | . | . | . | . | 25 | 8 | . | . | . | . | 33 |
| 3.00-3.49 | . | . | . | . | . | 10 | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 739 | 1985 | 2046 | 539 | 122 | 49 | 4 | 2 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 3.7 NO. OF CASES= 5141.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 762 | 1691 | 726 | 49 | 10 | 1 | . | . | . | . | 3239 |
| 0.50-0.99 | . | 581 | 1514 | 227 | 9 | 4 | . | . | . | . | 2335 |
| 1.00-1.49 | . | 1 | 362 | 243 | 44 | 1 | 1 | 1 | . | . | 653 |
| 1.50-1.99 | . | . | 37 | 165 | 52 | 8 | 1 | . | . | . | 263 |
| 2.00-2.49 | . | . | . | 63 | 26 | 5 | 1 | . | . | . | 95 |
| 2.50-2.99 | . | . | . | . | 44 | 8 | . | . | . | . | 52 |
| 3.00-3.49 | . | . | . | . | . | 34 | . | . | . | . | 34 |
| 3.50-3.99 | . | . | . | . | . | 10 | 3 | . | . | . | 13 |
| 4.00-4.49 | . | . | . | . | . | . | 4 | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 762 | 2273 | 2639 | 747 | 185 | 71 | 10 | 3 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 6269.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1249 | 1998 | 972 | 134 | 20 | 1 | . | . | . | . | 4374 |
| 0.50-0.99 | . | 1696 | 1468 | 451 | 50 | 7 | 1 | . | . | . | 3673 |
| 1.00-1.49 | . | 2 | 545 | 328 | 96 | 7 | 2 | . | . | . | 980 |
| 1.50-1.99 | . | . | 73 | 203 | 87 | 29 | 1 | 1 | . | . | 394 |
| 2.00-2.49 | . | . | 2 | 86 | 40 | 39 | 4 | . | . | . | 171 |
| 2.50-2.99 | . | . | . | 3 | 81 | 18 | 2 | . | . | . | 104 |
| 3.00-3.49 | . | . | . | . | 5 | 49 | 2 | . | . | . | 56 |
| 3.50-3.99 | . | . | . | . | . | 19 | 11 | . | . | . | 30 |
| 4.00-4.49 | . | . | . | . | . | 3 | 7 | . | . | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 5 | . | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1249 | 3696 | 3060 | 1205 | 379 | 172 | 31 | 7 | 3 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 9179.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 2091 | 2831 | 402 | 132 | 26 | 11 | . | . | . | . | 5493 |
| 0.50-0.99 | . | 2548 | 342 | 86 | 25 | 10 | 1 | . | . | . | 3012 |
| 1.00-1.49 | . | . | 627 | 12 | 5 | 7 | 2 | 1 | . | . | 654 |
| 1.50-1.99 | . | . | 180 | 19 | 7 | 3 | . | . | . | . | 209 |
| 2.00-2.49 | . | . | 7 | 14 | 1 | 1 | . | 1 | . | . | 24 |
| 2.50-2.99 | . | . | . | . | 5 | 2 | . | . | . | . | 7 |
| 3.00-3.49 | . | . | . | . | 1 | 1 | 1 | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | 2 | 2 | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 2091 | 5379 | 1558 | 263 | 70 | 37 | 7 | 4 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 8811.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 2353 | 2410 | 532 | 187 | 39 | 23 | 1 | 1 | . | . | 5546 |
| 0.50-0.99 | . | 2522 | 362 | 113 | 42 | 19 | 2 | . | . | . | 3060 |
| 1.00-1.49 | . | . | 1024 | 14 | 8 | 8 | . | 1 | . | . | 1055 |
| 1.50-1.99 | . | . | 210 | . | 1 | 2 | 1 | . | . | . | 214 |
| 2.00-2.49 | . | . | 12 | 10 | . | 1 | . | 1 | . | . | 24 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 2353 | 4932 | 2140 | 324 | 90 | 53 | 4 | 3 | 1 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 9268.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1100 | 1540 | 345 | 101 | 23 | 9 | 1 | . | . | . | 3119 |
| 0.50-0.99 | . | 2491 | 752 | 87 | 29 | 22 | 1 | . | . | . | 3382 |
| 1.00-1.49 | . | 1 | 1005 | 4 | 14 | 6 | 5 | 1 | . | . | 1036 |
| 1.50-1.99 | . | . | 531 | 74 | . | 1 | 1 | . | . | . | 607 |
| 2.00-2.49 | . | . | 7 | 59 | . | 1 | . | . | . | . | 67 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1100 | 4032 | 2640 | 329 | 66 | 39 | 8 | 1 | 0 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 7694.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 597 | 979 | 260 | 56 | 16 | 13 | . | . | . | . | 1921 |
| 0.50-0.99 | . | 2314 | 1147 | 88 | 35 | 26 | 6 | 2 | . | . | 3618 |
| 1.00-1.49 | . | . | 937 | 6 | 16 | 9 | 2 | 1 | . | . | 971 |
| 1.50-1.99 | . | . | 668 | 90 | 4 | 1 | 4 | . | . | . | 767 |
| 2.00-2.49 | . | . | . | 59 | . | 2 | . | . | . | . | 61 |
| 2.50-2.99 | . | . | . | 7 | . | . | . | 1 | . | . | 8 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 597 | 3293 | 3012 | 306 | 72 | 51 | 12 | 4 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 6882.

STATION S06 47.67N 90.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

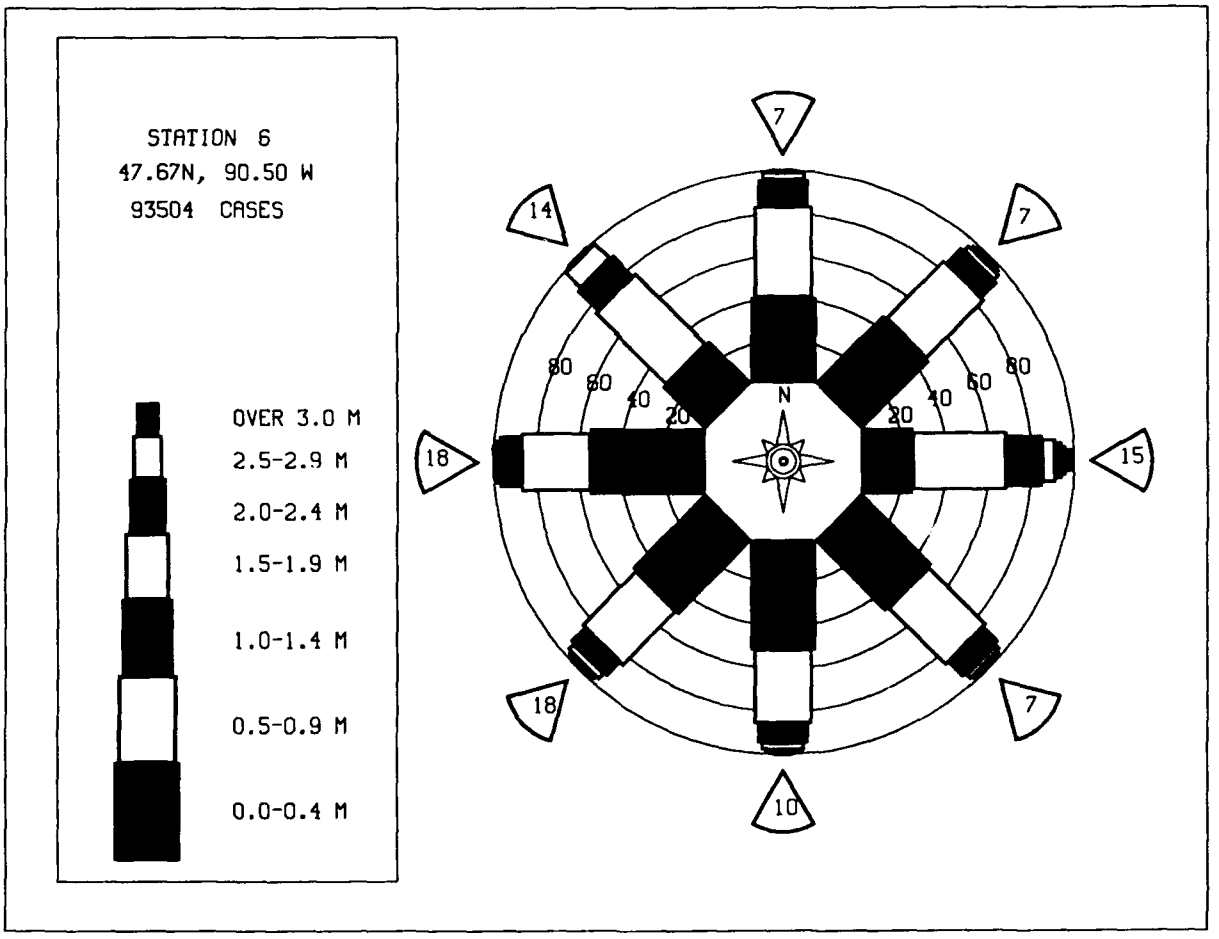
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 457 | 768 | 174 | 49 | 20 | 6 | . | . | . | . | 1474 |
| 0.50-0.99 | . | 1765 | 541 | 79 | 43 | 20 | 6 | 3 | . | . | 2457 |
| 1.00-1.49 | . | . | 666 | 14 | 22 | 17 | 3 | 4 | . | . | 726 |
| 1.50-1.99 | . | . | 332 | 36 | 1 | 7 | 2 | 2 | 1 | . | 381 |
| 2.00-2.49 | . | . | 1 | 9 | . | 1 | . | 1 | . | . | 12 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 457 | 2533 | 1714 | 187 | 86 | 51 | 11 | 10 | 1 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 4733.

STATION S06 47.67N 90.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1361 | 2133 | 560 | 104 | 24 | 9 | . | . | . | . | 4191 |
| 0.50-0.99 | . | 1989 | 1621 | 227 | 42 | 19 | 3 | . | . | . | 3901 |
| 1.00-1.49 | . | . | 768 | 288 | 57 | 18 | 4 | 2 | . | . | 1137 |
| 1.50-1.99 | . | . | 226 | 151 | 65 | 22 | 4 | 2 | . | . | 470 |
| 2.00-2.49 | . | . | 3 | 55 | 28 | 28 | 6 | 4 | . | . | 124 |
| 2.50-2.99 | . | . | . | 2 | 35 | 14 | 5 | 4 | . | . | 60 |
| 3.00-3.49 | . | . | . | . | 1 | 24 | 4 | 4 | 1 | . | 34 |
| 3.50-3.99 | . | . | . | . | . | 9 | 5 | 3 | 3 | . | 20 |
| 4.00-4.49 | . | . | . | . | . | . | 7 | 2 | 3 | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | . | 4 | 2 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 1361 | 4122 | 3178 | 827 | 252 | 143 | 38 | 27 | 12 | 5 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 9.3 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S06 (47.67N 90.50W)

| | MONTH | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| YEAR | | | | | | | | | | | | | MEAN |
| 1956 | 0.6 | 0.8 | 1.0 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.5 | 0.9 | 1.0 | 0.9 | 0.7 |
| 1957 | 0.8 | 0.8 | 0.7 | 0.7 | 0.8 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 0.9 | 0.8 | 0.7 |
| 1958 | 0.6 | 0.8 | 0.5 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.7 | 1.1 | 0.7 | 0.6 |
| 1959 | 0.7 | 0.8 | 0.7 | 0.6 | 0.8 | 0.5 | 0.4 | 0.4 | 0.7 | 0.7 | 0.8 | 1.1 | 0.7 |
| 1960 | 0.7 | 0.7 | 0.7 | 0.8 | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.7 | 0.9 | 0.8 | 0.6 |
| 1961 | 0.6 | 0.7 | 0.9 | 0.7 | 0.5 | 0.5 | 0.3 | 0.3 | 0.6 | 0.6 | 0.8 | 0.7 | 0.6 |
| 1962 | 0.9 | 0.7 | 0.8 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1963 | 0.8 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 | 0.6 |
| 1964 | 1.0 | 0.8 | 0.8 | 0.8 | 0.7 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.8 | 0.7 | 0.7 |
| 1965 | 0.9 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 1.2 | 1.2 | 0.7 |
| 1966 | 1.0 | 1.1 | 1.8 | 1.1 | 0.9 | 0.7 | 0.6 | 0.6 | 0.7 | 1.1 | 1.0 | 0.9 | 0.9 |
| 1967 | 1.1 | 0.9 | 1.3 | 0.9 | 0.9 | 0.8 | 0.5 | 0.6 | 0.7 | 1.2 | 0.9 | 1.4 | 0.9 |
| 1968 | 1.0 | 1.1 | 1.1 | 1.1 | 0.9 | 0.7 | 0.7 | 0.7 | 0.7 | 0.9 | 1.1 | 1.1 | 0.9 |
| 1969 | 1.1 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.6 | 0.8 | 0.7 | 0.7 | 0.7 |
| 1970 | 0.6 | 0.8 | 0.8 | 0.9 | 0.8 | 0.5 | 0.5 | 0.4 | 0.7 | 0.8 | 0.8 | 0.8 | 0.7 |
| 1971 | 0.8 | 0.9 | 0.8 | 0.7 | 0.7 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 0.8 | 0.7 | 0.7 |
| 1972 | 0.9 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.8 | 0.7 | 0.8 | 0.6 |
| 1973 | 0.7 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.5 | 0.7 | 0.9 | 0.7 | 0.6 |
| 1974 | 0.8 | 0.6 | 0.8 | 0.6 | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1975 | 1.0 | 0.7 | 1.0 | 0.6 | 0.4 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 | 0.7 | 0.7 |
| 1976 | 0.8 | 0.8 | 1.0 | 0.6 | 0.5 | 0.5 | 0.3 | 0.4 | 0.5 | 0.5 | 0.7 | 0.7 | 0.6 |
| 1977 | 0.7 | 1.0 | 1.2 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.8 | 1.1 | 0.7 |
| 1978 | 0.7 | 0.5 | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.8 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1979 | 0.6 | 0.6 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.5 | 0.7 | 0.8 | 0.6 |
| 1980 | 0.7 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.3 | 0.4 | 0.7 | 0.7 | 0.6 | 0.8 | 0.6 |
| 1981 | 0.6 | 0.8 | 0.7 | 0.7 | 0.4 | 0.5 | 0.3 | 0.4 | 0.6 | 0.8 | 0.7 | 0.6 | 0.6 |
| 1982 | 0.9 | 0.7 | 1.0 | 0.7 | 0.7 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1983 | 0.8 | 0.8 | 1.2 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.6 | 0.6 | 1.1 | 0.9 | 0.7 |
| 1984 | 0.7 | 0.8 | 0.9 | 0.9 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 1.0 | 0.9 | 0.9 | 0.7 |
| 1985 | 0.8 | 0.7 | 1.2 | 0.7 | 0.6 | 0.5 | 0.3 | 0.4 | 0.6 | 0.7 | 0.7 | 0.8 | 0.7 |
| 1986 | 0.9 | 0.6 | 0.9 | 0.9 | 0.5 | 0.4 | 0.4 | 0.4 | 0.7 | 0.6 | 0.9 | 0.8 | 0.7 |
| 1987 | 0.6 | 0.8 | 1.1 | 0.5 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 0.6 | 0.6 |
| MEAN | 0.8 | 0.8 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 0.8 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S06 (47.67N 90.50W)

| | MONTH | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| YEAR | | | | | | | | | | | | |
| 1956 | 4.0 | 4.7 | 7.5 | 3.7 | 3.0 | 1.9 | 1.1 | 1.5 | 1.7 | 2.9 | 3.3 | 4.6 |
| 1957 | 2.5 | 3.4 | 2.6 | 4.2 | 2.8 | 1.9 | 1.4 | 1.6 | 1.7 | 1.5 | 2.5 | 2.6 |
| 1958 | 2.8 | 3.0 | 1.4 | 5.9 | 1.6 | 2.2 | 1.4 | 1.2 | 2.2 | 2.1 | 5.4 | 2.1 |
| 1959 | 1.8 | 4.3 | 2.3 | 2.1 | 2.5 | 1.3 | 1.8 | 1.3 | 2.7 | 2.0 | 2.6 | 7.5 |
| 1960 | 2.1 | 3.5 | 3.0 | 2.6 | 2.0 | 1.4 | 1.4 | 1.6 | 1.7 | 2.2 | 6.6 | 3.5 |
| 1961 | 1.9 | 2.9 | 3.1 | 2.0 | 1.8 | 1.3 | 1.4 | 1.4 | 2.1 | 2.0 | 3.8 | 2.1 |
| 1962 | 2.6 | 3.7 | 4.9 | 1.8 | 2.0 | 1.1 | 1.5 | 1.3 | 1.7 | 4.9 | 3.4 | 2.6 |
| 1963 | 1.9 | 3.3 | 3.0 | 2.1 | 2.3 | 3.0 | 1.1 | 1.5 | 1.6 | 2.2 | 2.6 | 5.3 |
| 1964 | 4.6 | 3.8 | 2.7 | 2.7 | 3.3 | 1.8 | 0.9 | 2.6 | 2.3 | 1.9 | 3.9 | 3.1 |
| 1965 | 3.5 | 5.2 | 4.9 | 3.0 | 2.3 | 1.5 | 0.8 | 1.0 | 2.2 | 3.4 | 9.2 | 7.0 |
| 1966 | 4.3 | 4.1 | 9.3 | 6.6 | 2.8 | 2.2 | 2.0 | 2.9 | 2.1 | 4.0 | 4.7 | 4.1 |
| 1967 | 7.5 | 3.3 | 5.2 | 3.1 | 4.0 | 3.5 | 1.8 | 1.5 | 2.4 | 5.5 | 3.9 | 4.5 |
| 1968 | 3.5 | 3.1 | 3.3 | 4.2 | 2.7 | 2.2 | 3.8 | 2.0 | 1.8 | 3.3 | 5.1 | 5.1 |
| 1969 | 5.7 | 3.2 | 1.9 | 2.9 | 2.3 | 3.1 | 1.1 | 2.1 | 1.9 | 2.4 | 2.5 | 4.2 |
| 1970 | 1.6 | 2.0 | 5.6 | 4.3 | 2.7 | 1.8 | 1.3 | 1.2 | 2.8 | 3.2 | 3.0 | 3.8 |
| 1971 | 2.5 | 4.0 | 3.7 | 2.7 | 3.6 | 1.5 | 1.6 | 1.2 | 1.9 | 5.3 | 4.3 | 3.1 |
| 1972 | 4.0 | 4.5 | 3.4 | 2.4 | 1.9 | 1.2 | 1.0 | 1.2 | 2.6 | 3.0 | 2.7 | 5.6 |
| 1973 | 3.1 | 2.6 | 3.7 | 2.1 | 1.9 | 1.5 | 1.2 | 0.8 | 1.7 | 3.4 | 2.9 | 2.8 |
| 1974 | 4.4 | 2.3 | 4.3 | 3.2 | 2.1 | 1.3 | 1.4 | 1.4 | 1.4 | 2.6 | 3.5 | 4.7 |
| 1975 | 5.9 | 2.7 | 6.5 | 2.6 | 1.2 | 1.2 | 1.4 | 2.7 | 2.6 | 4.5 | 4.1 | 2.8 |
| 1976 | 3.3 | 3.0 | 4.3 | 1.5 | 1.3 | 1.9 | 1.2 | 1.3 | 2.1 | 3.1 | 1.7 | 3.0 |
| 1977 | 1.9 | 6.4 | 5.1 | 1.6 | 1.5 | 1.3 | 1.5 | 1.0 | 4.7 | 3.1 | 4.5 | 7.8 |
| 1978 | 2.0 | 1.5 | 2.8 | 2.4 | 1.2 | 1.8 | 1.1 | 1.3 | 3.7 | 2.8 | 3.1 | 4.2 |
| 1979 | 1.6 | 3.5 | 2.9 | 4.2 | 2.1 | 1.8 | 1.2 | 1.2 | 2.6 | 2.4 | 3.5 | 2.8 |
| 1980 | 2.6 | 2.7 | 3.6 | 1.4 | 1.6 | 1.5 | 1.1 | 2.1 | 3.2 | 2.7 | 2.5 | 3.7 |
| 1981 | 1.6 | 2.1 | 3.0 | 3.2 | 1.3 | 2.2 | 1.1 | 1.3 | 3.4 | 3.0 | 3.0 | 2.3 |
| 1982 | 5.7 | 2.4 | 4.1 | 3.9 | 1.9 | 1.4 | 1.3 | 1.0 | 2.6 | 3.1 | 5.1 | 3.4 |
| 1983 | 3.4 | 4.2 | 6.4 | 2.9 | 1.4 | 1.5 | 1.5 | 1.3 | 1.5 | 2.1 | 5.0 | 4.4 |
| 1984 | 3.7 | 3.8 | 3.4 | 3.6 | 1.7 | 2.3 | 1.2 | 1.4 | 2.4 | 4.7 | 3.0 | 2.8 |
| 1985 | 3.7 | 3.3 | 9.3 | 3.1 | 1.7 | 1.5 | 1.1 | 2.2 | 1.9 | 2.4 | 2.2 | 2.3 |
| 1986 | 4.2 | 3.6 | 3.1 | 3.4 | 1.9 | 1.5 | 1.2 | 1.2 | 3.5 | 3.8 | 6.2 | 3.3 |
| 1987 | 2.0 | 5.3 | 5.6 | 1.7 | 2.7 | 0.9 | 1.7 | 0.9 | 1.5 | 2.1 | 3.4 | 2.8 |

32 YR. STATISTICS FOR WIS STATION S06

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.7 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 9.3 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 83.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66030418 |

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 583 | 991 | 316 | 67 | 27 | 6 | | | | | 1990 |
| 0.50-0.99 | . | 983 | 309 | 214 | 89 | 47 | 11 | 2 | | | 1655 |
| 1.00-1.49 | . | . | 264 | 65 | 52 | 42 | 20 | 10 | | | 453 |
| 1.50-1.99 | . | . | 49 | 1 | 16 | 23 | 16 | 20 | 2 | 1 | 128 |
| 2.00-2.49 | . | . | . | . | . | 10 | 4 | 10 | 3 | | 27 |
| 2.50-2.99 | . | . | . | . | . | 1 | 2 | 4 | 2 | 3 | 12 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | |
| TOTAL | 583 | 1974 | 938 | 347 | 184 | 129 | 53 | 46 | 10 | 6 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 4006.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 495 | 706 | 226 | 51 | 24 | 9 | . | . | . | . | 1511 |
| 0.50-0.99 | . | 380 | 436 | 122 | 42 | 26 | 3 | . | . | . | 1009 |
| 1.00-1.49 | . | . | 136 | 70 | 54 | 27 | 7 | 3 | . | . | 297 |
| 1.50-1.99 | . | . | 31 | 33 | 23 | 36 | 7 | 5 | . | . | 135 |
| 2.00-2.49 | . | . | 2 | 8 | 2 | 20 | 16 | 6 | 2 | . | 56 |
| 2.50-2.99 | . | . | . | 3 | . | 4 | 10 | 8 | 2 | . | 27 |
| 3.00-3.49 | . | . | . | . | . | . | 1 | 3 | 7 | . | 11 |
| 3.50-3.99 | . | . | . | . | . | . | . | 2 | 2 | 2 | 6 |
| 4.00-4.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | |
| TOTAL | 495 | 1086 | 831 | 287 | 145 | 122 | 44 | 28 | 13 | 4 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 2873.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 532 | 725 | 267 | 72 | 22 | 6 | 1 | . | . | . | 1625 |
| 0.50-0.99 | . | 297 | 699 | 173 | 22 | 10 | 1 | . | . | . | 1202 |
| 1.00-1.49 | . | . | 234 | 97 | 45 | 20 | 2 | . | . | . | 398 |
| 1.50-1.99 | . | . | 18 | 55 | 40 | 26 | 4 | 1 | . | . | 144 |
| 2.00-2.49 | . | . | . | 25 | 12 | 25 | 8 | 6 | 1 | . | 77 |
| 2.50-2.99 | . | . | . | 1 | . | 13 | 9 | 8 | . | . | 31 |
| 3.00-3.49 | . | . | . | . | . | 1 | 6 | 8 | 4 | . | 19 |
| 3.50-3.99 | . | . | . | . | . | . | 2 | 4 | 2 | 2 | 10 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 532 | 1022 | 1218 | 423 | 141 | 101 | 33 | 27 | 12 | 5 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 3302.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 474 | 748 | 209 | 37 | 6 | 2 | . | . | . | . | 1476 |
| 0.50-0.99 | . | 370 | 1006 | 166 | 10 | 5 | . | . | . | . | 1557 |
| 1.00-1.49 | . | . | 300 | 237 | 53 | 10 | 2 | . | . | . | 602 |
| 1.50-1.99 | . | . | 12 | 103 | 55 | 21 | 2 | . | . | . | 193 |
| 2.00-2.49 | . | . | . | 37 | 12 | 41 | 8 | 4 | . | . | 102 |
| 2.50-2.99 | . | . | . | 1 | 29 | 19 | 10 | 10 | 1 | . | 70 |
| 3.00-3.49 | . | . | . | . | 7 | 20 | 9 | 10 | 6 | . | 52 |
| 3.50-3.99 | . | . | . | . | 1 | 10 | 7 | 6 | 7 | 1 | 32 |
| 4.00-4.49 | . | . | . | . | . | 2 | 7 | 7 | 3 | 1 | 20 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 8 | 2 | 1 | 13 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | 2 | 5 | 10 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | 3 | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 2 | 1 | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 3 | 4 |
| 7.00+ | | | | | | | | | | 8 | 8 |
| TOTAL | 474 | 1118 | 1527 | 581 | 173 | 130 | 47 | 49 | 25 | 23 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 9.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 3901.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 702 | 1346 | 350 | 47 | 11 | 3 | . | . | . | . | 2459 |
| 0.50-0.99 | . | 914 | 2726 | 222 | 17 | 3 | 1 | . | . | . | 3883 |
| 1.00-1.49 | . | . | 755 | 860 | 101 | 11 | 2 | . | . | . | 1729 |
| 1.50-1.99 | . | . | 33 | 403 | 191 | 40 | 1 | . | . | . | 668 |
| 2.00-2.49 | . | . | . | 99 | 93 | 78 | 13 | . | . | . | 283 |
| 2.50-2.99 | . | . | . | 1 | 96 | 55 | 22 | 7 | 3 | . | 184 |
| 3.00-3.49 | . | . | . | . | 4 | 99 | 20 | 18 | 5 | . | 146 |
| 3.50-3.99 | . | . | . | . | . | 40 | 19 | 8 | 12 | . | 79 |
| 4.00-4.49 | . | . | . | . | . | 4 | 29 | 21 | 18 | 4 | 76 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 16 | 18 | 4 | 46 |
| 5.00-5.49 | . | . | . | . | . | . | . | 14 | 4 | 5 | 23 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 18 | 5 | 23 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 7 | 6 | 13 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | 10 | 13 |
| 7.00+ | | | | | | | | | | 16 | 16 |
| TOTAL | 702 | 2260 | 3864 | 1632 | 513 | 333 | 115 | 84 | 88 | 50 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 9.4 MEAN TP(SEC)= 4.4 NO. OF CASES= 9036.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 618 | 1082 | 250 | 39 | 9 | 2 | . | . | . | . | 2000 |
| 0.50-0.99 | . | 611 | 1637 | 106 | 6 | 8 | . | . | . | . | 2368 |
| 1.00-1.49 | . | . | 322 | 388 | 34 | 4 | . | . | . | . | 748 |
| 1.50-1.99 | . | . | 6 | 154 | 82 | 19 | 2 | . | . | . | 263 |
| 2.00-2.49 | . | . | . | 23 | 32 | 52 | 3 | . | . | . | 110 |
| 2.50-2.99 | . | . | . | . | 28 | 17 | 8 | 6 | 1 | . | 60 |
| 3.00-3.49 | . | . | . | . | . | 24 | 6 | 7 | . | . | 37 |
| 3.50-3.99 | . | . | . | . | . | 6 | 4 | 1 | 3 | . | 14 |
| 4.00-4.49 | . | . | . | . | . | . | 6 | 2 | 1 | 1 | 10 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 618 | 1693 | 2215 | 710 | 191 | 132 | 29 | 17 | 6 | 3 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 5263.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 792 | 1082 | 276 | 42 | 10 | 1 | . | . | . | . | 2203 |
| 0.50-0.99 | . | 411 | 1039 | 83 | 7 | 2 | 1 | . | . | . | 1543 |
| 1.00-1.49 | . | . | 157 | 186 | 23 | 2 | . | . | . | . | 368 |
| 1.50-1.99 | . | . | 4 | 64 | 41 | 7 | . | . | . | . | 116 |
| 2.00-2.49 | . | . | . | 6 | 16 | 16 | 3 | 1 | . | . | 42 |
| 2.50-2.99 | . | . | . | . | 8 | 3 | . | . | . | . | 11 |
| 3.00-3.49 | . | . | . | . | . | 6 | 3 | . | . | . | 9 |
| 3.50-3.99 | . | . | . | . | . | 1 | 4 | 1 | 1 | . | 7 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 792 | 1493 | 1476 | 381 | 105 | 38 | 12 | 2 | 1 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 4031.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 721 | 1317 | 269 | 31 | 11 | 2 | . | . | . | . | 2351 |
| 0.50-0.99 | . | 377 | 925 | 66 | 5 | 2 | 1 | . | . | . | 1376 |
| 1.00-1.49 | . | . | 203 | 101 | 9 | 3 | . | . | . | . | 316 |
| 1.50-1.99 | . | . | 8 | 78 | 19 | 5 | . | . | . | . | 110 |
| 2.00-2.49 | . | . | . | 18 | 10 | 4 | 2 | . | . | . | 34 |
| 2.50-2.99 | . | . | . | 1 | 11 | 4 | . | . | . | . | 16 |
| 3.00-3.49 | . | . | . | . | 1 | 2 | . | . | 2 | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 721 | 1694 | 1405 | 295 | 66 | 22 | 3 | 0 | 2 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 3944.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 827 | 1281 | 298 | 56 | 12 | 2 | 1 | . | . | . | 2477 |
| 0.50-0.99 | . | 445 | 1017 | 47 | 4 | 2 | 1 | . | . | . | 1516 |
| 1.00-1.49 | . | . | 285 | 66 | 10 | 2 | 1 | . | . | . | 364 |
| 1.50-1.99 | . | . | 19 | 121 | 8 | 2 | 1 | . | . | . | 151 |
| 2.00-2.49 | . | . | . | 49 | 8 | . | . | 1 | . | . | 58 |
| 2.50-2.99 | . | . | . | 1 | 4 | . | . | 1 | . | . | 6 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 827 | 1726 | 1619 | 340 | 47 | 10 | 4 | 2 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 4287.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 767 | 1601 | 520 | 45 | 9 | . | . | . | . | . | 2942 |
| 0.50-0.99 | . | 549 | 1683 | 154 | 8 | 1 | 1 | . | . | . | 2396 |
| 1.00-1.49 | . | 1 | 420 | 270 | 23 | 4 | 1 | . | . | . | 719 |
| 1.50-1.99 | . | . | 23 | 187 | 49 | 6 | . | 1 | . | . | 266 |
| 2.00-2.49 | . | . | . | 57 | 37 | 4 | 1 | . | . | . | 99 |
| 2.50-2.99 | . | . | . | . | 41 | 9 | 1 | . | . | . | 51 |
| 3.00-3.49 | . | . | . | . | 1 | 22 | . | 1 | . | . | 24 |
| 3.50-3.99 | . | . | . | . | . | 7 | . | . | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 767 | 2151 | 2646 | 713 | 168 | 54 | 6 | 2 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 6096.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1029 | 1990 | 928 | 89 | 11 | 2 | 1 | . | . | . | 4050 |
| 0.50-0.99 | . | 1248 | 2174 | 385 | 26 | 3 | . | . | . | . | 3836 |
| 1.00-1.49 | . | 1 | 619 | 559 | 83 | 7 | . | . | . | . | 1269 |
| 1.50-1.99 | . | . | 99 | 259 | 144 | 14 | . | 2 | . | . | 518 |
| 2.00-2.49 | . | . | 2 | 83 | 52 | 32 | . | . | . | . | 169 |
| 2.50-2.99 | . | . | . | 3 | 75 | 34 | 1 | . | 1 | . | 114 |
| 3.00-3.49 | . | . | . | . | 5 | 47 | 2 | . | . | . | 54 |
| 3.50-3.99 | . | . | . | . | . | 25 | 5 | . | . | . | 30 |
| 4.00-4.49 | . | . | . | . | . | 2 | 9 | . | 1 | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1029 | 3239 | 3822 | 1378 | 396 | 166 | 19 | 5 | 4 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 9418.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1628 | 2363 | 370 | 91 | 22 | 10 | . | . | . | . | 4484 |
| 0.50-0.99 | . | 2361 | 301 | 104 | 10 | 4 | 2 | . | . | . | 2782 |
| 1.00-1.49 | . | . | 608 | 29 | 3 | 3 | 1 | . | . | . | 644 |
| 1.50-1.99 | . | . | 175 | 34 | 9 | 3 | 1 | . | . | . | 222 |
| 2.00-2.49 | . | . | 6 | 14 | 2 | 5 | . | . | . | . | 27 |
| 2.50-2.99 | . | . | . | . | 4 | 3 | . | 1 | . | . | 8 |
| 3.00-3.49 | . | . | . | . | 2 | 4 | . | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1628 | 4724 | 1460 | 272 | 52 | 33 | 4 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 7655.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 2337 | 2222 | 452 | 133 | 38 | 22 | 3 | . | 1 | . | 5208 |
| 0.50-0.99 | . | 1974 | 405 | 126 | 44 | 14 | 3 | 1 | . | . | 2567 |
| 1.00-1.49 | . | . | 736 | 20 | 16 | 9 | 4 | . | . | . | 785 |
| 1.50-1.99 | . | . | 166 | . | 1 | 6 | . | 1 | . | . | 174 |
| 2.00-2.49 | . | . | 5 | 3 | . | . | 1 | 2 | . | . | 11 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 2337 | 4196 | 1764 | 282 | 99 | 51 | 11 | 4 | 1 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 8187.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1535 | 1743 | 387 | 117 | 47 | 26 | 2 | . | . | . | 3857 |
| 0.50-0.99 | . | 2310 | 726 | 115 | 33 | 23 | 5 | 1 | . | . | 3213 |
| 1.00-1.49 | . | . | 776 | 16 | 10 | 9 | 4 | . | . | . | 815 |
| 1.50-1.99 | . | . | 376 | 47 | 4 | 3 | 2 | . | . | . | 432 |
| 2.00-2.49 | . | . | 1 | 22 | . | . | . | . | . | . | 23 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1535 | 4053 | 2266 | 318 | 94 | 61 | 13 | 1 | 0 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 7808.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1024 | 1351 | 405 | 102 | 31 | 13 | . | . | . | . | 2926 |
| 0.50-0.99 | . | 2768 | 1206 | 116 | 40 | 36 | 7 | 1 | . | . | 4174 |
| 1.00-1.49 | . | . | 968 | 8 | 18 | 12 | 4 | 2 | . | . | 1012 |
| 1.50-1.99 | . | . | 518 | 66 | 4 | 5 | 1 | 1 | . | . | 595 |
| 2.00-2.49 | . | . | . | 22 | . | . | 1 | 2 | . | . | 25 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1024 | 4119 | 3097 | 316 | 93 | 66 | 13 | 6 | 0 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 8179.

STATION S07 47.53N 90.70W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

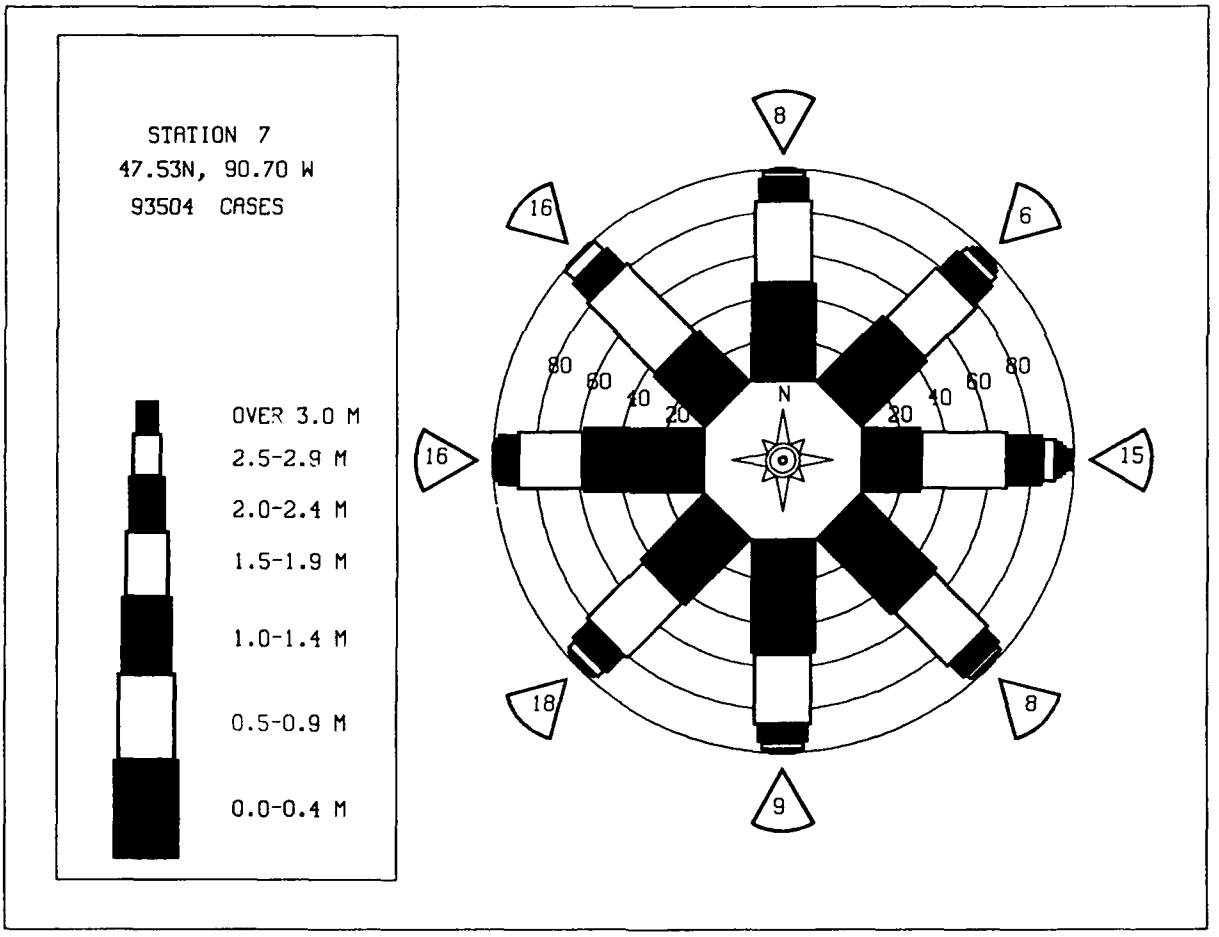
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 653 | 1036 | 276 | 94 | 20 | 10 | . | . | . | . | 2089 |
| 0.50-0.99 | . | 1978 | 521 | 124 | 56 | 42 | 10 | 1 | . | . | 2732 |
| 1.00-1.49 | . | . | 621 | 24 | 37 | 28 | 8 | 10 | . | . | 728 |
| 1.50-1.99 | . | . | 280 | 17 | 3 | 12 | 3 | 3 | 2 | . | 320 |
| 2.00-2.49 | . | . | 1 | 12 | . | . | 1 | 3 | . | . | 17 |
| 2.50-2.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 653 | 3014 | 1699 | 271 | 116 | 92 | 22 | 18 | 3 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 5518.

STATION S07 47.53N 90.70W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1472 | 2159 | 580 | 112 | 31 | 12 | . | . | . | . | 4366 |
| 0.50-0.99 | . | 1798 | 1681 | 233 | 42 | 23 | 5 | . | . | . | 3782 |
| 1.00-1.49 | . | . | 741 | 300 | 57 | 20 | 5 | 2 | . | . | 1125 |
| 1.50-1.99 | . | . | 182 | 162 | 69 | 23 | 4 | 3 | . | . | 443 |
| 2.00-2.49 | . | . | 1 | 48 | 28 | 29 | 6 | 3 | . | . | 115 |
| 2.50-2.99 | . | . | . | 1 | 30 | 16 | 6 | 4 | 1 | . | 58 |
| 3.00-3.49 | . | . | . | . | 2 | 22 | 4 | 4 | 2 | . | 34 |
| 3.50-3.99 | . | . | . | . | . | 9 | 4 | 2 | 2 | . | 17 |
| 4.00-4.49 | . | . | . | . | . | 1 | 5 | 3 | 2 | . | 11 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | 2 | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | 1 | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 1472 | 3957 | 3185 | 856 | 259 | 155 | 40 | 25 | 12 | 4 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 9.4 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S07 (47.53N 90.70W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 0.8 | 1.0 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.5 | 0.9 | 1.0 | 0.9 | 0.7 |
| 1957 | 0.8 | 0.8 | 0.7 | 0.7 | 0.8 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 0.8 | 0.7 |
| 1958 | 0.6 | 0.8 | 0.5 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 1.1 | 0.7 | 0.6 |
| 1959 | 0.7 | 0.8 | 0.7 | 0.6 | 0.8 | 0.5 | 0.4 | 0.4 | 0.7 | 0.7 | 0.8 | 1.1 | 0.7 |
| 1960 | 0.7 | 0.7 | 0.7 | 0.8 | 0.7 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.9 | 0.8 | 0.6 |
| 1961 | 0.6 | 0.7 | 0.9 | 0.7 | 0.6 | 0.5 | 0.3 | 0.3 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 |
| 1962 | 0.9 | 0.8 | 0.8 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1963 | 0.8 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 | 0.6 |
| 1964 | 1.0 | 0.8 | 0.9 | 0.8 | 0.7 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.8 | 0.7 | 0.7 |
| 1965 | 0.9 | 0.9 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.3 | 0.6 | 0.7 | 1.1 | 1.1 | 0.7 |
| 1966 | 0.9 | 1.0 | 1.6 | 1.0 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 1.0 | 0.9 | 0.8 | 0.8 |
| 1967 | 1.1 | 0.8 | 1.1 | 0.8 | 0.8 | 0.7 | 0.5 | 0.5 | 0.6 | 1.1 | 0.8 | 1.2 | 0.8 |
| 1968 | 0.9 | 1.0 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.8 | 1.1 | 1.0 | 0.8 |
| 1969 | 1.0 | 0.6 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.7 | 0.7 | 0.7 | 0.6 |
| 1970 | 0.6 | 0.8 | 0.7 | 0.9 | 0.8 | 0.5 | 0.5 | 0.4 | 0.6 | 0.7 | 0.8 | 0.8 | 0.7 |
| 1971 | 0.8 | 1.0 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.8 | 0.8 | 0.7 | 0.6 |
| 1972 | 0.9 | 0.7 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.8 | 0.6 | 0.8 | 0.6 |
| 1973 | 0.7 | 0.7 | 0.8 | 0.7 | 0.6 | 0.5 | 0.3 | 0.3 | 0.5 | 0.7 | 0.9 | 0.7 | 0.6 |
| 1974 | 0.8 | 0.6 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.5 | 0.4 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1975 | 1.0 | 0.7 | 1.1 | 0.7 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.8 | 0.9 | 0.7 | 0.7 |
| 1976 | 0.8 | 0.8 | 1.1 | 0.6 | 0.5 | 0.5 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.6 | 0.6 |
| 1977 | 0.7 | 1.0 | 1.2 | 0.5 | 0.5 | 0.3 | 0.4 | 0.3 | 0.6 | 0.6 | 0.8 | 1.1 | 0.7 |
| 1978 | 0.7 | 0.5 | 0.5 | 0.8 | 0.5 | 0.4 | 0.3 | 0.4 | 0.8 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1979 | 0.6 | 0.6 | 0.8 | 0.7 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.5 | 0.7 | 0.8 | 0.6 |
| 1980 | 0.7 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.7 | 0.6 | 0.8 | 0.6 |
| 1981 | 0.6 | 0.8 | 0.7 | 0.7 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.8 | 0.7 | 0.6 | 0.6 |
| 1982 | 0.9 | 0.7 | 1.0 | 0.7 | 0.7 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1983 | 0.8 | 0.8 | 1.2 | 0.6 | 0.6 | 0.4 | 0.4 | 0.3 | 0.5 | 0.6 | 1.1 | 0.8 | 0.7 |
| 1984 | 0.7 | 0.8 | 0.9 | 0.9 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.9 | 0.9 | 0.9 | 0.7 |
| 1985 | 0.8 | 0.7 | 1.2 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1986 | 0.8 | 0.6 | 0.9 | 0.9 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.9 | 0.8 | 0.6 |
| 1987 | 0.6 | 0.8 | 1.2 | 0.5 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 0.6 | 0.6 |
| MEAN | 0.8 | 0.8 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 0.8 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S07 (47.53N 90.70W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.6 | 4.1 | 8.5 | 3.5 | 3.1 | 2.0 | 1.1 | 1.6 | 1.6 | 3.1 | 3.6 | 4.9 |
| 1957 | 2.8 | 2.5 | 3.3 | 4.3 | 2.8 | 1.9 | 1.3 | 1.4 | 1.8 | 1.7 | 2.6 | 2.5 |
| 1958 | 2.6 | 3.8 | 1.6 | 5.8 | 1.5 | 1.8 | 1.3 | 1.2 | 1.8 | 2.0 | 5.2 | 2.6 |
| 1959 | 1.7 | 4.2 | 2.4 | 1.8 | 3.1 | 1.4 | 1.5 | 1.2 | 2.5 | 2.1 | 2.5 | 8.1 |
| 1960 | 2.0 | 4.0 | 3.6 | 2.4 | 2.2 | 1.3 | 1.2 | 1.7 | 1.6 | 2.3 | 6.8 | 3.2 |
| 1961 | 1.9 | 2.5 | 2.9 | 2.4 | 1.7 | 1.6 | 1.4 | 1.1 | 2.0 | 1.8 | 3.7 | 1.8 |
| 1962 | 2.9 | 3.7 | 4.9 | 1.9 | 2.1 | 1.4 | 1.3 | 1.3 | 1.8 | 4.2 | 3.2 | 2.9 |
| 1963 | 1.8 | 3.7 | 2.7 | 2.4 | 1.9 | 2.8 | 1.1 | 1.5 | 1.8 | 2.3 | 2.0 | 4.9 |
| 1964 | 4.6 | 3.6 | 2.8 | 2.5 | 3.5 | 2.2 | 0.9 | 2.9 | 2.6 | 1.9 | 4.0 | 3.4 |
| 1965 | 3.7 | 5.2 | 4.7 | 2.8 | 2.1 | 1.6 | 0.8 | 0.9 | 2.5 | 3.1 | 8.1 | 6.4 |
| 1966 | 3.6 | 4.2 | 7.6 | 6.1 | 2.5 | 2.2 | 1.4 | 2.4 | 1.8 | 3.8 | 4.2 | 3.5 |
| 1967 | 7.1 | 2.6 | 4.7 | 2.9 | 3.5 | 3.0 | 1.5 | 1.4 | 2.1 | 4.7 | 3.4 | 4.0 |
| 1968 | 3.1 | 2.6 | 3.4 | 4.1 | 2.4 | 2.0 | 3.5 | 1.7 | 1.7 | 2.5 | 5.0 | 5.1 |
| 1969 | 4.6 | 2.7 | 2.4 | 2.8 | 2.0 | 2.1 | 1.2 | 2.3 | 1.6 | 2.8 | 2.2 | 3.9 |
| 1970 | 1.6 | 2.1 | 4.5 | 4.1 | 2.8 | 1.8 | 1.2 | 1.1 | 3.2 | 2.7 | 2.8 | 3.5 |
| 1971 | 2.5 | 4.8 | 3.7 | 2.7 | 2.8 | 1.6 | 1.3 | 1.0 | 1.6 | 4.7 | 4.3 | 2.5 |
| 1972 | 4.1 | 4.3 | 3.0 | 2.1 | 2.3 | 1.5 | 0.9 | 1.2 | 2.4 | 2.9 | 2.5 | 4.6 |
| 1973 | 3.4 | 2.8 | 3.5 | 2.0 | 2.1 | 1.5 | 1.0 | 0.8 | 1.9 | 2.9 | 2.9 | 2.7 |
| 1974 | 3.4 | 2.4 | 4.4 | 3.4 | 2.2 | 1.3 | 1.4 | 1.3 | 1.5 | 2.6 | 3.1 | 4.4 |
| 1975 | 6.0 | 2.4 | 6.8 | 3.0 | 1.2 | 1.2 | 1.7 | 2.6 | 2.3 | 3.9 | 4.0 | 2.8 |
| 1976 | 3.1 | 3.4 | 4.6 | 2.0 | 1.5 | 1.9 | 1.1 | 1.3 | 1.9 | 3.0 | 1.6 | 3.0 |
| 1977 | 1.8 | 6.6 | 5.2 | 1.5 | 1.5 | 1.1 | 1.4 | 1.0 | 4.3 | 3.4 | 4.6 | 7.4 |
| 1978 | 2.7 | 1.4 | 2.7 | 2.7 | 1.4 | 1.5 | 1.2 | 1.2 | 3.7 | 2.4 | 2.8 | 3.8 |
| 1979 | 1.7 | 3.5 | 2.9 | 4.3 | 2.1 | 1.5 | 0.9 | 1.2 | 2.5 | 2.1 | 3.4 | 3.0 |
| 1980 | 2.4 | 2.8 | 3.7 | 1.7 | 1.9 | 1.8 | 0.9 | 1.6 | 2.6 | 2.4 | 2.8 | 3.4 |
| 1981 | 1.5 | 2.0 | 3.3 | 3.1 | 1.0 | 1.6 | 0.9 | 1.2 | 2.7 | 2.6 | 2.9 | 1.9 |
| 1982 | 5.6 | 2.7 | 4.6 | 3.8 | 2.1 | 1.4 | 1.0 | 1.0 | 2.1 | 3.2 | 4.5 | 3.3 |
| 1983 | 3.1 | 4.2 | 6.0 | 2.5 | 1.6 | 1.6 | 1.7 | 1.4 | 1.5 | 1.7 | 4.7 | 3.9 |
| 1984 | 3.5 | 3.1 | 3.7 | 3.6 | 2.4 | 2.1 | 1.0 | 1.2 | 2.6 | 4.5 | 2.9 | 2.3 |
| 1985 | 3.5 | 3.9 | 9.4 | 3.5 | 1.7 | 1.5 | 1.1 | 1.9 | 1.8 | 2.1 | 2.7 | 2.6 |
| 1986 | 4.0 | 3.3 | 3.4 | 3.5 | 2.0 | 1.3 | 1.6 | 1.5 | 3.1 | 3.6 | 6.0 | 3.3 |
| 1987 | 2.4 | 5.4 | 6.2 | 1.8 | 2.8 | 0.9 | 1.5 | 0.9 | 1.2 | 2.1 | 2.8 | 2.9 |

32 YR. STATISTICS FOR WIS STATION S07

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.7 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 225.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 9.4 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 67.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 85030418 |

STATION S08 47.53N 90 92W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 681 | 978 | 329 | 81 | 32 | 8 | . | . | . | . | 2109 |
| 0.50-0.99 | . | 1065 | 248 | 199 | 104 | 39 | 17 | 5 | . | . | 1677 |
| 1.00-1.49 | . | . | 276 | 31 | 36 | 44 | 13 | 12 | . | . | 412 |
| 1.50-1.99 | . | . | 37 | 1 | 11 | 19 | 16 | 12 | 4 | 1 | 101 |
| 2.00-2.49 | . | . | . | . | . | 4 | 6 | 9 | 4 | 1 | 24 |
| 2.50-2.99 | . | . | . | . | . | . | 1 | 4 | 3 | 2 | 10 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 681 | 2043 | 890 | 312 | 183 | 114 | 53 | 42 | 16 | 5 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 4071.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 562 | 730 | 248 | 55 | 20 | 12 | . | . | . | . | 1627 |
| 0.50-0.99 | . | 497 | 331 | 163 | 51 | 27 | 7 | 3 | . | . | 1079 |
| 1.00-1.49 | . | . | 80 | 88 | 77 | 40 | 10 | 2 | . | . | 297 |
| 1.50-1.99 | . | . | 11 | 12 | 11 | 47 | 16 | 6 | 1 | . | 104 |
| 2.00-2.49 | . | . | 1 | 3 | 2 | 18 | 22 | 14 | 3 | . | 63 |
| 2.50-2.99 | . | . | . | . | . | 3 | 6 | 7 | 3 | . | 19 |
| 3.00-3.49 | . | . | . | . | . | . | . | 5 | 6 | 4 | 15 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 562 | 1227 | 671 | 321 | 161 | 147 | 61 | 37 | 15 | 8 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 3017.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 602 | 756 | 283 | 69 | 24 | 7 | 1 | . | . | . | 1742 |
| 0.50-0.99 | . | 390 | 565 | 189 | 26 | 9 | 2 | . | . | . | 1181 |
| 1.00-1.49 | . | . | 135 | 134 | 67 | 21 | 4 | 1 | . | . | 362 |
| 1.50-1.99 | . | . | 9 | 36 | 33 | 33 | 6 | 2 | . | . | 121 |
| 2.00-2.49 | . | . | . | 6 | 5 | 20 | 10 | 5 | . | . | 46 |
| 2.50-2.99 | . | . | . | . | 1 | 5 | 9 | 12 | 4 | . | 31 |
| 3.00-3.49 | . | . | . | . | . | . | 8 | 6 | 1 | 1 | 16 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | 1 | 4 | . | 6 |
| 4.00-4.49 | . | . | . | . | . | . | . | 2 | 4 | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 602 | 1146 | 992 | 433 | 159 | 95 | 41 | 29 | 13 | 2 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 3299.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 514 | 765 | 228 | 41 | 8 | 4 | . | . | . | . | 1560 |
| 0.50-0.99 | . | 428 | 890 | 183 | 11 | 4 | . | . | . | . | 1516 |
| 1.00-1.49 | . | . | 218 | 217 | 53 | 12 | 2 | . | . | . | 502 |
| 1.50-1.99 | . | . | 20 | 74 | 44 | 23 | 3 | 1 | . | . | 165 |
| 2.00-2.49 | . | . | . | 25 | 11 | 33 | 9 | 3 | . | . | 81 |
| 2.50-2.99 | . | . | . | 1 | 20 | 17 | 9 | 7 | 2 | . | 56 |
| 3.00-3.49 | . | . | . | . | 1 | 18 | 4 | 5 | 8 | . | 36 |
| 3.50-3.99 | . | . | . | . | . | 11 | 6 | 5 | 5 | 1 | 28 |
| 4.00-4.49 | . | . | . | . | . | . | 6 | 6 | 3 | 1 | 16 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 3 | 4 | 2 | 12 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 2 | 3 | 7 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 3 | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | 3 | 5 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 4 | 4 |
| TOTAL | 514 | 1193 | 1356 | 541 | 148 | 122 | 42 | 32 | 27 | 19 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 4.1 NO. OF CASES= 3756.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 745 | 1311 | 370 | 47 | 11 | 4 | . | . | . | . | 2488 |
| 0.50-0.99 | . | 926 | 2714 | 236 | 14 | 5 | 1 | . | . | . | 3896 |
| 1.00-1.49 | . | . | 725 | 860 | 117 | 12 | . | . | . | . | 1714 |
| 1.50-1.99 | . | . | 36 | 386 | 192 | 37 | 2 | . | . | . | 653 |
| 2.00-2.49 | . | . | . | 104 | 85 | 80 | 14 | 2 | . | . | 285 |
| 2.50-2.99 | . | . | . | 2 | 99 | 51 | 28 | 9 | 1 | . | 190 |
| 3.00-3.49 | . | . | . | . | 5 | 98 | 18 | 14 | 8 | . | 143 |
| 3.50-3.99 | . | . | . | . | . | 35 | 27 | 10 | 12 | . | 84 |
| 4.00-4.49 | . | . | . | . | . | 2 | 32 | 23 | 21 | 3 | 81 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 16 | 17 | 4 | 41 |
| 5.00-5.49 | . | . | . | . | . | . | . | 13 | 4 | 6 | 23 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 12 | 4 | 17 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 12 | 5 | 17 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | 9 | 12 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 21 | 21 |
| TOTAL | 745 | 2237 | 3845 | 1635 | 523 | 324 | 126 | 88 | 90 | 52 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 8.6 MEAN TP(SEC)= 4.4 NO. OF CASES= 9061.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 609 | 1078 | 247 | 37 | 8 | 4 | . | . | . | . | 1983 |
| 0.50-0.99 | . | 601 | 1634 | 118 | 9 | 5 | . | . | . | . | 2367 |
| 1.00-1.49 | . | . | 303 | 403 | 27 | 6 | . | . | . | . | 739 |
| 1.50-1.99 | . | . | 7 | 144 | 88 | 19 | 2 | . | . | . | 260 |
| 2.00-2.49 | . | . | . | 19 | 32 | 53 | 7 | 2 | . | . | 113 |
| 2.50-2.99 | . | . | . | . | 27 | 14 | 10 | 6 | 2 | . | 59 |
| 3.00-3.49 | . | . | . | . | 1 | 22 | 6 | 7 | 2 | . | 38 |
| 3.50-3.99 | . | . | . | . | . | 11 | 4 | . | 2 | . | 17 |
| 4.00-4.49 | . | . | . | . | . | . | 5 | 2 | . | 1 | 8 |
| 4.50-4.99 | . | . | . | . | . | . | . | 3 | 1 | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 609 | 1679 | 2191 | 721 | 192 | 134 | 34 | 20 | 7 | 4 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.0 NO. OF CASES= 5243.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 772 | 1168 | 272 | 36 | 11 | 2 | . | . | . | . | 2261 |
| 0.50-0.99 | . | 396 | 1029 | 99 | 5 | 2 | 1 | . | . | . | 1532 |
| 1.00-1.49 | . | . | 143 | 186 | 25 | 2 | . | . | . | . | 356 |
| 1.50-1.99 | . | . | 3 | 63 | 37 | 16 | 1 | . | . | . | 120 |
| 2.00-2.49 | . | . | . | 7 | 18 | 13 | 2 | . | . | . | 40 |
| 2.50-2.99 | . | . | . | . | 8 | 6 | . | 2 | . | . | 16 |
| 3.00-3.49 | . | . | . | . | . | 4 | 1 | 1 | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | 1 | 4 | 1 | 1 | . | 7 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 772 | 1564 | 1447 | 391 | 104 | 46 | 10 | 4 | 1 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 4068.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 755 | 1360 | 310 | 26 | 11 | 2 | . | . | . | . | 2464 |
| 0.50-0.99 | . | 424 | 964 | 74 | 5 | 4 | . | . | . | . | 1471 |
| 1.00-1.49 | . | . | 208 | 102 | 20 | 3 | . | . | . | . | 333 |
| 1.50-1.99 | . | . | 10 | 86 | 16 | 4 | . | . | . | . | 116 |
| 2.00-2.49 | . | . | . | 17 | 9 | 8 | 2 | . | . | . | 36 |
| 2.50-2.99 | . | . | . | . | 8 | 3 | . | . | . | . | 11 |
| 3.00-3.49 | . | . | . | . | 1 | 3 | 1 | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 755 | 1784 | 1492 | 305 | 70 | 27 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 4158.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 879 | 1439 | 366 | 51 | 10 | 2 | 1 | . | . | . | 2748 |
| 0.50-0.99 | . | 448 | 1152 | 58 | 5 | 2 | . | . | . | . | 1665 |
| 1.00-1.49 | . | . | 326 | 74 | 9 | 3 | 1 | . | . | . | 413 |
| 1.50-1.99 | . | . | 22 | 132 | 5 | 1 | 1 | . | . | . | 161 |
| 2.00-2.49 | . | . | . | 48 | 7 | . | . | 1 | . | . | 56 |
| 2.50-2.99 | . | . | . | . | 6 | . | . | . | 1 | . | 7 |
| 3.00-3.49 | . | . | . | . | . | 2 | . | . | 2 | . | 4 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 879 | 1887 | 1866 | 363 | 42 | 11 | 3 | 1 | 3 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 4736.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 803 | 1544 | 748 | 47 | 9 | . | . | . | . | . | 3151 |
| 0.50-0.99 | . | 601 | 1787 | 294 | 12 | . | 1 | . | . | . | 2695 |
| 1.00-1.49 | . | . | 621 | 262 | 60 | 5 | 1 | . | . | . | 949 |
| 1.50-1.99 | . | . | 67 | 204 | 103 | 13 | 1 | . | 1 | . | 389 |
| 2.00-2.49 | . | . | . | 77 | 67 | 20 | 2 | 1 | . | . | 167 |
| 2.50-2.99 | . | . | . | 2 | 18 | 34 | . | 1 | . | . | 55 |
| 3.00-3.49 | . | . | . | 1 | 2 | 5 | 1 | 1 | . | . | 10 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 803 | 2145 | 3223 | 887 | 271 | 78 | 7 | 4 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 6946.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1045 | 1560 | 580 | 97 | 10 | 3 | 1 | . | . | . | 3296 |
| 0.50-0.99 | . | 1267 | 1073 | 219 | 26 | 3 | . | . | . | . | 2588 |
| 1.00-1.49 | . | . | 597 | 112 | 80 | 11 | . | . | . | . | 800 |
| 1.50-1.99 | . | . | 93 | 110 | 64 | 25 | 1 | 2 | . | . | 295 |
| 2.00-2.49 | . | . | 1 | 68 | 11 | 40 | 4 | . | . | . | 124 |
| 2.50-2.99 | . | . | . | 26 | 1 | 8 | 5 | 1 | 1 | . | 42 |
| 3.00-3.49 | . | . | . | . | 4 | . | 1 | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1045 | 2827 | 2344 | 632 | 196 | 90 | 12 | 5 | 2 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 6701.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1638 | 2007 | 290 | 87 | 27 | 12 | . | . | . | . | 4061 |
| 0.50-0.99 | . | 1793 | 227 | 68 | 8 | 3 | 2 | . | . | . | 2101 |
| 1.00-1.49 | . | . | 416 | 9 | 7 | 1 | 2 | . | . | . | 435 |
| 1.50-1.99 | . | . | 67 | 13 | 3 | 5 | 2 | . | . | . | 90 |
| 2.00-2.49 | . | . | . | 2 | . | 2 | 1 | . | 1 | . | 6 |
| 2.50-2.99 | . | . | . | 2 | 1 | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1638 | 3800 | 1000 | 181 | 47 | 23 | 7 | 0 | 1 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 6272.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 2600 | 2385 | 451 | 136 | 39 | 20 | 4 | 1 | 1 | . | 5637 |
| 0.50-0.99 | . | 2444 | 308 | 144 | 37 | 12 | 3 | 1 | . | . | 2949 |
| 1.00-1.49 | . | . | 882 | 20 | 24 | 7 | 5 | . | 1 | . | 939 |
| 1.50-1.99 | . | . | 144 | 4 | 4 | 5 | 1 | 1 | . | . | 155 |
| 2.00-2.49 | . | . | 1 | 4 | . | 1 | 2 | 2 | 1 | 1 | 12 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 2600 | 4829 | 1786 | 304 | 104 | 45 | 15 | 5 | 3 | 1 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 9073.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1685 | 1938 | 401 | 113 | 48 | 27 | 3 | . | . | . | 4215 |
| 0.50-0.99 | . | 2746 | 781 | 121 | 38 | 22 | 5 | 1 | . | . | 3714 |
| 1.00-1.49 | . | . | 1008 | 10 | 13 | 9 | 4 | 1 | . | . | 1045 |
| 1.50-1.99 | . | . | 401 | 44 | 4 | 4 | 2 | . | . | . | 455 |
| 2.00-2.49 | . | . | 1 | 21 | . | . | . | . | . | . | 22 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1685 | 4684 | 2592 | 310 | 103 | 62 | 14 | 2 | 0 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 8850.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1145 | 1380 | 399 | 111 | 33 | 20 | . | . | . | . | 3088 |
| 0.50-0.99 | . | 2938 | 1272 | 120 | 41 | 29 | 7 | 2 | . | . | 4409 |
| 1.00-1.49 | . | . | 1019 | 11 | 17 | 17 | 4 | 1 | . | . | 1069 |
| 1.50-1.99 | . | . | 551 | 69 | 3 | 6 | 2 | 1 | . | . | 632 |
| 2.00-2.49 | . | . | . | 21 | . | . | 1 | 2 | . | . | 24 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1145 | 4318 | 3241 | 334 | 94 | 72 | 14 | 6 | 0 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 8637.

STATION S08 47.53N 90.92W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

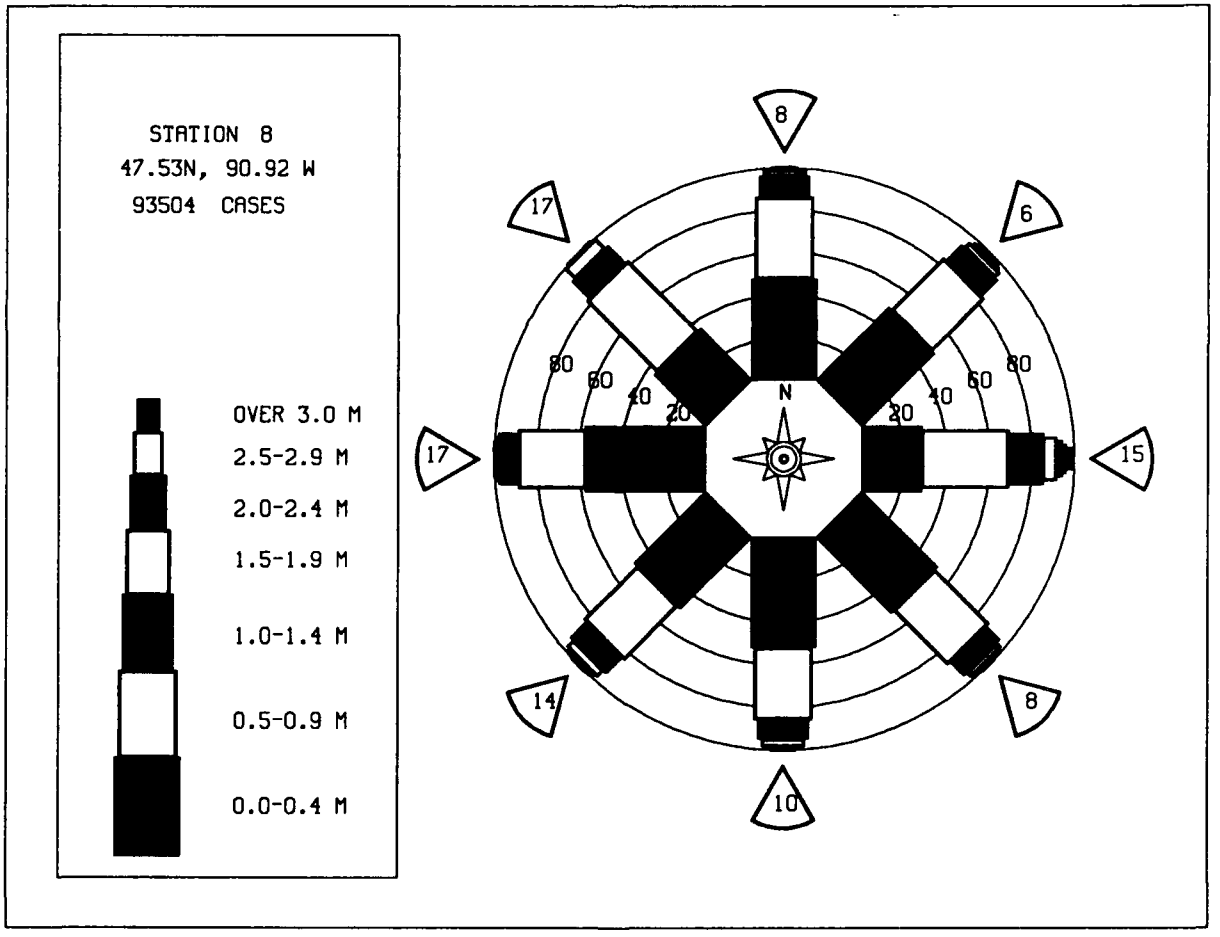
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 722 | 1042 | 268 | 89 | 18 | 11 | 1 | . | . | . | 2151 |
| 0.50-0.99 | . | 2034 | 534 | 122 | 58 | 34 | 13 | 2 | . | . | 2797 |
| 1.00-1.49 | . | . | 617 | 23 | 36 | 23 | 8 | 8 | 1 | . | 716 |
| 1.50-1.99 | . | . | 269 | 18 | 3 | 12 | 5 | 3 | 2 | . | 312 |
| 2.00-2.49 | . | . | . | 9 | . | 1 | 2 | 1 | . | . | 13 |
| 2.50-2.99 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 722 | 3076 | 1688 | 261 | 115 | 81 | 29 | 15 | 5 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 5616.

STATION S08 47.53N 90.92W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1576 | 2144 | 579 | 113 | 32 | 14 | 1 | . | . | . | 4459 |
| 0.50-0.99 | . | 1900 | 1551 | 241 | 45 | 20 | 6 | 1 | . | . | 3764 |
| 1.00-1.49 | . | . | 758 | 254 | 67 | 22 | 5 | 2 | . | . | 1108 |
| 1.50-1.99 | . | . | 175 | 139 | 63 | 27 | 6 | 2 | . | . | 412 |
| 2.00-2.49 | . | . | . | 43 | 25 | 29 | 8 | 4 | . | . | 109 |
| 2.50-2.99 | . | . | . | 3 | 19 | 14 | 7 | 5 | 2 | . | 50 |
| 3.00-3.49 | . | . | . | . | 1 | 15 | 4 | 4 | 3 | . | 27 |
| 3.50-3.99 | . | . | . | . | . | 6 | 4 | 2 | 2 | . | 14 |
| 4.00-4.49 | . | . | . | . | . | . | 4 | 3 | 2 | . | 9 |
| 4.50-4.99 | . | . | . | . | . | . | . | 2 | 2 | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | 1 | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 1576 | 4044 | 3063 | 793 | 252 | 147 | 45 | 26 | 13 | 4 | |

MEAN HS(M)= 0.6 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S08 (47.53N 90.92W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 0.8 | 1.0 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.9 | 1.0 | 0.9 | 0.7 |
| 1957 | 0.8 | 0.8 | 0.7 | 0.7 | 0.8 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 0.7 | 0.6 |
| 1958 | 0.6 | 0.8 | 0.5 | 0.8 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 1.1 | 0.7 | 0.6 |
| 1959 | 0.7 | 0.7 | 0.7 | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 1.1 | 0.7 |
| 1960 | 0.7 | 0.7 | 0.7 | 0.8 | 0.6 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.9 | 0.7 | 0.6 |
| 1961 | 0.6 | 0.7 | 0.9 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 0.7 | 0.6 | 0.6 |
| 1962 | 0.9 | 0.8 | 0.8 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1963 | 0.7 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.5 | 0.8 | 0.9 | 0.6 |
| 1964 | 1.0 | 0.7 | 0.8 | 0.8 | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.8 | 0.7 | 0.7 |
| 1965 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | 0.7 | 1.0 | 1.1 | 0.7 |
| 1966 | 0.9 | 0.9 | 1.6 | 1.0 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.9 | 0.9 | 0.8 | 0.8 |
| 1967 | 1.1 | 0.8 | 1.0 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.6 | 1.0 | 0.8 | 1.2 | 0.8 |
| 1968 | 0.9 | 1.0 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.8 | 1.0 | 1.0 | 0.8 |
| 1969 | 1.0 | 0.6 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.7 | 0.7 | 0.6 | 0.6 |
| 1970 | 0.6 | 0.8 | 0.7 | 0.9 | 0.8 | 0.5 | 0.5 | 0.4 | 0.6 | 0.7 | 0.8 | 0.8 | 0.7 |
| 1971 | 0.8 | 0.9 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.7 | 0.8 | 0.6 | 0.6 |
| 1972 | 0.9 | 0.7 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.8 | 0.6 | 0.7 | 0.6 |
| 1973 | 0.7 | 0.7 | 0.8 | 0.7 | 0.6 | 0.4 | 0.3 | 0.3 | 0.5 | 0.7 | 0.8 | 0.7 | 0.6 |
| 1974 | 0.8 | 0.6 | 0.8 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1975 | 0.9 | 0.6 | 1.1 | 0.7 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.8 | 0.7 | 0.6 |
| 1976 | 0.8 | 0.8 | 1.0 | 0.6 | 0.5 | 0.5 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.6 | 0.6 |
| 1977 | 0.6 | 1.0 | 1.2 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.6 | 0.6 | 0.8 | 1.0 | 0.7 |
| 1978 | 0.7 | 0.5 | 0.5 | 0.7 | 0.5 | 0.4 | 0.3 | 0.4 | 0.8 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1979 | 0.6 | 0.6 | 0.8 | 0.7 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.5 | 0.7 | 0.7 | 0.6 |
| 1980 | 0.7 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.7 | 0.6 | 0.8 | 0.6 |
| 1981 | 0.6 | 0.7 | 0.7 | 0.7 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.7 | 0.6 | 0.6 | 0.6 |
| 1982 | 0.9 | 0.7 | 1.0 | 0.7 | 0.7 | 0.4 | 0.3 | 0.3 | 0.5 | 0.7 | 0.7 | 0.9 | 0.6 |
| 1983 | 0.8 | 0.8 | 1.2 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.6 | 1.0 | 0.8 | 0.7 |
| 1984 | 0.7 | 0.7 | 0.8 | 0.8 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.9 | 0.8 | 0.8 | 0.7 |
| 1985 | 0.8 | 0.7 | 1.2 | 0.6 | 0.5 | 0.5 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 |
| 1986 | 0.8 | 0.6 | 0.8 | 0.9 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.5 | 0.8 | 0.8 | 0.6 |
| 1987 | 0.6 | 0.8 | 1.2 | 0.5 | 0.5 | 0.3 | 0.4 | 0.3 | 0.4 | 0.6 | 0.7 | 0.6 | 0.6 |
| MEAN | 0.8 | 0.7 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.8 | 0.8 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S08 (47.53N 90.92W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.6 | 4.0 | 8.6 | 3.4 | 3.1 | 2.0 | 1.1 | 1.6 | 1.6 | 3.2 | 3.3 | 4.9 |
| 1957 | 2.7 | 2.5 | 3.3 | 4.4 | 2.9 | 1.6 | 1.3 | 1.4 | 1.7 | 1.5 | 2.7 | 2.4 |
| 1958 | 2.7 | 3.8 | 1.6 | 6.0 | 1.4 | 1.7 | 1.3 | 1.2 | 1.8 | 1.9 | 5.2 | 2.1 |
| 1959 | 1.7 | 3.2 | 2.2 | 1.8 | 2.0 | 1.2 | 1.3 | 1.2 | 1.9 | 1.8 | 2.4 | 8.3 |
| 1960 | 2.0 | 2.7 | 3.6 | 2.2 | 2.0 | 1.2 | 1.2 | 1.7 | 1.6 | 2.4 | 7.0 | 2.4 |
| 1961 | 1.9 | 2.4 | 2.8 | 2.4 | 1.7 | 1.6 | 1.4 | 1.0 | 1.6 | 1.5 | 2.7 | 1.8 |
| 1962 | 2.5 | 3.7 | 4.9 | 1.9 | 2.0 | 1.4 | 1.3 | 1.2 | 1.7 | 2.5 | 2.6 | 2.5 |
| 1963 | 1.6 | 3.8 | 2.5 | 2.4 | 1.8 | 2.8 | 1.1 | 1.6 | 1.6 | 2.3 | 1.9 | 4.6 |
| 1964 | 4.2 | 2.7 | 2.9 | 2.5 | 2.6 | 1.8 | 0.9 | 3.0 | 2.3 | 1.9 | 4.0 | 3.5 |
| 1965 | 3.6 | 5.2 | 4.7 | 2.8 | 2.1 | 1.6 | 0.7 | 0.9 | 2.0 | 2.4 | 7.8 | 6.5 |
| 1966 | 3.6 | 4.3 | 7.7 | 6.2 | 2.5 | 1.9 | 1.4 | 2.4 | 1.8 | 3.0 | 4.0 | 3.5 |
| 1967 | 7.1 | 2.5 | 4.5 | 2.1 | 3.4 | 3.0 | 1.5 | 1.3 | 2.1 | 4.5 | 3.4 | 3.8 |
| 1968 | 3.1 | 2.6 | 2.6 | 4.1 | 2.3 | 2.0 | 2.6 | 1.6 | 1.6 | 2.4 | 4.8 | 4.4 |
| 1969 | 4.0 | 2.6 | 2.0 | 2.8 | 1.8 | 2.1 | 1.1 | 1.9 | 1.5 | 2.1 | 2.0 | 3.9 |
| 1970 | 1.5 | 1.8 | 4.4 | 4.0 | 2.8 | 1.8 | 1.2 | 1.1 | 2.0 | 2.6 | 2.8 | 3.5 |
| 1971 | 2.1 | 4.9 | 3.8 | 2.8 | 2.7 | 1.5 | 1.3 | 1.0 | 1.5 | 4.0 | 4.4 | 2.4 |
| 1972 | 2.7 | 4.4 | 2.9 | 2.1 | 2.2 | 1.2 | 0.9 | 1.1 | 1.9 | 2.3 | 2.2 | 4.4 |
| 1973 | 3.5 | 2.7 | 3.5 | 1.9 | 1.9 | 1.5 | 1.0 | 0.8 | 1.6 | 2.6 | 3.0 | 2.4 |
| 1974 | 2.6 | 2.5 | 4.4 | 3.5 | 2.2 | 1.3 | 1.4 | 1.2 | 1.5 | 2.5 | 3.0 | 4.3 |
| 1975 | 5.8 | 1.9 | 7.0 | 3.2 | 1.1 | 1.2 | 1.4 | 1.9 | 2.0 | 2.7 | 4.0 | 2.8 |
| 1976 | 3.1 | 2.5 | 4.7 | 2.2 | 1.5 | 1.9 | 1.1 | 1.3 | 1.8 | 2.3 | 1.6 | 2.5 |
| 1977 | 1.8 | 6.7 | 5.2 | 1.4 | 1.5 | 1.1 | 1.4 | 0.9 | 4.2 | 3.4 | 4.6 | 7.4 |
| 1978 | 2.5 | 1.4 | 2.7 | 2.7 | 1.4 | 1.5 | 1.1 | 1.2 | 3.7 | 2.0 | 2.5 | 3.8 |
| 1979 | 1.6 | 3.6 | 3.1 | 4.3 | 2.1 | 1.2 | 0.8 | 1.2 | 2.1 | 2.1 | 2.4 | 2.4 |
| 1980 | 2.3 | 2.8 | 3.8 | 1.4 | 1.8 | 1.8 | 0.9 | 1.2 | 2.3 | 2.0 | 2.5 | 2.5 |
| 1981 | 1.5 | 1.8 | 3.2 | 2.9 | 1.2 | 1.5 | 0.9 | 1.2 | 2.7 | 2.6 | 2.5 | 1.8 |
| 1982 | 5.8 | 2.5 | 4.6 | 3.8 | 2.1 | 1.3 | 1.0 | 1.0 | 1.9 | 3.3 | 2.9 | 2.8 |
| 1983 | 2.3 | 3.1 | 6.1 | 2.6 | 1.6 | 1.5 | 1.5 | 1.4 | 1.5 | 1.7 | 4.8 | 3.8 |
| 1984 | 2.5 | 3.0 | 3.8 | 3.2 | 1.7 | 1.7 | 1.0 | 1.2 | 2.3 | 4.5 | 2.9 | 2.2 |
| 1985 | 3.9 | 3.3 | 8.9 | 3.4 | 1.7 | 1.5 | 1.1 | 1.6 | 1.8 | 2.0 | 2.8 | 2.2 |
| 1986 | 4.1 | 3.1 | 3.3 | 3.6 | 1.9 | 1.2 | 1.6 | 1.2 | 3.1 | 2.5 | 4.1 | 2.4 |
| 1987 | 2.3 | 5.5 | 6.3 | 1.6 | 2.9 | 0.9 | 1.6 | 0.9 | 1.2 | 2.0 | 2.6 | 2.2 |

32 YR. STATISTICS FOR WIS STATION S08

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.6 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 8.9 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 73.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 85030421 |

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 937 | 1341 | 385 | 86 | 33 | 11 | . | . | . | . | 2793 |
| 0.50-0.99 | . | 994 | 462 | 218 | 70 | 62 | 13 | . | . | . | 1819 |
| 1.00-1.49 | . | 1 | 203 | 139 | 60 | 45 | 22 | 5 | . | . | 475 |
| 1.50-1.99 | . | . | 39 | 5 | 22 | 35 | 12 | 12 | 5 | . | 130 |
| 2.00-2.49 | . | . | 1 | . | 1 | 11 | 13 | 4 | 2 | 1 | 33 |
| 2.50-2.99 | . | . | . | . | . | 2 | 2 | 2 | 1 | 3 | 10 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 937 | 2336 | 1090 | 448 | 186 | 166 | 62 | 23 | 13 | 4 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.7 NO. OF CASES= 4937.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 531 | 808 | 212 | 32 | 14 | 1 | . | . | . | . | 1598 |
| 0.50-0.99 | . | 316 | 552 | 121 | 35 | 12 | . | . | . | . | 1036 |
| 1.00-1.49 | . | . | 109 | 97 | 32 | 19 | 3 | 1 | . | . | 261 |
| 1.50-1.99 | . | . | 9 | 44 | 27 | 31 | 2 | 3 | . | . | 116 |
| 2.00-2.49 | . | . | . | 26 | 7 | 17 | 10 | 6 | . | . | 66 |
| 2.50-2.99 | . | . | . | 4 | 8 | 5 | 14 | 5 | . | . | 36 |
| 3.00-3.49 | . | . | . | . | 1 | . | 4 | 5 | 2 | . | 12 |
| 3.50-3.99 | . | . | . | . | . | . | . | 4 | . | 1 | 5 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 531 | 1124 | 882 | 324 | 124 | 85 | 33 | 24 | 3 | 2 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 2944.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 471 | 651 | 196 | 32 | 16 | 6 | . | . | . | . | 1372 |
| 0.50-0.99 | . | 264 | 717 | 113 | 21 | 13 | . | . | . | . | 1128 |
| 1.00-1.49 | . | . | 148 | 170 | 41 | 13 | 4 | . | . | . | 376 |
| 1.50-1.99 | . | . | 8 | 72 | 58 | 14 | 1 | . | . | . | 153 |
| 2.00-2.49 | . | . | . | 13 | 19 | 23 | 4 | 2 | . | . | 61 |
| 2.50-2.99 | . | . | . | . | 16 | 10 | 9 | 7 | . | . | 42 |
| 3.00-3.49 | . | . | . | . | 1 | 6 | 12 | 2 | . | . | 21 |
| 3.50-3.99 | . | . | . | . | . | 1 | 5 | 5 | 1 | 1 | 13 |
| 4.00-4.49 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 2 | 3 | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | 2 | 2 |
| TOTAL | 471 | 915 | 1069 | 400 | 172 | 86 | 35 | 18 | 9 | 6 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 8.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 2991.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 456 | 658 | 177 | 27 | 6 | 3 | . | . | . | . | 1327 |
| 0.50-0.99 | . | 432 | 1056 | 100 | 17 | 11 | . | . | . | . | 1616 |
| 1.00-1.49 | . | . | 306 | 303 | 31 | 10 | 1 | . | . | . | 651 |
| 1.50-1.99 | . | . | 13 | 158 | 57 | 8 | 1 | . | . | . | 237 |
| 2.00-2.49 | . | . | . | 62 | 41 | 27 | 3 | 1 | . | . | 134 |
| 2.50-2.99 | . | . | . | 1 | 52 | 18 | 6 | 1 | 1 | . | 79 |
| 3.00-3.49 | . | . | . | . | 7 | 26 | 16 | 5 | 2 | . | 56 |
| 3.50-3.99 | . | . | . | . | . | 18 | 10 | 7 | 3 | . | 38 |
| 4.00-4.49 | . | . | . | . | . | 4 | 14 | 5 | 1 | . | 24 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 14 | 1 | 1 | 18 |
| 5.00-5.49 | . | . | . | . | . | . | . | 11 | 2 | 1 | 14 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 6 | 1 | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 7 | . | 7 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 7.00+ | | | | | | | | | | 3 | 3 |
| TOTAL | 456 | 1090 | 1552 | 651 | 211 | 125 | 53 | 44 | 26 | 7 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 9.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 3962.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 838 | 1457 | 274 | 58 | 14 | 3 | . | . | . | . | 2644 |
| 0.50-0.99 | . | 959 | 2707 | 111 | 2 | 4 | . | . | . | . | 3783 |
| 1.00-1.49 | . | . | 845 | 864 | 33 | 8 | . | . | . | . | 1750 |
| 1.50-1.99 | . | . | 34 | 467 | 197 | 11 | 1 | . | . | . | 710 |
| 2.00-2.49 | . | . | . | 121 | 86 | 66 | 5 | 2 | . | . | 280 |
| 2.50-2.99 | . | . | . | 3 | 137 | 60 | 16 | 3 | . | . | 219 |
| 3.00-3.49 | . | . | . | . | 4 | 103 | 25 | 16 | . | . | 148 |
| 3.50-3.99 | . | . | . | . | . | 55 | 36 | 10 | 1 | . | 102 |
| 4.00-4.49 | . | . | . | . | . | 1 | 42 | 11 | . | 1 | 55 |
| 4.50-4.99 | . | . | . | . | . | . | 9 | 18 | . | . | 27 |
| 5.00-5.49 | . | . | . | . | . | . | . | 33 | 1 | . | 34 |
| 5.50-5.99 | . | . | . | . | . | . | . | 7 | 11 | 1 | 19 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 7 | . | 7 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | 2 | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 838 | 2416 | 3860 | 1624 | 473 | 311 | 134 | 100 | 22 | 6 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 9170.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 879 | 1312 | 224 | 38 | 13 | 3 | . | . | . | . | 2469 |
| 0.50-0.99 | . | 685 | 1818 | 52 | 8 | 5 | . | . | . | . | 2568 |
| 1.00-1.49 | . | . | 332 | 421 | 17 | 2 | . | . | . | . | 772 |
| 1.50-1.99 | . | . | 7 | 166 | 67 | 12 | 2 | . | . | . | 254 |
| 2.00-2.49 | . | . | . | 25 | 47 | 34 | 2 | . | . | . | 108 |
| 2.50-2.99 | . | . | . | . | 29 | 11 | 6 | . | . | . | 46 |
| 3.00-3.49 | . | . | . | . | 2 | 11 | 3 | . | . | . | 16 |
| 3.50-3.99 | . | . | . | . | . | 3 | 4 | 2 | . | . | 9 |
| 4.00-4.49 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 879 | 1997 | 2381 | 702 | 183 | 81 | 20 | 2 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 5852.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 890 | 1191 | 233 | 40 | 9 | 3 | 1 | . | . | . | 2367 |
| 0.50-0.99 | . | 448 | 1093 | 48 | 4 | . | . | . | . | . | 1593 |
| 1.00-1.49 | . | . | 160 | 192 | 16 | 1 | . | . | . | . | 369 |
| 1.50-1.99 | . | . | 2 | 60 | 27 | 2 | . | . | . | . | 91 |
| 2.00-2.49 | . | . | . | 12 | 7 | 7 | . | . | . | . | 26 |
| 2.50-2.99 | . | . | . | . | 9 | 4 | 1 | 1 | . | . | 15 |
| 3.00-3.49 | . | . | . | . | . | 4 | 2 | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | 1 | . | 1 | 3 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 890 | 1639 | 1488 | 352 | 72 | 22 | 6 | 2 | 0 | 1 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 4191.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 697 | 1076 | 196 | 40 | 5 | 3 | . | . | . | . | 2017 |
| 0.50-0.99 | . | 432 | 818 | 26 | 6 | . | . | . | . | . | 1282 |
| 1.00-1.49 | . | . | 202 | 108 | 7 | . | . | . | . | . | 317 |
| 1.50-1.99 | . | . | 18 | 69 | 11 | 2 | . | . | . | . | 100 |
| 2.00-2.49 | . | . | . | 17 | 8 | 1 | 1 | . | . | . | 27 |
| 2.50-2.99 | . | . | . | . | 6 | 1 | . | . | . | . | 7 |
| 3.00-3.49 | . | . | . | . | 1 | 2 | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 697 | 1508 | 1234 | 260 | 44 | 9 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 3517.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 760 | 1040 | 199 | 35 | 8 | 2 | 1 | . | . | . | 2045 |
| 0.50-0.99 | . | 447 | 905 | 26 | 1 | . | . | . | . | . | 1379 |
| 1.00-1.49 | . | . | 350 | 26 | 7 | 1 | . | . | . | . | 384 |
| 1.50-1.99 | . | . | 25 | 90 | 7 | 2 | . | . | . | . | 124 |
| 2.00-2.49 | . | . | . | 19 | 1 | 2 | . | . | . | . | 22 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | 3 | . | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 760 | 1487 | 1479 | 198 | 27 | 7 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 3711.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 701 | 1264 | 291 | 25 | 2 | 1 | . | . | . | . | 2284 |
| 0.50-0.99 | . | 552 | 1627 | 62 | . | . | . | . | . | . | 2241 |
| 1.00-1.49 | . | . | 557 | 240 | 7 | . | . | . | . | . | 804 |
| 1.50-1.99 | . | . | 32 | 240 | 43 | 3 | . | . | . | . | 318 |
| 2.00-2.49 | . | . | . | 78 | 39 | 1 | . | . | . | . | 118 |
| 2.50-2.99 | . | . | . | . | 49 | 5 | . | . | . | . | 54 |
| 3.00-3.49 | . | . | . | . | 1 | 14 | . | . | . | . | 15 |
| 3.50-3.99 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 701 | 1816 | 2507 | 645 | 141 | 29 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 5469.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 885 | 1341 | 418 | 55 | 12 | 2 | . | . | . | . | 2713 |
| 0.50-0.99 | . | 775 | 2073 | 190 | 6 | . | . | . | . | . | 3044 |
| 1.00-1.49 | . | . | 641 | 485 | 37 | 2 | . | . | . | . | 1165 |
| 1.50-1.99 | . | . | 40 | 328 | 126 | 6 | . | . | . | . | 500 |
| 2.00-2.49 | . | . | . | 88 | 81 | 8 | . | . | . | . | 177 |
| 2.50-2.99 | . | . | . | 3 | 88 | 45 | . | . | . | . | 136 |
| 3.00-3.49 | . | . | . | . | 3 | 62 | 1 | . | . | . | 66 |
| 3.50-3.99 | . | . | . | . | . | 20 | 2 | . | . | . | 22 |
| 4.00-4.49 | . | . | . | . | . | 3 | 3 | . | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 885 | 2116 | 3172 | 1149 | 353 | 148 | 7 | 3 | 1 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 7337.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1080 | 1105 | 156 | 40 | 7 | 3 | 1 | . | . | . | 2392 |
| 0.50-0.99 | . | 1448 | 1194 | 27 | 4 | 2 | . | . | . | . | 2675 |
| 1.00-1.49 | . | . | 619 | 39 | 9 | 1 | . | . | . | . | 668 |
| 1.50-1.99 | . | . | 165 | 117 | 12 | . | . | . | . | . | 294 |
| 2.00-2.49 | . | . | . | 54 | 11 | 7 | 1 | . | . | . | 73 |
| 2.50-2.99 | . | . | . | 6 | 6 | 2 | . | . | 1 | . | 15 |
| 3.00-3.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | . | 1 | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1080 | 2553 | 2134 | 283 | 49 | 17 | 3 | 0 | 2 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 5734.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1624 | 1420 | 196 | 49 | 18 | 6 | 1 | . | . | . | 3314 |
| 0.50-0.99 | . | 2208 | 1547 | 35 | 12 | 7 | 1 | . | . | . | 3810 |
| 1.00-1.49 | . | . | 1116 | 20 | 11 | 3 | . | . | . | . | 1150 |
| 1.50-1.99 | . | . | 348 | 235 | 8 | 1 | . | . | . | . | 592 |
| 2.00-2.49 | . | . | . | 117 | . | . | . | . | . | . | 117 |
| 2.50-2.99 | . | . | . | 8 | 1 | . | . | . | . | . | 9 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1624 | 3628 | 3207 | 464 | 50 | 17 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 8417.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1456 | 1820 | 180 | 82 | 20 | 8 | . | . | . | . | 3566 |
| 0.50-0.99 | . | 2912 | 1475 | 36 | 11 | 10 | . | 1 | . | . | 4445 |
| 1.00-1.49 | . | . | 1429 | 11 | 6 | 3 | . | . | . | . | 1449 |
| 1.50-1.99 | . | . | 537 | 260 | 3 | 2 | 1 | . | . | . | 803 |
| 2.00-2.49 | . | . | 1 | 112 | . | . | . | . | . | . | 113 |
| 2.50-2.99 | . | . | . | 12 | 1 | . | . | 1 | . | . | 14 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1456 | 4732 | 3622 | 513 | 41 | 23 | 1 | 2 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 9727.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1435 | 1735 | 336 | 99 | 50 | 20 | . | . | . | . | 3675 |
| 0.50-0.99 | . | 2888 | 1126 | 80 | 28 | 37 | 2 | 1 | . | . | 4162 |
| 1.00-1.49 | . | . | 1065 | 25 | 16 | 6 | 2 | . | . | . | 1114 |
| 1.50-1.99 | . | . | 441 | 38 | 3 | 3 | 2 | . | . | . | 487 |
| 2.00-2.49 | . | . | 1 | 17 | . | 2 | 1 | . | . | . | 21 |
| 2.50-2.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1435 | 4623 | 2969 | 259 | 97 | 68 | 7 | 2 | 0 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 8855.

STATION S09 47.38N 90.92W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

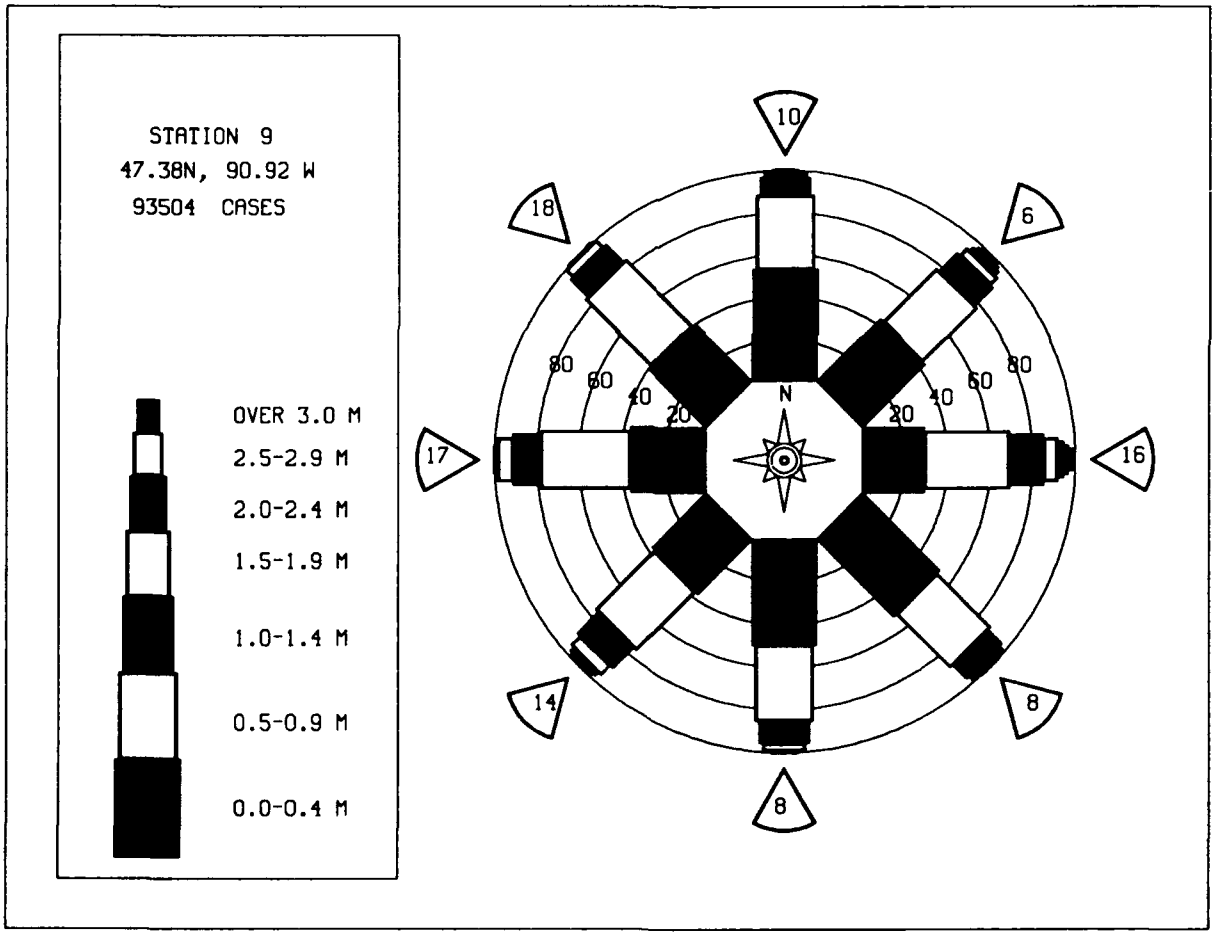
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1239 | 1555 | 356 | 97 | 38 | 18 | . | . | . | . | 3303 |
| 0.50-0.99 | . | 2072 | 647 | 133 | 58 | 59 | 8 | 1 | . | . | 2978 |
| 1.00-1.49 | . | . | 520 | 57 | 27 | 19 | 8 | 9 | 1 | . | 641 |
| 1.50-1.99 | . | . | 164 | 5 | 6 | 17 | 3 | 6 | 1 | . | 202 |
| 2.00-2.49 | . | . | 1 | 4 | . | 2 | 2 | 3 | 1 | . | 13 |
| 2.50-2.99 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 3.00-3.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1239 | 3627 | 1688 | 296 | 129 | 116 | 21 | 21 | 4 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.4 NO. OF CASES= 6690.

STATION S09 47.38N 90.92W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1488 | 1978 | 403 | 84 | 27 | 9 | . | . | . | . | 3989 |
| 0.50-0.99 | . | 1783 | 1982 | 138 | 28 | 22 | 2 | . | . | . | 3955 |
| 1.00-1.49 | . | . | 861 | 320 | 36 | 13 | 4 | 1 | . | . | 1235 |
| 1.50-1.99 | . | . | 189 | 236 | 68 | 15 | 2 | 2 | . | . | 512 |
| 2.00-2.49 | . | . | . | 77 | 35 | 21 | 4 | 1 | . | . | 138 |
| 2.50-2.99 | . | . | . | 4 | 40 | 16 | 5 | 2 | . | . | 67 |
| 3.00-3.49 | . | . | . | . | 2 | 23 | 6 | 2 | . | . | 33 |
| 3.50-3.99 | . | . | . | . | . | 10 | 5 | 3 | . | . | 18 |
| 4.00-4.49 | . | . | . | . | . | . | 6 | 1 | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 3 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1488 | 3761 | 3435 | 859 | 236 | 129 | 35 | 19 | 2 | 0 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 9.3 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S09 (47.38N 90.92W)

| | MONTH | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| YEAR | | | | | | | | | | | | | MEAN |
| 1956 | 0.6 | 0.8 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 1.0 | 1.1 | 1.0 | 0.8 |
| 1957 | 0.9 | 0.8 | 0.7 | 0.7 | 0.8 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 1.0 | 0.8 | 0.7 |
| 1958 | 0.7 | 0.9 | 0.5 | 0.9 | 0.6 | 0.5 | 0.5 | 0.4 | 0.7 | 0.7 | 1.2 | 0.8 | 0.7 |
| 1959 | 0.8 | 0.8 | 0.7 | 0.6 | 0.8 | 0.5 | 0.4 | 0.4 | 0.7 | 0.7 | 0.9 | 1.1 | 0.7 |
| 1960 | 0.8 | 0.8 | 0.7 | 0.9 | 0.7 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 1.0 | 0.9 | 0.7 |
| 1961 | 0.7 | 0.8 | 0.9 | 0.7 | 0.6 | 0.5 | 0.3 | 0.3 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 |
| 1962 | 0.9 | 0.8 | 0.9 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 | 0.7 |
| 1963 | 0.9 | 0.9 | 0.9 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 1.0 | 0.7 |
| 1964 | 1.0 | 0.8 | 0.9 | 0.8 | 0.7 | 0.4 | 0.4 | 0.6 | 0.6 | 0.6 | 0.9 | 0.7 | 0.7 |
| 1965 | 1.0 | 1.0 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.6 | 0.8 | 1.1 | 1.2 | 0.7 |
| 1966 | 0.9 | 1.0 | 1.6 | 0.9 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 1.0 | 0.9 | 0.8 | 0.8 |
| 1967 | 1.1 | 0.8 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 1.0 | 0.8 | 1.2 | 0.8 |
| 1968 | 0.9 | 1.0 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 1.0 | 1.0 | 0.8 |
| 1969 | 1.0 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.5 | 0.8 | 0.7 | 0.7 | 0.7 |
| 1970 | 0.7 | 0.9 | 0.7 | 1.0 | 0.9 | 0.5 | 0.5 | 0.4 | 0.7 | 0.7 | 0.8 | 0.8 | 0.7 |
| 1971 | 0.9 | 1.0 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.7 | 0.8 | 0.7 | 0.7 |
| 1972 | 1.0 | 0.8 | 0.9 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.8 | 0.7 | 0.8 | 0.7 |
| 1973 | 0.8 | 0.7 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.3 | 0.5 | 0.7 | 0.9 | 0.8 | 0.6 |
| 1974 | 0.8 | 0.6 | 0.9 | 0.7 | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.9 | 0.9 | 0.7 |
| 1975 | 1.0 | 0.7 | 1.1 | 0.8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 0.9 | 0.7 | 0.7 |
| 1976 | 0.9 | 0.9 | 1.2 | 0.7 | 0.6 | 0.6 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.7 | 0.6 |
| 1977 | 0.7 | 1.0 | 1.2 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 1.0 | 0.7 |
| 1978 | 0.8 | 0.5 | 0.5 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.8 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1979 | 0.6 | 0.6 | 0.9 | 0.7 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1980 | 0.8 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.3 | 0.5 | 0.6 | 0.8 | 0.6 | 0.9 | 0.6 |
| 1981 | 0.6 | 0.8 | 0.7 | 0.7 | 0.4 | 0.5 | 0.3 | 0.4 | 0.6 | 0.8 | 0.7 | 0.6 | 0.6 |
| 1982 | 1.0 | 0.8 | 1.0 | 0.7 | 0.7 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1983 | 0.8 | 0.8 | 1.2 | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | 0.6 | 0.7 | 1.1 | 0.9 | 0.7 |
| 1984 | 0.8 | 0.8 | 0.9 | 0.9 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 1.0 | 0.9 | 0.9 | 0.7 |
| 1985 | 0.9 | 0.8 | 1.3 | 0.7 | 0.5 | 0.5 | 0.3 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1986 | 0.9 | 0.6 | 0.9 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 1.0 | 0.8 | 0.7 |
| 1987 | 0.7 | 0.8 | 1.2 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.7 | 0.8 | 0.7 | 0.6 |
| MEAN | 0.8 | 0.8 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.9 | 0.9 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S09 (47.38N 90.92W)

| | MONTH | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| YEAR | | | | | | | | | | | | |
| 1956 | 3.0 | 3.5 | 6.8 | 3.6 | 3.7 | 2.6 | 1.2 | 1.6 | 1.6 | 2.9 | 3.8 | 5.1 |
| 1957 | 2.9 | 2.4 | 3.7 | 4.3 | 2.9 | 2.0 | 1.7 | 1.2 | 2.1 | 1.7 | 2.8 | 2.4 |
| 1958 | 2.9 | 4.1 | 2.1 | 5.2 | 1.9 | 1.4 | 1.4 | 1.4 | 1.9 | 2.3 | 4.6 | 2.8 |
| 1959 | 2.1 | 3.9 | 2.4 | 2.1 | 2.6 | 1.8 | 1.4 | 1.3 | 2.3 | 2.4 | 2.7 | 6.6 |
| 1960 | 2.1 | 3.5 | 3.8 | 2.7 | 2.1 | 1.6 | 1.2 | 1.8 | 1.6 | 2.5 | 6.5 | 3.1 |
| 1961 | 2.0 | 2.5 | 2.7 | 2.2 | 2.4 | 1.7 | 1.6 | 0.8 | 1.5 | 1.7 | 3.4 | 2.1 |
| 1962 | 3.2 | 3.3 | 4.9 | 2.1 | 2.2 | 1.8 | 1.2 | 1.4 | 2.2 | 3.7 | 3.1 | 3.4 |
| 1963 | 2.0 | 4.0 | 2.4 | 2.2 | 1.9 | 2.6 | 1.2 | 1.6 | 1.9 | 2.2 | 2.1 | 4.3 |
| 1964 | 4.4 | 3.4 | 3.2 | 2.5 | 3.4 | 2.5 | 1.0 | 3.2 | 3.2 | 2.3 | 4.0 | 3.6 |
| 1965 | 3.4 | 4.9 | 4.5 | 2.3 | 1.9 | 1.6 | 1.1 | 1.1 | 2.4 | 2.9 | 7.0 | 5.6 |
| 1966 | 3.4 | 4.2 | 7.1 | 5.4 | 2.5 | 2.3 | 1.3 | 2.3 | 1.8 | 3.8 | 3.9 | 3.2 |
| 1967 | 7.3 | 2.4 | 4.2 | 2.5 | 3.5 | 3.0 | 1.5 | 1.4 | 2.1 | 3.9 | 3.0 | 3.7 |
| 1968 | 3.2 | 2.4 | 3.0 | 4.0 | 2.0 | 1.9 | 3.3 | 1.6 | 1.8 | 2.0 | 4.3 | 4.6 |
| 1969 | 3.5 | 2.6 | 2.5 | 3.3 | 2.3 | 2.1 | 1.3 | 2.2 | 1.5 | 2.4 | 2.4 | 3.9 |
| 1970 | 1.8 | 2.8 | 3.9 | 3.5 | 3.2 | 1.8 | 1.2 | 1.3 | 2.7 | 2.3 | 2.6 | 3.9 |
| 1971 | 2.4 | 4.9 | 3.9 | 2.6 | 2.6 | 1.7 | 1.2 | 1.1 | 1.4 | 4.0 | 4.1 | 2.3 |
| 1972 | 4.0 | 4.2 | 2.9 | 2.4 | 2.7 | 1.4 | 1.1 | 1.2 | 2.2 | 2.9 | 2.8 | 4.7 |
| 1973 | 3.7 | 2.2 | 3.1 | 1.9 | 2.1 | 1.3 | 1.4 | 0.9 | 1.7 | 2.5 | 3.1 | 2.8 |
| 1974 | 3.3 | 2.4 | 4.3 | 3.5 | 2.2 | 1.7 | 1.8 | 1.3 | 1.7 | 2.3 | 2.9 | 3.9 |
| 1975 | 4.9 | 2.7 | 6.0 | 3.6 | 1.4 | 1.2 | 1.4 | 2.2 | 2.1 | 3.4 | 3.7 | 3.1 |
| 1976 | 3.1 | 3.2 | 5.9 | 2.6 | 1.6 | 2.2 | 1.0 | 1.2 | 1.7 | 2.9 | 1.8 | 3.0 |
| 1977 | 2.0 | 6.0 | 5.3 | 1.5 | 1.5 | 1.1 | 1.6 | 1.1 | 4.0 | 3.5 | 4.4 | 6.1 |
| 1978 | 2.3 | 1.4 | 2.6 | 2.3 | 1.7 | 1.6 | 1.2 | 1.3 | 3.8 | 2.4 | 2.7 | 3.6 |
| 1979 | 1.8 | 3.5 | 3.0 | 3.7 | 2.1 | 1.2 | 1.1 | 1.2 | 2.6 | 2.0 | 3.3 | 2.8 |
| 1980 | 2.8 | 3.0 | 3.4 | 1.5 | 1.9 | 1.9 | 1.1 | 1.3 | 2.2 | 2.4 | 2.8 | 3.2 |
| 1981 | 1.6 | 2.1 | 3.3 | 2.8 | 1.4 | 1.9 | 1.0 | 1.2 | 2.7 | 2.3 | 3.2 | 1.8 |
| 1982 | 5.5 | 3.0 | 4.4 | 3.7 | 1.7 | 1.8 | 1.3 | 0.9 | 2.2 | 3.4 | 3.9 | 2.9 |
| 1983 | 2.9 | 4.0 | 5.2 | 2.5 | 2.0 | 1.7 | 1.3 | 1.4 | 1.8 | 1.8 | 5.0 | 3.7 |
| 1984 | 3.2 | 2.8 | 3.9 | 3.5 | 2.1 | 2.1 | 1.4 | 1.2 | 3.0 | 4.6 | 2.6 | 2.4 |
| 1985 | 3.9 | 4.5 | 9.3 | 2.9 | 1.8 | 1.9 | 1.0 | 1.6 | 2.0 | 2.4 | 3.6 | 2.9 |
| 1986 | 4.0 | 3.2 | 3.5 | 4.0 | 2.2 | 1.4 | 1.8 | 1.3 | 3.1 | 3.1 | 5.9 | 3.4 |
| 1987 | 2.4 | 5.1 | 5.2 | 1.6 | 3.2 | 1.3 | 1.4 | 1.2 | 1.2 | 2.6 | 2.9 | 3.2 |

32 YR. STATISTICS FOR WIS STATION S09

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.7 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 9.3 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 71.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 85030421 |

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1525 | 1921 | 504 | 120 | 41 | 29 | . | . | . | . | 4140 |
| 0.50-0.99 | . | 1518 | 389 | 233 | 103 | 56 | 19 | 2 | . | . | 2320 |
| 1.00-1.49 | . | . | 266 | 81 | 68 | 43 | 22 | 7 | . | . | 487 |
| 1.50-1.99 | . | . | 26 | 4 | 16 | 35 | 22 | 10 | 4 | 1 | 118 |
| 2.00-2.49 | . | . | . | . | 1 | 9 | 9 | 6 | 4 | 3 | 32 |
| 2.50-2.99 | . | . | . | . | . | . | 1 | 2 | 2 | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1525 | 3439 | 1185 | 438 | 229 | 172 | 73 | 29 | 11 | 4 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 6658.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 614 | 866 | 221 | 40 | 17 | 3 | . | . | . | . | 1761 |
| 0.50-0.99 | . | 402 | 489 | 129 | 26 | 19 | 4 | . | . | . | 1069 |
| 1.00-1.49 | . | . | 58 | 149 | 58 | 32 | 1 | 1 | . | . | 299 |
| 1.50-1.99 | . | . | 6 | 32 | 37 | 33 | 9 | 3 | 1 | . | 121 |
| 2.00-2.49 | . | . | . | 1 | 17 | 18 | 20 | 10 | 1 | . | 67 |
| 2.50-2.99 | . | . | . | . | 2 | 8 | 10 | 7 | 1 | 2 | 30 |
| 3.00-3.49 | . | . | . | . | . | . | 2 | 7 | 3 | 1 | 13 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | 1 | 3 | 4 |
| 4.00-4.49 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 614 | 1268 | 774 | 351 | 157 | 113 | 46 | 30 | 8 | 10 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 3166.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 449 | 533 | 175 | 31 | 19 | 5 | . | . | . | . | 1212 |
| 0.50-0.99 | . | 266 | 412 | 108 | 12 | 10 | . | . | . | . | 808 |
| 1.00-1.49 | . | . | 82 | 134 | 38 | 11 | 5 | . | . | . | 270 |
| 1.50-1.99 | . | . | 3 | 21 | 31 | 11 | 1 | 1 | . | . | 68 |
| 2.00-2.49 | . | . | . | 7 | 7 | 7 | 5 | 2 | . | . | 28 |
| 2.50-2.99 | . | . | . | . | 1 | 4 | 12 | 2 | . | . | 19 |
| 3.00-3.49 | . | . | . | . | . | 2 | 1 | 1 | . | 1 | 5 |
| 3.50-3.99 | . | . | . | . | . | . | 2 | 2 | 1 | . | 5 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | 2 | 2 | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 449 | 799 | 672 | 301 | 108 | 50 | 26 | 8 | 4 | 4 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 2276.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 468 | 593 | 159 | 27 | 11 | 5 | . | . | . | . | 1263 |
| 0.50-0.99 | . | 503 | 832 | 100 | 23 | 18 | 2 | . | . | . | 1478 |
| 1.00-1.49 | . | . | 270 | 225 | 34 | 7 | . | . | . | . | 536 |
| 1.50-1.99 | . | . | 14 | 94 | 53 | 8 | 1 | . | . | . | 170 |
| 2.00-2.49 | . | . | . | 47 | 38 | 25 | 5 | 1 | . | . | 116 |
| 2.50-2.99 | . | . | . | . | 33 | 10 | 7 | 4 | . | . | 54 |
| 3.00-3.49 | . | . | . | . | 6 | 16 | 8 | 3 | 1 | . | 34 |
| 3.50-3.99 | . | . | . | . | . | 16 | 8 | 4 | 2 | . | 30 |
| 4.00-4.49 | . | . | . | . | . | 2 | 6 | 7 | . | 2 | 17 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 9 | 2 | . | 16 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 3 | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 7.00+ | | | | | | | | | | 2 | 2 |
| TOTAL | 468 | 1096 | 1275 | 493 | 198 | 107 | 42 | 35 | 17 | 4 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 3510.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 913 | 1454 | 283 | 65 | 12 | 7 | . | . | . | . | 2734 |
| 0.50-0.99 | . | 998 | 2767 | 127 | 9 | 5 | . | . | . | . | 3906 |
| 1.00-1.49 | . | . | 916 | 902 | 33 | 5 | 1 | . | . | . | 1857 |
| 1.50-1.99 | . | . | 45 | 568 | 199 | 9 | 2 | . | . | . | 823 |
| 2.00-2.49 | . | . | . | 164 | 117 | 70 | 3 | 1 | . | . | 355 |
| 2.50-2.99 | . | . | . | 3 | 152 | 63 | 28 | 2 | . | . | 248 |
| 3.00-3.49 | . | . | . | . | 10 | 116 | 31 | 12 | . | . | 169 |
| 3.50-3.99 | . | . | . | . | . | 57 | 29 | 11 | 2 | . | 99 |
| 4.00-4.49 | . | . | . | . | . | 5 | 39 | 20 | 1 | . | 65 |
| 4.50-4.99 | . | . | . | . | . | . | 11 | 18 | 2 | . | 31 |
| 5.00-5.49 | . | . | . | . | . | . | . | 33 | 1 | 1 | 35 |
| 5.50-5.99 | . | . | . | . | . | . | . | 8 | 16 | . | 24 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 14 | . | 14 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 4 | 1 | 5 |
| 7.00+ | . | . | . | . | . | . | . | . | 2 | 4 | 6 |
| TOTAL | 913 | 2452 | 4011 | 1829 | 532 | 337 | 144 | 105 | 42 | 6 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.3 NO. OF CASES= 9721.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1004 | 1377 | 201 | 24 | 13 | 7 | . | . | . | . | 2626 |
| 0.50-0.99 | . | 745 | 1934 | 67 | 1 | 5 | . | . | . | . | 2752 |
| 1.00-1.49 | . | . | 398 | 433 | 26 | 5 | . | . | . | . | 862 |
| 1.50-1.99 | . | . | 12 | 194 | 87 | 16 | . | . | . | . | 309 |
| 2.00-2.49 | . | . | . | 37 | 34 | 26 | 4 | . | . | . | 101 |
| 2.50-2.99 | . | . | . | . | 31 | 16 | 7 | 2 | . | . | 56 |
| 3.00-3.49 | . | . | . | . | 3 | 18 | 4 | 1 | . | 1 | 27 |
| 3.50-3.99 | . | . | . | . | . | 5 | 6 | . | . | . | 11 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1004 | 2122 | 2545 | 755 | 195 | 98 | 22 | 4 | 0 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 6320.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 896 | 1194 | 240 | 38 | 14 | 5 | . | . | . | . | 2387 |
| 0.50-0.99 | . | 500 | 1111 | 65 | 8 | 1 | . | . | . | . | 1685 |
| 1.00-1.49 | . | . | 197 | 240 | 12 | 1 | . | . | . | . | 450 |
| 1.50-1.99 | . | . | 2 | 82 | 31 | 4 | . | . | . | . | 119 |
| 2.00-2.49 | . | . | . | 9 | 9 | 8 | . | . | . | . | 26 |
| 2.50-2.99 | . | . | . | . | 13 | 3 | 1 | . | . | . | 17 |
| 3.00-3.49 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 896 | 1694 | 1550 | 434 | 87 | 27 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 4397.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 733 | 1162 | 161 | 26 | 4 | . | . | . | . | . | 2086 |
| 0.50-0.99 | . | 463 | 940 | 48 | 5 | . | . | . | . | . | 1456 |
| 1.00-1.49 | . | . | 218 | 82 | 7 | . | . | . | . | . | 307 |
| 1.50-1.99 | . | . | 9 | 85 | 9 | 1 | 1 | . | . | . | 105 |
| 2.00-2.49 | . | . | . | 13 | 6 | 2 | . | . | . | . | 21 |
| 2.50-2.99 | . | . | . | . | 8 | 1 | . | . | . | . | 9 |
| 3.00-3.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 733 | 1625 | 1328 | 254 | 39 | 8 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 3737.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 834 | 1316 | 225 | 37 | 6 | 3 | . | . | . | . | 2421 |
| 0.50-0.99 | . | 594 | 1383 | 47 | . | . | . | . | . | . | 2024 |
| 1.00-1.49 | . | . | 545 | 114 | 8 | . | . | . | . | . | 667 |
| 1.50-1.99 | . | . | 21 | 217 | 12 | 1 | . | . | . | . | 251 |
| 2.00-2.49 | . | . | . | 86 | 9 | 2 | . | . | . | . | 97 |
| 2.50-2.99 | . | . | . | . | 10 | . | . | 1 | . | . | 11 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | 1 | 2 |
| 3.50-3.99 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 834 | 1910 | 2174 | 501 | 46 | 9 | 0 | 1 | 0 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 5129.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 673 | 1224 | 413 | 38 | 6 | . | . | . | . | . | 2354 |
| 0.50-0.99 | . | 1063 | 1414 | 342 | 3 | . | . | . | . | . | 2822 |
| 1.00-1.49 | . | . | 285 | 607 | 146 | 3 | . | . | . | . | 1041 |
| 1.50-1.99 | . | . | 31 | 179 | 162 | 21 | . | . | . | . | 393 |
| 2.00-2.49 | . | . | . | 48 | 93 | 40 | . | . | . | . | 181 |
| 2.50-2.99 | . | . | . | . | 14 | 10 | . | . | . | . | 24 |
| 3.00-3.49 | . | . | . | . | 1 | . | 1 | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 673 | 2287 | 2143 | 1214 | 425 | 75 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 6385.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 920 | 1235 | 294 | 50 | 11 | 3 | . | . | . | . | 2513 |
| 0.50-0.99 | . | 1732 | 482 | 236 | 22 | 1 | . | . | . | . | 2473 |
| 1.00-1.49 | . | . | 232 | 108 | 74 | 4 | . | . | . | . | 418 |
| 1.50-1.99 | . | . | 54 | 19 | 48 | 28 | 1 | . | . | . | 150 |
| 2.00-2.49 | . | . | 4 | 2 | 4 | 25 | 4 | . | . | . | 39 |
| 2.50-2.99 | . | . | . | 1 | . | 3 | 2 | 1 | . | . | 7 |
| 3.00-3.49 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 920 | 2967 | 1066 | 416 | 159 | 64 | 8 | 2 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 5247.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1198 | 1302 | 136 | 32 | 14 | 6 | 1 | . | . | . | 2689 |
| 0.50-0.99 | . | 1455 | 168 | 35 | 4 | 3 | . | . | . | . | 1665 |
| 1.00-1.49 | . | . | 283 | 17 | 5 | 1 | . | . | . | . | 306 |
| 1.50-1.99 | . | . | 44 | 1 | 6 | 2 | . | . | . | . | 53 |
| 2.00-2.49 | . | . | 2 | . | . | 1 | . | . | . | . | 3 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1198 | 2757 | 633 | 85 | 29 | 13 | 1 | 0 | 2 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.0 NO. OF CASES= 4420.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1888 | 1899 | 224 | 64 | 22 | 13 | 1 | . | . | . | 4111 |
| 0.50-0.99 | . | 2197 | 273 | 44 | 13 | 3 | 1 | 1 | . | . | 2532 |
| 1.00-1.49 | . | . | 706 | 20 | 13 | 3 | . | . | . | . | 742 |
| 1.50-1.99 | . | . | 108 | 1 | 3 | 2 | 2 | . | . | . | 116 |
| 2.00-2.49 | . | . | 1 | . | . | . | . | 1 | 1 | . | 3 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1888 | 4096 | 1312 | 129 | 51 | 21 | 4 | 3 | 2 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.0 NO. OF CASES= 7028.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1563 | 1921 | 178 | 57 | 13 | 12 | . | 1 | . | . | 3745 |
| 0.50-0.99 | . | 2920 | 740 | 38 | 9 | 9 | . | . | . | . | 3716 |
| 1.00-1.49 | . | . | 1045 | 17 | 8 | 2 | . | . | . | . | 1072 |
| 1.50-1.99 | . | . | 267 | 19 | 3 | 2 | 1 | . | . | . | 292 |
| 2.00-2.49 | . | . | 4 | 10 | . | . | . | . | . | . | 14 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1563 | 4841 | 2234 | 141 | 33 | 25 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 8275.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1483 | 1726 | 269 | 97 | 53 | 18 | 1 | . | . | . | 3647 |
| 0.50-0.99 | . | 3265 | 1457 | 67 | 17 | 20 | 4 | 2 | . | . | 4832 |
| 1.00-1.49 | . | . | 1130 | 27 | 13 | 4 | 2 | . | . | . | 1176 |
| 1.50-1.99 | . | . | 513 | 42 | 2 | 8 | 1 | . | . | . | 566 |
| 2.00-2.49 | . | . | . | 19 | . | 1 | . | . | . | . | 20 |
| 2.50-2.99 | . | . | . | 1 | . | 1 | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1483 | 4991 | 3369 | 253 | 85 | 52 | 8 | 3 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 9588.

STATION S10 47.38N 91.13W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

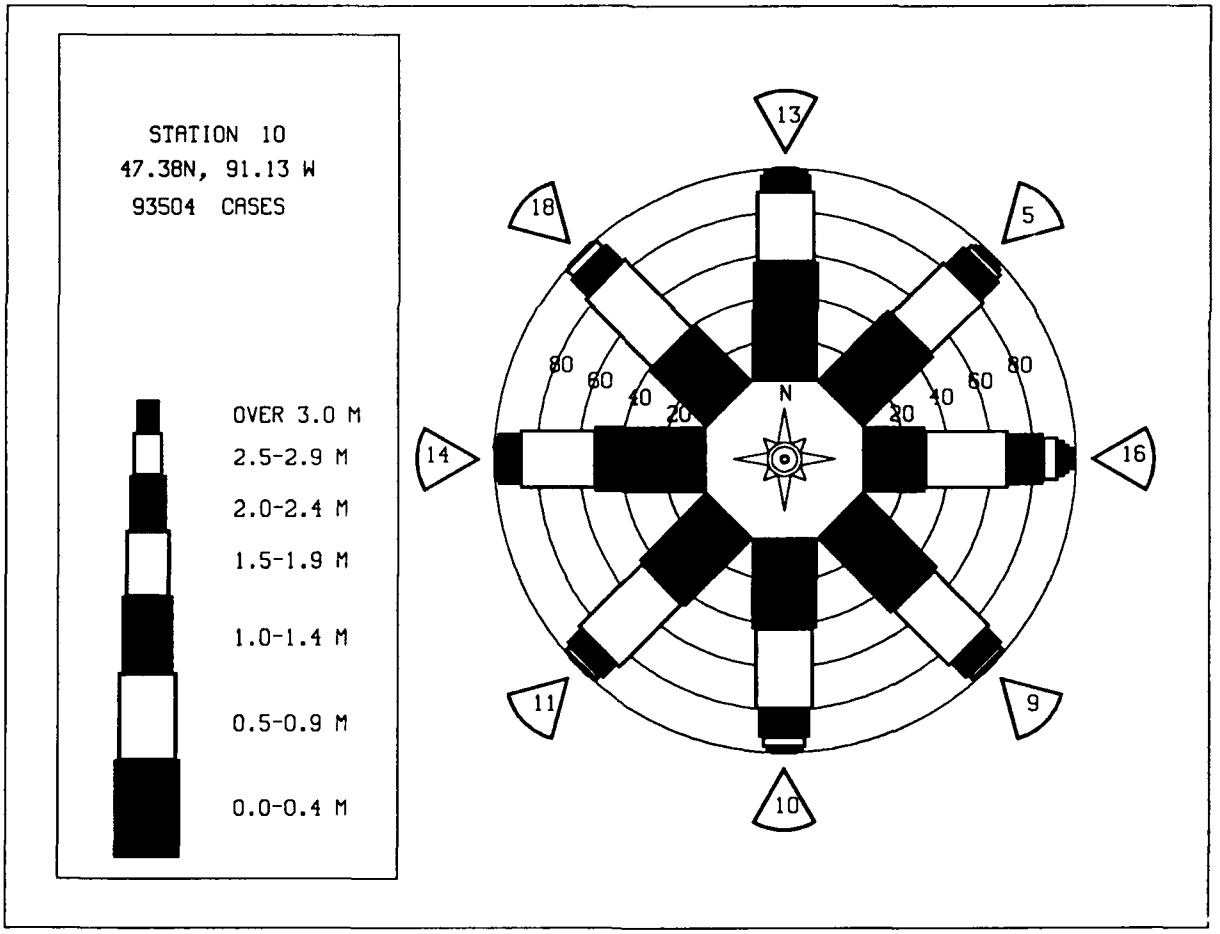
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1597 | 1757 | 363 | 106 | 52 | 28 | 1 | . | . | . | 3904 |
| 0.50-0.99 | . | 2388 | 579 | 110 | 59 | 60 | 9 | 2 | . | . | 3207 |
| 1.00-1.49 | . | . | 709 | 33 | 23 | 18 | 4 | 12 | 1 | . | 800 |
| 1.50-1.99 | . | . | 187 | 17 | 6 | 12 | 5 | 5 | 1 | . | 233 |
| 2.00-2.49 | . | . | . | 9 | . | 2 | 3 | 4 | 1 | . | 19 |
| 2.50-2.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1597 | 4145 | 1838 | 275 | 140 | 120 | 22 | 24 | 4 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.3 NO. OF CASES= 7647.

STATION S10 47.38N 91.13W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1676 | 2148 | 405 | 85 | 31 | 15 | . | . | . | . | 4360 |
| 0.50-0.99 | . | 2101 | 1537 | 180 | 32 | 21 | 4 | . | . | . | 3875 |
| 1.00-1.49 | . | . | 734 | 319 | 57 | 14 | 3 | 2 | . | . | 1129 |
| 1.50-1.99 | . | . | 134 | 158 | 71 | 19 | 4 | 2 | . | . | 388 |
| 2.00-2.49 | . | . | 1 | 45 | 33 | 24 | 5 | 2 | . | . | 110 |
| 2.50-2.99 | . | . | . | . | 26 | 12 | 7 | 2 | . | . | 47 |
| 3.00-3.49 | . | . | . | . | 2 | 15 | 4 | 3 | . | . | 24 |
| 3.50-3.99 | . | . | . | . | . | 8 | 4 | 1 | . | . | 13 |
| 4.00-4.49 | . | . | . | . | . | . | 4 | 2 | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1676 | 4249 | 2811 | 787 | 252 | 128 | 36 | 20 | 2 | 0 | |

MEAN HS(M)= 0.6 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S10 (47.38N 91.13W)

| | MONTH | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| YEAR | | | | | | | | | | | | | MEAN |
| 1956 | 0.6 | 0.7 | 1.0 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.9 | 1.0 | 0.9 | 0.7 |
| 1957 | 0.8 | 0.8 | 0.7 | 0.7 | 0.8 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 0.7 | 0.7 |
| 1958 | 0.6 | 0.8 | 0.5 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 1.1 | 0.7 | 0.6 |
| 1959 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 1.1 | 0.7 |
| 1960 | 0.7 | 0.7 | 0.7 | 0.8 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.9 | 0.7 | 0.6 |
| 1961 | 0.7 | 0.7 | 0.9 | 0.6 | 0.6 | 0.5 | 0.3 | 0.3 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 |
| 1962 | 0.8 | 0.9 | 0.9 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.8 | 0.7 |
| 1963 | 0.7 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.3 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 | 0.6 |
| 1964 | 0.9 | 0.7 | 0.9 | 0.8 | 0.7 | 0.4 | 0.4 | 0.6 | 0.5 | 0.6 | 0.8 | 0.7 | 0.7 |
| 1965 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.6 | 0.7 | 0.9 | 1.1 | 0.7 |
| 1966 | 0.9 | 0.9 | 1.5 | 0.9 | 0.7 | 0.5 | 0.4 | 0.5 | 0.5 | 0.8 | 0.8 | 0.8 | 0.8 |
| 1967 | 1.1 | 0.8 | 0.9 | 0.7 | 0.7 | 0.6 | 0.4 | 0.5 | 0.6 | 0.9 | 0.7 | 1.0 | 0.7 |
| 1968 | 0.9 | 0.9 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1969 | 1.0 | 0.6 | 0.6 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.7 | 0.7 | 0.7 | 0.6 |
| 1970 | 0.6 | 0.8 | 0.7 | 0.9 | 0.9 | 0.6 | 0.5 | 0.4 | 0.6 | 0.6 | 0.7 | 0.8 | 0.7 |
| 1971 | 0.8 | 1.0 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.7 | 0.8 | 0.6 | 0.6 |
| 1972 | 0.9 | 0.7 | 0.9 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.6 | 0.7 | 0.6 |
| 1973 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.5 | 0.7 | 0.8 | 0.7 | 0.6 |
| 1974 | 0.7 | 0.6 | 0.9 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.9 | 0.8 | 0.6 |
| 1975 | 0.9 | 0.7 | 1.1 | 0.8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.8 | 0.9 | 0.7 | 0.7 |
| 1976 | 0.9 | 0.8 | 1.1 | 0.7 | 0.5 | 0.6 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 |
| 1977 | 0.6 | 0.9 | 1.2 | 0.5 | 0.5 | 0.3 | 0.4 | 0.3 | 0.6 | 0.7 | 0.8 | 1.0 | 0.7 |
| 1978 | 0.7 | 0.5 | 0.5 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.8 | 0.6 | 0.7 | 0.7 | 0.6 |
| 1979 | 0.6 | 0.6 | 0.8 | 0.7 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.6 | 0.6 | 0.7 | 0.6 |
| 1980 | 0.8 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.7 | 0.6 | 0.8 | 0.6 |
| 1981 | 0.6 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.7 | 0.6 | 0.6 | 0.6 |
| 1982 | 0.9 | 0.7 | 1.0 | 0.7 | 0.7 | 0.4 | 0.3 | 0.3 | 0.5 | 0.7 | 0.7 | 0.9 | 0.6 |
| 1983 | 0.8 | 0.8 | 1.2 | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | 0.5 | 0.6 | 1.0 | 0.8 | 0.7 |
| 1984 | 0.7 | 0.7 | 0.9 | 0.8 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.9 | 0.8 | 0.8 | 0.7 |
| 1985 | 0.8 | 0.7 | 1.2 | 0.7 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1986 | 0.8 | 0.6 | 0.8 | 0.9 | 0.6 | 0.4 | 0.4 | 0.4 | 0.6 | 0.5 | 0.8 | 0.7 | 0.6 |
| 1987 | 0.6 | 0.8 | 1.2 | 0.5 | 0.6 | 0.3 | 0.4 | 0.3 | 0.4 | 0.6 | 0.7 | 0.7 | 0.6 |
| MEAN | 0.8 | 0.7 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.8 | 0.8 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S10 (47.38N 91.13W)

| | MONTH | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| YEAR | | | | | | | | | | | | |
| 1956 | 3.0 | 3.6 | 7.0 | 3.6 | 3.8 | 2.7 | 1.2 | 1.8 | 1.9 | 3.1 | 3.4 | 5.0 |
| 1957 | 2.6 | 2.5 | 3.5 | 4.1 | 3.0 | 1.4 | 1.5 | 1.2 | 1.8 | 1.5 | 3.1 | 2.4 |
| 1958 | 2.9 | 4.3 | 2.4 | 5.6 | 1.7 | 1.2 | 1.3 | 1.3 | 2.0 | 1.9 | 5.0 | 2.0 |
| 1959 | 2.0 | 2.8 | 2.2 | 1.6 | 2.7 | 1.3 | 1.3 | 1.3 | 2.4 | 1.9 | 2.2 | 6.9 |
| 1960 | 1.8 | 2.6 | 4.2 | 3.0 | 2.4 | 1.3 | 1.2 | 2.4 | 1.6 | 2.5 | 7.1 | 2.0 |
| 1961 | 2.0 | 2.5 | 2.4 | 1.7 | 2.6 | 1.8 | 1.3 | 0.8 | 1.6 | 1.7 | 2.3 | 1.7 |
| 1962 | 3.1 | 3.7 | 5.1 | 2.5 | 2.0 | 2.3 | 1.1 | 1.5 | 1.6 | 2.2 | 2.7 | 2.4 |
| 1963 | 1.7 | 4.3 | 2.6 | 2.2 | 2.5 | 2.7 | 1.2 | 1.6 | 1.6 | 2.6 | 1.9 | 3.7 |
| 1964 | 3.9 | 2.3 | 3.3 | 2.8 | 2.3 | 1.4 | 1.2 | 3.3 | 2.0 | 2.2 | 4.3 | 3.8 |
| 1965 | 3.4 | 5.0 | 4.5 | 2.4 | 1.9 | 1.6 | 0.9 | 1.1 | 1.7 | 2.2 | 6.8 | 5.8 |
| 1966 | 3.2 | 4.3 | 7.2 | 5.8 | 2.1 | 1.6 | 1.3 | 2.1 | 1.3 | 2.8 | 3.9 | 3.1 |
| 1967 | 7.7 | 2.2 | 3.9 | 2.0 | 3.3 | 2.8 | 1.2 | 1.4 | 1.8 | 3.6 | 3.0 | 3.5 |
| 1968 | 3.5 | 2.3 | 2.2 | 4.1 | 1.8 | 1.8 | 2.2 | 1.4 | 1.5 | 2.1 | 3.9 | 3.9 |
| 1969 | 3.0 | 2.4 | 2.0 | 3.4 | 2.0 | 1.9 | 1.4 | 2.0 | 1.4 | 2.4 | 2.2 | 4.0 |
| 1970 | 1.7 | 1.9 | 3.6 | 3.6 | 3.4 | 2.0 | 1.2 | 1.4 | 2.3 | 2.0 | 2.6 | 4.1 |
| 1971 | 2.2 | 5.2 | 4.0 | 2.7 | 2.1 | 1.9 | 1.2 | 1.0 | 1.2 | 4.2 | 4.2 | 2.1 |
| 1972 | 2.9 | 4.2 | 2.7 | 2.5 | 3.0 | 1.4 | 0.8 | 1.2 | 2.1 | 2.5 | 2.8 | 4.8 |
| 1973 | 3.5 | 2.2 | 3.0 | 2.2 | 1.8 | 1.3 | 1.0 | 1.0 | 1.7 | 2.6 | 3.2 | 2.3 |
| 1974 | 2.4 | 2.9 | 4.5 | 3.5 | 2.3 | 1.5 | 2.0 | 1.4 | 1.5 | 2.8 | 3.2 | 3.6 |
| 1975 | 4.8 | 2.2 | 6.3 | 3.7 | 1.5 | 1.2 | 1.4 | 1.6 | 1.6 | 2.5 | 3.6 | 2.9 |
| 1976 | 3.2 | 2.5 | 6.2 | 2.9 | 1.5 | 2.2 | 1.0 | 1.2 | 1.2 | 1.9 | 1.4 | 2.3 |
| 1977 | 1.6 | 6.3 | 5.1 | 1.8 | 1.4 | 1.2 | 1.0 | 1.1 | 3.3 | 3.5 | 4.6 | 6.5 |
| 1978 | 2.0 | 1.3 | 2.0 | 2.2 | 1.9 | 1.2 | 1.2 | 1.5 | 4.0 | 2.4 | 2.4 | 3.8 |
| 1979 | 1.9 | 3.5 | 3.0 | 3.5 | 2.1 | 1.2 | 0.8 | 1.2 | 2.1 | 1.9 | 2.0 | 2.5 |
| 1980 | 2.9 | 3.5 | 3.3 | 1.4 | 2.4 | 2.2 | 0.9 | 1.3 | 1.8 | 2.3 | 2.4 | 2.6 |
| 1981 | 1.5 | 2.3 | 3.3 | 2.8 | 1.5 | 1.4 | 1.1 | 1.2 | 3.0 | 2.5 | 2.2 | 1.8 |
| 1982 | 5.6 | 3.1 | 4.8 | 3.7 | 1.7 | 1.4 | 0.9 | 1.0 | 1.7 | 3.4 | 2.3 | 2.8 |
| 1983 | 2.3 | 2.8 | 5.3 | 2.5 | 2.3 | 1.5 | 1.2 | 1.1 | 1.4 | 1.7 | 5.1 | 3.7 |
| 1984 | 2.2 | 3.2 | 4.0 | 3.6 | 1.4 | 1.7 | 1.0 | 1.2 | 2.1 | 4.7 | 2.5 | 2.3 |
| 1985 | 4.0 | 2.5 | 7.1 | 2.4 | 1.8 | 1.4 | 0.9 | 1.3 | 2.0 | 2.6 | 3.9 | 2.2 |
| 1986 | 3.9 | 2.9 | 3.4 | 4.0 | 2.0 | 1.2 | 2.0 | 0.9 | 2.9 | 2.6 | 3.8 | 2.0 |
| 1987 | 2.3 | 5.2 | 5.4 | 1.7 | 3.3 | 1.2 | 1.8 | 1.2 | 1.4 | 1.9 | 2.7 | 2.0 |

32 YR. STATISTICS FOR WIS STATION S10

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 0.6 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 3.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 90.0 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.3 |
| LARGEST WAVE HS . . . . . | (METERS) | 7.7 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 81.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 67010703 |

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1496 | 1270 | 375 | 82 | 33 | 12 | . | . | . | . | 3268 |
| 0.50-0.99 | . | 2029 | 1386 | 234 | 85 | 65 | 8 | 1 | . | . | 3808 |
| 1.00-1.49 | . | . | 594 | 85 | 79 | 44 | 16 | 6 | . | . | 824 |
| 1.50-1.99 | . | . | 166 | 108 | 21 | 37 | 11 | 9 | . | . | 352 |
| 2.00-2.49 | . | . | 2 | 35 | 2 | 19 | 13 | 9 | 4 | . | 84 |
| 2.50-2.99 | . | . | . | 2 | . | 2 | 7 | 5 | 4 | 1 | 21 |
| 3.00-3.49 | . | . | . | . | . | . | . | 2 | 2 | 3 | 7 |
| 3.50-3.99 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1496 | 3299 | 2523 | 546 | 220 | 179 | 55 | 33 | 12 | 4 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 7838.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 453 | 649 | 131 | 36 | 9 | 1 | . | . | . | . | 1279 |
| 0.50-0.99 | . | 603 | 667 | 128 | 32 | 21 | . | . | . | . | 1451 |
| 1.00-1.49 | . | . | 119 | 105 | 50 | 19 | 6 | 1 | . | . | 300 |
| 1.50-1.99 | . | . | 29 | 58 | 33 | 36 | 3 | 2 | . | . | 161 |
| 2.00-2.49 | . | . | 1 | 23 | 25 | 18 | 12 | 5 | 1 | . | 85 |
| 2.50-2.99 | . | . | . | 1 | 18 | 6 | 19 | 6 | 1 | . | 51 |
| 3.00-3.49 | . | . | . | . | 5 | 6 | . | 8 | 3 | . | 22 |
| 3.50-3.99 | . | . | . | . | . | 4 | . | 6 | 2 | . | 12 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 453 | 1252 | 947 | 351 | 172 | 111 | 40 | 28 | 8 | 3 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 3161.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 386 | 455 | 147 | 17 | 17 | 4 | . | . | . | . | 1026 |
| 0.50-0.99 | . | 241 | 575 | 88 | 19 | 9 | . | . | . | . | 932 |
| 1.00-1.49 | . | . | 132 | 160 | 31 | 12 | 3 | . | . | . | 338 |
| 1.50-1.99 | . | . | 3 | 73 | 35 | 21 | 2 | . | . | . | 134 |
| 2.00-2.49 | . | . | . | 12 | 22 | 22 | 5 | 1 | . | . | 62 |
| 2.50-2.99 | . | . | . | 1 | 13 | 8 | 3 | 4 | . | . | 29 |
| 3.00-3.49 | . | . | . | . | 2 | 8 | 10 | 5 | 1 | . | 26 |
| 3.50-3.99 | . | . | . | . | . | 3 | 4 | 2 | . | . | 9 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | 6 | 1 | . | 9 |
| 4.50-4.99 | . | . | . | . | . | . | . | 2 | 3 | 1 | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | 3 | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 3 | 4 |
| TOTAL | 386 | 696 | 857 | 351 | 139 | 87 | 29 | 20 | 10 | 8 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 9.3 MEAN TP(SEC)= 4.1 NO. OF CASES= 2431.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 394 | 550 | 117 | 16 | 6 | 2 | . | . | . | . | 1085 |
| 0.50-0.99 | . | 408 | 1032 | 110 | 22 | 10 | . | . | . | . | 1582 |
| 1.00-1.49 | . | . | 385 | 349 | 28 | 13 | 2 | . | . | . | 777 |
| 1.50-1.99 | . | . | 22 | 211 | 78 | 11 | 2 | . | . | . | 324 |
| 2.00-2.49 | . | . | . | 86 | 36 | 36 | 3 | 2 | . | . | 163 |
| 2.50-2.99 | . | . | . | 1 | 88 | 21 | 10 | . | . | . | 120 |
| 3.00-3.49 | . | . | . | . | 6 | 36 | 9 | 6 | . | . | 57 |
| 3.50-3.99 | . | . | . | . | . | 23 | 12 | 7 | 5 | . | 47 |
| 4.00-4.49 | . | . | . | . | . | 6 | 19 | 8 | 1 | . | 34 |
| 4.50-4.99 | . | . | . | . | . | . | 9 | 16 | 2 | . | 27 |
| 5.00-5.49 | . | . | . | . | . | . | . | 17 | 2 | 2 | 21 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 2 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 6 | . | 6 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 5 | 1 | 6 |
| 7.00+ | . | . | . | . | . | . | . | . | 2 | 4 | 6 |
| TOTAL | 394 | 958 | 1556 | 773 | 264 | 158 | 66 | 58 | 25 | 7 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 9.6 MEAN TP(SEC)= 4.4 NO. OF CASES= 4002.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 837 | 1408 | 295 | 55 | 7 | 6 | . | . | . | . | 2608 |
| 0.50-0.99 | . | 902 | 2796 | 132 | 17 | 12 | . | . | . | . | 3859 |
| 1.00-1.49 | . | . | 938 | 894 | 36 | 12 | 1 | . | . | . | 1881 |
| 1.50-1.99 | . | . | 47 | 558 | 189 | 21 | 3 | 1 | . | . | 819 |
| 2.00-2.49 | . | . | . | 170 | 114 | 57 | 5 | 1 | . | . | 347 |
| 2.50-2.99 | . | . | . | 3 | 167 | 55 | 20 | 4 | . | . | 249 |
| 3.00-3.49 | . | . | . | . | 9 | 142 | 27 | 11 | 4 | . | 193 |
| 3.50-3.99 | . | . | . | . | . | 56 | 34 | 2 | 3 | . | 95 |
| 4.00-4.49 | . | . | . | . | . | 6 | 55 | 16 | . | . | 77 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 17 | 1 | . | 26 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 31 | 5 | 1 | 38 |
| 5.50-5.99 | . | . | . | . | . | . | . | 11 | 7 | . | 18 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 6 | . | 7 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 837 | 2310 | 4076 | 1812 | 539 | 367 | 154 | 95 | 29 | 3 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.4 NO. OF CASES= 9578.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 942 | 1365 | 249 | 42 | 12 | 4 | . | 1 | . | . | 2615 |
| 0.50-0.99 | . | 719 | 1906 | 80 | 11 | 8 | . | . | . | . | 2724 |
| 1.00-1.49 | . | . | 466 | 349 | 31 | 8 | . | . | . | . | 854 |
| 1.50-1.99 | . | . | 16 | 179 | 62 | 17 | 1 | 1 | . | . | 276 |
| 2.00-2.49 | . | . | . | 34 | 29 | 23 | 4 | 2 | . | . | 92 |
| 2.50-2.99 | . | . | . | . | 20 | 9 | 8 | 2 | 2 | . | 41 |
| 3.00-3.49 | . | . | . | . | . | 9 | 3 | . | 1 | . | 13 |
| 3.50-3.99 | . | . | . | . | . | 4 | 3 | . | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 942 | 2084 | 2637 | 684 | 165 | 82 | 20 | 6 | 3 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 6207.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 820 | 1136 | 260 | 50 | 17 | 1 | . | 1 | . | . | 2285 |
| 0.50-0.99 | . | 565 | 992 | 75 | 11 | 4 | . | . | . | . | 1647 |
| 1.00-1.49 | . | . | 313 | 125 | 12 | 4 | . | . | . | . | 454 |
| 1.50-1.99 | . | . | 19 | 53 | 21 | 7 | 1 | . | . | . | 101 |
| 2.00-2.49 | . | . | . | 8 | 14 | 4 | . | . | . | . | 26 |
| 2.50-2.99 | . | . | . | 1 | 2 | 3 | 1 | . | . | . | 7 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 820 | 1701 | 1584 | 312 | 77 | 23 | 4 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 4239.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 681 | 984 | 116 | 24 | 4 | 1 | . | . | . | . | 1810 |
| 0.50-0.99 | . | 470 | 731 | 41 | 10 | . | . | . | . | . | 1252 |
| 1.00-1.49 | . | . | 275 | 66 | 7 | 1 | . | . | . | . | 349 |
| 1.50-1.99 | . | . | 18 | 39 | 4 | 5 | . | . | . | . | 66 |
| 2.00-2.49 | . | . | . | 9 | 3 | . | 1 | . | . | . | 13 |
| 2.50-2.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | 1 | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 681 | 1454 | 1140 | 179 | 29 | 8 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 3276.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 697 | 1057 | 154 | 34 | 6 | 2 | 1 | . | . | . | 1951 |
| 0.50-0.99 | . | 518 | 1049 | 40 | 4 | . | . | . | . | . | 1611 |
| 1.00-1.49 | . | . | 601 | 29 | 7 | 3 | . | . | . | . | 640 |
| 1.50-1.99 | . | . | 24 | 155 | 6 | 2 | . | . | . | . | 187 |
| 2.00-2.49 | . | . | . | 31 | 3 | 1 | . | . | . | . | 35 |
| 2.50-2.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | 3 | 1 | . | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 697 | 1575 | 1828 | 289 | 30 | 9 | 1 | 0 | 0 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 4149.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 629 | 1095 | 187 | 40 | 9 | 1 | . | . | . | . | 1961 |
| 0.50-0.99 | . | 552 | 1439 | 32 | 2 | 1 | . | . | . | . | 2026 |
| 1.00-1.49 | . | . | 624 | 243 | 9 | 2 | . | . | . | . | 878 |
| 1.50-1.99 | . | . | 25 | 319 | 14 | 5 | . | . | 1 | . | 364 |
| 2.00-2.49 | . | . | . | 108 | 49 | 1 | . | 1 | . | . | 159 |
| 2.50-2.99 | . | . | . | . | 67 | 1 | . | . | . | . | 68 |
| 3.00-3.49 | . | . | . | . | 4 | 10 | . | . | . | . | 14 |
| 3.50-3.99 | . | . | . | . | . | 5 | . | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 629 | 1647 | 2275 | 742 | 154 | 26 | 0 | 1 | 1 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 5130.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 780 | 1249 | 417 | 37 | 10 | 3 | . | . | . | . | 2496 |
| 0.50-0.99 | . | 973 | 1909 | 186 | 10 | . | 1 | . | . | . | 3079 |
| 1.00-1.49 | . | . | 630 | 572 | 34 | 3 | . | . | . | . | 1239 |
| 1.50-1.99 | . | . | 63 | 410 | 94 | 5 | . | . | . | . | 572 |
| 2.00-2.49 | . | . | . | 109 | 88 | 3 | 1 | . | . | . | 201 |
| 2.50-2.99 | . | . | . | 2 | 116 | 13 | . | . | . | . | 131 |
| 3.00-3.49 | . | . | . | . | 1 | 43 | 1 | . | . | . | 45 |
| 3.50-3.99 | . | . | . | . | . | 8 | . | . | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | 2 | 4 | . | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 780 | 2222 | 3019 | 1316 | 353 | 80 | 7 | 2 | 1 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 7285.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 927 | 1642 | 223 | 40 | 17 | 8 | . | . | . | . | 2857 |
| 0.50-0.99 | . | 1932 | 326 | 98 | 12 | 5 | . | 1 | . | . | 2374 |
| 1.00-1.49 | . | . | 457 | 77 | 5 | 4 | . | . | . | . | 543 |
| 1.50-1.99 | . | . | 89 | 53 | 12 | 1 | 1 | . | . | . | 156 |
| 2.00-2.49 | . | . | 8 | 21 | 7 | 2 | . | 1 | 1 | . | 40 |
| 2.50-2.99 | . | . | . | . | 8 | 3 | . | . | . | . | 11 |
| 3.00-3.49 | . | . | . | . | . | 6 | . | . | 1 | . | 7 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | 1 | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 927 | 3574 | 1103 | 289 | 61 | 31 | 2 | 2 | 3 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.2 NO. OF CASES= 5614.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1555 | 1756 | 257 | 77 | 28 | 12 | 1 | . | . | . | 3686 |
| 0.50-0.99 | . | 1881 | 304 | 66 | 27 | 8 | 1 | 1 | . | . | 2288 |
| 1.00-1.49 | . | . | 609 | 12 | 12 | 7 | . | . | . | . | 640 |
| 1.50-1.99 | . | . | 125 | . | 4 | 3 | . | . | . | . | 132 |
| 2.00-2.49 | . | . | 5 | . | . | . | 1 | . | . | . | 6 |
| 2.50-2.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1555 | 3637 | 1300 | 155 | 71 | 30 | 3 | 3 | 2 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 6326.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1305 | 1856 | 187 | 67 | 20 | 10 | . | . | . | . | 3445 |
| 0.50-0.99 | . | 2199 | 730 | 69 | 24 | 18 | 1 | 1 | . | . | 3042 |
| 1.00-1.49 | . | . | 702 | 21 | 11 | 8 | . | . | . | . | 742 |
| 1.50-1.99 | . | . | 266 | 33 | 6 | 2 | 1 | . | . | . | 308 |
| 2.00-2.49 | . | . | 6 | 18 | . | . | 1 | . | . | . | 25 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1305 | 4055 | 1891 | 208 | 61 | 38 | 3 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 7080.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1242 | 1786 | 212 | 86 | 43 | 5 | . | . | . | . | 3374 |
| 0.50-0.99 | . | 3324 | 1492 | 101 | 48 | 39 | 7 | . | . | . | 5011 |
| 1.00-1.49 | . | . | 1314 | 25 | 21 | 8 | 2 | . | . | . | 1371 |
| 1.50-1.99 | . | . | 574 | 34 | 1 | 10 | 1 | 1 | . | . | 621 |
| 2.00-2.49 | . | . | . | 32 | . | 3 | 2 | 1 | 1 | . | 39 |
| 2.50-2.99 | . | . | . | 3 | . | . | 1 | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1242 | 5110 | 3592 | 281 | 113 | 66 | 13 | 2 | 1 | 2 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 9756.

STATION S11 47.23N 91.13W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

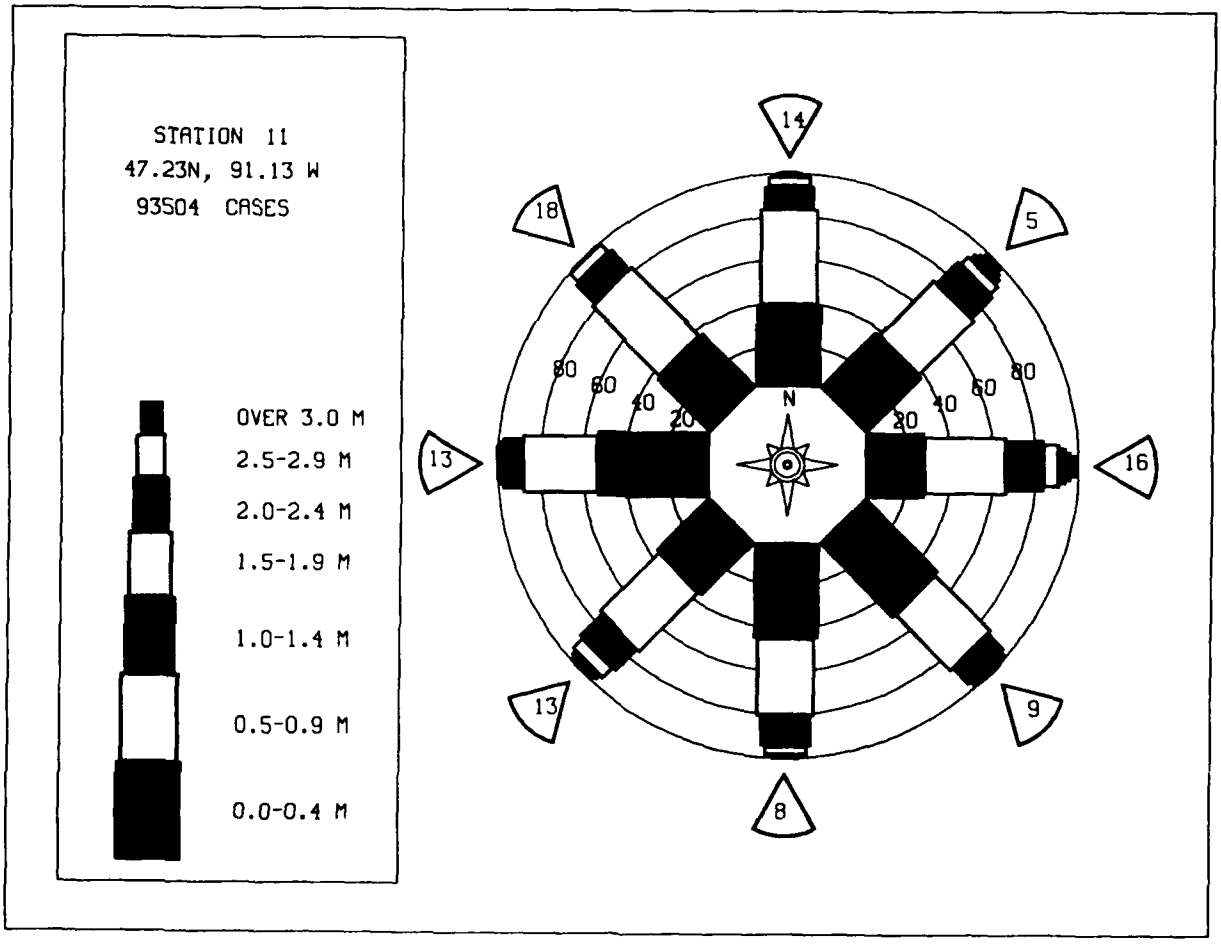
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1209 | 1358 | 308 | 86 | 38 | 18 | . | . | . | . | 3017 |
| 0.50-0.99 | . | 1977 | 1158 | 122 | 64 | 50 | 9 | . | . | . | 3380 |
| 1.00-1.49 | . | . | 882 | 48 | 55 | 22 | 5 | 8 | 1 | . | 1021 |
| 1.50-1.99 | . | . | 311 | 111 | 10 | 9 | 2 | 6 | . | . | 449 |
| 2.00-2.49 | . | . | 3 | 36 | 1 | 6 | 2 | 6 | 2 | . | 56 |
| 2.50-2.99 | . | . | . | . | . | . | 2 | 3 | 2 | . | 7 |
| 3.00-3.49 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1209 | 3335 | 2662 | 403 | 168 | 105 | 20 | 26 | 7 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 7432.

STATION S11 47.23N 91.13W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1435 | 1962 | 364 | 79 | 28 | 9 | . | . | . | . | 3877 |
| 0.50-0.99 | . | 1930 | 1849 | 160 | 40 | 25 | 2 | . | . | . | 4006 |
| 1.00-1.49 | . | . | 904 | 316 | 43 | 17 | 3 | 1 | . | . | 1284 |
| 1.50-1.99 | . | . | 180 | 240 | 59 | 19 | 2 | 2 | . | . | 502 |
| 2.00-2.49 | . | . | 2 | 73 | 39 | 19 | 5 | 3 | . | . | 141 |
| 2.50-2.99 | . | . | . | 1 | 50 | 12 | 7 | 2 | 1 | . | 73 |
| 3.00-3.49 | . | . | . | . | 3 | 26 | 5 | 3 | 1 | . | 38 |
| 3.50-3.99 | . | . | . | . | . | 10 | 5 | 2 | 1 | . | 18 |
| 4.00-4.49 | . | . | . | . | . | 1 | 8 | 3 | . | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 3 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | . | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1435 | 3892 | 3299 | 869 | 262 | 138 | 38 | 25 | 5 | 0 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 9.6 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S11 (47.23N 91.13W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 0.8 | 1.1 | 0.9 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 1.0 | 1.1 | 1.0 | 0.8 |
| 1957 | 0.9 | 0.8 | 0.8 | 0.8 | 0.9 | 0.5 | 0.4 | 0.5 | 0.6 | 0.6 | 1.0 | 0.8 | 0.7 |
| 1958 | 0.7 | 0.9 | 0.6 | 0.9 | 0.6 | 0.5 | 0.5 | 0.4 | 0.7 | 0.7 | 1.2 | 0.8 | 0.7 |
| 1959 | 0.8 | 0.9 | 0.7 | 0.6 | 0.8 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 0.9 | 1.1 | 0.7 |
| 1960 | 0.8 | 0.8 | 0.8 | 0.9 | 0.7 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 1.1 | 0.9 | 0.7 |
| 1961 | 0.8 | 0.8 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 |
| 1962 | 0.9 | 1.0 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1963 | 0.8 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 1.0 | 0.7 |
| 1964 | 1.0 | 0.8 | 1.0 | 0.8 | 0.7 | 0.5 | 0.4 | 0.6 | 0.5 | 0.6 | 0.9 | 0.7 | 0.7 |
| 1965 | 0.9 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 1.0 | 1.2 | 0.7 |
| 1966 | 0.9 | 1.0 | 1.6 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.9 | 0.9 | 0.8 | 0.8 |
| 1967 | 1.2 | 0.9 | 1.0 | 0.7 | 0.7 | 0.6 | 0.4 | 0.5 | 0.6 | 0.9 | 0.8 | 1.1 | 0.8 |
| 1968 | 0.9 | 1.0 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.7 | 1.0 | 1.1 | 0.8 |
| 1969 | 1.0 | 0.7 | 0.7 | 0.8 | 0.6 | 0.6 | 0.4 | 0.5 | 0.5 | 0.8 | 0.7 | 0.7 | 0.7 |
| 1970 | 0.7 | 1.0 | 0.7 | 1.0 | 1.0 | 0.6 | 0.5 | 0.4 | 0.7 | 0.7 | 0.8 | 0.9 | 0.8 |
| 1971 | 0.9 | 1.1 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.7 | 0.9 | 0.7 | 0.7 |
| 1972 | 1.0 | 0.8 | 1.0 | 0.7 | 0.6 | 0.5 | 0.3 | 0.4 | 0.5 | 0.8 | 0.7 | 0.8 | 0.7 |
| 1973 | 0.7 | 0.7 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.3 | 0.5 | 0.7 | 0.9 | 0.8 | 0.6 |
| 1974 | 0.8 | 0.7 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 1.0 | 0.9 | 0.7 |
| 1975 | 1.0 | 0.8 | 1.2 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 0.7 | 0.8 |
| 1976 | 0.9 | 0.9 | 1.2 | 0.8 | 0.6 | 0.7 | 0.4 | 0.3 | 0.4 | 0.4 | 0.6 | 0.7 | 0.7 |
| 1977 | 0.6 | 1.0 | 1.3 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.9 | 1.0 | 0.7 |
| 1978 | 0.8 | 0.5 | 0.5 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.9 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1979 | 0.6 | 0.7 | 0.9 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.7 | 0.7 | 0.8 | 0.6 |
| 1980 | 0.8 | 0.7 | 0.8 | 0.6 | 0.5 | 0.6 | 0.3 | 0.5 | 0.6 | 0.8 | 0.6 | 0.8 | 0.6 |
| 1981 | 0.7 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 0.7 | 0.6 | 0.6 |
| 1982 | 1.0 | 0.8 | 1.0 | 0.7 | 0.7 | 0.4 | 0.3 | 0.3 | 0.6 | 0.8 | 0.8 | 0.9 | 0.7 |
| 1983 | 0.8 | 0.9 | 1.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.6 | 0.7 | 1.2 | 0.9 | 0.8 |
| 1984 | 0.8 | 0.8 | 1.0 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 1.0 | 0.9 | 0.9 | 0.7 |
| 1985 | 0.9 | 0.8 | 1.4 | 0.7 | 0.6 | 0.5 | 0.3 | 0.5 | 0.6 | 0.7 | 0.8 | 0.8 | 0.7 |
| 1986 | 0.9 | 0.7 | 0.9 | 1.0 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.6 | 1.0 | 0.8 | 0.7 |
| 1987 | 0.7 | 0.9 | 1.3 | 0.6 | 0.7 | 0.4 | 0.5 | 0.3 | 0.4 | 0.7 | 0.8 | 0.7 | 0.7 |
| MEAN | 0.8 | 0.8 | 1.0 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.9 | 0.9 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S11 (47.23N 91.13W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.0 | 3.9 | 6.7 | 3.9 | 3.8 | 2.9 | 1.2 | 2.0 | 1.7 | 2.9 | 4.2 | 5.0 |
| 1957 | 2.9 | 2.2 | 3.9 | 4.4 | 3.0 | 1.6 | 1.5 | 1.3 | 2.2 | 1.8 | 3.1 | 2.4 |
| 1958 | 2.7 | 4.5 | 2.5 | 5.6 | 2.2 | 1.2 | 1.3 | 1.3 | 2.0 | 2.1 | 4.9 | 2.5 |
| 1959 | 2.2 | 3.5 | 2.8 | 1.9 | 2.5 | 1.6 | 1.3 | 1.3 | 2.6 | 2.5 | 3.0 | 6.9 |
| 1960 | 2.5 | 4.1 | 4.3 | 3.1 | 2.6 | 1.4 | 1.2 | 2.4 | 1.5 | 2.3 | 7.1 | 2.7 |
| 1961 | 2.3 | 2.2 | 2.5 | 1.9 | 2.8 | 1.9 | 1.6 | 0.9 | 1.5 | 1.6 | 3.0 | 1.8 |
| 1962 | 3.3 | 3.7 | 5.0 | 2.4 | 2.0 | 2.6 | 1.1 | 1.3 | 2.3 | 3.3 | 2.9 | 3.2 |
| 1963 | 2.1 | 4.3 | 2.6 | 2.5 | 2.5 | 2.8 | 1.2 | 1.6 | 1.8 | 2.4 | 2.3 | 4.3 |
| 1964 | 4.3 | 3.1 | 3.4 | 2.8 | 3.3 | 1.9 | 1.2 | 3.4 | 2.8 | 2.0 | 4.2 | 3.8 |
| 1965 | 3.5 | 5.0 | 4.4 | 2.4 | 1.9 | 1.6 | 1.2 | 1.1 | 2.3 | 2.7 | 6.5 | 5.6 |
| 1966 | 3.3 | 4.2 | 7.2 | 5.7 | 2.4 | 2.1 | 1.2 | 2.2 | 1.5 | 4.0 | 4.1 | 3.3 |
| 1967 | 7.6 | 2.4 | 3.9 | 2.6 | 3.8 | 2.7 | 1.3 | 1.5 | 2.4 | 3.6 | 2.8 | 3.7 |
| 1968 | 3.6 | 2.3 | 2.8 | 4.0 | 1.7 | 1.9 | 3.3 | 1.4 | 1.7 | 1.8 | 4.1 | 4.6 |
| 1969 | 3.7 | 2.6 | 2.6 | 3.4 | 2.6 | 1.9 | 1.6 | 2.3 | 1.8 | 2.5 | 2.4 | 3.9 |
| 1970 | 1.8 | 3.2 | 4.2 | 3.6 | 3.6 | 2.0 | 1.4 | 1.6 | 2.7 | 1.9 | 2.5 | 4.3 |
| 1971 | 2.3 | 5.4 | 3.9 | 3.0 | 2.4 | 1.8 | 1.2 | 1.2 | 1.4 | 4.3 | 4.1 | 2.3 |
| 1972 | 3.8 | 4.2 | 3.2 | 2.8 | 3.1 | 1.5 | 1.0 | 1.2 | 2.1 | 2.6 | 3.4 | 5.1 |
| 1973 | 3.6 | 2.2 | 3.0 | 1.9 | 2.2 | 1.3 | 1.2 | 1.1 | 1.9 | 2.2 | 3.5 | 2.8 |
| 1974 | 3.2 | 2.9 | 4.6 | 3.6 | 2.5 | 1.7 | 2.0 | 1.4 | 1.7 | 2.4 | 3.6 | 4.0 |
| 1975 | 5.0 | 2.4 | 6.2 | 4.0 | 1.8 | 1.3 | 1.3 | 2.5 | 2.0 | 3.0 | 3.8 | 2.9 |
| 1976 | 3.2 | 3.1 | 5.7 | 3.2 | 1.9 | 2.4 | 1.0 | 1.1 | 1.8 | 2.6 | 1.4 | 3.0 |
| 1977 | 1.6 | 7.2 | 5.5 | 1.8 | 1.4 | 1.2 | 1.2 | 1.1 | 4.0 | 3.6 | 4.4 | 6.3 |
| 1978 | 2.4 | 1.7 | 2.5 | 2.4 | 1.9 | 1.5 | 1.2 | 1.7 | 4.1 | 2.4 | 2.9 | 3.7 |
| 1979 | 2.5 | 3.6 | 3.1 | 3.6 | 2.1 | 1.2 | 0.9 | 1.2 | 2.7 | 2.0 | 2.8 | 2.9 |
| 1980 | 3.1 | 3.6 | 3.4 | 1.9 | 2.6 | 2.4 | 1.1 | 1.6 | 2.3 | 2.8 | 2.9 | 2.9 |
| 1981 | 1.7 | 2.4 | 3.5 | 2.8 | 1.9 | 1.6 | 1.2 | 1.5 | 3.0 | 2.5 | 3.1 | 1.7 |
| 1982 | 5.6 | 3.4 | 4.6 | 3.9 | 2.2 | 1.4 | 0.9 | 1.0 | 2.4 | 3.5 | 3.7 | 2.9 |
| 1983 | 2.8 | 3.6 | 5.3 | 2.6 | 2.4 | 1.7 | 1.5 | 1.3 | 1.8 | 2.6 | 5.1 | 3.7 |
| 1984 | 3.1 | 3.3 | 4.0 | 3.6 | 1.8 | 2.5 | 1.2 | 1.2 | 2.8 | 4.9 | 2.3 | 2.6 |
| 1985 | 4.0 | 4.0 | 9.6 | 2.8 | 2.2 | 1.6 | 1.0 | 1.4 | 2.6 | 2.9 | 4.0 | 2.9 |
| 1986 | 4.0 | 3.2 | 3.6 | 4.1 | 2.3 | 1.6 | 2.1 | 1.3 | 3.0 | 2.9 | 5.7 | 3.2 |
| 1987 | 2.6 | 5.2 | 5.3 | 1.7 | 3.4 | 1.5 | 1.7 | 1.2 | 1.2 | 2.5 | 2.7 | 2.9 |

32 YR. STATISTICS FOR WIS STATION S11

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.7 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 9.6 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 68.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 85030421 |

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 2188 | 2711 | 672 | 180 | 82 | 36 | . | . | . | . | 5869 |
| 0.50-0.99 | . | 2237 | 624 | 309 | 150 | 81 | 16 | 3 | . | . | 3420 |
| 1.00-1.49 | . | . | 303 | 128 | 112 | 64 | 16 | 11 | . | . | 634 |
| 1.50-1.99 | . | . | 70 | 16 | 39 | 51 | 22 | 11 | 2 | . | 211 |
| 2.00-2.49 | . | . | 6 | . | 4 | 20 | 18 | 12 | 3 | 1 | 64 |
| 2.50-2.99 | . | . | . | . | . | 5 | 2 | 11 | 4 | 2 | 24 |
| 3.00-3.49 | . | . | . | . | . | . | 2 | 1 | 2 | 1 | 6 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 2188 | 4948 | 1675 | 633 | 387 | 257 | 76 | 49 | 12 | 6 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 9580.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 380 | 475 | 136 | 43 | 17 | 3 | . | . | . | . | 1054 |
| 0.50-0.99 | . | 254 | 271 | 94 | 25 | 14 | . | . | . | . | 658 |
| 1.00-1.49 | . | . | 56 | 50 | 26 | 20 | 2 | . | . | . | 154 |
| 1.50-1.99 | . | . | 9 | 25 | 5 | 12 | 5 | 2 | . | . | 58 |
| 2.00-2.49 | . | . | . | 4 | 5 | 8 | 1 | 3 | 1 | . | 22 |
| 2.50-2.99 | . | . | . | . | 4 | 4 | 3 | 4 | 2 | . | 17 |
| 3.00-3.49 | . | . | . | . | . | 6 | . | 1 | 1 | . | 8 |
| 3.50-3.99 | . | . | . | . | . | 4 | . | 1 | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | 2 | 1 | 2 | 6 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 3 | 3 |
| TOTAL | 380 | 729 | 472 | 216 | 82 | 72 | 11 | 13 | 8 | 6 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 10.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 1875.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 443 | 467 | 167 | 32 | 14 | 9 | . | . | . | . | 1132 |
| 0.50-0.99 | . | 273 | 459 | 81 | 18 | 11 | . | . | . | . | 842 |
| 1.00-1.49 | . | . | 115 | 98 | 24 | 12 | 4 | . | . | . | 253 |
| 1.50-1.99 | . | . | 5 | 50 | 23 | 16 | 2 | . | . | . | 96 |
| 2.00-2.49 | . | . | . | 9 | 13 | 14 | 5 | 2 | 1 | . | 44 |
| 2.50-2.99 | . | . | . | 1 | 13 | 3 | 3 | 1 | . | . | 21 |
| 3.00-3.49 | . | . | . | . | 1 | 13 | 2 | 2 | . | . | 18 |
| 3.50-3.99 | . | . | . | . | . | 3 | 3 | 2 | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | 1 | 2 | 1 | 1 | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 1 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | 1 | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 443 | 740 | 746 | 271 | 106 | 82 | 24 | 10 | 2 | 5 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 2288.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 382 | 540 | 135 | 24 | 8 | 1 | . | . | . | . | 1090 |
| 0.50-0.99 | . | 409 | 868 | 118 | 16 | 5 | . | . | . | . | 1416 |
| 1.00-1.49 | . | . | 332 | 322 | 26 | 19 | 3 | . | . | . | 702 |
| 1.50-1.99 | . | . | 20 | 216 | 73 | 18 | 2 | 1 | . | . | 330 |
| 2.00-2.49 | . | . | . | 75 | 57 | 25 | 4 | 1 | . | . | 162 |
| 2.50-2.99 | . | . | . | 1 | 95 | 34 | 4 | 2 | 1 | . | 137 |
| 3.00-3.49 | . | . | . | . | 7 | 62 | 9 | 7 | 3 | . | 88 |
| 3.50-3.99 | . | . | . | . | . | 29 | 6 | 5 | 1 | . | 41 |
| 4.00-4.49 | . | . | . | . | . | 5 | 22 | 7 | 2 | . | 36 |
| 4.50-4.99 | . | . | . | . | . | . | 10 | 11 | 4 | 1 | 26 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 17 | 4 | . | 23 |
| 5.50-5.99 | . | . | . | . | . | . | . | 6 | 5 | 1 | 12 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 7.00+ | . | . | . | . | . | . | . | . | 4 | 6 | 10 |
| TOTAL | 382 | 949 | 1355 | 756 | 282 | 198 | 62 | 57 | 31 | 8 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 10.0 MEAN TP(SEC)= 4.5 NO. OF CASES= 3836.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 886 | 1361 | 302 | 43 | 13 | 7 | . | . | . | . | 2612 |
| 0.50-0.99 | . | 982 | 2754 | 173 | 37 | 20 | 1 | . | . | . | 3967 |
| 1.00-1.49 | . | . | 1098 | 953 | 57 | 17 | 2 | . | . | . | 2127 |
| 1.50-1.99 | . | . | 71 | 656 | 225 | 34 | 2 | 1 | 1 | . | 990 |
| 2.00-2.49 | . | . | . | 227 | 136 | 81 | 3 | 3 | 1 | . | 451 |
| 2.50-2.99 | . | . | . | 1 | 211 | 52 | 24 | 5 | 4 | . | 297 |
| 3.00-3.49 | . | . | . | . | 19 | 161 | 23 | 2 | 1 | . | 206 |
| 3.50-3.99 | . | . | . | . | . | 70 | 36 | 1 | 1 | . | 108 |
| 4.00-4.49 | . | . | . | . | . | 10 | 53 | 10 | . | . | 73 |
| 4.50-4.99 | . | . | . | . | . | . | 18 | 17 | 2 | . | 37 |
| 5.00-5.49 | . | . | . | . | . | . | . | 31 | 5 | . | 36 |
| 5.50-5.99 | . | . | . | . | . | . | . | 12 | 9 | . | 21 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 11 | . | 12 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| TOTAL | 886 | 2343 | 4225 | 2053 | 698 | 452 | 162 | 83 | 39 | 3 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 10256.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 938 | 1444 | 289 | 43 | 14 | 5 | . | 1 | . | . | 2734 |
| 0.50-0.99 | . | 882 | 1834 | 119 | 19 | 12 | . | . | . | . | 2866 |
| 1.00-1.49 | . | . | 518 | 202 | 37 | 11 | 1 | . | . | . | 769 |
| 1.50-1.99 | . | . | 27 | 133 | 35 | 19 | 4 | 1 | . | . | 219 |
| 2.00-2.49 | . | . | . | 38 | 16 | 10 | 4 | . | 1 | . | 69 |
| 2.50-2.99 | . | . | . | . | 16 | 3 | 3 | . | 2 | . | 24 |
| 3.00-3.49 | . | . | . | . | 2 | 8 | 1 | . | . | . | 11 |
| 3.50-3.99 | . | . | . | . | . | 4 | 2 | . | . | . | 6 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 938 | 2326 | 2668 | 535 | 139 | 72 | 15 | 2 | 3 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 6277.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 759 | 1071 | 220 | 41 | 14 | 2 | . | 1 | . | . | 2108 |
| 0.50-0.99 | . | 643 | 884 | 86 | 11 | 3 | . | . | . | . | 1627 |
| 1.00-1.49 | . | . | 360 | 55 | 11 | 7 | . | . | . | . | 433 |
| 1.50-1.99 | . | . | 20 | 54 | 11 | 6 | 1 | 2 | . | . | 94 |
| 2.00-2.49 | . | . | . | 5 | 2 | 6 | 3 | . | . | . | 16 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 759 | 1714 | 1484 | 241 | 49 | 25 | 5 | 3 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 4013.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 628 | 761 | 97 | 27 | 9 | 3 | . | . | . | . | 1525 |
| 0.50-0.99 | . | 716 | 609 | 63 | 14 | 4 | . | . | . | . | 1406 |
| 1.00-1.49 | . | . | 274 | 25 | 7 | 2 | . | . | . | . | 308 |
| 1.50-1.99 | . | . | 34 | 25 | . | 3 | . | . | . | . | 62 |
| 2.00-2.49 | . | . | . | 3 | . | 1 | . | . | . | . | 4 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 628 | 1477 | 1014 | 143 | 31 | 13 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 3102.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 675 | 681 | 106 | 37 | 9 | 2 | . | . | . | . | 1510 |
| 0.50-0.99 | . | 931 | 691 | 42 | 9 | . | . | 1 | . | . | 1674 |
| 1.00-1.49 | . | . | 350 | 17 | 9 | 2 | . | . | . | . | 378 |
| 1.50-1.99 | . | . | 57 | 32 | 1 | 1 | 1 | . | . | . | 92 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | 2 | . | . | 1 | 1 | . | . | 4 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 675 | 1612 | 1204 | 130 | 29 | 5 | 2 | 2 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.3 NO. OF CASES= 3430.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 603 | 819 | 75 | 23 | 11 | 3 | . | . | . | . | 1534 |
| 0.50-0.99 | . | 782 | 1522 | 38 | 7 | . | . | . | . | . | 2349 |
| 1.00-1.49 | . | . | 900 | 111 | 5 | 4 | . | . | . | . | 1020 |
| 1.50-1.99 | . | . | 94 | 361 | 2 | 5 | . | . | 1 | . | 463 |
| 2.00-2.49 | . | . | . | 131 | 31 | 1 | . | . | . | . | 163 |
| 2.50-2.99 | . | . | . | 1 | 42 | 1 | . | . | . | . | 44 |
| 3.00-3.49 | . | . | . | . | 5 | . | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | 1 | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 603 | 1601 | 2591 | 665 | 103 | 15 | 0 | 0 | 1 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 5227.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 711 | 1055 | 124 | 28 | 12 | 2 | . | . | . | . | 1932 |
| 0.50-0.99 | . | 590 | 1648 | 37 | 14 | 3 | . | . | . | . | 2292 |
| 1.00-1.49 | . | . | 934 | 209 | 5 | 4 | . | . | . | . | 1152 |
| 1.50-1.99 | . | . | 53 | 547 | . | 3 | 1 | . | . | . | 604 |
| 2.00-2.49 | . | . | . | 255 | 54 | . | . | 1 | 1 | . | 311 |
| 2.50-2.99 | . | . | . | . | 97 | . | . | . | . | . | 97 |
| 3.00-3.49 | . | . | . | . | 4 | 6 | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | . | 5 | . | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 711 | 1645 | 2759 | 1076 | 186 | 23 | 3 | 1 | 1 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 5999.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 794 | 901 | 111 | 41 | 11 | 6 | 1 | . | . | . | 1865 |
| 0.50-0.99 | . | 1094 | 1186 | 31 | 8 | 2 | 2 | 1 | . | . | 2324 |
| 1.00-1.49 | . | . | 695 | 52 | 8 | 6 | . | . | . | . | 761 |
| 1.50-1.99 | . | . | 140 | 151 | 3 | . | 1 | 1 | . | . | 296 |
| 2.00-2.49 | . | . | . | 101 | 16 | 1 | . | . | 1 | . | 119 |
| 2.50-2.99 | . | . | . | 5 | 14 | . | . | . | . | . | 19 |
| 3.00-3.49 | . | . | . | . | 3 | 3 | . | . | 1 | . | 7 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | 1 | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 794 | 1995 | 2132 | 381 | 63 | 20 | 4 | 3 | 2 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 5054.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1329 | 1076 | 187 | 59 | 25 | 9 | 1 | . | . | . | 2686 |
| 0.50-0.99 | . | 1996 | 1441 | 41 | 18 | 7 | 1 | 2 | . | . | 3506 |
| 1.00-1.49 | . | . | 1220 | 4 | 11 | 7 | . | . | . | . | 1242 |
| 1.50-1.99 | . | . | 355 | 213 | 2 | 1 | 1 | . | . | . | 572 |
| 2.00-2.49 | . | . | . | 102 | . | . | . | . | . | . | 102 |
| 2.50-2.99 | . | . | . | 21 | 1 | . | . | 1 | 1 | . | 24 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | 1 | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1329 | 3072 | 3203 | 441 | 57 | 24 | 3 | 4 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 7616.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1188 | 1640 | 181 | 69 | 21 | 8 | . | . | . | . | 3107 |
| 0.50-0.99 | . | 2879 | 1719 | 57 | 25 | 20 | 3 | 1 | . | . | 4704 |
| 1.00-1.49 | . | 1 | 1571 | 11 | 11 | 6 | . | . | . | . | 1600 |
| 1.50-1.99 | . | . | 500 | 393 | 2 | 4 | . | 1 | . | . | 900 |
| 2.00-2.49 | . | . | . | 178 | . | . | 1 | 1 | . | . | 180 |
| 2.50-2.99 | . | . | . | 10 | 5 | . | . | . | . | . | 15 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1188 | 4520 | 3971 | 718 | 65 | 38 | 4 | 3 | 0 | 2 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 9837.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1115 | 1446 | 211 | 91 | 35 | 13 | . | . | . | . | 2911 |
| 0.50-0.99 | . | 3049 | 1286 | 86 | 67 | 36 | 5 | . | . | . | 4529 |
| 1.00-1.49 | . | . | 1265 | 24 | 22 | 19 | 1 | 5 | 1 | . | 1337 |
| 1.50-1.99 | . | . | 494 | 54 | 5 | 8 | 1 | 5 | 2 | . | 569 |
| 2.00-2.49 | . | . | 1 | 35 | . | 1 | 3 | 2 | 2 | 1 | 45 |
| 2.50-2.99 | . | . | . | 4 | . | . | 1 | 1 | . | . | 6 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1115 | 4495 | 3257 | 294 | 129 | 77 | 11 | 13 | 6 | 2 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 8800.

STATION S12 47.08N 91.35W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

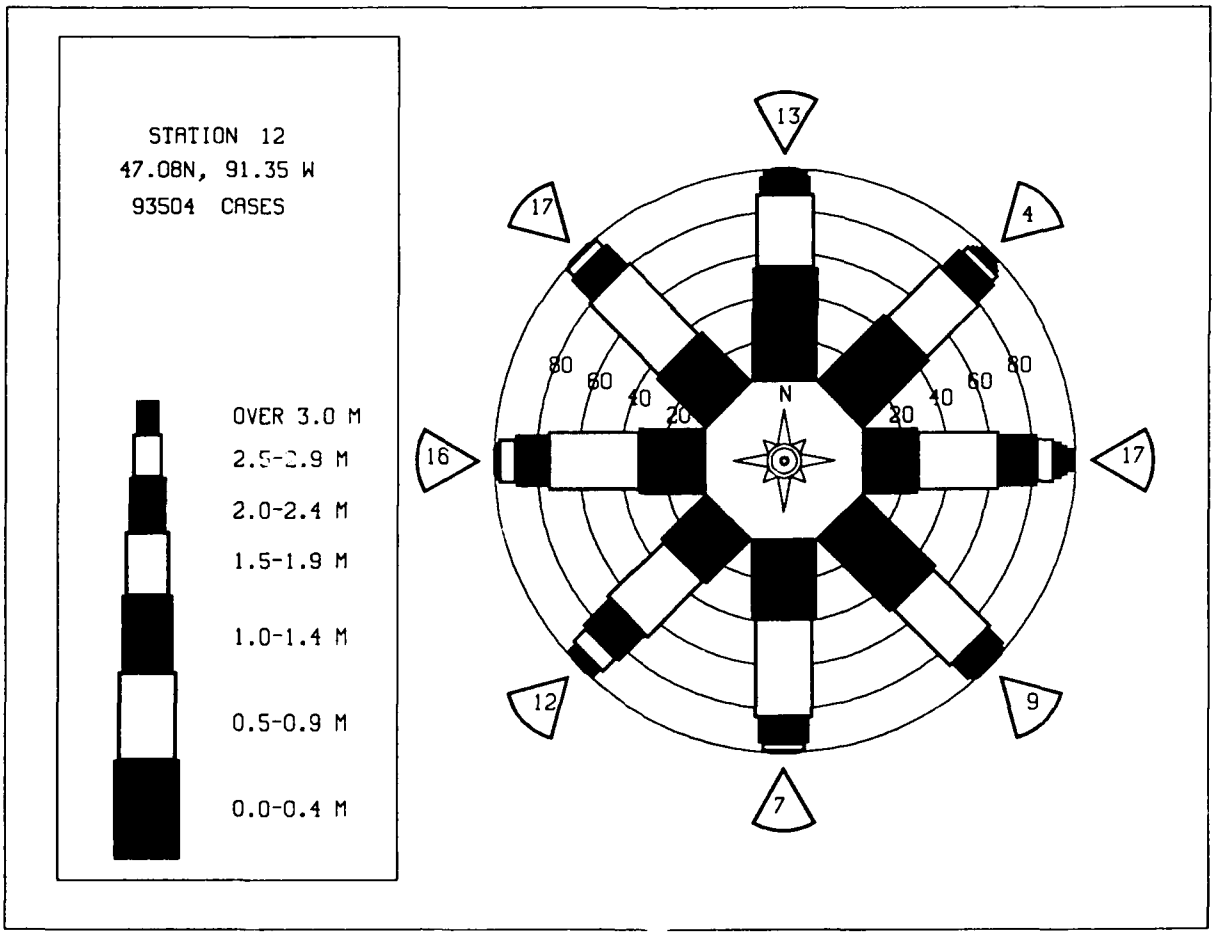
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1055 | 1300 | 275 | 118 | 62 | 25 | 1 | . | . | . | 2836 |
| 0.50-0.99 | . | 1971 | 495 | 181 | 113 | 69 | 13 | 1 | . | . | 2843 |
| 1.00-1.49 | . | . | 637 | 44 | 59 | 58 | 16 | 14 | 1 | . | 829 |
| 1.50-1.99 | . | . | 128 | 4 | 9 | 23 | 6 | 16 | 2 | . | 188 |
| 2.00-2.49 | . | . | 1 | 4 | . | 5 | 10 | 4 | 4 | 1 | 29 |
| 2.50-2.99 | . | . | . | . | . | . | . | 2 | 5 | 3 | 10 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1055 | 3271 | 1536 | 351 | 243 | 180 | 46 | 38 | 13 | 4 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 6314.

STATION S12 47.08N 91.35W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1408 | 1775 | 329 | 91 | 36 | 14 | . | . | . | . | 3653 |
| 0.50-0.99 | . | 1969 | 1829 | 156 | 55 | 29 | 4 | . | . | . | 4042 |
| 1.00-1.49 | . | . | 1063 | 231 | 43 | 26 | 4 | 3 | . | . | 1370 |
| 1.50-1.99 | . | . | 208 | 293 | 44 | 20 | 5 | 4 | . | . | 574 |
| 2.00-2.49 | . | . | . | 117 | 33 | 17 | 5 | 3 | 1 | . | 176 |
| 2.50-2.99 | . | . | . | 4 | 50 | 10 | 4 | 2 | 2 | . | 72 |
| 3.00-3.49 | . | . | . | . | 4 | 26 | 3 | 1 | 1 | . | 35 |
| 3.50-3.99 | . | . | . | . | . | 12 | 4 | . | . | . | 16 |
| 4.00-4.49 | . | . | . | . | . | 1 | 7 | 2 | . | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 2 | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 1 | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 1408 | 3744 | 3429 | 892 | 265 | 155 | 39 | 23 | 7 | 1 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 10.2 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S12 (47.08N 91.35W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.7 | 0.8 | 1.1 | 0.9 | 0.8 | 0.6 | 0.5 | 0.6 | 0.6 | 1.0 | 1.2 | 1.1 | 0.8 |
| 1957 | 1.0 | 0.9 | 0.8 | 0.8 | 0.9 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 1.0 | 0.8 | 0.7 |
| 1958 | 0.7 | 0.9 | 0.6 | 1.0 | 0.6 | 0.5 | 0.5 | 0.4 | 0.7 | 0.8 | 1.3 | 0.9 | 0.7 |
| 1959 | 0.9 | 0.9 | 0.8 | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 0.7 | 0.8 | 1.0 | 1.2 | 0.8 |
| 1960 | 0.8 | 0.8 | 0.8 | 1.0 | 0.7 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 1.1 | 0.9 | 0.7 |
| 1961 | 0.8 | 0.8 | 1.0 | 0.7 | 0.7 | 0.6 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.7 | 0.7 |
| 1962 | 1.0 | 1.0 | 1.0 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 1.0 | 0.7 |
| 1963 | 0.9 | 1.0 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.9 | 1.0 | 0.7 |
| 1964 | 1.1 | 0.9 | 1.0 | 0.9 | 0.8 | 0.5 | 0.4 | 0.7 | 0.6 | 0.6 | 0.9 | 0.8 | 0.8 |
| 1965 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 1.0 | 1.2 | 0.7 |
| 1966 | 1.0 | 0.9 | 1.5 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.9 | 0.9 | 0.8 | 0.8 |
| 1967 | 1.2 | 0.8 | 0.9 | 0.7 | 0.7 | 0.6 | 0.4 | 0.5 | 0.6 | 0.9 | 0.8 | 1.0 | 0.8 |
| 1968 | 0.9 | 0.9 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.9 | 1.0 | 0.8 |
| 1969 | 1.0 | 0.8 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.6 | 0.5 | 0.8 | 0.8 | 0.7 | 0.7 |
| 1970 | 0.7 | 1.0 | 0.8 | 1.1 | 1.0 | 0.6 | 0.5 | 0.5 | 0.8 | 0.7 | 0.8 | 0.9 | 0.8 |
| 1971 | 1.0 | 1.2 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.7 | 0.9 | 0.8 | 0.7 |
| 1972 | 1.0 | 0.8 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.9 | 0.7 | 0.8 | 0.7 |
| 1973 | 0.8 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.5 | 0.7 | 0.9 | 0.8 | 0.6 |
| 1974 | 0.9 | 0.7 | 1.0 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 1.0 | 1.0 | 0.7 |
| 1975 | 1.0 | 0.8 | 1.3 | 1.0 | 0.6 | 0.6 | 0.5 | 0.6 | 0.6 | 0.8 | 1.0 | 0.8 | 0.8 |
| 1976 | 1.0 | 0.9 | 1.3 | 0.8 | 0.6 | 0.7 | 0.4 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 |
| 1977 | 0.7 | 1.1 | 1.3 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.7 | 0.8 | 0.9 | 1.1 | 0.7 |
| 1978 | 0.8 | 0.6 | 0.5 | 0.8 | 0.5 | 0.4 | 0.4 | 0.5 | 0.9 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1979 | 0.7 | 0.7 | 0.9 | 0.7 | 0.5 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 | 0.8 | 0.8 | 0.6 |
| 1980 | 0.9 | 0.7 | 0.8 | 0.6 | 0.5 | 0.6 | 0.4 | 0.5 | 0.7 | 0.8 | 0.7 | 0.8 | 0.7 |
| 1981 | 0.7 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 0.7 | 0.7 | 0.6 |
| 1982 | 1.0 | 0.9 | 1.1 | 0.7 | 0.7 | 0.4 | 0.3 | 0.3 | 0.6 | 0.8 | 0.8 | 1.0 | 0.7 |
| 1983 | 0.8 | 0.9 | 1.3 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.7 | 0.7 | 1.2 | 1.0 | 0.8 |
| 1984 | 0.8 | 0.8 | 1.0 | 0.9 | 0.6 | 0.5 | 0.4 | 0.5 | 0.7 | 1.0 | 0.9 | 0.9 | 0.8 |
| 1985 | 0.9 | 0.8 | 1.4 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 0.9 | 0.8 |
| 1986 | 0.9 | 0.7 | 1.0 | 1.0 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.6 | 1.0 | 0.9 | 0.7 |
| 1987 | 0.7 | 0.9 | 1.3 | 0.6 | 0.7 | 0.4 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 0.7 | 0.7 |
| MEAN | 0.9 | 0.9 | 1.0 | 0.8 | 0.7 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 0.9 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S12 (47.08N 91.35W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.0 | 4.2 | 6.6 | 4.0 | 3.9 | 3.1 | 1.3 | 2.1 | 1.7 | 3.3 | 4.0 | 5.0 |
| 1957 | 2.9 | 2.3 | 4.3 | 4.5 | 3.2 | 1.7 | 1.8 | 1.4 | 2.1 | 2.0 | 3.2 | 2.4 |
| 1958 | 2.6 | 4.9 | 2.9 | 5.8 | 2.4 | 1.4 | 1.6 | 1.3 | 2.1 | 2.4 | 5.1 | 2.7 |
| 1959 | 2.4 | 3.1 | 2.6 | 2.0 | 2.5 | 1.9 | 1.5 | 1.3 | 2.9 | 2.6 | 2.8 | 7.1 |
| 1960 | 2.2 | 3.9 | 4.4 | 3.4 | 3.1 | 1.6 | 1.2 | 2.5 | 1.7 | 2.4 | 7.5 | 2.4 |
| 1961 | 2.2 | 2.5 | 2.8 | 2.3 | 2.9 | 2.3 | 1.9 | 1.2 | 1.5 | 2.0 | 2.7 | 2.1 |
| 1962 | 3.4 | 3.6 | 5.1 | 2.6 | 2.3 | 2.8 | 1.2 | 1.4 | 2.3 | 2.9 | 2.6 | 2.5 |
| 1963 | 2.2 | 4.9 | 2.7 | 2.7 | 2.7 | 2.9 | 1.2 | 1.6 | 1.9 | 2.2 | 2.1 | 3.9 |
| 1964 | 4.6 | 2.7 | 3.8 | 2.8 | 2.8 | 2.3 | 1.4 | 3.7 | 2.9 | 2.5 | 4.3 | 3.4 |
| 1965 | 3.7 | 5.1 | 4.4 | 2.4 | 2.0 | 1.8 | 1.2 | 1.2 | 2.1 | 2.4 | 6.2 | 5.6 |
| 1966 | 2.8 | 4.4 | 7.2 | 5.8 | 2.5 | 2.3 | 1.2 | 1.7 | 1.8 | 2.7 | 4.5 | 2.9 |
| 1967 | 7.7 | 2.3 | 3.8 | 2.6 | 3.7 | 2.5 | 1.8 | 1.5 | 2.2 | 3.0 | 2.5 | 3.1 |
| 1968 | 4.1 | 2.4 | 2.7 | 4.0 | 1.8 | 2.0 | 3.0 | 1.7 | 1.7 | 1.9 | 4.0 | 3.7 |
| 1969 | 3.0 | 3.1 | 2.3 | 4.0 | 2.4 | 2.3 | 1.7 | 2.4 | 1.9 | 2.6 | 2.5 | 3.6 |
| 1970 | 2.2 | 2.7 | 4.2 | 3.9 | 4.0 | 2.5 | 1.5 | 1.3 | 2.3 | 2.3 | 2.9 | 4.8 |
| 1971 | 2.4 | 5.9 | 4.1 | 3.2 | 2.2 | 1.8 | 1.4 | 1.2 | 1.3 | 4.3 | 4.1 | 2.2 |
| 1972 | 3.8 | 4.1 | 3.5 | 3.1 | 3.5 | 1.6 | 1.2 | 1.3 | 2.1 | 2.6 | 3.6 | 5.5 |
| 1973 | 3.7 | 2.1 | 2.9 | 2.1 | 2.3 | 1.3 | 1.1 | 0.9 | 1.9 | 2.2 | 3.5 | 2.3 |
| 1974 | 2.8 | 3.0 | 4.7 | 3.7 | 2.3 | 1.7 | 2.2 | 1.3 | 2.0 | 2.2 | 4.2 | 3.7 |
| 1975 | 5.1 | 2.8 | 6.2 | 4.3 | 2.1 | 1.5 | 1.4 | 2.5 | 2.2 | 2.5 | 3.8 | 3.0 |
| 1976 | 3.4 | 3.2 | 6.1 | 3.6 | 2.0 | 2.7 | 0.9 | 1.1 | 1.6 | 2.3 | 1.8 | 2.6 |
| 1977 | 2.0 | 7.9 | 5.8 | 2.1 | 1.9 | 1.3 | 1.4 | 1.3 | 3.7 | 3.7 | 4.6 | 6.4 |
| 1978 | 1.9 | 2.3 | 2.5 | 2.5 | 2.3 | 1.6 | 1.2 | 1.6 | 4.4 | 2.3 | 2.9 | 3.5 |
| 1979 | 2.4 | 3.8 | 3.3 | 3.8 | 2.3 | 1.3 | 1.3 | 1.3 | 2.4 | 1.8 | 2.6 | 2.7 |
| 1980 | 3.5 | 3.7 | 3.1 | 2.0 | 2.8 | 3.0 | 1.1 | 1.9 | 2.4 | 2.6 | 2.5 | 2.5 |
| 1981 | 2.2 | 2.6 | 3.5 | 2.7 | 2.3 | 1.9 | 1.2 | 1.6 | 3.1 | 2.8 | 2.7 | 2.0 |
| 1982 | 5.9 | 3.6 | 4.9 | 3.8 | 2.4 | 1.9 | 1.0 | 1.1 | 2.3 | 3.2 | 3.2 | 2.9 |
| 1983 | 2.5 | 3.1 | 5.7 | 2.6 | 2.7 | 1.7 | 1.5 | 1.4 | 2.0 | 2.4 | 5.2 | 3.7 |
| 1984 | 2.9 | 3.5 | 4.0 | 3.8 | 2.0 | 2.1 | 1.4 | 1.5 | 2.5 | 5.1 | 2.1 | 2.8 |
| 1985 | 4.2 | 3.4 | 10.2 | 2.9 | 2.6 | 2.0 | 1.3 | 2.2 | 2.7 | 3.1 | 4.6 | 2.8 |
| 1986 | 4.1 | 2.8 | 3.7 | 4.3 | 2.5 | 1.5 | 2.3 | 1.3 | 2.8 | 2.6 | 5.1 | 2.7 |
| 1987 | 2.4 | 5.3 | 5.3 | 2.2 | 3.5 | 1.5 | 1.5 | 1.4 | 1.2 | 2.5 | 3.0 | 3.1 |

32 YR. STATISTICS FOR WIS STATION S12

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.7 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 90.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 10.2 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 29.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 85030418 |

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 2435 | 2820 | 629 | 206 | 87 | 45 | 6 | . | . | . | 6228 |
| 0.50-0.99 | . | 2727 | 465 | 276 | 145 | 86 | 24 | 7 | . | . | 3730 |
| 1.00-1.49 | . | . | 453 | 66 | 82 | 82 | 18 | 16 | 2 | . | 719 |
| 1.50-1.99 | . | . | 69 | 3 | 24 | 44 | 26 | 22 | 3 | 2 | 193 |
| 2.00-2.49 | . | . | 6 | . | . | 13 | 5 | 12 | 9 | 2 | 47 |
| 2.50-2.99 | . | . | . | . | . | 1 | 2 | 5 | 6 | 3 | 17 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | 1 | 3 | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 2435 | 5547 | 1622 | 551 | 338 | 271 | 81 | 63 | 22 | 14 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 10250.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 380 | 510 | 108 | 41 | 13 | 5 | . | . | . | . | 1057 |
| 0.50-0.99 | . | 314 | 282 | 81 | 24 | 18 | 2 | . | . | . | 721 |
| 1.00-1.49 | . | . | 58 | 85 | 24 | 20 | 3 | 1 | . | . | 191 |
| 1.50-1.99 | . | . | 9 | 19 | 11 | 16 | 3 | 1 | 1 | . | 60 |
| 2.00-2.49 | . | . | . | 3 | 13 | 11 | 4 | 5 | 1 | . | 37 |
| 2.50-2.99 | . | . | . | . | . | 11 | 1 | 1 | . | . | 13 |
| 3.00-3.49 | . | . | . | . | . | 3 | 4 | 3 | 2 | . | 12 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | 3 | 1 | 1 | 6 |
| 4.00-4.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 380 | 824 | 457 | 229 | 85 | 84 | 18 | 15 | 7 | 3 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 1979.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 533 | 527 | 178 | 38 | 18 | 9 | . | . | . | . | 1303 |
| 0.50-0.99 | . | 379 | 320 | 84 | 24 | 10 | 3 | . | . | . | 820 |
| 1.00-1.49 | . | . | 74 | 105 | 33 | 16 | 4 | . | . | . | 232 |
| 1.50-1.99 | . | . | 6 | 26 | 25 | 7 | 5 | 3 | . | . | 72 |
| 2.00-2.49 | . | . | . | 3 | 8 | 6 | 4 | . | . | . | 21 |
| 2.50-2.99 | . | . | . | 1 | 2 | 12 | 1 | 3 | 1 | . | 20 |
| 3.00-3.49 | . | . | . | . | . | 7 | 2 | 3 | 1 | . | 13 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | . | . | 1 | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 533 | 906 | 578 | 257 | 110 | 67 | 20 | 11 | 5 | 3 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 2343.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 419 | 521 | 122 | 25 | 10 | 2 | . | . | . | . | 1099 |
| 0.50-0.99 | . | 457 | 716 | 114 | 16 | 6 | . | 1 | . | . | 1310 |
| 1.00-1.49 | . | . | 275 | 251 | 24 | 17 | 3 | 1 | . | . | 571 |
| 1.50-1.99 | . | . | 21 | 150 | 59 | 17 | 2 | 1 | . | . | 250 |
| 2.00-2.49 | . | . | . | 54 | 53 | 25 | 2 | . | 1 | . | 135 |
| 2.50-2.99 | . | . | . | 1 | 66 | 28 | 3 | 4 | 2 | . | 104 |
| 3.00-3.49 | . | . | . | . | 3 | 54 | 3 | 4 | 1 | . | 65 |
| 3.50-3.99 | . | . | . | . | . | 25 | 8 | 5 | 1 | . | 39 |
| 4.00-4.49 | . | . | . | . | . | 4 | 10 | 4 | 2 | 1 | 21 |
| 4.50-4.99 | . | . | . | . | . | . | 11 | 12 | 2 | 1 | 26 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 9 | 5 | . | 15 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 2 | . | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 4 | 1 | 5 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 6 | 7 |
| TOTAL | 419 | 978 | 1134 | 595 | 231 | 178 | 43 | 45 | 26 | 9 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 3442.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 871 | 1372 | 256 | 47 | 13 | 8 | . | . | . | . | 2567 |
| 0.50-0.99 | . | 1100 | 2645 | 175 | 40 | 13 | 1 | . | . | . | 3974 |
| 1.00-1.49 | . | . | 1103 | 1028 | 56 | 12 | 2 | . | . | . | 2201 |
| 1.50-1.99 | . | . | 63 | 667 | 258 | 31 | 2 | 1 | . | . | 1022 |
| 2.00-2.49 | . | . | . | 210 | 155 | 85 | 21 | 3 | 2 | . | 476 |
| 2.50-2.99 | . | . | . | 2 | 247 | 49 | 12 | 4 | 3 | . | 317 |
| 3.00-3.49 | . | . | . | . | 17 | 182 | 32 | 3 | . | . | 234 |
| 3.50-3.99 | . | . | . | . | . | 82 | 42 | 3 | 1 | . | 128 |
| 4.00-4.49 | . | . | . | . | . | 9 | 53 | 20 | . | . | 82 |
| 4.50-4.99 | . | . | . | . | . | . | 18 | 26 | 1 | . | 45 |
| 5.00-5.49 | . | . | . | . | . | . | . | 34 | 4 | . | 38 |
| 5.50-5.99 | . | . | . | . | . | . | . | 11 | 18 | . | 29 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 17 | . | 17 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 9 | 2 | 11 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 4 | 5 |
| TOTAL | 871 | 2472 | 4067 | 2129 | 786 | 471 | 183 | 105 | 56 | 6 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 10443.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 858 | 1509 | 236 | 36 | 14 | 6 | . | 2 | . | . | 2661 |
| 0.50-0.99 | . | 841 | 1896 | 105 | 16 | 10 | . | . | . | . | 2868 |
| 1.00-1.49 | . | . | 592 | 204 | 34 | 9 | . | . | . | . | 839 |
| 1.50-1.99 | . | . | 25 | 182 | 45 | 18 | 2 | 1 | . | . | 273 |
| 2.00-2.49 | . | . | . | 60 | 16 | 12 | 5 | 1 | 1 | . | 95 |
| 2.50-2.99 | . | . | . | . | 22 | 7 | 3 | . | . | . | 32 |
| 3.00-3.49 | . | . | . | . | 1 | 12 | 1 | . | . | . | 14 |
| 3.50-3.99 | . | . | . | . | . | 3 | 3 | . | . | . | 6 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 858 | 2350 | 2749 | 587 | 148 | 77 | 16 | 4 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 6363.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 728 | 1118 | 162 | 33 | 11 | 4 | . | . | . | . | 2056 |
| 0.50-0.99 | . | 640 | 948 | 84 | 10 | 3 | . | . | . | . | 1685 |
| 1.00-1.49 | . | . | 447 | 58 | 10 | 7 | . | . | . | . | 522 |
| 1.50-1.99 | . | . | 16 | 79 | 14 | 9 | 1 | 2 | . | . | 121 |
| 2.00-2.49 | . | . | . | 6 | 3 | 4 | 2 | . | . | . | 15 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | 1 | . | 2 | 1 | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 728 | 1758 | 1573 | 261 | 48 | 29 | 4 | 2 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 4127.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 649 | 971 | 85 | 23 | 7 | . | . | . | . | . | 1735 |
| 0.50-0.99 | . | 593 | 755 | 64 | 13 | 1 | . | . | . | . | 1426 |
| 1.00-1.49 | . | . | 331 | 22 | 5 | 5 | . | . | . | . | 363 |
| 1.50-1.99 | . | . | 22 | 48 | 1 | 2 | . | . | . | . | 73 |
| 2.00-2.49 | . | . | . | 9 | 1 | 3 | . | . | . | . | 13 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 649 | 1564 | 1193 | 167 | 27 | 11 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 3386.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 725 | 1104 | 96 | 25 | 12 | 3 | . | . | . | . | 1965 |
| 0.50-0.99 | . | 720 | 1256 | 33 | 6 | 2 | . | . | . | . | 2017 |
| 1.00-1.49 | . | . | 1037 | 23 | 7 | 3 | . | . | . | . | 1070 |
| 1.50-1.99 | . | . | 45 | 244 | 1 | 1 | . | . | . | . | 291 |
| 2.00-2.49 | . | . | . | 70 | 2 | 1 | 1 | 1 | . | . | 75 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | 5 | . | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 725 | 1824 | 2434 | 396 | 33 | 10 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.6 NO. OF CASES= 5081.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 620 | 1100 | 144 | 23 | 9 | 3 | . | . | . | . | 1899 |
| 0.50-0.99 | . | 1112 | 1721 | 56 | 9 | . | . | . | . | . | 2898 |
| 1.00-1.49 | . | . | 779 | 308 | 5 | 3 | . | . | . | . | 1095 |
| 1.50-1.99 | . | . | 103 | 348 | 2 | 2 | . | . | 1 | . | 456 |
| 2.00-2.49 | . | . | 3 | 91 | 3 | . | . | . | . | . | 97 |
| 2.50-2.99 | . | . | . | 2 | 6 | . | . | . | . | 1 | 9 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 620 | 2212 | 2750 | 828 | 35 | 8 | 0 | 0 | 1 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 6045.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 768 | 1143 | 142 | 33 | 14 | 5 | . | . | . | . | 2105 |
| 0.50-0.99 | . | 1680 | 559 | 105 | 5 | 2 | . | . | . | . | 2351 |
| 1.00-1.49 | . | . | 425 | 93 | 7 | 2 | . | . | . | . | 527 |
| 1.50-1.99 | . | . | 168 | 25 | 9 | 4 | . | . | . | . | 206 |
| 2.00-2.49 | . | . | 2 | 9 | 2 | . | . | 1 | . | . | 14 |
| 2.50-2.99 | . | . | . | 1 | . | 1 | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 768 | 2823 | 1296 | 267 | 37 | 14 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 4877.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 994 | 1044 | 132 | 55 | 12 | 16 | 2 | 1 | . | . | 2256 |
| 0.50-0.99 | . | 1259 | 154 | 32 | 12 | 4 | 1 | 1 | . | . | 1463 |
| 1.00-1.49 | . | . | 288 | 13 | 6 | 5 | 1 | . | . | . | 313 |
| 1.50-1.99 | . | . | 59 | 1 | . | . | . | . | 2 | . | 62 |
| 2.00-2.49 | . | . | 1 | 2 | . | . | . | . | . | . | 3 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | 1 | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 994 | 2303 | 634 | 104 | 30 | 25 | 4 | 2 | 4 | 1 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 3844.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1687 | 1772 | 220 | 71 | 22 | 17 | . | . | . | . | 3789 |
| 0.50-0.99 | . | 2259 | 188 | 42 | 28 | 9 | 2 | 1 | . | . | 2529 |
| 1.00-1.49 | . | . | 709 | 8 | 9 | 9 | . | . | . | . | 735 |
| 1.50-1.99 | . | . | 108 | . | 2 | 2 | 1 | . | . | . | 113 |
| 2.00-2.49 | . | . | 2 | 4 | . | . | . | . | 1 | . | 7 |
| 2.50-2.99 | . | . | . | . | . | . | 1 | 1 | 1 | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1687 | 4031 | 1227 | 125 | 61 | 37 | 4 | 2 | 2 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 6718.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1390 | 1873 | 182 | 80 | 26 | 13 | 1 | 1 | . | . | 3566 |
| 0.50-0.99 | . | 2963 | 588 | 56 | 22 | 17 | 4 | 1 | . | . | 3651 |
| 1.00-1.49 | . | . | 1184 | 13 | 10 | 5 | 1 | . | . | . | 1213 |
| 1.50-1.99 | . | . | 231 | 9 | 1 | 1 | 1 | 1 | . | . | 244 |
| 2.00-2.49 | . | . | 7 | 10 | . | 1 | . | . | . | . | 18 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | . | 1 | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1390 | 4836 | 2192 | 169 | 59 | 37 | 7 | 4 | 0 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 8141.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1290 | 1666 | 217 | 108 | 35 | 19 | 1 | . | . | . | 3336 |
| 0.50-0.99 | . | 3639 | 1599 | 65 | 52 | 37 | 3 | . | . | . | 5395 |
| 1.00-1.49 | . | . | 1464 | 23 | 11 | 17 | 4 | 6 | 2 | . | 1527 |
| 1.50-1.99 | . | . | 636 | 65 | 5 | 4 | 4 | 5 | 3 | 1 | 723 |
| 2.00-2.49 | . | . | 2 | 34 | . | 1 | . | . | 1 | . | 38 |
| 2.50-2.99 | . | . | . | 7 | . | . | . | . | . | 1 | 8 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1290 | 5305 | 3918 | 302 | 103 | 78 | 12 | 11 | 7 | 2 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 10321.

STATION S13 47.08N 91.57W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

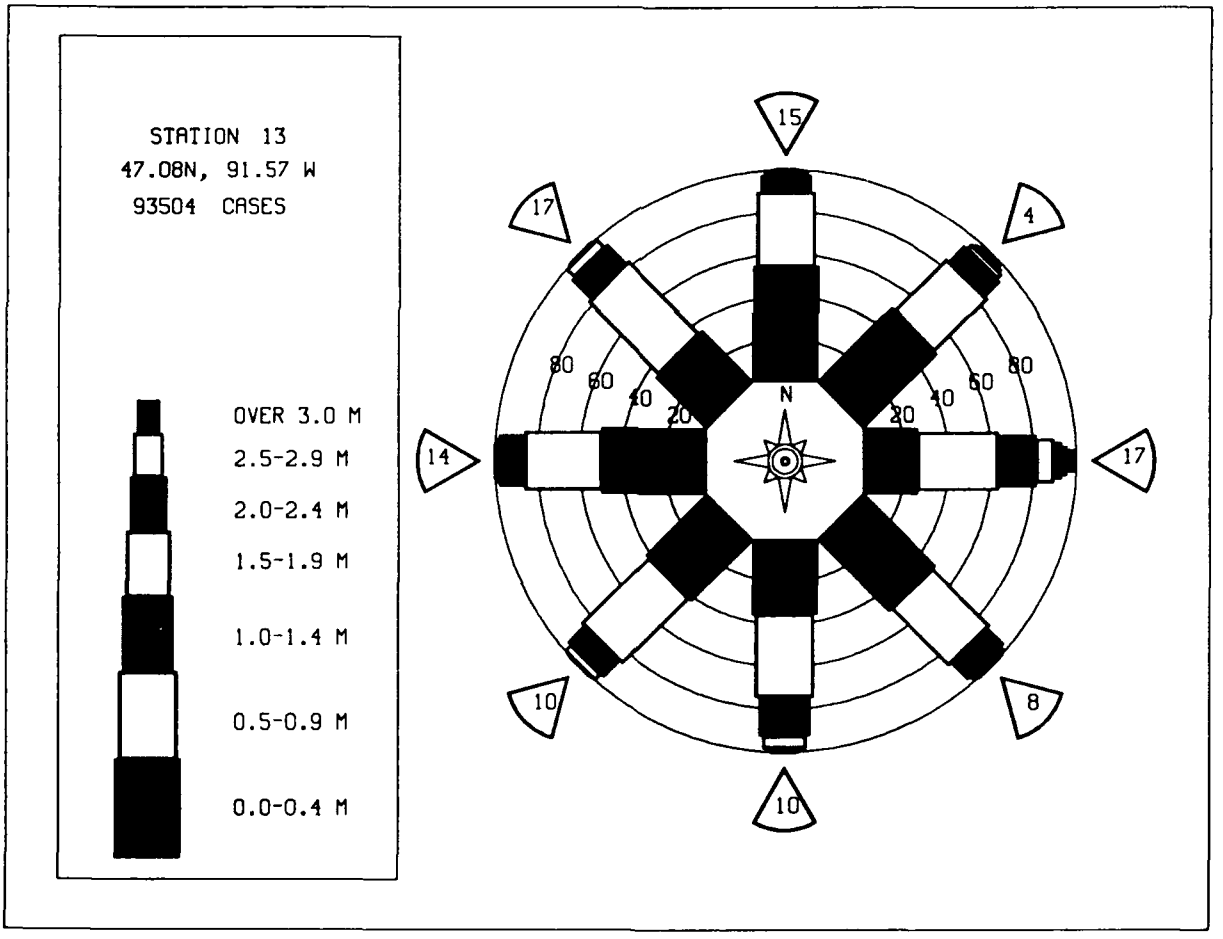
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1155 | 1272 | 254 | 115 | 68 | 37 | 3 | . | . | . | 2904 |
| 0.50-0.99 | . | 1980 | 448 | 113 | 82 | 52 | 13 | 5 | . | . | 2693 |
| 1.00-1.49 | . | . | 682 | 16 | 18 | 28 | 6 | 11 | 2 | . | 763 |
| 1.50-1.99 | . | . | 119 | 8 | 9 | 12 | 6 | 9 | 3 | 1 | 167 |
| 2.00-2.49 | . | . | 3 | 9 | . | 1 | 4 | 4 | 2 | 3 | 26 |
| 2.50-2.99 | . | . | . | . | . | . | . | 1 | 1 | 1 | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1155 | 3252 | 1506 | 261 | 177 | 130 | 32 | 30 | 8 | 5 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 6144.

STATION S13 47.08N 91.57W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1550 | 2032 | 317 | 96 | 38 | 19 | 1 | . | . | . | 4053 |
| 0.50-0.99 | . | 2267 | 1454 | 149 | 51 | 27 | 5 | 1 | . | . | 3954 |
| 1.00-1.49 | . | . | 990 | 232 | 34 | 24 | 4 | 3 | . | . | 1287 |
| 1.50-1.99 | . | . | 170 | 188 | 47 | 17 | 5 | 4 | 1 | . | 432 |
| 2.00-2.49 | . | . | 2 | 58 | 25 | 16 | 5 | 2 | 1 | . | 109 |
| 2.50-2.99 | . | . | . | 1 | 34 | 11 | 2 | 2 | 1 | . | 51 |
| 3.00-3.49 | . | . | . | . | 2 | 26 | 4 | 1 | . | . | 33 |
| 3.50-3.99 | . | . | . | . | . | 11 | 5 | 1 | . | . | 17 |
| 4.00-4.49 | . | . | . | . | . | 1 | 6 | 2 | . | . | 9 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 4 | . | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | 1 | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 1550 | 4299 | 2933 | 724 | 231 | 152 | 39 | 25 | 9 | 1 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S13 (47.08N 91.57W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 0.7 | 1.0 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.9 | 1.1 | 1.0 | 0.8 |
| 1957 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.9 | 0.8 | 0.7 |
| 1958 | 0.7 | 0.9 | 0.6 | 0.9 | 0.6 | 0.5 | 0.5 | 0.4 | 0.7 | 0.7 | 1.1 | 0.8 | 0.7 |
| 1959 | 0.8 | 0.8 | 0.7 | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 0.9 | 1.1 | 0.7 |
| 1960 | 0.7 | 0.8 | 0.8 | 0.9 | 0.7 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 1.1 | 0.8 | 0.7 |
| 1961 | 0.8 | 0.8 | 1.0 | 0.7 | 0.7 | 0.5 | 0.4 | 0.3 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 |
| 1962 | 0.9 | 1.0 | 1.0 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1963 | 0.8 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 | 0.7 |
| 1964 | 1.0 | 0.7 | 0.9 | 0.9 | 0.7 | 0.5 | 0.4 | 0.7 | 0.5 | 0.6 | 0.9 | 0.7 | 0.7 |
| 1965 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.3 | 0.6 | 0.7 | 0.9 | 1.1 | 0.7 |
| 1966 | 0.9 | 0.9 | 1.4 | 0.9 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.8 | 0.8 | 0.8 | 0.8 |
| 1967 | 1.1 | 0.8 | 0.8 | 0.7 | 0.7 | 0.5 | 0.4 | 0.5 | 0.5 | 0.8 | 0.7 | 0.9 | 0.7 |
| 1968 | 0.9 | 0.8 | 0.8 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 0.7 |
| 1969 | 0.9 | 0.7 | 0.6 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 0.7 | 0.7 |
| 1970 | 0.7 | 0.9 | 0.7 | 1.0 | 1.0 | 0.6 | 0.5 | 0.4 | 0.7 | 0.7 | 0.7 | 0.9 | 0.7 |
| 1971 | 0.9 | 1.1 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.7 | 0.8 | 0.7 | 0.7 |
| 1972 | 0.9 | 0.7 | 1.0 | 0.7 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.8 | 0.6 | 0.7 | 0.6 |
| 1973 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.4 | 0.4 | 0.3 | 0.5 | 0.7 | 0.8 | 0.7 | 0.6 |
| 1974 | 0.8 | 0.7 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 1.0 | 0.9 | 0.7 |
| 1975 | 1.0 | 0.8 | 1.2 | 1.0 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 0.9 | 0.7 | 0.8 |
| 1976 | 0.9 | 0.8 | 1.2 | 0.8 | 0.6 | 0.7 | 0.4 | 0.3 | 0.4 | 0.4 | 0.6 | 0.6 | 0.6 |
| 1977 | 0.6 | 1.0 | 1.2 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.9 | 1.0 | 0.7 |
| 1978 | 0.8 | 0.5 | 0.5 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.9 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1979 | 0.6 | 0.7 | 0.9 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.7 | 0.7 | 0.8 | 0.6 |
| 1980 | 0.8 | 0.6 | 0.7 | 0.5 | 0.5 | 0.6 | 0.4 | 0.5 | 0.6 | 0.8 | 0.6 | 0.8 | 0.6 |
| 1981 | 0.6 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.6 | 0.6 | 0.6 |
| 1982 | 1.0 | 0.8 | 1.0 | 0.7 | 0.7 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1983 | 0.8 | 0.8 | 1.3 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.6 | 0.7 | 1.1 | 0.8 | 0.7 |
| 1984 | 0.7 | 0.8 | 1.0 | 0.9 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.9 | 0.8 | 0.8 | 0.7 |
| 1985 | 0.8 | 0.8 | 1.3 | 0.7 | 0.6 | 0.5 | 0.3 | 0.5 | 0.6 | 0.7 | 0.8 | 0.8 | 0.7 |
| 1986 | 0.9 | 0.6 | 0.8 | 1.0 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.6 | 0.9 | 0.8 | 0.7 |
| 1987 | 0.6 | 0.8 | 1.3 | 0.6 | 0.7 | 0.4 | 0.5 | 0.3 | 0.4 | 0.7 | 0.8 | 0.7 | 0.6 |
| MEAN | 0.8 | 0.8 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 0.8 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S13 (47.08N 91.57W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.0 | 4.3 | 6.9 | 3.9 | 4.2 | 3.2 | 1.6 | 2.2 | 1.9 | 3.3 | 3.4 | 5.1 |
| 1957 | 2.5 | 2.2 | 4.0 | 4.1 | 3.3 | 1.7 | 1.9 | 1.5 | 2.1 | 2.0 | 2.8 | 2.4 |
| 1958 | 2.3 | 5.2 | 3.0 | 6.3 | 2.4 | 1.3 | 1.7 | 1.3 | 2.2 | 2.1 | 5.4 | 2.1 |
| 1959 | 2.6 | 2.7 | 2.3 | 1.9 | 2.7 | 1.7 | 1.3 | 1.3 | 3.0 | 2.0 | 2.8 | 7.5 |
| 1960 | 1.8 | 2.5 | 4.5 | 3.6 | 3.3 | 1.5 | 1.2 | 2.6 | 1.7 | 2.0 | 7.8 | 2.5 |
| 1961 | 2.3 | 2.8 | 3.0 | 2.5 | 3.0 | 2.4 | 1.6 | 0.9 | 1.5 | 1.8 | 1.9 | 2.0 |
| 1962 | 3.5 | 3.8 | 5.3 | 2.9 | 2.3 | 3.1 | 1.2 | 1.4 | 1.6 | 1.9 | 2.2 | 2.2 |
| 1963 | 2.0 | 5.1 | 3.0 | 2.8 | 2.8 | 3.0 | 1.1 | 1.6 | 1.6 | 2.2 | 2.2 | 3.2 |
| 1964 | 4.7 | 2.2 | 3.9 | 3.2 | 2.7 | 1.7 | 1.3 | 3.9 | 2.0 | 2.3 | 4.4 | 3.5 |
| 1965 | 4.0 | 5.2 | 4.5 | 2.7 | 2.2 | 2.2 | 1.2 | 1.2 | 2.1 | 2.2 | 6.3 | 5.9 |
| 1966 | 3.0 | 4.5 | 7.2 | 6.1 | 2.3 | 1.8 | 1.2 | 1.5 | 1.4 | 2.6 | 4.6 | 2.6 |
| 1967 | 7.9 | 2.1 | 3.8 | 2.8 | 3.3 | 2.7 | 1.3 | 1.6 | 1.6 | 2.7 | 2.4 | 3.2 |
| 1968 | 4.3 | 2.2 | 2.0 | 4.3 | 1.8 | 2.0 | 1.8 | 1.7 | 1.7 | 2.1 | 4.0 | 3.7 |
| 1969 | 2.8 | 3.3 | 2.2 | 4.0 | 2.0 | 2.5 | 1.8 | 2.0 | 1.4 | 2.6 | 1.9 | 3.6 |
| 1970 | 1.7 | 2.0 | 3.8 | 4.1 | 4.2 | 2.7 | 1.7 | 1.2 | 2.3 | 1.8 | 3.1 | 5.2 |
| 1971 | 2.5 | 6.1 | 4.1 | 3.4 | 2.0 | 2.1 | 1.4 | 1.2 | 1.2 | 4.4 | 4.2 | 2.3 |
| 1972 | 4.1 | 4.1 | 3.4 | 3.2 | 3.6 | 1.8 | 1.1 | 1.3 | 2.1 | 2.0 | 3.4 | 5.6 |
| 1973 | 3.8 | 2.1 | 3.1 | 2.1 | 2.4 | 1.3 | 1.2 | 1.1 | 2.1 | 2.0 | 3.7 | 2.1 |
| 1974 | 2.7 | 3.0 | 4.9 | 3.8 | 2.3 | 1.8 | 2.2 | 1.6 | 2.1 | 2.5 | 4.6 | 3.4 |
| 1975 | 4.3 | 2.5 | 6.4 | 4.5 | 2.3 | 1.6 | 1.3 | 1.6 | 2.3 | 2.3 | 3.7 | 3.1 |
| 1976 | 3.5 | 2.9 | 6.5 | 3.8 | 1.5 | 2.6 | 1.0 | 1.1 | 1.6 | 1.6 | 1.4 | 2.4 |
| 1977 | 1.6 | 6.6 | 5.7 | 2.4 | 1.6 | 1.2 | 1.0 | 1.1 | 3.2 | 3.8 | 4.8 | 6.7 |
| 1978 | 1.9 | 2.4 | 2.2 | 2.6 | 2.3 | 1.6 | 1.2 | 1.6 | 4.7 | 2.0 | 2.8 | 3.5 |
| 1979 | 2.6 | 4.0 | 3.4 | 4.0 | 2.3 | 1.3 | 1.2 | 1.3 | 2.6 | 1.8 | 1.8 | 2.3 |
| 1980 | 3.5 | 3.8 | 3.0 | 2.1 | 3.1 | 3.2 | 1.0 | 1.8 | 2.2 | 2.9 | 1.9 | 1.9 |
| 1981 | 1.5 | 2.7 | 3.6 | 2.8 | 2.2 | 1.8 | 1.1 | 1.6 | 3.1 | 2.8 | 2.2 | 1.7 |
| 1982 | 6.6 | 3.8 | 5.2 | 3.8 | 2.6 | 1.4 | 1.2 | 1.1 | 2.2 | 3.3 | 2.6 | 3.2 |
| 1983 | 2.4 | 3.2 | 5.9 | 2.6 | 2.8 | 1.8 | 1.5 | 1.3 | 2.2 | 1.8 | 5.4 | 3.4 |
| 1984 | 1.9 | 3.7 | 4.2 | 3.9 | 1.7 | 1.6 | 0.9 | 1.5 | 2.2 | 5.3 | 1.9 | 3.0 |
| 1985 | 4.4 | 2.5 | 7.5 | 3.0 | 2.6 | 1.4 | 0.9 | 1.5 | 2.0 | 3.3 | 4.8 | 2.0 |
| 1986 | 4.2 | 2.7 | 3.3 | 4.5 | 2.7 | 1.6 | 2.7 | 0.9 | 2.8 | 2.4 | 4.1 | 2.9 |
| 1987 | 2.3 | 5.3 | 5.5 | 2.4 | 3.6 | 1.7 | 1.7 | 1.5 | 1.2 | 1.9 | 3.1 | 2.1 |

32 YR. STATISTICS FOR WIS STATION S13

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 3.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 90.0 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.3 |
| LARGEST WAVE HS . . . . . | (METERS) | 7.9 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 83.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 67010703 |

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 2085 | 1321 | 501 | 159 | 70 | 27 | . | 1 | . | . | 4164 |
| 0.50-0.99 | . | 2892 | 1904 | 222 | 139 | 71 | 14 | 3 | . | . | 5245 |
| 1.00-1.49 | . | . | 942 | 16 | 62 | 74 | 18 | 8 | . | . | 1120 |
| 1.50-1.99 | . | . | 278 | 130 | 13 | 44 | 18 | 19 | 3 | . | 505 |
| 2.00-2.49 | . | . | 1 | 83 | 5 | 20 | 18 | 19 | 6 | 1 | 153 |
| 2.50-2.99 | . | . | . | 8 | 1 | 3 | 7 | 12 | 10 | 4 | 45 |
| 3.00-3.49 | . | . | . | 2 | 2 | . | . | 4 | 5 | 3 | 16 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | 1 | 2 | 4 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 2085 | 4213 | 3626 | 620 | 293 | 239 | 75 | 66 | 25 | 15 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 7.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 10544.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 377 | 407 | 133 | 45 | 13 | 5 | . | . | . | . | 980 |
| 0.50-0.99 | . | 402 | 304 | 77 | 35 | 20 | 1 | . | . | . | 839 |
| 1.00-1.49 | . | . | 120 | 25 | 18 | 23 | . | . | 1 | . | 187 |
| 1.50-1.99 | . | . | 11 | 29 | 6 | 5 | 4 | 2 | 1 | . | 58 |
| 2.00-2.49 | . | . | . | 10 | 6 | 4 | 5 | 2 | 3 | . | 30 |
| 2.50-2.99 | . | . | . | . | 12 | . | 1 | 3 | . | . | 16 |
| 3.00-3.49 | . | . | . | . | 2 | 6 | 2 | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | . | 3 | 2 | 2 | . | 1 | 8 |
| 4.00-4.49 | . | . | . | . | . | 1 | 3 | . | 1 | 1 | 6 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 377 | 809 | 568 | 186 | 92 | 67 | 18 | 9 | 8 | 3 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 2013.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 495 | 460 | 196 | 50 | 16 | 7 | . | . | . | . | 1224 |
| 0.50-0.99 | . | 266 | 451 | 104 | 23 | 13 | . | . | . | . | 857 |
| 1.00-1.49 | . | . | 231 | 47 | 18 | 22 | 5 | 1 | . | . | 324 |
| 1.50-1.99 | . | . | 10 | 70 | 23 | 10 | 4 | . | 1 | . | 118 |
| 2.00-2.49 | . | . | . | 25 | 6 | 6 | 8 | 2 | . | . | 47 |
| 2.50-2.99 | . | . | . | 2 | 19 | 5 | 6 | 1 | 1 | . | 34 |
| 3.00-3.49 | . | . | . | . | 3 | 7 | 1 | 3 | 2 | . | 16 |
| 3.50-3.99 | . | . | . | . | 1 | 10 | 3 | 1 | . | . | 15 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | 2 | 1 | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | 2 | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 495 | 726 | 888 | 298 | 109 | 81 | 30 | 12 | 7 | 4 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 2493.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 457 | 521 | 162 | 38 | 6 | 1 | . | . | . | . | 1185 |
| 0.50-0.99 | . | 443 | 912 | 130 | 34 | 12 | . | . | . | . | 1531 |
| 1.00-1.49 | . | . | 816 | 78 | 32 | 28 | 5 | 3 | . | . | 962 |
| 1.50-1.99 | . | . | 102 | 226 | 33 | 31 | 6 | . | . | . | 396 |
| 2.00-2.49 | . | . | . | 166 | 18 | 34 | 11 | 2 | 1 | . | 232 |
| 2.50-2.99 | . | . | . | 27 | 40 | 28 | 17 | 6 | 3 | . | 121 |
| 3.00-3.49 | . | . | . | . | 17 | 18 | 14 | 7 | 4 | . | 60 |
| 3.50-3.99 | . | . | . | . | 5 | 12 | 6 | 16 | 2 | . | 41 |
| 4.00-4.49 | . | . | . | . | . | 4 | 5 | 8 | 4 | . | 21 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 4 | 5 | 1 | 11 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | 4 | 1 | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 6 | . | 8 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 5 | 6 |
| TOTAL | 457 | 964 | 1992 | 665 | 185 | 168 | 66 | 48 | 35 | 8 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 4311.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 973 | 1338 | 344 | 74 | 14 | 5 | | | | | 2748 |
| 0.50-0.99 | . | 1274 | 2178 | 214 | 65 | 23 | 1 | 1 | . | . | 3756 |
| 1.00-1.49 | . | . | 2128 | 17 | 39 | 40 | 4 | 1 | 2 | . | 2231 |
| 1.50-1.99 | . | . | 253 | 470 | 10 | 47 | 17 | 4 | 2 | 1 | 804 |
| 2.00-2.49 | . | . | . | 322 | . | 35 | 32 | 9 | 5 | . | 403 |
| 2.50-2.99 | . | . | . | 72 | 38 | 19 | 38 | 6 | 4 | . | 177 |
| 3.00-3.49 | . | . | . | . | 40 | 3 | 20 | 16 | 1 | . | 80 |
| 3.50-3.99 | . | . | . | . | 9 | 1 | 2 | 24 | 4 | . | 40 |
| 4.00-4.49 | . | . | . | . | 1 | 2 | . | 10 | 13 | . | 26 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | 7 | 1 | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 973 | 2612 | 4903 | 1169 | 216 | 176 | 114 | 71 | 39 | 4 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 9630.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1028 | 1555 | 352 | 79 | 17 | 6 | | 1 | 1 | . | 3039 |
| 0.50-0.99 | . | 1432 | 1078 | 128 | 49 | 26 | 1 | 1 | . | . | 2715 |
| 1.00-1.49 | . | . | 620 | 2 | 18 | 28 | 5 | 2 | . | . | 675 |
| 1.50-1.99 | . | . | 64 | 95 | 2 | 14 | 6 | 1 | 1 | . | 183 |
| 2.00-2.49 | . | . | . | 49 | . | 1 | 3 | 2 | 2 | . | 57 |
| 2.50-2.99 | . | . | . | 5 | 2 | 2 | 2 | . | 1 | . | 12 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1028 | 2987 | 2114 | 358 | 88 | 77 | 17 | 8 | 5 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 6257.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 844 | 1186 | 232 | 66 | 20 | 2 | . | . | . | . | 2350 |
| 0.50-0.99 | . | 1248 | 295 | 70 | 38 | 8 | . | . | . | . | 1659 |
| 1.00-1.49 | . | . | 136 | 2 | 6 | 22 | 1 | 1 | . | . | 168 |
| 1.50-1.99 | . | . | 9 | . | . | 3 | 5 | 1 | . | . | 18 |
| 2.00-2.49 | . | . | . | . | . | . | 4 | . | . | . | 4 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 844 | 2434 | 672 | 138 | 64 | 35 | 10 | 2 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 3933.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 725 | 858 | 116 | 44 | 9 | . | . | . | . | . | 1752 |
| 0.50-0.99 | . | 1053 | 318 | 39 | 28 | 9 | . | . | . | . | 1447 |
| 1.00-1.49 | . | . | 174 | . | 4 | 6 | . | . | . | . | 184 |
| 1.50-1.99 | . | . | 23 | 4 | . | . | 1 | . | . | . | 28 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 725 | 1911 | 631 | 87 | 41 | 15 | 4 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 3201.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 801 | 688 | 132 | 59 | 14 | 5 | . | 1 | . | . | 1700 |
| 0.50-0.99 | . | 1194 | 986 | 32 | 18 | 6 | 1 | . | . | . | 2237 |
| 1.00-1.49 | . | . | 682 | 1 | 1 | 5 | 1 | . | . | . | 690 |
| 1.50-1.99 | . | . | 96 | 39 | . | 2 | 1 | . | . | . | 138 |
| 2.00-2.49 | . | . | . | 4 | . | . | . | 1 | . | . | 5 |
| 2.50-2.99 | . | . | . | 2 | 2 | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 801 | 1882 | 1896 | 137 | 35 | 18 | 3 | 2 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 4471.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 613 | 797 | 54 | 39 | 14 | 3 | . | . | . | . | 1520 |
| 0.50-0.99 | . | 790 | 1006 | 25 | 16 | 3 | . | . | . | . | 1840 |
| 1.00-1.49 | . | . | 1012 | . | 2 | 5 | 1 | 1 | . | . | 1021 |
| 1.50-1.99 | . | . | 141 | 275 | . | . | . | . | 1 | . | 417 |
| 2.00-2.49 | . | . | . | 93 | . | . | . | . | . | . | 93 |
| 2.50-2.99 | . | . | . | 5 | 2 | . | . | . | . | . | 7 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 613 | 1587 | 2213 | 437 | 34 | 11 | 1 | 1 | 1 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.7 NO. OF CASES= 4589.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 791 | 1040 | 152 | 57 | 22 | 5 | . | . | . | . | 2067 |
| 0.50-0.99 | . | 889 | 1197 | 49 | 12 | 10 | . | . | . | . | 2157 |
| 1.00-1.49 | . | . | 1183 | 25 | 2 | 7 | 1 | 1 | . | . | 1219 |
| 1.50-1.99 | . | . | 63 | 379 | . | 2 | . | . | . | . | 444 |
| 2.00-2.49 | . | . | . | 126 | . | . | . | 1 | . | . | 127 |
| 2.50-2.99 | . | . | . | 3 | 9 | . | . | . | . | . | 12 |
| 3.00-3.49 | . | . | . | . | 4 | . | . | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 791 | 1929 | 2595 | 639 | 50 | 25 | 1 | 2 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 5651.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 840 | 1407 | 176 | 71 | 18 | 16 | 2 | . | . | . | 2530 |
| 0.50-0.99 | . | 1660 | 478 | 52 | 18 | 14 | 1 | 2 | . | . | 2225 |
| 1.00-1.49 | . | . | 578 | 39 | 4 | 4 | 1 | . | . | . | 626 |
| 1.50-1.99 | . | . | 94 | 151 | 1 | . | . | . | 1 | . | 247 |
| 2.00-2.49 | . | . | 6 | 66 | . | . | . | . | . | . | 72 |
| 2.50-2.99 | . | . | . | 4 | 11 | . | . | . | . | . | 15 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | 1 | 2 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 840 | 3067 | 1332 | 383 | 52 | 36 | 4 | 2 | 2 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 5357.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1515 | 1885 | 218 | 103 | 26 | 23 | | | | | 3770 |
| 0.50-0.99 | . | 2229 | 207 | 38 | 41 | 19 | 2 | 2 | 1 | . | 2539 |
| 1.00-1.49 | . | . | 809 | 2 | 6 | 14 | 1 | . | . | . | 832 |
| 1.50-1.99 | . | . | 137 | . | . | 5 | 1 | . | . | . | 143 |
| 2.00-2.49 | . | . | 3 | 5 | . | . | 1 | . | 2 | . | 11 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1515 | 4114 | 1374 | 148 | 73 | 61 | 5 | 2 | 4 | 1 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.1 NO. OF CASES= 6833.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1337 | 1903 | 170 | 99 | 34 | 10 | | | | | 3553 |
| 0.50-0.99 | . | 2320 | 893 | 47 | 43 | 22 | 3 | 1 | . | . | 3329 |
| 1.00-1.49 | . | . | 928 | . | 6 | 8 | . | . | . | . | 942 |
| 1.50-1.99 | . | . | 391 | 35 | . | 1 | 2 | 1 | . | . | 430 |
| 2.00-2.49 | . | . | 3 | 33 | . | . | . | 2 | . | . | 38 |
| 2.50-2.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1337 | 4223 | 2385 | 214 | 83 | 41 | 5 | 5 | 0 | 2 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 7764.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1248 | 1711 | 250 | 128 | 26 | 12 | | | | | 3375 |
| 0.50-0.99 | . | 3366 | 1371 | 89 | 82 | 44 | 2 | . | . | . | 4954 |
| 1.00-1.49 | . | . | 1482 | 2 | 11 | 19 | 3 | 4 | 2 | . | 1523 |
| 1.50-1.99 | . | . | 589 | 63 | . | 3 | 2 | 7 | 1 | . | 665 |
| 2.00-2.49 | . | . | . | 41 | . | . | 1 | . | . | . | 42 |
| 2.50-2.99 | . | . | . | 10 | . | . | . | . | 1 | . | 11 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1248 | 5077 | 3692 | 333 | 119 | 78 | 8 | 11 | 4 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 9894.

STATION S14 46.95N 91.57W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

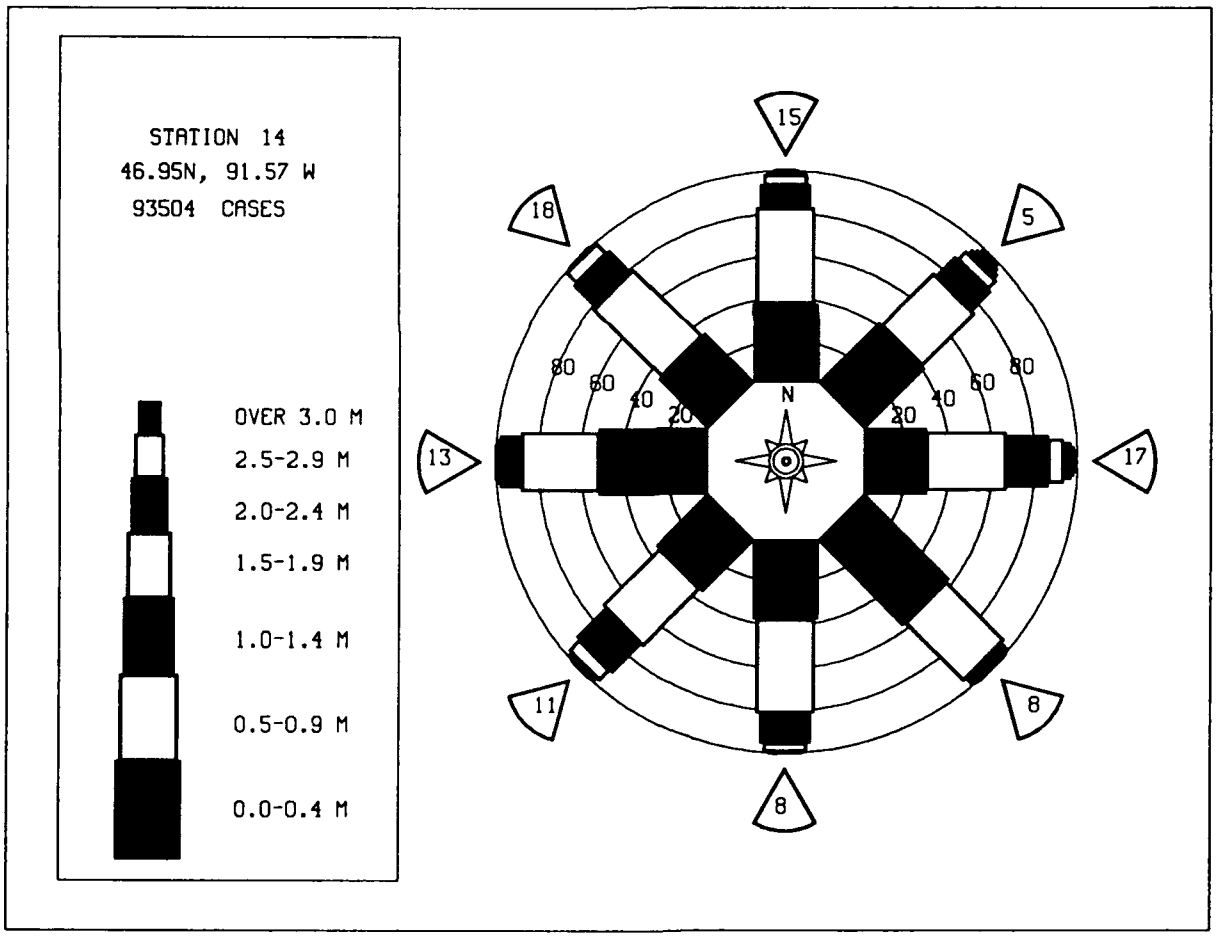
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 934 | 855 | 214 | 109 | 41 | 18 | | | | | 2171 |
| 0.50-0.99 | . | 1964 | 979 | 99 | 80 | 57 | 9 | 3 | . | . | 3191 |
| 1.00-1.49 | . | . | 1019 | 5 | 22 | 35 | 5 | 4 | . | . | 1090 |
| 1.50-1.99 | . | . | 371 | 97 | 1 | 6 | 4 | 10 | 3 | . | 492 |
| 2.00-2.49 | . | . | 2 | 38 | . | 2 | 2 | 2 | 6 | 1 | 53 |
| 2.50-2.99 | . | . | . | 2 | . | . | 1 | 3 | 1 | . | 7 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 934 | 2819 | 2585 | 350 | 144 | 118 | 21 | 22 | 10 | 3 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 6563.

STATION S14 46.95N 91.57W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1507 | 1794 | 341 | 122 | 36 | 15 | . | . | . | . | 3815 |
| 0.50-0.99 | . | 2343 | 1456 | 142 | 72 | 36 | 3 | 1 | . | . | 4053 |
| 1.00-1.49 | . | . | 1286 | 26 | 25 | 34 | 5 | 2 | . | . | 1378 |
| 1.50-1.99 | . | . | 263 | 207 | 9 | 17 | 7 | 4 | 1 | . | 508 |
| 2.00-2.49 | . | . | 1 | 106 | 3 | 10 | 8 | 4 | 2 | . | 134 |
| 2.50-2.99 | . | . | . | 14 | 14 | 5 | 7 | 3 | 2 | . | 45 |
| 3.00-3.49 | . | . | . | . | 6 | 3 | 3 | 3 | 1 | . | 16 |
| 3.50-3.99 | . | . | . | . | 1 | 2 | 1 | 4 | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | 2 | 2 | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1507 | 4137 | 3347 | 617 | 166 | 123 | 34 | 23 | 9 | 0 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S14 (46.95N 91.57W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 0.8 | 0.9 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.9 | 1.1 | 1.0 | 0.8 |
| 1957 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 1.0 | 0.8 | 0.7 |
| 1958 | 0.7 | 0.9 | 0.6 | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 1.1 | 0.8 | 0.7 |
| 1959 | 0.9 | 0.8 | 0.7 | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 0.9 | 1.1 | 0.7 |
| 1960 | 0.8 | 0.8 | 0.8 | 0.9 | 0.7 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 1.1 | 0.9 | 0.7 |
| 1961 | 0.8 | 0.8 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 |
| 1962 | 0.9 | 1.0 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1963 | 0.9 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.8 | 1.0 | 0.7 |
| 1964 | 1.0 | 0.8 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.6 | 0.5 | 0.6 | 0.9 | 0.7 | 0.7 |
| 1965 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.9 | 1.1 | 0.7 |
| 1966 | 0.9 | 0.9 | 1.4 | 0.9 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.8 | 0.8 | 0.8 | 0.8 |
| 1967 | 1.1 | 0.8 | 0.8 | 0.7 | 0.7 | 0.5 | 0.4 | 0.5 | 0.5 | 0.8 | 0.7 | 0.9 | 0.7 |
| 1968 | 0.8 | 0.9 | 0.8 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 0.7 |
| 1969 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.7 | 0.7 | 0.7 | 0.7 |
| 1970 | 0.8 | 1.0 | 0.7 | 1.0 | 0.9 | 0.6 | 0.5 | 0.4 | 0.7 | 0.7 | 0.8 | 0.8 | 0.7 |
| 1971 | 0.9 | 1.1 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.8 | 0.7 | 0.7 |
| 1972 | 0.9 | 0.8 | 0.9 | 0.7 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.8 | 0.7 | 0.7 | 0.6 |
| 1973 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.4 | 0.4 | 0.3 | 0.5 | 0.6 | 0.8 | 0.7 | 0.6 |
| 1974 | 0.8 | 0.7 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 1.0 | 0.9 | 0.7 |
| 1975 | 1.0 | 0.8 | 1.2 | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 0.9 | 0.7 | 0.8 |
| 1976 | 0.9 | 0.9 | 1.2 | 0.8 | 0.6 | 0.7 | 0.4 | 0.3 | 0.4 | 0.4 | 0.6 | 0.7 | 0.7 |
| 1977 | 0.7 | 1.0 | 1.2 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1978 | 0.8 | 0.6 | 0.5 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.8 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1979 | 0.6 | 0.6 | 0.9 | 0.6 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.7 | 0.7 | 0.8 | 0.6 |
| 1980 | 0.8 | 0.6 | 0.8 | 0.5 | 0.5 | 0.6 | 0.4 | 0.5 | 0.6 | 0.8 | 0.6 | 0.8 | 0.6 |
| 1981 | 0.7 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.6 | 0.6 | 0.6 |
| 1982 | 1.0 | 0.8 | 1.0 | 0.7 | 0.7 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1983 | 0.8 | 0.8 | 1.2 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.7 | 1.1 | 0.9 | 0.7 |
| 1984 | 0.8 | 0.8 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.9 | 0.8 | 0.9 | 0.7 |
| 1985 | 0.9 | 0.8 | 1.3 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1986 | 0.9 | 0.6 | 0.9 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.6 | 1.0 | 0.8 | 0.7 |
| 1987 | 0.7 | 0.8 | 1.1 | 0.6 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.7 | 0.8 | 0.7 | 0.6 |
| MEAN | 0.8 | 0.8 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 0.8 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S14 (46.95N 91.57W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.2 | 2.7 | 4.7 | 4.4 | 2.8 | 2.3 | 1.2 | 1.6 | 1.6 | 2.7 | 4.2 | 3.0 |
| 1957 | 3.0 | 2.0 | 4.4 | 3.7 | 3.0 | 1.5 | 1.8 | 1.4 | 1.8 | 1.9 | 3.5 | 2.5 |
| 1958 | 2.6 | 3.8 | 2.3 | 4.7 | 1.9 | 1.3 | 1.7 | 1.5 | 2.0 | 2.4 | 5.6 | 2.4 |
| 1959 | 2.2 | 2.5 | 2.5 | 1.8 | 2.6 | 1.7 | 1.2 | 1.3 | 2.9 | 2.1 | 3.1 | 7.7 |
| 1960 | 1.9 | 3.3 | 3.0 | 3.7 | 2.5 | 1.5 | 1.2 | 2.1 | 1.5 | 2.0 | 8.1 | 2.6 |
| 1961 | 2.3 | 2.9 | 3.2 | 2.1 | 3.4 | 2.3 | 1.6 | 1.3 | 1.4 | 1.8 | 2.3 | 1.8 |
| 1962 | 2.5 | 2.6 | 4.2 | 2.4 | 2.1 | 2.2 | 1.1 | 1.3 | 1.9 | 2.4 | 2.0 | 2.1 |
| 1963 | 2.0 | 3.3 | 3.0 | 2.5 | 2.8 | 2.2 | 1.0 | 1.4 | 1.7 | 1.9 | 2.2 | 4.0 |
| 1964 | 3.8 | 2.3 | 2.6 | 2.9 | 2.4 | 2.1 | 1.2 | 2.5 | 2.4 | 2.1 | 3.1 | 2.7 |
| 1965 | 3.3 | 3.5 | 4.5 | 1.9 | 1.9 | 1.6 | 1.1 | 1.2 | 2.1 | 2.1 | 4.4 | 4.1 |
| 1966 | 2.5 | 3.1 | 5.8 | 4.3 | 2.3 | 2.0 | 1.5 | 1.4 | 1.5 | 2.8 | 3.2 | 2.3 |
| 1967 | 6.0 | 2.1 | 2.7 | 2.3 | 3.3 | 2.5 | 1.6 | 1.4 | 1.8 | 2.5 | 2.0 | 2.7 |
| 1968 | 2.9 | 2.2 | 2.6 | 3.0 | 1.8 | 1.6 | 2.6 | 1.5 | 1.5 | 1.9 | 3.5 | 3.5 |
| 1969 | 2.6 | 2.4 | 2.4 | 3.7 | 2.0 | 1.8 | 1.5 | 2.4 | 1.4 | 2.1 | 2.1 | 2.6 |
| 1970 | 1.8 | 2.3 | 3.6 | 2.5 | 2.9 | 2.1 | 1.3 | 1.3 | 2.0 | 1.8 | 2.5 | 3.5 |
| 1971 | 2.5 | 4.3 | 3.0 | 2.5 | 2.2 | 1.8 | 1.3 | 1.1 | 1.3 | 2.9 | 2.8 | 2.0 |
| 1972 | 3.4 | 3.3 | 3.6 | 2.5 | 2.5 | 1.5 | 1.1 | 1.1 | 1.9 | 2.2 | 3.8 | 3.7 |
| 1973 | 2.5 | 1.7 | 2.2 | 1.8 | 1.9 | 1.2 | 1.1 | 0.9 | 1.8 | 1.7 | 2.5 | 2.3 |
| 1974 | 2.4 | 2.1 | 3.2 | 2.7 | 1.9 | 2.0 | 2.0 | 1.4 | 1.6 | 2.1 | 3.8 | 2.9 |
| 1975 | 4.4 | 2.5 | 5.0 | 2.9 | 1.8 | 1.5 | 1.3 | 2.1 | 2.0 | 2.1 | 3.8 | 2.2 |
| 1976 | 2.4 | 2.7 | 4.5 | 3.5 | 1.8 | 2.9 | 0.9 | 1.0 | 1.5 | 1.9 | 1.4 | 2.2 |
| 1977 | 1.6 | 6.1 | 6.2 | 2.0 | 1.5 | 1.1 | 1.2 | 1.3 | 3.1 | 3.0 | 3.2 | 4.7 |
| 1978 | 2.0 | 1.8 | 1.9 | 1.8 | 1.9 | 1.5 | 1.1 | 1.6 | 3.2 | 2.0 | 2.3 | 2.4 |
| 1979 | 2.0 | 2.7 | 2.6 | 2.7 | 1.7 | 1.3 | 1.1 | 1.2 | 2.1 | 1.7 | 2.2 | 2.2 |
| 1980 | 2.6 | 2.6 | 2.9 | 1.9 | 2.1 | 2.2 | 1.0 | 1.6 | 1.8 | 2.1 | 2.1 | 2.1 |
| 1981 | 1.8 | 2.2 | 2.7 | 2.0 | 2.2 | 1.7 | 1.1 | 1.3 | 2.3 | 2.0 | 2.2 | 1.7 |
| 1982 | 4.2 | 2.5 | 3.5 | 2.6 | 1.7 | 1.6 | 1.0 | 1.2 | 1.9 | 2.3 | 2.7 | 2.7 |
| 1983 | 2.3 | 2.9 | 4.2 | 2.2 | 2.1 | 1.7 | 1.3 | 1.1 | 1.8 | 2.1 | 4.1 | 2.5 |
| 1984 | 2.4 | 2.5 | 2.9 | 2.8 | 1.9 | 1.9 | 1.3 | 1.2 | 2.0 | 3.7 | 1.9 | 2.1 |
| 1985 | 3.1 | 2.9 | 8.3 | 2.5 | 1.8 | 1.6 | 1.2 | 1.9 | 2.4 | 2.5 | 3.4 | 2.7 |
| 1986 | 2.9 | 2.3 | 2.8 | 3.1 | 2.2 | 1.4 | 2.2 | 1.1 | 2.1 | 2.2 | 4.4 | 2.3 |
| 1987 | 2.0 | 3.8 | 3.8 | 1.9 | 2.6 | 1.3 | 1.5 | 1.2 | 1.4 | 2.1 | 2.2 | 2.8 |

32 YR. STATISTICS FOR WIS STATION S14

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 0.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.2 |
| LARGEST WAVE HS | (METERS) | 8.3 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 62.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 85030421 |

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 3087 | 3056 | 263 | 183 | 116 | 43 | 7 | 2 | . | . | 6757 |
| 0.50-0.99 | . | 3054 | 151 | 8 | 16 | 47 | 19 | 19 | 4 | . | 3318 |
| 1.00-1.49 | . | . | 579 | 3 | 3 | 4 | 10 | 11 | 6 | 3 | 619 |
| 1.50-1.99 | . | . | 106 | 1 | 1 | 4 | 3 | 4 | 2 | 5 | 126 |
| 2.00-2.49 | . | . | 5 | 4 | . | 1 | . | 1 | . | . | 11 |
| 2.50-2.99 | . | . | . | 3 | . | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 3087 | 6110 | 1104 | 204 | 136 | 99 | 39 | 37 | 12 | 9 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 10146.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 507 | 558 | 36 | 34 | 19 | 6 | . | . | . | . | 1160 |
| 0.50-0.99 | . | 428 | 161 | 11 | 7 | 16 | 2 | 2 | 1 | 1 | 629 |
| 1.00-1.49 | . | . | 96 | 25 | 7 | 1 | 1 | 1 | 4 | . | 135 |
| 1.50-1.99 | . | . | 11 | 38 | 4 | 1 | 1 | . | . | . | 55 |
| 2.00-2.49 | . | . | . | 4 | 8 | 4 | . | . | . | . | 16 |
| 2.50-2.99 | . | . | . | 2 | . | . | 3 | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | . | 1 | . | 5 | . | . | 6 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 507 | 986 | 304 | 114 | 46 | 29 | 7 | 8 | 5 | 1 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 1887.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 833 | 662 | 83 | 53 | 27 | 11 | . | . | . | . | 1669 |
| 0.50-0.99 | . | 513 | 311 | 6 | 5 | 13 | 3 | 3 | . | . | 854 |
| 1.00-1.49 | . | . | 119 | 60 | 6 | 1 | 2 | 3 | 2 | . | 193 |
| 1.50-1.99 | . | . | 16 | 35 | 14 | 2 | . | . | . | . | 67 |
| 2.00-2.49 | . | . | . | 17 | 12 | 3 | 1 | . | . | . | 33 |
| 2.50-2.99 | . | . | . | 1 | . | 4 | 3 | 1 | 1 | 1 | 11 |
| 3.00-3.49 | . | . | . | . | . | 1 | 3 | . | . | 1 | 5 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | 2 | 1 | . | 4 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 833 | 1175 | 529 | 172 | 64 | 36 | 12 | 9 | 5 | 3 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 2665.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 622 | 627 | 49 | 38 | 17 | 9 | . | . | . | . | 1362 |
| 0.50-0.99 | . | 614 | 749 | . | 8 | 11 | 1 | 3 | . | . | 1386 |
| 1.00-1.49 | . | . | 858 | 36 | 1 | 2 | 1 | . | 2 | . | 900 |
| 1.50-1.99 | . | . | 62 | 311 | 7 | 1 | . | . | . | . | 381 |
| 2.00-2.49 | . | . | . | 203 | 17 | 4 | . | . | . | . | 224 |
| 2.50-2.99 | . | . | . | 14 | 42 | 5 | 2 | . | . | . | 63 |
| 3.00-3.49 | . | . | . | . | 34 | 10 | . | . | . | 1 | 45 |
| 3.50-3.99 | . | . | . | . | 2 | 10 | 3 | . | 1 | 1 | 17 |
| 4.00-4.49 | . | . | . | . | . | 4 | 5 | 1 | 1 | . | 11 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | 1 | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 1 | 1 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 4 | 4 |
| TOTAL | 622 | 1241 | 1718 | 602 | 128 | 56 | 15 | 6 | 8 | 8 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 9.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 4132.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1352 | 1565 | 89 | 72 | 32 | 9 | 1 | . | . | . | 3120 |
| 0.50-0.99 | . | 1391 | 2171 | 2 | 12 | 16 | 7 | 1 | 3 | . | 3603 |
| 1.00-1.49 | . | . | 2203 | 12 | . | . | . | 2 | 4 | . | 2221 |
| 1.50-1.99 | . | . | 104 | 667 | 5 | . | . | . | 1 | . | 777 |
| 2.00-2.49 | . | . | . | 436 | 2 | . | . | . | . | . | 438 |
| 2.50-2.99 | . | . | . | 29 | 94 | 1 | . | . | . | . | 124 |
| 3.00-3.49 | . | . | . | . | 65 | . | . | . | . | . | 65 |
| 3.50-3.99 | . | . | . | . | 6 | 10 | 1 | . | . | . | 17 |
| 4.00-4.49 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1352 | 2956 | 4567 | 1218 | 216 | 40 | 9 | 3 | 9 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 9708.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1452 | 1788 | 69 | 36 | 17 | 8 | . | 1 | 1 | . | 3372 |
| 0.50-0.99 | . | 1394 | 1221 | . | 7 | 16 | 7 | 3 | 2 | . | 2650 |
| 1.00-1.49 | . | . | 779 | . | . | . | 2 | . | . | . | 781 |
| 1.50-1.99 | . | . | 38 | 163 | . | . | . | . | . | . | 201 |
| 2.00-2.49 | . | . | . | 59 | . | . | . | . | . | . | 59 |
| 2.50-2.99 | . | . | . | 2 | 4 | . | . | . | . | . | 6 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1452 | 3182 | 2107 | 260 | 28 | 24 | 9 | 4 | 3 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 6617.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1110 | 1368 | 72 | 29 | 9 | 8 | . | . | . | . | 2596 |
| 0.50-0.99 | . | 1434 | 333 | 1 | 6 | 14 | 4 | 2 | . | . | 1793 |
| 1.00-1.49 | . | . | 135 | 1 | . | 1 | . | . | . | . | 137 |
| 1.50-1.99 | . | . | 11 | 1 | . | . | . | . | . | . | 12 |
| 2.00-2.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1110 | 2802 | 551 | 34 | 15 | 23 | 4 | 2 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.0 NO. OF CASES= 4254.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 995 | 1191 | 27 | 23 | 17 | 8 | . | . | . | . | 2261 |
| 0.50-0.99 | . | 860 | 55 | . | 3 | 4 | 1 | . | . | . | 923 |
| 1.00-1.49 | . | . | 88 | . | . | . | 1 | . | . | . | 89 |
| 1.50-1.99 | . | . | 3 | . | . | . | . | . | . | . | 3 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 995 | 2051 | 173 | 23 | 20 | 12 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.8 NO. OF CASES= 3069.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1048 | 1290 | 54 | 25 | 20 | 11 | . | 1 | . | . | 2449 |
| 0.50-0.99 | . | 1496 | 88 | . | 2 | 4 | 1 | 1 | . | . | 1592 |
| 1.00-1.49 | . | . | 272 | . | . | . | . | . | . | . | 272 |
| 1.50-1.99 | . | . | 6 | . | . | . | . | . | . | . | 6 |
| 2.00-2.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1048 | 2786 | 420 | 27 | 22 | 15 | 1 | 2 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 2.9 NO. OF CASES= 4046.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 788 | 832 | 18 | 19 | 16 | 3 | . | . | . | . | 1676 |
| 0.50-0.99 | . | 1722 | 547 | . | 3 | 3 | . | . | . | . | 2275 |
| 1.00-1.49 | . | . | 449 | . | . | . | 1 | . | . | . | 450 |
| 1.50-1.99 | . | . | 121 | 4 | . | . | . | . | . | 1 | 126 |
| 2.00-2.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 788 | 2554 | 1135 | 25 | 19 | 6 | 1 | 0 | 0 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 4239.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 970 | 796 | 50 | 28 | 11 | 8 | . | . | 1 | . | 1863 |
| 0.50-0.99 | . | 1789 | 665 | . | 1 | 4 | 2 | . | . | . | 2462 |
| 1.00-1.49 | . | . | 427 | . | . | . | . | . | . | . | 427 |
| 1.50-1.99 | . | . | 135 | 4 | . | . | . | . | . | . | 139 |
| 2.00-2.49 | . | . | . | 5 | . | . | . | . | . | . | 5 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 970 | 2585 | 1277 | 37 | 12 | 12 | 2 | 0 | 1 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 4584.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1197 | 1053 | 40 | 29 | 18 | 10 | . | 1 | . | . | 2348 |
| 0.50-0.99 | . | 1784 | 251 | . | . | 4 | 1 | 1 | 2 | . | 2043 |
| 1.00-1.49 | . | . | 488 | . | . | . | . | . | . | . | 488 |
| 1.50-1.99 | . | . | 75 | 6 | . | . | . | . | . | 1 | 82 |
| 2.00-2.49 | . | . | . | 8 | . | . | . | . | . | . | 8 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1197 | 2837 | 854 | 44 | 18 | 14 | 1 | 2 | 2 | 1 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 4655.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1957 | 1879 | 77 | 64 | 19 | 14 | . | . | 1 | . | 4011 |
| 0.50-0.99 | . | 2424 | 148 | 1 | . | 6 | 2 | 1 | . | . | 2582 |
| 1.00-1.49 | . | . | 697 | . | . | . | . | 1 | 2 | . | 700 |
| 1.50-1.99 | . | . | 115 | . | . | . | . | . | . | . | 115 |
| 2.00-2.49 | . | . | 1 | 7 | . | . | . | . | . | . | 8 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1957 | 4303 | 1038 | 72 | 19 | 20 | 2 | 2 | 3 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 2.9 NO. OF CASES= 6939.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1756 | 2434 | 67 | 43 | 37 | 17 | 2 | . | . | . | 4356 |
| 0.50-0.99 | . | 3614 | 409 | . | 1 | 5 | 1 | 1 | 1 | . | 4032 |
| 1.00-1.49 | . | . | 1452 | . | . | . | . | . | . | . | 1452 |
| 1.50-1.99 | . | . | 205 | 3 | . | . | . | . | . | . | 208 |
| 2.00-2.49 | . | . | 6 | 11 | . | . | . | . | . | . | 17 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1756 | 6048 | 2139 | 58 | 38 | 22 | 3 | 1 | 1 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 9418.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1653 | 1752 | 91 | 80 | 34 | 23 | 2 | . | . | . | 3635 |
| 0.50-0.99 | . | 4009 | 1618 | . | 3 | 17 | . | 5 | 5 | . | 5657 |
| 1.00-1.49 | . | . | 1532 | . | . | . | 1 | 6 | 1 | 1 | 1541 |
| 1.50-1.99 | . | . | 675 | 64 | . | . | . | . | . | 1 | 740 |
| 2.00-2.49 | . | . | 1 | 45 | . | . | . | . | . | . | 46 |
| 2.50-2.99 | . | . | . | 6 | . | . | . | . | . | . | 6 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1653 | 5761 | 3917 | 195 | 37 | 40 | 3 | 11 | 6 | 2 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 10878.

STATION S15 46.80N 92.00W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

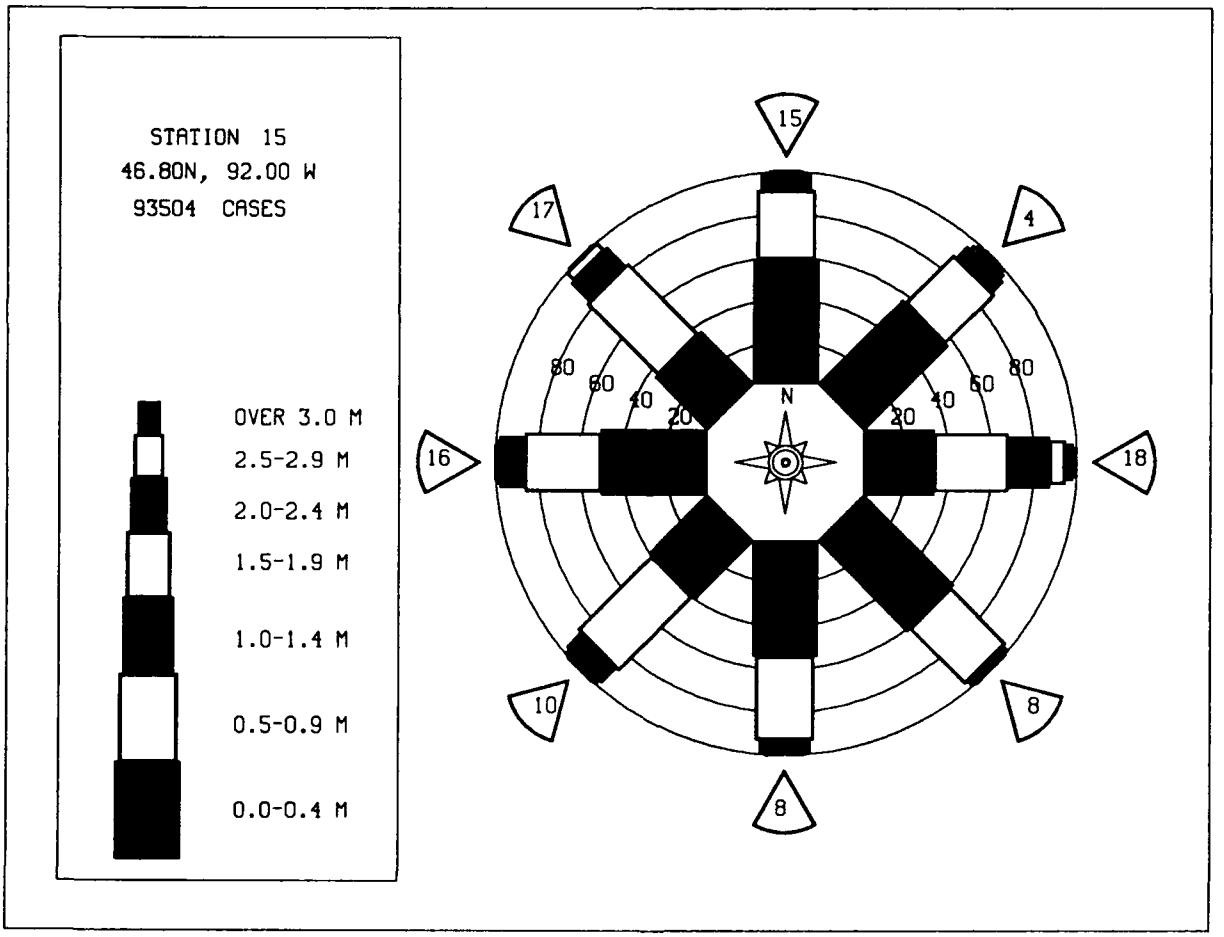
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1360 | 1414 | 96 | 98 | 69 | 43 | 4 | 1 | . | . | 3085 |
| 0.50-0.99 | . | 2172 | 410 | 2 | 9 | 28 | 14 | 8 | 3 | . | 2646 |
| 1.00-1.49 | . | . | 760 | 3 | 1 | 1 | 3 | 6 | 4 | 1 | 779 |
| 1.50-1.99 | . | . | 156 | 8 | 1 | . | . | 2 | 3 | 2 | 172 |
| 2.00-2.49 | . | . | . | 8 | . | . | . | . | 1 | . | 9 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1360 | 3586 | 1422 | 119 | 80 | 72 | 21 | 17 | 11 | 3 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 6267.

STATION S15 46.80N 92.00W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 2069 | 2227 | 118 | 86 | 48 | 24 | 1 | . | . | . | 4573 |
| 0.50-0.99 | . | 2870 | 929 | 3 | 8 | 21 | 6 | 5 | 2 | . | 3844 |
| 1.00-1.49 | . | . | 1094 | 14 | 1 | 1 | 2 | 3 | 2 | . | 1117 |
| 1.50-1.99 | . | . | 184 | 130 | 3 | . | . | . | . | 1 | 318 |
| 2.00-2.49 | . | . | 1 | 81 | 4 | 1 | . | . | . | . | 87 |
| 2.50-2.99 | . | . | . | 6 | 14 | 1 | . | . | . | . | 21 |
| 3.00-3.49 | . | . | . | . | 9 | 1 | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 2069 | 5097 | 2326 | 320 | 87 | 51 | 9 | 8 | 4 | 1 | |

MEAN HS(M)= 0.6 LARGEST HS(M)= 9.1 MEAN TP(SEC)= 3.2 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S15 (46.80N 92.00W)

| | MONTH | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| YEAR | | | | | | | | | | | | | MEAN |
| 1956 | 0.6 | 0.7 | 0.8 | 0.7 | 0.7 | 0.5 | 0.4 | 0.5 | 0.5 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1957 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.7 | 0.6 |
| 1958 | 0.6 | 0.8 | 0.6 | 0.8 | 0.6 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 1.0 | 0.7 | 0.6 |
| 1959 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 0.9 | 0.6 |
| 1960 | 0.7 | 0.7 | 0.7 | 0.8 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 1.0 | 0.8 | 0.6 |
| 1961 | 0.7 | 0.7 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 |
| 1962 | 0.8 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1963 | 0.7 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1964 | 0.9 | 0.7 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.6 | 0.5 | 0.5 | 0.8 | 0.6 | 0.6 |
| 1965 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.6 | 0.8 | 0.9 | 0.6 |
| 1966 | 0.8 | 0.7 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.7 | 0.7 | 0.6 |
| 1967 | 1.0 | 0.7 | 0.7 | 0.6 | 0.6 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.6 | 0.8 | 0.6 |
| 1968 | 0.7 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.8 | 0.6 |
| 1969 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.6 | 0.7 | 0.6 | 0.6 |
| 1970 | 0.7 | 0.8 | 0.6 | 0.8 | 0.8 | 0.6 | 0.4 | 0.4 | 0.6 | 0.6 | 0.6 | 0.8 | 0.7 |
| 1971 | 0.8 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.3 | 0.3 | 0.4 | 0.5 | 0.7 | 0.6 | 0.6 |
| 1972 | 0.8 | 0.7 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.5 | 0.6 | 0.6 |
| 1973 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 0.7 | 0.6 | 0.5 |
| 1974 | 0.7 | 0.6 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.9 | 0.8 | 0.6 |
| 1975 | 0.8 | 0.7 | 1.0 | 0.9 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.7 | 0.8 | 0.6 | 0.7 |
| 1976 | 0.8 | 0.7 | 1.0 | 0.7 | 0.5 | 0.6 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.6 |
| 1977 | 0.6 | 0.8 | 1.0 | 0.5 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1978 | 0.7 | 0.5 | 0.4 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.7 | 0.6 | 0.6 | 0.7 | 0.5 |
| 1979 | 0.6 | 0.6 | 0.8 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.6 | 0.6 | 0.7 | 0.5 |
| 1980 | 0.8 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.7 | 0.6 | 0.7 | 0.6 |
| 1981 | 0.6 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.3 | 0.3 | 0.6 | 0.6 | 0.5 | 0.6 | 0.5 |
| 1982 | 0.9 | 0.7 | 0.8 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1983 | 0.7 | 0.7 | 0.9 | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | 0.6 | 0.6 | 0.9 | 0.8 | 0.6 |
| 1984 | 0.7 | 0.7 | 0.8 | 0.8 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.8 | 0.7 | 0.7 | 0.6 |
| 1985 | 0.8 | 0.7 | 1.0 | 0.7 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1986 | 0.8 | 0.6 | 0.7 | 0.8 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.8 | 0.7 | 0.6 |
| 1987 | 0.6 | 0.7 | 0.9 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 | 0.6 | 0.5 |
| MEAN | 0.7 | 0.7 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S15 (46.80N 92.00W)

| | MONTH | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| YEAR | | | | | | | | | | | | |
| 1956 | 2.1 | 2.6 | 3.7 | 3.9 | 2.3 | 2.1 | 1.2 | 1.6 | 1.3 | 2.1 | 3.2 | 3.1 |
| 1957 | 2.3 | 1.9 | 3.9 | 2.8 | 2.8 | 1.6 | 1.9 | 1.2 | 1.4 | 1.8 | 2.2 | 2.4 |
| 1958 | 2.1 | 3.4 | 2.1 | 3.6 | 2.5 | 1.3 | 1.7 | 1.3 | 1.8 | 2.0 | 5.8 | 2.1 |
| 1959 | 2.3 | 1.9 | 2.0 | 1.6 | 2.4 | 1.8 | 1.1 | 1.3 | 2.2 | 2.1 | 2.8 | 7.5 |
| 1960 | 1.8 | 2.4 | 2.7 | 4.0 | 2.5 | 1.5 | 1.2 | 2.1 | 1.5 | 1.9 | 9.1 | 2.0 |
| 1961 | 2.2 | 2.3 | 2.6 | 2.0 | 3.3 | 1.9 | 1.5 | 0.9 | 1.2 | 1.6 | 1.6 | 1.7 |
| 1962 | 2.4 | 2.6 | 4.3 | 2.5 | 2.1 | 2.3 | 1.1 | 1.5 | 1.5 | 1.8 | 1.9 | 2.1 |
| 1963 | 1.6 | 3.0 | 2.3 | 2.1 | 1.8 | 2.1 | 1.0 | 1.5 | 1.2 | 1.6 | 2.2 | 2.6 |
| 1964 | 3.3 | 2.0 | 2.1 | 2.4 | 1.8 | 1.6 | 1.3 | 2.4 | 1.8 | 1.9 | 2.6 | 2.8 |
| 1965 | 3.8 | 3.1 | 2.7 | 2.1 | 1.3 | 1.6 | 1.1 | 1.1 | 1.8 | 1.8 | 3.4 | 3.2 |
| 1966 | 2.3 | 2.8 | 4.1 | 3.5 | 1.7 | 1.5 | 1.1 | 1.3 | 1.3 | 2.2 | 2.9 | 1.8 |
| 1967 | 4.3 | 2.1 | 2.1 | 2.1 | 2.4 | 2.0 | 1.1 | 1.0 | 1.5 | 2.5 | 1.6 | 2.0 |
| 1968 | 2.5 | 1.9 | 1.8 | 2.3 | 1.6 | 1.5 | 1.6 | 1.5 | 1.3 | 2.0 | 2.1 | 3.0 |
| 1969 | 2.1 | 2.1 | 1.9 | 2.2 | 1.5 | 1.9 | 1.5 | 1.8 | 1.2 | 1.7 | 1.6 | 2.0 |
| 1970 | 1.6 | 1.8 | 3.1 | 2.3 | 2.7 | 1.7 | 1.3 | 1.2 | 1.5 | 1.7 | 2.6 | 3.5 |
| 1971 | 2.3 | 3.0 | 2.2 | 2.1 | 1.9 | 1.4 | 1.3 | 1.2 | 1.1 | 2.6 | 2.3 | 1.9 |
| 1972 | 3.5 | 2.3 | 2.9 | 2.5 | 2.3 | 1.6 | 1.0 | 1.1 | 1.6 | 1.6 | 3.5 | 3.1 |
| 1973 | 2.3 | 1.4 | 2.1 | 1.7 | 1.7 | 1.2 | 0.9 | 0.9 | 1.7 | 1.7 | 2.1 | 1.9 |
| 1974 | 2.1 | 2.1 | 2.8 | 2.2 | 1.9 | 1.5 | 2.1 | 1.1 | 1.6 | 1.6 | 3.2 | 2.2 |
| 1975 | 3.3 | 2.6 | 3.9 | 2.6 | 1.7 | 1.6 | 1.0 | 1.4 | 1.7 | 1.6 | 3.1 | 2.2 |
| 1976 | 2.3 | 2.5 | 3.5 | 2.6 | 1.5 | 2.8 | 0.9 | 0.9 | 1.2 | 1.4 | 1.4 | 2.1 |
| 1977 | 1.6 | 3.6 | 4.7 | 2.1 | 1.4 | 1.1 | 0.8 | 0.9 | 2.2 | 2.3 | 2.7 | 3.6 |
| 1978 | 1.9 | 1.9 | 1.6 | 1.9 | 1.9 | 1.1 | 1.1 | 1.6 | 3.1 | 1.5 | 2.1 | 2.3 |
| 1979 | 2.1 | 2.8 | 2.3 | 2.3 | 1.7 | 1.3 | 1.1 | 1.3 | 1.9 | 1.4 | 1.6 | 1.7 |
| 1980 | 2.5 | 2.2 | 2.2 | 1.7 | 2.0 | 2.3 | 1.0 | 1.3 | 1.6 | 2.0 | 1.7 | 1.7 |
| 1981 | 1.6 | 2.0 | 2.8 | 1.7 | 1.9 | 1.4 | 1.1 | 1.5 | 1.9 | 1.8 | 1.6 | 1.5 |
| 1982 | 3.7 | 2.2 | 3.3 | 2.1 | 1.7 | 1.4 | 1.1 | 1.0 | 1.6 | 2.1 | 2.1 | 2.3 |
| 1983 | 2.1 | 2.3 | 3.4 | 2.2 | 2.1 | 1.6 | 1.2 | 1.2 | 1.9 | 1.6 | 3.1 | 2.4 |
| 1984 | 1.8 | 2.3 | 2.5 | 2.4 | 1.6 | 1.7 | 0.9 | 1.2 | 1.9 | 3.3 | 1.9 | 2.3 |
| 1985 | 2.9 | 2.0 | 4.6 | 2.2 | 1.7 | 1.4 | 1.1 | 1.4 | 1.6 | 2.7 | 3.1 | 1.9 |
| 1986 | 2.6 | 2.1 | 2.4 | 2.6 | 1.9 | 1.2 | 2.2 | 0.8 | 1.9 | 1.7 | 2.9 | 2.2 |
| 1987 | 1.9 | 3.4 | 2.9 | 1.8 | 2.3 | 1.3 | 1.6 | 1.2 | 1.2 | 1.9 | 2.1 | 1.8 |

32 YR. STATISTICS FOR WIS STATION S15

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.6 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.2 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.4 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.0 |
| LARGEST WAVE HS | (METERS) | 9.1 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 73.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 60112818 |

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 2779 | 3075 | 363 | 237 | 118 | 55 | 3 | 1 | . | . | 6631 |
| 0.50-0.99 | . | 2974 | 223 | 56 | 64 | 50 | 21 | 14 | 1 | . | 3403 |
| 1.00-1.49 | . | . | 515 | 21 | 11 | 22 | 19 | 18 | 4 | 3 | 613 |
| 1.50-1.99 | . | . | 137 | 4 | . | 4 | 8 | 9 | 7 | 2 | 171 |
| 2.00-2.49 | . | . | 10 | 3 | 2 | 2 | 2 | 2 | 3 | 5 | 29 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | 2 | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 2779 | 6049 | 1248 | 323 | 195 | 133 | 53 | 44 | 17 | 13 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.1 NO. OF CASES= 10164.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 419 | 427 | 77 | 42 | 17 | 4 | . | . | . | . | 986 |
| 0.50-0.99 | . | 324 | 171 | 10 | 11 | 20 | 1 | 1 | 2 | . | 540 |
| 1.00-1.49 | . | . | 113 | 16 | . | 2 | 3 | 1 | 1 | . | 136 |
| 1.50-1.99 | . | . | 14 | 32 | 5 | 1 | 1 | 1 | 1 | . | 55 |
| 2.00-2.49 | . | . | . | 27 | 4 | 1 | . | . | . | . | 32 |
| 2.50-2.99 | . | . | . | 1 | 7 | 3 | 1 | . | . | . | 12 |
| 3.00-3.49 | . | . | . | . | 3 | 3 | . | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | 1 | 2 | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | 2 | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | 3 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 419 | 751 | 375 | 128 | 47 | 37 | 9 | 8 | 4 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 1673.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 751 | 597 | 133 | 69 | 26 | 12 | . | . | . | . | 1588 |
| 0.50-0.99 | . | 453 | 353 | 22 | 14 | 21 | 4 | 1 | . | . | 868 |
| 1.00-1.49 | . | . | 199 | 32 | 4 | 3 | 5 | 1 | 1 | . | 245 |
| 1.50-1.99 | . | . | 23 | 58 | 16 | . | . | 1 | 1 | . | 99 |
| 2.00-2.49 | . | . | 1 | 26 | 9 | 1 | 1 | 1 | . | . | 39 |
| 2.50-2.99 | . | . | . | 4 | 12 | 3 | . | . | . | . | 19 |
| 3.00-3.49 | . | . | . | . | 1 | 5 | 1 | . | 1 | . | 8 |
| 3.50-3.99 | . | . | . | . | . | 1 | 2 | 1 | . | 1 | 5 |
| 4.00-4.49 | . | . | . | . | . | . | 3 | . | . | 1 | 4 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 1 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 751 | 1050 | 709 | 211 | 82 | 46 | 18 | 8 | 4 | 3 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 2710.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 599 | 576 | 88 | 57 | 19 | 7 | . | . | . | . | 1346 |
| 0.50-0.99 | . | 867 | 932 | 14 | 23 | 23 | 4 | 4 | . | . | 1867 |
| 1.00-1.49 | . | . | 666 | 40 | 5 | 14 | 11 | 1 | 2 | . | 739 |
| 1.50-1.99 | . | . | 201 | 159 | 10 | . | 4 | 1 | 2 | . | 377 |
| 2.00-2.49 | . | . | . | 109 | 6 | 5 | 1 | 4 | 2 | . | 127 |
| 2.50-2.99 | . | . | . | 33 | 22 | 6 | . | 3 | 2 | 2 | 68 |
| 3.00-3.49 | . | . | . | 3 | 9 | 10 | . | . | 1 | 1 | 24 |
| 3.50-3.99 | . | . | . | . | . | 7 | 3 | . | 1 | . | 11 |
| 4.00-4.49 | . | . | . | . | . | 2 | 6 | . | 1 | 2 | 11 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | 1 | 1 | 4 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 2 | 3 | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 4 | 4 |
| TOTAL | 599 | 1443 | 1887 | 415 | 94 | 74 | 31 | 16 | 18 | 11 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 8.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 4308.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1364 | 1140 | 166 | 115 | 39 | 10 | | | | | 2834 |
| 0.50-0.99 | . | 2486 | 2272 | 10 | 33 | 27 | 8 | 3 | 2 | 1 | 4842 |
| 1.00-1.49 | . | . | 1428 | 10 | 3 | 13 | 17 | 3 | 7 | . | 1481 |
| 1.50-1.99 | . | . | 411 | 328 | 4 | 1 | 5 | 5 | 2 | . | 756 |
| 2.00-2.49 | . | . | . | 178 | 1 | . | . | 3 | . | . | 182 |
| 2.50-2.99 | . | . | . | 75 | 6 | . | . | 1 | 1 | . | 83 |
| 3.00-3.49 | . | . | . | 5 | 13 | . | . | . | . | . | 18 |
| 3.50-3.99 | . | . | . | . | 3 | 1 | 1 | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1364 | 3626 | 4277 | 721 | 103 | 52 | 31 | 15 | 13 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 9556.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1478 | 1420 | 161 | 63 | 23 | 9 | 1 | 1 | 1 | . | 3157 |
| 0.50-0.99 | . | 2029 | 1105 | 5 | 19 | 32 | 6 | 4 | . | . | 3200 |
| 1.00-1.49 | . | . | 481 | . | . | 5 | 4 | 3 | 3 | . | 496 |
| 1.50-1.99 | . | . | 88 | 71 | . | . | 1 | . | 1 | . | 161 |
| 2.00-2.49 | . | . | . | 16 | . | . | . | . | . | . | 16 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1478 | 3449 | 1835 | 156 | 42 | 46 | 12 | 8 | 5 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 6582.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1117 | 1282 | 106 | 55 | 12 | 9 | . | . | . | . | 2581 |
| 0.50-0.99 | . | 1395 | 249 | . | 8 | 17 | 6 | 2 | . | . | 1677 |
| 1.00-1.49 | . | . | 100 | . | . | 3 | . | 1 | . | . | 104 |
| 1.50-1.99 | . | . | 9 | 1 | . | . | 1 | . | . | . | 11 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1117 | 2677 | 464 | 57 | 20 | 29 | 7 | 3 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.0 NO. OF CASES= 4097.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 937 | 1007 | 54 | 29 | 23 | 7 | . | . | . | . | 2057 |
| 0.50-0.99 | . | 851 | 58 | . | 4 | 6 | 1 | . | . | . | 920 |
| 1.00-1.49 | . | . | 74 | . | . | . | 1 | . | . | . | 75 |
| 1.50-1.99 | . | . | 3 | . | . | . | . | . | . | . | 3 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 937 | 1858 | 189 | 31 | 27 | 13 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 2.8 NO. OF CASES= 2865.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 938 | 1110 | 71 | 42 | 24 | 7 | . | . | . | . | 2192 |
| 0.50-0.99 | . | 1287 | 58 | . | 2 | 8 | 1 | . | . | . | 1356 |
| 1.00-1.49 | . | . | 181 | . | . | . | . | 1 | . | . | 182 |
| 1.50-1.99 | . | . | 4 | . | . | . | . | . | . | . | 4 |
| 2.00-2.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 938 | 2397 | 314 | 44 | 26 | 15 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 2.9 NO. OF CASES= 3500.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 745 | 952 | 25 | 22 | 13 | 2 | . | . | . | . | 1759 |
| 0.50-0.99 | . | 1480 | 322 | . | 5 | 5 | . | . | . | . | 1812 |
| 1.00-1.49 | . | . | 389 | . | . | . | 1 | . | . | . | 390 |
| 1.50-1.99 | . | . | 55 | 4 | . | . | . | . | . | . | 59 |
| 2.00-2.49 | . | . | . | 3 | . | . | . | . | . | 1 | 4 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 745 | 2432 | 791 | 29 | 18 | 7 | 1 | 0 | 0 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 3769.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 910 | 872 | 58 | 45 | 10 | 9 | . | . | . | . | 1904 |
| 0.50-0.99 | . | 1871 | 680 | . | 2 | 6 | 1 | 1 | . | . | 2561 |
| 1.00-1.49 | . | . | 524 | . | . | 1 | . | . | 1 | . | 526 |
| 1.50-1.99 | . | . | 151 | 6 | . | . | . | . | . | . | 157 |
| 2.00-2.49 | . | . | . | 5 | . | . | . | . | . | . | 5 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 910 | 2743 | 1413 | 56 | 12 | 16 | 1 | 1 | 1 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 4825.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 997 | 912 | 41 | 29 | 12 | 11 | 2 | . | . | . | 2004 |
| 0.50-0.99 | . | 1769 | 934 | . | 3 | 8 | 1 | 1 | 1 | . | 2717 |
| 1.00-1.49 | . | . | 736 | . | . | . | . | . | . | . | 736 |
| 1.50-1.99 | . | . | 199 | 81 | . | . | . | . | . | . | 280 |
| 2.00-2.49 | . | . | . | 39 | . | . | . | . | . | . | 39 |
| 2.50-2.99 | . | . | . | 4 | 1 | . | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 997 | 2681 | 1910 | 153 | 18 | 19 | 3 | 1 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 5417.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1498 | 1112 | 89 | 56 | 10 | 7 | 1 | . | 1 | . | 2774 |
| 0.50-0.99 | . | 2142 | 1391 | . | 2 | 6 | 1 | . | . | . | 3542 |
| 1.00-1.49 | . | . | 1167 | . | . | . | 1 | . | 1 | . | 1169 |
| 1.50-1.99 | . | . | 319 | 188 | . | . | . | . | 2 | . | 509 |
| 2.00-2.49 | . | . | . | 108 | . | . | . | . | . | 1 | 109 |
| 2.50-2.99 | . | . | . | 20 | 5 | . | . | . | . | . | 25 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1498 | 3254 | 2966 | 372 | 18 | 13 | 3 | 0 | 4 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.4 NO. OF CASES= 7608.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1432 | 1704 | 77 | 50 | 33 | 11 | . | . | . | . | 3307 |
| 0.50-0.99 | . | 3091 | 2168 | . | 4 | 7 | 2 | 2 | . | . | 5274 |
| 1.00-1.49 | . | . | 2311 | . | . | . | . | . | . | . | 2311 |
| 1.50-1.99 | . | . | 680 | 545 | . | . | . | . | . | . | 1225 |
| 2.00-2.49 | . | . | . | 228 | . | . | . | . | . | 1 | 229 |
| 2.50-2.99 | . | . | . | 17 | 9 | . | . | . | . | . | 26 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1432 | 4795 | 5236 | 840 | 47 | 18 | 2 | 2 | 0 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 11576.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1386 | 1454 | 124 | 95 | 32 | 25 | 2 | . | . | . | 3118 |
| 0.50-0.99 | . | 3266 | 1276 | 2 | 12 | 22 | 2 | 4 | 2 | . | 4586 |
| 1.00-1.49 | . | . | 1224 | 1 | . | 1 | 1 | 7 | 2 | 1 | 1237 |
| 1.50-1.99 | . | . | 452 | 58 | . | . | . | . | 1 | 2 | 513 |
| 2.00-2.49 | . | . | 1 | 41 | . | . | . | . | . | 1 | 43 |
| 2.50-2.99 | . | . | . | 7 | 1 | . | . | . | . | . | 8 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1386 | 4720 | 3077 | 204 | 46 | 48 | 5 | 11 | 5 | 4 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 8897.

STATION S16 46.80N 91.78W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

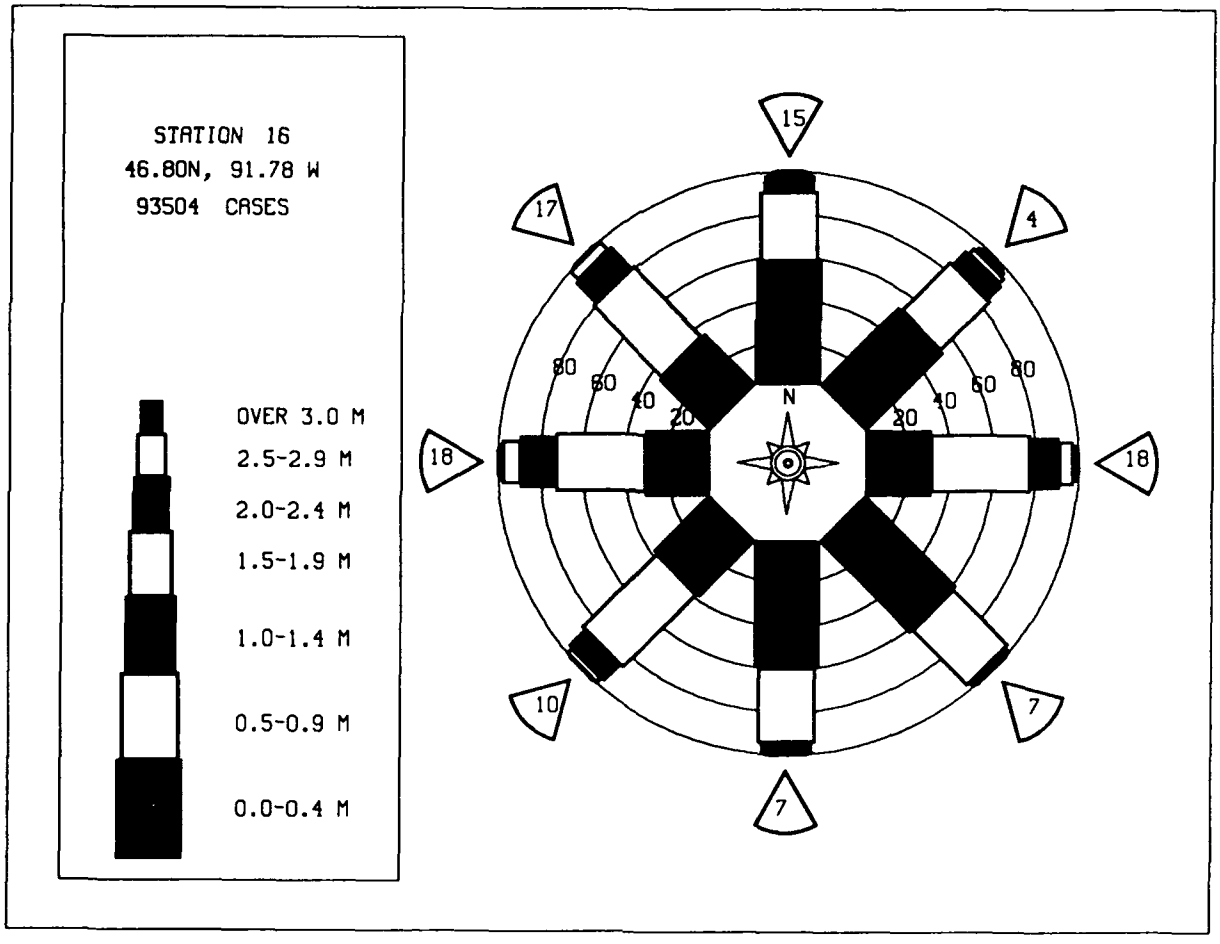
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1190 | 1390 | 131 | 129 | 71 | 41 | 2 | 1 | . | . | 2955 |
| 0.50-0.99 | . | 1987 | 360 | 23 | 31 | 39 | 9 | 7 | 1 | . | 2457 |
| 1.00-1.49 | . | . | 718 | 3 | 1 | 10 | 14 | 14 | 4 | . | 764 |
| 1.50-1.99 | . | . | 157 | 5 | 2 | . | . | 3 | 3 | 3 | 173 |
| 2.00-2.49 | . | . | . | 7 | . | . | . | 1 | 1 | 1 | 10 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1190 | 3377 | 1366 | 167 | 105 | 90 | 25 | 26 | 9 | 4 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 5957.

STATION S16 46.80N 91.78W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1854 | 1903 | 177 | 114 | 49 | 23 | 1 | . | . | . | 4121 |
| 0.50-0.99 | . | 2827 | 1256 | 14 | 24 | 30 | 7 | 4 | . | . | 4162 |
| 1.00-1.49 | . | . | 1083 | 12 | 2 | 7 | 8 | 5 | 2 | . | 1119 |
| 1.50-1.99 | . | . | 291 | 154 | 3 | . | 2 | 2 | 2 | . | 454 |
| 2.00-2.49 | . | . | 1 | 79 | 2 | . | . | 1 | . | 1 | 84 |
| 2.50-2.99 | . | . | . | 16 | 6 | 1 | . | . | . | . | 23 |
| 3.00-3.49 | . | . | . | . | 3 | 1 | . | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1854 | 4730 | 2808 | 389 | 89 | 63 | 19 | 12 | 4 | 1 | |

MEAN HS(M)= 0.6 LARGEST HS(M)= 8.7 MEAN TP(SEC)= 3.3 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S16 (46.80N 91.78W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 0.7 | 0.8 | 0.8 | 0.7 | 0.5 | 0.4 | 0.5 | 0.6 | 0.9 | 1.0 | 1.0 | 0.7 |
| 1957 | 0.9 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 0.9 | 0.8 | 0.7 |
| 1958 | 0.6 | 0.8 | 0.6 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 0.7 | 1.1 | 0.9 | 0.7 |
| 1959 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1960 | 0.8 | 0.7 | 0.7 | 0.9 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 1.1 | 0.9 | 0.7 |
| 1961 | 0.8 | 0.7 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 |
| 1962 | 0.9 | 0.8 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1963 | 0.9 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 | 0.6 |
| 1964 | 1.0 | 0.7 | 0.8 | 0.7 | 0.7 | 0.4 | 0.4 | 0.6 | 0.5 | 0.6 | 0.8 | 0.6 | 0.6 |
| 1965 | 0.9 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.7 | 0.9 | 1.0 | 0.6 |
| 1966 | 0.9 | 0.8 | 1.1 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.8 | 0.7 | 0.7 | 0.7 |
| 1967 | 1.0 | 0.7 | 0.7 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.7 | 0.8 | 0.6 |
| 1968 | 0.7 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1969 | 0.8 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.7 | 0.7 | 0.7 | 0.6 |
| 1970 | 0.7 | 0.9 | 0.7 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.7 | 0.7 | 0.7 | 0.8 | 0.7 |
| 1971 | 0.9 | 1.0 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.8 | 0.7 | 0.6 |
| 1972 | 0.9 | 0.7 | 0.8 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.6 | 0.6 | 0.6 |
| 1973 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.6 | 0.8 | 0.7 | 0.5 |
| 1974 | 0.7 | 0.6 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.4 | 0.5 | 0.6 | 0.9 | 0.8 | 0.6 |
| 1975 | 0.9 | 0.8 | 1.0 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 0.7 | 0.7 |
| 1976 | 0.8 | 0.8 | 1.0 | 0.7 | 0.5 | 0.6 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.7 | 0.6 |
| 1977 | 0.7 | 0.8 | 1.1 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.8 | 0.9 | 0.6 |
| 1978 | 0.8 | 0.5 | 0.5 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.7 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1979 | 0.6 | 0.6 | 0.8 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1980 | 0.8 | 0.6 | 0.7 | 0.5 | 0.5 | 0.6 | 0.4 | 0.5 | 0.6 | 0.8 | 0.6 | 0.8 | 0.6 |
| 1981 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.3 | 0.3 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 1982 | 0.9 | 0.7 | 0.9 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.5 | 0.7 | 0.7 | 0.8 | 0.6 |
| 1983 | 0.7 | 0.7 | 0.9 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 0.9 | 0.9 | 0.7 |
| 1984 | 0.8 | 0.7 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 0.8 | 0.8 | 0.7 |
| 1985 | 0.9 | 0.7 | 1.0 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1986 | 0.8 | 0.6 | 0.8 | 0.8 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.9 | 0.8 | 0.6 |
| 1987 | 0.6 | 0.7 | 0.9 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.7 | 0.7 | 0.7 | 0.6 |
| MEAN | 0.8 | 0.7 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.8 | 0.8 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S16 (46.80N 91.78W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.9 | 2.2 | 3.3 | 4.3 | 2.1 | 2.0 | 1.1 | 1.3 | 1.7 | 2.4 | 4.6 | 3.0 |
| 1957 | 2.9 | 1.9 | 4.3 | 2.6 | 3.4 | 1.7 | 1.9 | 1.0 | 1.7 | 1.8 | 2.6 | 2.5 |
| 1958 | 2.7 | 2.9 | 1.8 | 3.4 | 2.3 | 1.6 | 1.5 | 1.3 | 2.2 | 2.4 | 5.9 | 2.3 |
| 1959 | 2.5 | 2.4 | 2.1 | 2.0 | 2.3 | 2.0 | 1.5 | 1.3 | 2.7 | 2.7 | 3.3 | 7.3 |
| 1960 | 2.2 | 2.7 | 2.7 | 4.0 | 2.1 | 1.6 | 1.2 | 1.8 | 1.6 | 2.4 | 8.7 | 2.1 |
| 1961 | 2.9 | 2.1 | 2.4 | 2.1 | 3.6 | 1.7 | 2.0 | 1.1 | 1.5 | 1.8 | 2.0 | 2.1 |
| 1962 | 2.2 | 2.2 | 3.9 | 2.1 | 1.7 | 1.9 | 0.9 | 1.3 | 1.8 | 2.2 | 2.4 | 2.5 |
| 1963 | 2.1 | 2.5 | 2.3 | 1.8 | 1.7 | 1.8 | 1.2 | 1.2 | 1.6 | 1.6 | 2.2 | 3.8 |
| 1964 | 3.0 | 1.9 | 2.2 | 2.7 | 2.2 | 1.8 | 1.1 | 2.0 | 2.2 | 2.5 | 2.1 | 2.5 |
| 1965 | 3.7 | 2.6 | 2.9 | 1.8 | 1.5 | 1.5 | 1.0 | 1.2 | 1.7 | 2.2 | 3.3 | 2.9 |
| 1966 | 2.4 | 2.3 | 4.8 | 3.1 | 2.0 | 1.5 | 1.3 | 1.2 | 1.8 | 2.6 | 2.5 | 2.1 |
| 1967 | 4.8 | 2.1 | 1.9 | 2.0 | 2.8 | 1.7 | 1.4 | 1.3 | 1.5 | 2.5 | 1.9 | 2.0 |
| 1968 | 2.1 | 2.7 | 1.9 | 2.9 | 1.8 | 1.4 | 2.0 | 1.8 | 1.4 | 1.9 | 2.3 | 3.3 |
| 1969 | 2.0 | 1.8 | 1.9 | 2.5 | 1.5 | 1.6 | 1.5 | 2.4 | 1.3 | 1.7 | 1.8 | 2.1 |
| 1970 | 1.9 | 2.0 | 2.8 | 2.4 | 2.2 | 1.6 | 1.3 | 1.3 | 1.8 | 2.3 | 2.2 | 2.9 |
| 1971 | 2.3 | 3.0 | 2.3 | 2.0 | 2.2 | 1.4 | 1.4 | 1.0 | 1.1 | 2.2 | 2.2 | 2.2 |
| 1972 | 2.8 | 2.4 | 3.2 | 2.3 | 1.9 | 1.4 | 1.1 | 1.0 | 1.6 | 2.0 | 4.0 | 2.7 |
| 1973 | 1.9 | 1.4 | 1.8 | 1.4 | 1.4 | 1.1 | 1.1 | 0.8 | 1.5 | 2.2 | 1.8 | 1.9 |
| 1974 | 2.6 | 1.7 | 2.4 | 2.0 | 1.7 | 1.9 | 1.7 | 1.3 | 1.6 | 1.6 | 3.5 | 2.3 |
| 1975 | 4.1 | 2.8 | 5.1 | 2.4 | 1.8 | 1.4 | 1.4 | 1.7 | 1.5 | 1.9 | 4.0 | 1.9 |
| 1976 | 2.0 | 2.6 | 4.3 | 2.3 | 1.7 | 3.0 | 0.9 | 1.0 | 1.5 | 1.8 | 1.8 | 1.9 |
| 1977 | 2.0 | 4.0 | 5.8 | 1.7 | 2.0 | 1.3 | 1.1 | 1.1 | 2.5 | 2.6 | 2.4 | 3.2 |
| 1978 | 1.9 | 1.5 | 1.6 | 1.7 | 1.7 | 1.1 | 1.0 | 1.4 | 2.6 | 1.6 | 1.9 | 2.0 |
| 1979 | 1.7 | 2.4 | 1.9 | 2.0 | 1.4 | 1.4 | 1.3 | 1.2 | 1.6 | 1.8 | 1.8 | 1.9 |
| 1980 | 2.2 | 1.9 | 2.6 | 1.6 | 1.7 | 1.9 | 1.1 | 1.2 | 1.9 | 2.0 | 1.6 | 2.2 |
| 1981 | 1.7 | 2.1 | 2.3 | 1.9 | 1.9 | 1.9 | 0.9 | 1.1 | 2.5 | 1.8 | 1.8 | 1.5 |
| 1982 | 3.1 | 1.9 | 2.9 | 2.1 | 1.5 | 1.9 | 0.9 | 1.0 | 1.4 | 1.8 | 2.0 | 2.1 |
| 1983 | 2.2 | 2.2 | 3.0 | 1.8 | 1.8 | 1.4 | 1.1 | 1.4 | 1.8 | 1.8 | 2.7 | 2.3 |
| 1984 | 1.9 | 2.1 | 2.5 | 2.9 | 2.0 | 2.3 | 1.4 | 1.2 | 1.6 | 2.8 | 2.0 | 2.2 |
| 1985 | 2.4 | 2.3 | 4.7 | 2.1 | 1.5 | 2.0 | 0.9 | 1.5 | 1.9 | 2.3 | 2.7 | 2.2 |
| 1986 | 2.8 | 1.7 | 2.6 | 2.2 | 2.1 | 1.1 | 1.9 | 0.9 | 1.7 | 2.3 | 3.3 | 1.9 |
| 1987 | 1.7 | 2.8 | 2.6 | 1.7 | 1.9 | 1.5 | 1.3 | 1.0 | 1.2 | 1.9 | 2.0 | 2.2 |

32 YR. STATISTICS FOR WIS STATION S16

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.6 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.3 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.4 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.1 |
| LARGEST WAVE HS | (METERS) | 8.7 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 69.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 60112818 |

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 2067 | 2107 | 305 | 155 | 65 | 32 | . | 1 | . | . | 4732 |
| 0.50-0.99 | . | 1368 | 2172 | 53 | 81 | 43 | 13 | 3 | . | . | 3733 |
| 1.00-1.49 | . | . | 1706 | 4 | 5 | 20 | 8 | 12 | 1 | . | 1756 |
| 1.50-1.99 | . | . | 96 | 408 | 4 | 6 | 11 | 5 | 4 | 2 | 536 |
| 2.00-2.49 | . | . | 1 | 262 | . | . | 2 | 3 | 1 | 2 | 271 |
| 2.50-2.99 | . | . | . | 23 | 34 | 3 | 2 | 5 | 5 | 2 | 74 |
| 3.00-3.49 | . | . | . | . | 11 | . | . | 1 | 3 | 4 | 19 |
| 3.50-3.99 | . | . | . | . | 2 | 2 | . | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 2067 | 3475 | 4280 | 905 | 202 | 106 | 36 | 30 | 14 | 14 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 3.6 NO. OF CASES= 10422.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 429 | 497 | 125 | 62 | 14 | 4 | . | . | . | . | 1131 |
| 0.50-0.99 | . | 440 | 357 | 33 | 36 | 29 | 1 | . | 1 | . | 897 |
| 1.00-1.49 | . | . | 166 | 29 | 4 | 10 | 2 | 1 | 3 | . | 215 |
| 1.50-1.99 | . | . | 25 | 39 | 5 | . | 5 | 1 | 3 | . | 78 |
| 2.00-2.49 | . | . | 3 | 21 | 7 | . | 4 | 2 | . | . | 37 |
| 2.50-2.99 | . | . | . | 4 | 5 | 3 | 1 | 2 | . | . | 15 |
| 3.00-3.49 | . | . | . | 1 | 3 | 2 | 1 | . | . | 1 | 8 |
| 3.50-3.99 | . | . | . | . | . | 1 | 1 | . | . | 1 | 3 |
| 4.00-4.49 | . | . | . | . | . | . | 4 | . | 1 | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 1 | 1 | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 429 | 937 | 676 | 189 | 74 | 49 | 22 | 7 | 10 | 2 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 3.7 NO. OF CASES= 2253.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 545 | 472 | 152 | 60 | 18 | 9 | . | . | . | . | 1256 |
| 0.50-0.99 | . | 330 | 333 | 45 | 11 | 17 | 3 | 1 | . | . | 740 |
| 1.00-1.49 | . | . | 195 | 51 | 5 | 10 | 4 | 1 | . | . | 266 |
| 1.50-1.99 | . | . | 12 | 78 | 17 | 2 | 5 | 1 | 2 | . | 117 |
| 2.00-2.49 | . | . | . | 31 | 13 | 6 | 4 | 3 | 3 | . | 60 |
| 2.50-2.99 | . | . | . | 4 | 22 | 4 | 3 | 1 | 1 | . | 35 |
| 3.00-3.49 | . | . | . | . | . | 3 | 2 | 1 | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | 5 | 4 | 1 | . | 1 | 11 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | . | 2 | . | 4 |
| 4.50-4.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | 1 | 1 | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 545 | 802 | 692 | 269 | 86 | 58 | 27 | 12 | 10 | 4 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 2358.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 587 | 711 | 244 | 87 | 17 | 4 | . | . | . | . | 1650 |
| 0.50-0.99 | . | 1040 | 493 | 100 | 52 | 34 | 5 | 2 | . | . | 1726 |
| 1.00-1.49 | . | . | 312 | 81 | 66 | 51 | 20 | 3 | . | . | 533 |
| 1.50-1.99 | . | . | 75 | 55 | 29 | 50 | 19 | 5 | 2 | . | 235 |
| 2.00-2.49 | . | . | 13 | 22 | 9 | 17 | 19 | 13 | 4 | . | 97 |
| 2.50-2.99 | . | . | . | 2 | 14 | 10 | 5 | 13 | 5 | 1 | 50 |
| 3.00-3.49 | . | . | . | . | 3 | 10 | . | 2 | 6 | 2 | 23 |
| 3.50-3.99 | . | . | . | . | . | 4 | 5 | . | 1 | . | 10 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | 1 | 2 | 1 | 6 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 2 | 1 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 5 | 1 | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 3 | 3 |
| TOTAL | 587 | 1751 | 1137 | 347 | 190 | 180 | 78 | 41 | 29 | 10 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 4087.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1552 | 2178 | 448 | 214 | 47 | 8 | . | 1 | . | . | 4448 |
| 0.50-0.99 | . | 3428 | 336 | 150 | 132 | 55 | 4 | 2 | 2 | 1 | 4110 |
| 1.00-1.49 | . | . | 712 | 50 | 70 | 88 | 40 | 9 | 7 | . | 976 |
| 1.50-1.99 | . | . | 201 | 3 | 10 | 78 | 56 | 14 | 6 | . | 368 |
| 2.00-2.49 | . | . | 32 | 3 | 1 | 3 | 20 | 27 | 5 | . | 91 |
| 2.50-2.99 | . | . | . | 3 | . | . | 3 | 21 | 14 | 1 | 42 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | 2 | 3 | 1 | 7 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1552 | 5606 | 1729 | 424 | 260 | 232 | 123 | 76 | 38 | 4 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 9409.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1516 | 1945 | 373 | 132 | 34 | 16 | 1 | . | 1 | . | 4018 |
| 0.50-0.99 | . | 2022 | 213 | 33 | 53 | 50 | 6 | 6 | . | . | 2383 |
| 1.00-1.49 | . | . | 255 | 3 | 6 | 23 | 9 | 1 | 4 | . | 301 |
| 1.50-1.99 | . | . | 29 | . | . | 6 | 3 | . | 1 | . | 39 |
| 2.00-2.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1516 | 3967 | 870 | 168 | 93 | 95 | 20 | 7 | 6 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 6313.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1065 | 1165 | 214 | 83 | 20 | 6 | . | . | . | . | 2553 |
| 0.50-0.99 | . | 1214 | 197 | 8 | 19 | 29 | 3 | 2 | . | . | 1472 |
| 1.00-1.49 | . | . | 80 | 1 | 1 | 2 | 4 | 3 | . | 1 | 92 |
| 1.50-1.99 | . | . | 5 | . | . | . | 3 | . | . | . | 8 |
| 2.00-2.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1065 | 2379 | 496 | 94 | 40 | 37 | 10 | 5 | 0 | 1 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.0 NO. OF CASES= 3867.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 838 | 1026 | 88 | 43 | 20 | 5 | . | . | . | . | 2020 |
| 0.50-0.99 | . | 898 | 86 | 4 | 5 | 10 | 1 | . | . | . | 1004 |
| 1.00-1.49 | . | . | 75 | . | . | . | 1 | . | . | . | 76 |
| 1.50-1.99 | . | . | 2 | 1 | . | . | . | . | . | . | 3 |
| 2.00-2.49 | . | . | 1 | . | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 838 | 1924 | 252 | 48 | 25 | 15 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 2.9 NO. OF CASES= 2909.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 906 | 1127 | 90 | 62 | 24 | 6 | . | . | . | . | 2215 |
| 0.50-0.99 | . | 1242 | 63 | 3 | 5 | 12 | . | . | . | . | 1325 |
| 1.00-1.49 | . | . | 182 | . | . | . | . | . | . | . | 182 |
| 1.50-1.99 | . | . | 4 | . | . | . | . | . | . | . | 4 |
| 2.00-2.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | |
| TOTAL | 906 | 2369 | 339 | 68 | 29 | 18 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.0 NO. OF CASES= 3493.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 726 | 959 | 27 | 33 | 13 | 3 | . | . | . | . | 1761 |
| 0.50-0.99 | . | 1453 | 310 | 3 | 8 | 7 | 1 | . | . | . | 1782 |
| 1.00-1.49 | . | . | 366 | . | . | 1 | 1 | . | . | . | 368 |
| 1.50-1.99 | . | . | 50 | 4 | . | . | . | 1 | . | . | 55 |
| 2.00-2.49 | . | . | . | 3 | . | . | . | . | . | 1 | 3 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | |
| TOTAL | 726 | 2412 | 753 | 43 | 21 | 11 | 2 | 1 | 0 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 3718.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 774 | 944 | 69 | 45 | 14 | 6 | . | 1 | 1 | . | 1852 |
| 0.50-0.99 | . | 1855 | 594 | 1 | 6 | 9 | . | . | 1 | . | 2467 |
| 1.00-1.49 | . | . | 472 | . | . | 2 | . | 1 | . | . | 475 |
| 1.50-1.99 | . | . | 129 | 7 | . | . | . | . | . | . | 137 |
| 2.00-2.49 | . | . | . | 5 | . | . | . | . | . | . | 5 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | |
| TOTAL | 774 | 2799 | 1264 | 58 | 20 | 17 | 0 | 2 | 2 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 4623.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 840 | 1155 | 53 | 33 | 10 | 12 | 1 | . | . | . | 2104 |
| 0.50-0.99 | . | 1504 | 1032 | 2 | 5 | 13 | 1 | 1 | . | . | 2558 |
| 1.00-1.49 | . | . | 848 | 3 | . | 1 | . | . | 1 | . | 853 |
| 1.50-1.99 | . | . | 157 | 164 | . | . | . | . | . | . | 321 |
| 2.00-2.49 | . | . | . | 73 | . | . | . | . | . | . | 73 |
| 2.50-2.99 | . | . | . | 5 | 8 | . | . | . | . | . | 13 |
| 3.00-3.49 | . | . | . | . | 3 | . | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | |
| TOTAL | 840 | 2659 | 2090 | 280 | 26 | 28 | 2 | 1 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 5550.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1259 | 1751 | 85 | 59 | 13 | 4 | . | . | 1 | . | 3172 |
| 0.50-0.99 | . | 1238 | 1775 | 2 | 6 | 13 | 3 | . | . | . | 3037 |
| 1.00-1.49 | . | . | 1780 | 4 | . | 1 | 1 | . | 1 | . | 1787 |
| 1.50-1.99 | . | . | 118 | 593 | . | . | . | . | 1 | . | 712 |
| 2.00-2.49 | . | . | . | 305 | . | . | . | . | 1 | . | 306 |
| 2.50-2.99 | . | . | . | 17 | 62 | . | . | . | . | . | 79 |
| 3.00-3.49 | . | . | . | . | 24 | . | . | . | . | 1 | 25 |
| 3.50-3.99 | . | . | . | . | 1 | 1 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1259 | 2989 | 3758 | 980 | 106 | 19 | 4 | 0 | 4 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 8538.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1163 | 2081 | 79 | 47 | 20 | 6 | . | . | . | . | 3396 |
| 0.50-0.99 | . | 2231 | 1945 | 5 | 13 | 19 | 3 | 1 | . | . | 4217 |
| 1.00-1.49 | . | . | 2117 | 5 | . | . | 2 | 1 | . | . | 2125 |
| 1.50-1.99 | . | . | 235 | 743 | . | . | . | . | . | . | 978 |
| 2.00-2.49 | . | . | 1 | 441 | . | . | 1 | . | . | . | 443 |
| 2.50-2.99 | . | . | . | 22 | 68 | . | . | . | . | 1 | 91 |
| 3.00-3.49 | . | . | . | 1 | 14 | . | . | . | . | . | 15 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1163 | 4312 | 4377 | 1264 | 116 | 25 | 5 | 3 | 0 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 10543.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1088 | 1579 | 140 | 84 | 28 | 13 | 1 | . | . | . | 2933 |
| 0.50-0.99 | . | 3198 | 1319 | 17 | 27 | 35 | 3 | . | 1 | . | 4600 |
| 1.00-1.49 | . | . | 1918 | 21 | 2 | 4 | 1 | 6 | 3 | . | 1955 |
| 1.50-1.99 | . | . | 641 | 166 | . | 1 | 1 | . | . | . | 809 |
| 2.00-2.49 | . | . | 1 | 65 | 4 | . | . | 2 | 2 | 2 | 76 |
| 2.50-2.99 | . | . | . | 9 | 4 | . | . | 1 | . | . | 14 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1088 | 4777 | 4019 | 362 | 66 | 53 | 6 | 9 | 6 | 2 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 9725.

STATION S17 46.80N 91.57W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

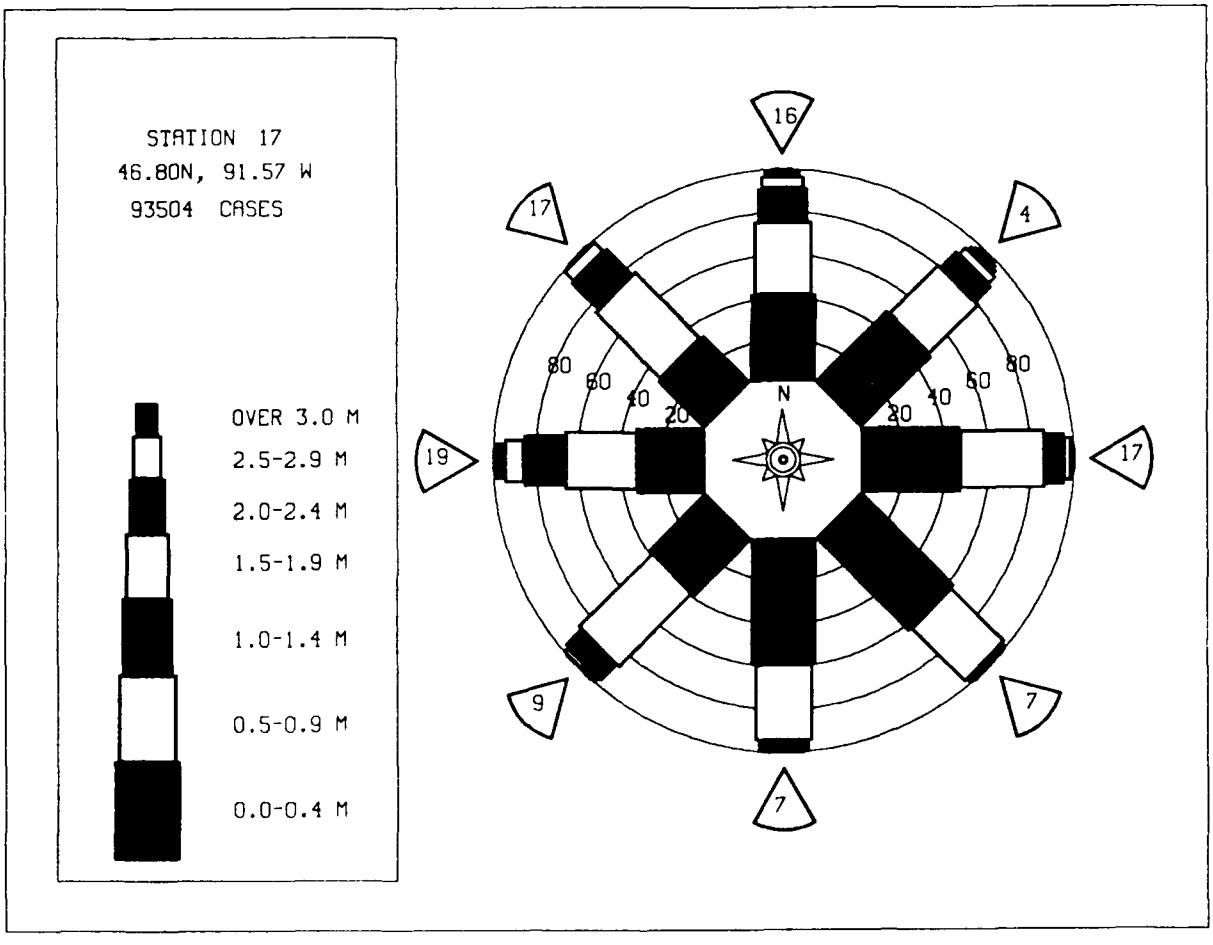
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 897 | 995 | 121 | 85 | 42 | 20 | . | 1 | . | . | 2161 |
| 0.50-0.99 | . | 1340 | 950 | 27 | 42 | 32 | 5 | 2 | . | . | 2398 |
| 1.00-1.49 | . | . | 960 | 2 | 1 | 7 | . | 5 | 1 | . | 976 |
| 1.50-1.99 | . | . | 142 | 257 | . | 2 | 1 | 1 | . | . | 403 |
| 2.00-2.49 | . | . | 1 | 128 | . | . | . | . | 1 | . | 130 |
| 2.50-2.99 | . | . | . | 4 | 6 | . | . | . | . | 2 | 12 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 897 | 2335 | 2174 | 503 | 91 | 61 | 6 | 9 | 2 | 3 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.6 NO. OF CASES= 5696.

STATION S17 46.80N 91.57W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1626 | 2069 | 262 | 129 | 40 | 16 | . | . | . | . | 4142 |
| 0.50-0.99 | . | 2481 | 1218 | 49 | 50 | 41 | 5 | 2 | . | . | 3846 |
| 1.00-1.49 | . | . | 1215 | 25 | 16 | 22 | 9 | 4 | 2 | . | 1293 |
| 1.50-1.99 | . | . | 192 | 252 | 6 | 14 | 10 | 3 | 2 | . | 479 |
| 2.00-2.49 | . | . | 5 | 136 | 3 | 2 | 5 | 5 | 1 | . | 157 |
| 2.50-2.99 | . | . | . | 9 | 22 | 2 | 1 | 4 | 2 | . | 40 |
| 3.00-3.49 | . | . | . | . | 6 | 1 | . | . | 1 | . | 8 |
| 3.50-3.99 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1626 | 4550 | 2892 | 600 | 143 | 99 | 31 | 18 | 8 | 0 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 3.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S17 (46.80N 91.57W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 0.7 | 0.8 | 0.9 | 0.7 | 0.5 | 0.4 | 0.5 | 0.6 | 0.9 | 1.1 | 1.1 | 0.8 |
| 1957 | 1.0 | 0.8 | 0.8 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 1.0 | 0.8 | 0.7 |
| 1958 | 0.7 | 0.9 | 0.6 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 1.2 | 1.0 | 0.7 |
| 1959 | 0.9 | 0.8 | 0.7 | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 1.0 | 1.0 | 0.7 |
| 1960 | 0.8 | 0.8 | 0.7 | 1.0 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 1.2 | 1.0 | 0.7 |
| 1961 | 0.9 | 0.8 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.5 | 0.5 | 0.6 | 0.7 | 0.6 |
| 1962 | 1.0 | 0.8 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 1.0 | 0.7 |
| 1963 | 1.0 | 0.9 | 0.8 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 1.0 | 0.7 |
| 1964 | 1.0 | 0.8 | 0.8 | 0.7 | 0.7 | 0.4 | 0.3 | 0.6 | 0.5 | 0.6 | 0.8 | 0.7 | 0.7 |
| 1965 | 0.9 | 0.9 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.7 | 0.9 | 1.1 | 0.7 |
| 1966 | 1.0 | 0.9 | 1.2 | 0.8 | 0.7 | 0.5 | 0.4 | 0.5 | 0.5 | 0.9 | 0.8 | 0.8 | 0.7 |
| 1967 | 1.1 | 0.8 | 0.7 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 0.8 | 0.9 | 0.7 |
| 1968 | 0.8 | 1.0 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 | 0.7 |
| 1969 | 0.9 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.7 | 0.8 | 0.7 | 0.6 |
| 1970 | 0.8 | 1.0 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 0.7 | 0.9 | 0.7 |
| 1971 | 1.0 | 1.1 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.8 | 0.7 | 0.7 |
| 1972 | 1.0 | 0.8 | 0.8 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.8 | 0.6 | 0.7 | 0.6 |
| 1973 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.6 | 0.8 | 0.7 | 0.5 |
| 1974 | 0.8 | 0.6 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 1.0 | 0.9 | 0.7 |
| 1975 | 1.0 | 0.8 | 1.1 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.9 | 0.7 | 0.7 |
| 1976 | 0.9 | 0.9 | 1.1 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.7 | 0.6 |
| 1977 | 0.7 | 1.0 | 1.1 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1978 | 0.9 | 0.6 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.7 | 0.7 | 0.8 | 0.6 |
| 1979 | 0.7 | 0.5 | 0.9 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.7 | 0.8 | 0.8 | 0.6 |
| 1980 | 0.9 | 0.6 | 0.7 | 0.5 | 0.5 | 0.6 | 0.4 | 0.4 | 0.6 | 0.8 | 0.6 | 0.8 | 0.6 |
| 1981 | 0.8 | 0.8 | 0.8 | 0.6 | 0.4 | 0.5 | 0.3 | 0.3 | 0.6 | 0.7 | 0.6 | 0.7 | 0.6 |
| 1982 | 1.0 | 0.8 | 1.0 | 0.7 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1983 | 0.8 | 0.7 | 0.9 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 1.0 | 1.0 | 0.7 |
| 1984 | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 0.8 | 0.9 | 0.7 |
| 1985 | 1.0 | 0.8 | 1.1 | 0.7 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 1.0 | 0.7 |
| 1986 | 0.9 | 0.6 | 0.9 | 0.8 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 1.0 | 0.8 | 0.7 |
| 1987 | 0.7 | 0.7 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.7 | 0.8 | 0.8 | 0.6 |
| MEAN | 0.9 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 0.8 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S17 (46.80N 91.57W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.1 | 2.0 | 3.0 | 4.1 | 2.4 | 2.3 | 1.1 | 1.3 | 2.0 | 2.7 | 4.5 | 3.1 |
| 1957 | 2.6 | 2.4 | 4.4 | 3.4 | 2.8 | 1.9 | 2.3 | 1.3 | 2.1 | 1.7 | 2.8 | 3.0 |
| 1958 | 3.1 | 2.7 | 1.7 | 3.2 | 2.4 | 1.9 | 1.7 | 1.8 | 2.4 | 2.7 | 5.8 | 2.9 |
| 1959 | 2.8 | 2.8 | 2.5 | 2.4 | 2.4 | 2.3 | 1.7 | 1.5 | 2.3 | 3.0 | 3.3 | 7.0 |
| 1960 | 2.3 | 3.3 | 2.7 | 3.8 | 1.8 | 2.0 | 1.2 | 1.5 | 1.8 | 2.8 | 8.3 | 2.6 |
| 1961 | 3.3 | 2.1 | 2.6 | 2.6 | 3.5 | 1.7 | 2.2 | 1.3 | 1.7 | 2.1 | 2.2 | 2.3 |
| 1962 | 2.2 | 2.0 | 4.6 | 2.3 | 1.7 | 1.5 | 1.1 | 1.6 | 2.1 | 2.6 | 2.8 | 3.1 |
| 1963 | 2.5 | 2.6 | 2.7 | 2.0 | 1.8 | 1.5 | 1.3 | 1.2 | 1.6 | 1.9 | 2.3 | 4.2 |
| 1964 | 3.0 | 2.1 | 2.6 | 3.1 | 2.6 | 2.1 | 1.2 | 1.7 | 2.6 | 3.1 | 2.3 | 2.1 |
| 1965 | 3.2 | 3.1 | 3.3 | 2.0 | 1.7 | 1.8 | 1.1 | 1.1 | 2.0 | 2.6 | 3.5 | 3.4 |
| 1966 | 2.8 | 2.2 | 5.0 | 2.7 | 2.2 | 1.6 | 1.2 | 1.1 | 2.1 | 3.1 | 2.2 | 2.5 |
| 1967 | 4.9 | 2.1 | 2.0 | 2.2 | 3.1 | 1.8 | 1.5 | 1.6 | 1.5 | 2.7 | 2.2 | 2.3 |
| 1968 | 2.0 | 3.1 | 2.4 | 2.7 | 1.8 | 1.7 | 2.1 | 1.8 | 1.7 | 2.0 | 2.9 | 3.1 |
| 1969 | 2.3 | 2.3 | 2.4 | 2.6 | 1.5 | 1.6 | 1.5 | 2.9 | 1.4 | 2.0 | 2.1 | 2.5 |
| 1970 | 2.0 | 2.3 | 3.2 | 2.9 | 2.1 | 2.0 | 1.5 | 1.4 | 2.1 | 2.6 | 2.4 | 2.9 |
| 1971 | 2.6 | 3.3 | 2.5 | 2.1 | 2.1 | 1.4 | 1.6 | 1.0 | 1.2 | 2.3 | 2.6 | 2.4 |
| 1972 | 2.9 | 2.3 | 3.1 | 2.6 | 1.7 | 1.6 | 1.3 | 1.1 | 1.6 | 2.4 | 3.9 | 2.6 |
| 1973 | 2.1 | 1.9 | 2.1 | 1.4 | 1.4 | 1.1 | 1.2 | 0.8 | 1.5 | 2.7 | 2.1 | 2.3 |
| 1974 | 2.8 | 2.1 | 2.9 | 2.2 | 1.6 | 1.7 | 2.0 | 1.5 | 1.7 | 1.8 | 3.3 | 2.7 |
| 1975 | 3.9 | 3.2 | 5.2 | 2.2 | 1.7 | 1.4 | 1.6 | 1.9 | 1.7 | 2.1 | 4.0 | 2.3 |
| 1976 | 2.1 | 3.1 | 4.2 | 2.2 | 1.7 | 2.9 | 1.0 | 1.2 | 1.7 | 2.0 | 2.2 | 2.3 |
| 1977 | 2.3 | 5.1 | 5.8 | 1.7 | 2.0 | 1.6 | 1.5 | 1.5 | 2.6 | 2.5 | 3.0 | 2.9 |
| 1978 | 2.4 | 2.1 | 2.0 | 2.1 | 1.3 | 1.2 | 0.9 | 1.2 | 2.2 | 2.0 | 2.3 | 2.1 |
| 1979 | 1.6 | 2.0 | 2.1 | 1.8 | 1.3 | 1.7 | 1.4 | 1.2 | 1.7 | 1.8 | 2.1 | 2.3 |
| 1980 | 2.7 | 2.1 | 3.2 | 2.1 | 1.4 | 1.9 | 1.2 | 1.4 | 2.2 | 2.4 | 1.6 | 2.6 |
| 1981 | 2.0 | 2.0 | 2.0 | 1.7 | 2.0 | 2.3 | 0.9 | 0.9 | 3.0 | 1.8 | 2.1 | 1.9 |
| 1982 | 3.0 | 1.9 | 3.5 | 2.4 | 1.2 | 2.2 | 1.2 | 1.1 | 1.4 | 2.0 | 2.4 | 3.3 |
| 1983 | 2.1 | 2.7 | 2.8 | 2.2 | 1.6 | 1.2 | 1.2 | 1.6 | 2.1 | 2.1 | 3.3 | 2.9 |
| 1984 | 2.2 | 2.1 | 3.1 | 3.4 | 2.3 | 2.5 | 1.6 | 1.3 | 1.6 | 2.4 | 2.3 | 2.6 |
| 1985 | 2.4 | 2.7 | 7.5 | 2.4 | 1.5 | 2.3 | 0.9 | 1.8 | 2.1 | 2.4 | 2.3 | 2.7 |
| 1986 | 3.3 | 2.1 | 2.6 | 2.6 | 2.4 | 1.1 | 1.5 | 1.1 | 1.8 | 2.3 | 4.1 | 2.2 |
| 1987 | 2.2 | 2.5 | 2.4 | 2.0 | 1.8 | 1.7 | 1.3 | 1.1 | 1.6 | 2.4 | 2.2 | 2.6 |

32 YR. STATISTICS FOR WIS STATION S17

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.5 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.2 |
| LARGEST WAVE HS | (METERS) | 8.3 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 61.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 60112815 |

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1953 | 1328 | 514 | 125 | 63 | 25 | . | . | . | . | 4008 |
| 0.50-0.99 | . | 2744 | 1774 | 231 | 120 | 69 | 13 | 1 | . | . | 4952 |
| 1.00-1.49 | . | . | 762 | 70 | 78 | 56 | 11 | 7 | . | . | 984 |
| 1.50-1.99 | . | . | 234 | 110 | 26 | 37 | 12 | 16 | 1 | . | 436 |
| 2.00-2.49 | . | . | 2 | 72 | 13 | 27 | 21 | 13 | 3 | . | 151 |
| 2.50-2.99 | . | . | . | 11 | 2 | 9 | 4 | 8 | 1 | 5 | 40 |
| 3.00-3.49 | . | . | . | . | . | 4 | 3 | 8 | 3 | 1 | 19 |
| 3.50-3.99 | . | . | . | . | . | . | 2 | . | 2 | 1 | 5 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1953 | 4072 | 3286 | 619 | 302 | 227 | 66 | 53 | 11 | 9 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 9928.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 397 | 394 | 158 | 56 | 14 | 4 | . | . | . | . | 1023 |
| 0.50-0.99 | . | 404 | 295 | 89 | 39 | 20 | . | . | . | . | 847 |
| 1.00-1.49 | . | . | 137 | 37 | 18 | 21 | 2 | . | . | . | 215 |
| 1.50-1.99 | . | . | 12 | 41 | 6 | 10 | 2 | 4 | 2 | . | 77 |
| 2.00-2.49 | . | . | . | 22 | 7 | 9 | 4 | 1 | 3 | . | 46 |
| 2.50-2.99 | . | . | . | 3 | 7 | 1 | 5 | 4 | 1 | . | 21 |
| 3.00-3.49 | . | . | . | . | 1 | 9 | 3 | . | 1 | . | 14 |
| 3.50-3.99 | . | . | . | . | . | 5 | 4 | 4 | . | . | 13 |
| 4.00-4.49 | . | . | . | . | . | . | 4 | 1 | 1 | 3 | 9 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 397 | 798 | 602 | 248 | 92 | 79 | 24 | 15 | 14 | 5 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 8.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 2143.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 466 | 392 | 207 | 41 | 16 | 6 | . | . | . | . | 1128 |
| 0.50-0.99 | . | 316 | 420 | 90 | 21 | 9 | 1 | . | . | . | 857 |
| 1.00-1.49 | . | . | 201 | 54 | 16 | 24 | 4 | . | 1 | . | 300 |
| 1.50-1.99 | . | . | 13 | 57 | 25 | 12 | 5 | . | . | . | 112 |
| 2.00-2.49 | . | . | . | 19 | 8 | 9 | 6 | 2 | 1 | . | 45 |
| 2.50-2.99 | . | . | . | 1 | 10 | 8 | 2 | 1 | 1 | . | 23 |
| 3.00-3.49 | . | . | . | . | 3 | 5 | 3 | . | 3 | . | 14 |
| 3.50-3.99 | . | . | . | . | . | 9 | 2 | 1 | . | . | 12 |
| 4.00-4.49 | . | . | . | . | . | 1 | 2 | 1 | 1 | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 466 | 708 | 841 | 262 | 99 | 83 | 28 | 5 | 11 | 3 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 2359.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 467 | 495 | 202 | 39 | 7 | . | . | . | . | . | 1210 |
| 0.50-0.99 | . | 664 | 896 | 162 | 41 | 13 | . | . | . | . | 1776 |
| 1.00-1.49 | . | . | 528 | 90 | 50 | 33 | 6 | 2 | . | . | 709 |
| 1.50-1.99 | . | . | 131 | 133 | 51 | 36 | 8 | 2 | . | . | 361 |
| 2.00-2.49 | . | . | . | 73 | 24 | 51 | 11 | 3 | . | . | 162 |
| 2.50-2.99 | . | . | . | 10 | 29 | 25 | 21 | 6 | 4 | . | 95 |
| 3.00-3.49 | . | . | . | . | 5 | 23 | 13 | 11 | 3 | . | 55 |
| 3.50-3.99 | . | . | . | . | 1 | 8 | 2 | 13 | 3 | . | 27 |
| 4.00-4.49 | . | . | . | . | . | 3 | 5 | 5 | 2 | . | 15 |
| 4.50-4.99 | . | . | . | . | . | . | . | 2 | 2 | 1 | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | 8 | . | 12 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 4 | 5 |
| TOTAL | 467 | 1159 | 1757 | 507 | 208 | 192 | 66 | 48 | 27 | 7 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 4171.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1088 | 1100 | 449 | 100 | 13 | 6 | . | . | . | . | 2756 |
| 0.50-0.99 | . | 2431 | 2242 | 242 | 86 | 31 | 1 | 1 | . | . | 5034 |
| 1.00-1.49 | . | . | 1160 | 35 | 97 | 50 | 8 | 1 | 2 | . | 1353 |
| 1.50-1.99 | . | . | 379 | 128 | 29 | 72 | 23 | 3 | 2 | 1 | 637 |
| 2.00-2.49 | . | . | 1 | 122 | 13 | 98 | 37 | 12 | 6 | . | 289 |
| 2.50-2.99 | . | . | . | 29 | 1 | 12 | 49 | 9 | 5 | . | 105 |
| 3.00-3.49 | . | . | . | 8 | 2 | 1 | 9 | 24 | . | . | 44 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | 25 | 10 | . | 36 |
| 4.00-4.49 | . | . | . | . | . | . | . | 1 | 7 | 1 | 9 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1088 | 3531 | 4231 | 664 | 241 | 270 | 128 | 76 | 33 | 4 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 9621.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1188 | 1435 | 470 | 89 | 25 | 5 | . | 2 | . | . | 3214 |
| 0.50-0.99 | . | 2031 | 895 | 130 | 65 | 26 | 2 | . | . | . | 3149 |
| 1.00-1.49 | . | . | 398 | 6 | 26 | 41 | 8 | . | . | . | 479 |
| 1.50-1.99 | . | . | 69 | 33 | 3 | 18 | 8 | 4 | 1 | . | 136 |
| 2.00-2.49 | . | . | . | 16 | . | 7 | 3 | . | 3 | . | 29 |
| 2.50-2.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1188 | 3466 | 1832 | 274 | 119 | 97 | 23 | 6 | 4 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 6565.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 950 | 1110 | 290 | 66 | 19 | 4 | . | . | . | . | 2439 |
| 0.50-0.99 | . | 1236 | 217 | 68 | 38 | 12 | . | . | . | . | 1571 |
| 1.00-1.49 | . | . | 94 | 3 | 3 | 17 | 3 | 1 | . | . | 121 |
| 1.50-1.99 | . | . | 2 | 1 | . | 4 | 4 | 1 | 1 | . | 13 |
| 2.00-2.49 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 950 | 2346 | 603 | 138 | 60 | 37 | 10 | 2 | 1 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 3884.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 794 | 905 | 163 | 66 | 12 | . | . | . | . | . | 1940 |
| 0.50-0.99 | . | 756 | 62 | 37 | 24 | 13 | . | . | . | . | 892 |
| 1.00-1.49 | . | . | 55 | . | 2 | 6 | . | . | . | . | 63 |
| 1.50-1.99 | . | . | 4 | . | . | . | 1 | . | . | . | 5 |
| 2.00-2.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 794 | 1661 | 284 | 103 | 38 | 19 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 2720.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 826 | 1007 | 157 | 66 | 12 | 3 | . | . | 1 | . | 2072 |
| 0.50-0.99 | . | 916 | 52 | 35 | 24 | 7 | . | . | . | . | 1034 |
| 1.00-1.49 | . | . | 81 | . | 1 | 2 | 1 | . | . | . | 85 |
| 1.50-1.99 | . | . | 4 | . | . | 1 | 1 | . | . | . | 6 |
| 2.00-2.49 | . | . | 1 | 1 | . | . | . | 1 | . | . | 3 |
| 2.50-2.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 826 | 1923 | 295 | 102 | 37 | 13 | 3 | 1 | 1 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.0 NO. OF CASES= 2999.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 669 | 1125 | 97 | 44 | 18 | 4 | . | . | . | . | 1957 |
| 0.50-0.99 | . | 1209 | 595 | 24 | 18 | 6 | . | . | . | . | 1852 |
| 1.00-1.49 | . | . | 589 | 5 | . | 6 | 1 | . | . | . | 601 |
| 1.50-1.99 | . | . | 32 | 103 | . | . | . | . | . | . | 135 |
| 2.00-2.49 | . | . | . | 33 | . | . | 1 | . | . | . | 34 |
| 2.50-2.99 | . | . | . | 2 | 2 | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 669 | 2334 | 1313 | 211 | 38 | 16 | 2 | 0 | 0 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 4293.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 761 | 951 | 118 | 55 | 17 | 3 | . | . | . | . | 1905 |
| 0.50-0.99 | . | 777 | 1127 | 21 | 16 | 8 | 1 | . | . | . | 1950 |
| 1.00-1.49 | . | . | 1134 | . | 2 | 7 | . | . | 1 | . | 1144 |
| 1.50-1.99 | . | . | 85 | 329 | . | . | 1 | 1 | . | . | 416 |
| 2.00-2.49 | . | . | . | 105 | . | . | . | . | . | . | 105 |
| 2.50-2.99 | . | . | . | 2 | 4 | . | . | . | . | . | 6 |
| 3.00-3.49 | . | . | . | . | 3 | . | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 761 | 1728 | 2464 | 512 | 42 | 18 | 2 | 1 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 5178.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 761 | 946 | 134 | 62 | 16 | 5 | 1 | . | . | . | 1925 |
| 0.50-0.99 | . | 905 | 1348 | 14 | 18 | 13 | 1 | . | . | . | 2299 |
| 1.00-1.49 | . | . | 1104 | 54 | 2 | 2 | 1 | 1 | . | . | 1164 |
| 1.50-1.99 | . | . | 98 | 359 | 1 | 1 | . | . | 1 | . | 460 |
| 2.00-2.49 | . | . | . | 161 | 7 | . | . | . | . | . | 168 |
| 2.50-2.99 | . | . | . | 3 | 32 | . | . | . | . | . | 35 |
| 3.00-3.49 | . | . | . | . | 11 | . | . | . | 1 | . | 12 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 761 | 1851 | 2684 | 653 | 87 | 23 | 4 | 1 | 2 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 5682.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1266 | 1119 | 174 | 73 | 24 | 8 | 1 | . | . | . | 2665 |
| 0.50-0.99 | . | 1788 | 1317 | 24 | 23 | 17 | . | 1 | 1 | . | 3171 |
| 1.00-1.49 | . | . | 1055 | 3 | 3 | 9 | . | . | . | . | 1070 |
| 1.50-1.99 | . | . | 275 | 173 | . | 1 | 1 | . | 1 | . | 451 |
| 2.00-2.49 | . | . | 1 | 101 | . | . | . | . | 1 | . | 103 |
| 2.50-2.99 | . | . | . | 17 | 2 | . | . | . | 1 | . | 20 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | 1 | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1266 | 2907 | 2822 | 392 | 52 | 36 | 2 | 1 | 4 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 7006.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1249 | 1559 | 147 | 67 | 21 | 5 | . | . | . | . | 3048 |
| 0.50-0.99 | . | 1793 | 1909 | 41 | 29 | 23 | 3 | 1 | . | . | 3799 |
| 1.00-1.49 | . | . | 1803 | 1 | 2 | 5 | 1 | . | . | . | 1812 |
| 1.50-1.99 | . | . | 396 | 639 | . | . | 1 | . | . | . | 1036 |
| 2.00-2.49 | . | . | . | 347 | . | . | . | . | . | . | 347 |
| 2.50-2.99 | . | . | . | 41 | 20 | . | . | . | . | . | 61 |
| 3.00-3.49 | . | . | . | . | 10 | . | . | 1 | . | . | 11 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1249 | 3352 | 4255 | 1136 | 82 | 33 | 5 | 2 | 0 | 2 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 9468.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1071 | 1553 | 218 | 97 | 24 | 5 | . | . | . | . | 2968 |
| 0.50-0.99 | . | 1243 | 2353 | 84 | 53 | 42 | 2 | 1 | . | . | 3778 |
| 1.00-1.49 | . | . | 2707 | 3 | 10 | 13 | 1 | 3 | 1 | . | 2738 |
| 1.50-1.99 | . | . | 150 | 1155 | . | 2 | . | 5 | 3 | . | 1315 |
| 2.00-2.49 | . | . | . | 578 | . | 1 | 1 | . | 1 | . | 581 |
| 2.50-2.99 | . | . | . | 39 | 50 | . | . | . | 1 | . | 90 |
| 3.00-3.49 | . | . | . | . | 13 | . | . | . | 1 | . | 14 |
| 3.50-3.99 | . | . | . | . | 1 | 1 | . | . | . | 1 | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1071 | 2796 | 5428 | 1956 | 151 | 64 | 4 | 9 | 7 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 10754.

STATION S18 46.95N 91.35W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

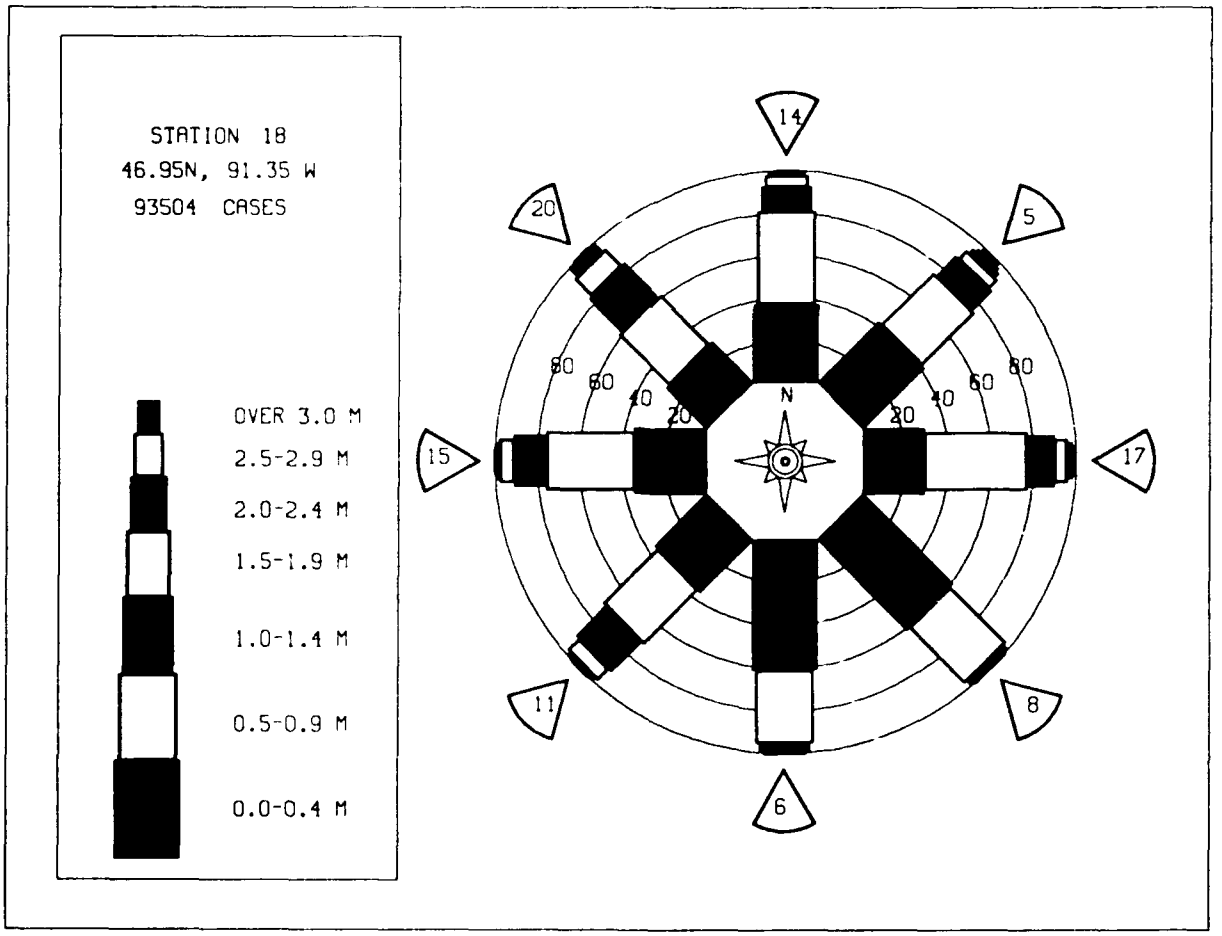
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 935 | 942 | 214 | 93 | 38 | 10 | . | . | . | . | 2232 |
| 0.50-0.99 | . | 1059 | 1273 | 102 | 85 | 52 | 7 | 1 | . | . | 2579 |
| 1.00-1.49 | . | . | 1373 | 9 | 24 | 31 | 5 | 3 | . | . | 1445 |
| 1.50-1.99 | . | . | 289 | 392 | 1 | 8 | 3 | 6 | 3 | . | 702 |
| 2.00-2.49 | . | . | 1 | 166 | . | 5 | 3 | 3 | 4 | . | 182 |
| 2.50-2.99 | . | . | . | 17 | 13 | . | 2 | 2 | 2 | 2 | 38 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | 1 | 1 | 2 | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 935 | 2001 | 3150 | 779 | 162 | 106 | 20 | 16 | 10 | 6 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 6733.

STATION S18 46.95N 91.35W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1484 | 1636 | 371 | 114 | 34 | 9 | . | . | . | . | 3648 |
| 0.50-0.99 | . | 2028 | 1678 | 140 | 70 | 37 | 3 | . | . | . | 3956 |
| 1.00-1.49 | . | . | 1318 | 37 | 33 | 32 | 5 | 1 | . | . | 1426 |
| 1.50-1.99 | . | . | 218 | 365 | 14 | 20 | 7 | 4 | 1 | . | 629 |
| 2.00-2.49 | . | . | . | 182 | 7 | 21 | 9 | 3 | 2 | . | 224 |
| 2.50-2.99 | . | . | . | 17 | 17 | 5 | 8 | 3 | 1 | . | 51 |
| 3.00-3.49 | . | . | . | . | 5 | 4 | 3 | 4 | 1 | . | 17 |
| 3.50-3.99 | . | . | . | . | . | 2 | 1 | 4 | 1 | . | 8 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | 1 | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1484 | 3664 | 3585 | 855 | 180 | 130 | 37 | 19 | 8 | 0 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S18 (46.95N 91.35W)

| | MONTH | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| YEAR | | | | | | | | | | | | | MEAN |
| 1956 | 0.7 | 0.8 | 1.0 | 0.9 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.9 | 1.2 | 1.1 | 0.8 |
| 1957 | 1.0 | 0.9 | 0.8 | 0.8 | 0.8 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 1.1 | 0.9 | 0.8 |
| 1958 | 0.7 | 1.0 | 0.6 | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 1.2 | 1.0 | 0.8 |
| 1959 | 1.0 | 0.9 | 0.8 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 1.0 | 1.1 | 0.8 |
| 1960 | 0.9 | 0.9 | 0.8 | 1.0 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 1.2 | 1.0 | 0.8 |
| 1961 | 1.0 | 0.8 | 1.0 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 | 0.7 |
| 1962 | 1.1 | 0.9 | 0.9 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 1.1 | 0.7 |
| 1963 | 1.0 | 1.0 | 0.9 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.9 | 1.1 | 0.7 |
| 1964 | 1.1 | 0.9 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.6 | 0.5 | 0.6 | 0.9 | 0.7 | 0.7 |
| 1965 | 1.0 | 1.0 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 1.0 | 1.2 | 0.7 |
| 1966 | 1.1 | 1.0 | 1.4 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.9 | 0.9 | 0.9 | 0.8 |
| 1967 | 1.2 | 0.9 | 0.8 | 0.7 | 0.7 | 0.5 | 0.4 | 0.5 | 0.5 | 0.9 | 0.8 | 1.0 | 0.7 |
| 1968 | 0.8 | 1.1 | 0.9 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 1.1 | 0.8 |
| 1969 | 1.0 | 0.7 | 0.8 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.5 | 0.8 | 0.9 | 0.8 | 0.7 |
| 1970 | 0.9 | 1.1 | 0.8 | 0.9 | 0.9 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 0.8 | 0.9 | 0.8 |
| 1971 | 1.1 | 1.2 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.3 | 0.4 | 0.7 | 0.9 | 0.8 | 0.7 |
| 1972 | 1.1 | 0.8 | 1.0 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.8 | 0.7 | 0.7 | 0.7 |
| 1973 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1974 | 0.8 | 0.7 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 1.1 | 1.0 | 0.7 |
| 1975 | 1.1 | 0.9 | 1.2 | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 0.8 | 0.8 |
| 1976 | 1.0 | 0.9 | 1.2 | 0.7 | 0.6 | 0.7 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.8 | 0.7 |
| 1977 | 0.8 | 1.1 | 1.2 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.9 | 1.0 | 0.7 |
| 1978 | 1.0 | 0.6 | 0.5 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.8 | 0.7 | 0.8 | 0.9 | 0.6 |
| 1979 | 0.7 | 0.6 | 0.9 | 0.6 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.7 | 0.8 | 0.9 | 0.6 |
| 1980 | 0.9 | 0.7 | 0.8 | 0.6 | 0.5 | 0.6 | 0.4 | 0.5 | 0.6 | 0.9 | 0.7 | 0.9 | 0.7 |
| 1981 | 0.8 | 0.8 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.7 | 0.7 | 0.6 |
| 1982 | 1.1 | 0.8 | 1.1 | 0.7 | 0.6 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 | 0.8 | 1.0 | 0.7 |
| 1983 | 0.9 | 0.8 | 1.1 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.7 | 1.1 | 1.0 | 0.7 |
| 1984 | 0.9 | 0.8 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.9 | 0.8 | 0.9 | 0.7 |
| 1985 | 1.1 | 0.8 | 1.3 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 1.0 | 0.8 |
| 1986 | 1.0 | 0.7 | 0.9 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 1.0 | 0.9 | 0.7 |
| 1987 | 0.7 | 0.8 | 1.1 | 0.6 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.8 | 0.8 | 0.8 | 0.6 |
| MEAN | 0.9 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.9 | 0.9 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S18 (46.95N 91.35W)

| | MONTH | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| YEAR | | | | | | | | | | | | |
| 1956 | 2.5 | 2.4 | 4.1 | 4.1 | 2.5 | 2.1 | 1.0 | 1.5 | 1.8 | 2.6 | 4.1 | 2.8 |
| 1957 | 2.8 | 2.4 | 4.4 | 4.3 | 2.7 | 1.7 | 2.2 | 1.3 | 1.9 | 1.9 | 2.9 | 3.3 |
| 1958 | 2.7 | 3.5 | 1.9 | 4.2 | 2.0 | 1.7 | 1.5 | 1.5 | 2.5 | 2.6 | 5.3 | 2.6 |
| 1959 | 2.9 | 2.6 | 2.6 | 2.0 | 2.8 | 1.9 | 1.5 | 1.5 | 2.5 | 2.8 | 3.1 | 7.3 |
| 1960 | 2.5 | 3.3 | 3.6 | 3.5 | 2.1 | 1.7 | 1.4 | 1.8 | 2.0 | 2.7 | 7.7 | 2.5 |
| 1961 | 3.1 | 2.8 | 2.8 | 2.1 | 3.1 | 1.7 | 2.0 | 1.1 | 1.6 | 2.2 | 2.6 | 2.1 |
| 1962 | 2.9 | 2.2 | 4.2 | 2.3 | 1.7 | 1.9 | 1.2 | 1.3 | 2.1 | 2.7 | 2.5 | 2.9 |
| 1963 | 2.2 | 2.9 | 3.0 | 2.2 | 2.7 | 2.0 | 1.2 | 1.2 | 1.7 | 2.0 | 2.9 | 3.9 |
| 1964 | 3.9 | 2.6 | 2.2 | 2.8 | 2.5 | 2.0 | 1.1 | 2.2 | 2.4 | 2.5 | 2.8 | 2.3 |
| 1965 | 3.1 | 3.2 | 4.3 | 1.9 | 1.7 | 1.5 | 1.1 | 1.2 | 2.1 | 2.5 | 4.3 | 4.0 |
| 1966 | 2.6 | 2.7 | 5.7 | 3.8 | 2.0 | 2.0 | 1.2 | 1.4 | 1.8 | 2.6 | 2.9 | 2.5 |
| 1967 | 5.8 | 2.9 | 2.5 | 2.1 | 3.2 | 2.2 | 1.8 | 1.3 | 2.0 | 3.3 | 2.2 | 2.7 |
| 1968 | 2.6 | 3.0 | 2.9 | 3.0 | 2.1 | 1.4 | 2.8 | 2.0 | 1.6 | 2.6 | 3.7 | 3.9 |
| 1969 | 3.0 | 2.1 | 2.5 | 3.5 | 2.0 | 1.6 | 1.4 | 2.4 | 1.6 | 2.4 | 2.2 | 2.5 |
| 1970 | 2.2 | 2.6 | 3.8 | 2.4 | 2.5 | 1.8 | 1.3 | 1.5 | 2.2 | 2.5 | 2.7 | 3.0 |
| 1971 | 2.4 | 4.2 | 3.1 | 2.2 | 2.2 | 1.6 | 1.4 | 1.1 | 1.2 | 2.8 | 2.5 | 2.4 |
| 1972 | 3.4 | 3.0 | 3.4 | 2.5 | 2.2 | 1.4 | 1.1 | 1.2 | 1.9 | 2.3 | 3.7 | 3.4 |
| 1973 | 2.5 | 1.7 | 2.0 | 1.5 | 1.9 | 1.0 | 1.1 | 0.8 | 1.8 | 2.2 | 2.1 | 2.5 |
| 1974 | 2.6 | 1.9 | 2.9 | 2.5 | 1.8 | 1.8 | 1.8 | 1.3 | 1.9 | 2.0 | 3.6 | 2.7 |
| 1975 | 4.3 | 3.4 | 5.4 | 2.6 | 1.6 | 1.3 | 1.4 | 2.3 | 1.9 | 2.2 | 3.9 | 2.2 |
| 1976 | 2.5 | 2.6 | 4.1 | 3.2 | 1.8 | 2.7 | 1.0 | 1.1 | 1.6 | 1.9 | 1.9 | 2.2 |
| 1977 | 2.2 | 6.5 | 5.8 | 1.7 | 1.8 | 1.3 | 1.4 | 1.2 | 3.1 | 2.9 | 3.2 | 4.1 |
| 1978 | 2.6 | 1.7 | 2.2 | 1.8 | 1.6 | 1.6 | 1.1 | 1.4 | 2.9 | 1.9 | 2.1 | 2.2 |
| 1979 | 2.0 | 2.3 | 2.2 | 2.3 | 1.6 | 1.5 | 1.3 | 1.6 | 2.0 | 1.9 | 2.3 | 2.2 |
| 1980 | 2.3 | 2.3 | 3.2 | 1.8 | 1.9 | 1.9 | 1.1 | 1.6 | 2.4 | 2.2 | 2.1 | 2.2 |
| 1981 | 2.1 | 2.5 | 2.4 | 2.0 | 1.9 | 1.9 | 1.1 | 1.2 | 2.4 | 2.3 | 2.2 | 1.9 |
| 1982 | 4.0 | 2.2 | 3.1 | 2.4 | 1.5 | 2.1 | 1.1 | 1.1 | 1.9 | 2.2 | 3.1 | 2.7 |
| 1983 | 2.3 | 3.1 | 3.7 | 1.9 | 2.1 | 1.6 | 1.3 | 1.4 | 1.8 | 2.1 | 4.3 | 2.7 |
| 1984 | 2.4 | 2.1 | 3.0 | 2.8 | 2.1 | 2.2 | 1.5 | 1.6 | 2.0 | 3.3 | 2.6 | 2.3 |
| 1985 | 2.8 | 3.2 | 8.9 | 2.4 | 1.6 | 2.2 | 1.3 | 2.1 | 2.3 | 2.1 | 3.1 | 2.9 |
| 1986 | 3.5 | 2.3 | 3.2 | 2.7 | 2.1 | 1.3 | 1.9 | 1.1 | 2.0 | 2.2 | 5.0 | 2.6 |
| 1987 | 1.9 | 3.5 | 3.4 | 2.3 | 2.3 | 1.5 | 1.2 | 1.2 | 1.7 | 2.5 | 2.2 | 3.0 |

32 YR. STATISTICS FOR WIS STATION S18

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.2 |
| LARGEST WAVE HS | (METERS) | 8.9 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 61.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 85030421 |

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1676 | 2111 | 398 | 115 | 48 | 12 | . | . | . | . | 4360 |
| 0.50-0.99 | . | 921 | 2553 | 149 | 90 | 58 | 7 | . | . | . | 3778 |
| 1.00-1.49 | . | . | 1172 | 65 | 36 | 28 | 10 | 7 | . | . | 1318 |
| 1.50-1.99 | . | . | 49 | 406 | 8 | 11 | 7 | 5 | . | . | 486 |
| 2.00-2.49 | . | . | . | 269 | 50 | 7 | 6 | 6 | 3 | 1 | 342 |
| 2.50-2.99 | . | . | . | 10 | 95 | 1 | 1 | . | 2 | 2 | 111 |
| 3.00-3.49 | . | . | . | . | 17 | 7 | . | 2 | 5 | 3 | 34 |
| 3.50-3.99 | . | . | . | . | . | 6 | 1 | 1 | 2 | . | 10 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | 1 | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1676 | 3032 | 4172 | 1014 | 344 | 131 | 32 | 22 | 12 | 8 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 9783.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 420 | 553 | 177 | 57 | 14 | 3 | . | . | . | . | 1224 |
| 0.50-0.99 | . | 352 | 401 | 95 | 37 | 24 | 1 | . | . | . | 910 |
| 1.00-1.49 | . | . | 139 | 56 | 29 | 22 | 5 | 1 | 1 | . | 253 |
| 1.50-1.99 | . | . | 13 | 60 | 12 | 11 | 5 | 2 | 3 | . | 106 |
| 2.00-2.49 | . | . | . | 22 | 11 | 8 | 12 | 5 | 1 | 1 | 60 |
| 2.50-2.99 | . | . | . | 3 | 16 | 8 | 3 | 1 | . | . | 31 |
| 3.00-3.49 | . | . | . | . | 1 | 11 | 2 | 3 | . | . | 17 |
| 3.50-3.99 | . | . | . | . | . | 7 | 2 | 2 | 1 | 1 | 13 |
| 4.00-4.49 | . | . | . | . | . | 1 | 2 | 2 | 1 | 2 | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 2 | 1 | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 420 | 905 | 730 | 293 | 120 | 95 | 34 | 18 | 13 | 4 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 2480.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 425 | 506 | 197 | 44 | 16 | 4 | . | . | . | . | 1192 |
| 0.50-0.99 | . | 278 | 377 | 75 | 13 | 13 | 1 | . | 1 | . | 758 |
| 1.00-1.49 | . | . | 150 | 75 | 20 | 21 | 3 | 1 | . | . | 270 |
| 1.50-1.99 | . | . | 8 | 58 | 18 | 10 | 5 | 1 | 1 | . | 101 |
| 2.00-2.49 | . | . | 1 | 18 | 10 | 9 | 7 | 1 | 1 | . | 47 |
| 2.50-2.99 | . | . | . | 2 | 14 | 3 | 3 | 3 | 3 | . | 28 |
| 3.00-3.49 | . | . | . | . | . | 6 | 2 | 2 | . | . | 10 |
| 3.50-3.99 | . | . | . | . | . | 4 | 4 | . | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | 1 | 2 | 1 | . | 1 | 5 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | 1 | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 2 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 425 | 784 | 733 | 272 | 91 | 71 | 27 | 13 | 10 | 2 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 2288.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 515 | 685 | 325 | 71 | 8 | 1 | . | . | . | . | 1605 |
| 0.50-0.99 | . | 978 | 472 | 281 | 54 | 20 | 1 | . | . | . | 1806 |
| 1.00-1.49 | . | . | 210 | 156 | 116 | 58 | 9 | 2 | . | . | 551 |
| 1.50-1.99 | . | . | 31 | 58 | 62 | 48 | 19 | 1 | . | . | 219 |
| 2.00-2.49 | . | . | 3 | 11 | 10 | 39 | 21 | 6 | 4 | . | 94 |
| 2.50-2.99 | . | . | . | 1 | 17 | 10 | 13 | 22 | 4 | . | 67 |
| 3.00-3.49 | . | . | . | . | 5 | 12 | 2 | 9 | 4 | . | 32 |
| 3.50-3.99 | . | . | . | . | . | 3 | 2 | 1 | 5 | 1 | 12 |
| 4.00-4.49 | . | . | . | . | . | . | 5 | . | 2 | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | . | 2 | 3 | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 515 | 1663 | 1041 | 578 | 272 | 191 | 72 | 44 | 26 | 5 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 4.1 NO. OF CASES= 4139.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1464 | 2034 | 817 | 180 | 29 | 7 | . | . | . | . | 4531 |
| 0.50-0.99 | . | 2935 | 331 | 495 | 165 | 50 | 3 | 1 | 1 | . | 3981 |
| 1.00-1.49 | . | . | 447 | 103 | 152 | 104 | 18 | 4 | 2 | 1 | 831 |
| 1.50-1.99 | . | . | 84 | 6 | 59 | 147 | 38 | 8 | 9 | . | 351 |
| 2.00-2.49 | . | . | 11 | . | 1 | 32 | 52 | 18 | 3 | . | 117 |
| 2.50-2.99 | . | . | . | . | . | 2 | 10 | 32 | 4 | . | 48 |
| 3.00-3.49 | . | . | . | . | . | . | . | 10 | 7 | 1 | 18 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1464 | 4969 | 1690 | 784 | 406 | 342 | 121 | 73 | 27 | 4 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.7 NO. OF CASES= 9254.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1492 | 1756 | 597 | 152 | 24 | 4 | . | . | . | . | 4025 |
| 0.50-0.99 | . | 1902 | 216 | 124 | 93 | 52 | 4 | . | . | . | 2391 |
| 1.00-1.49 | . | . | 167 | 4 | 31 | 33 | 13 | 2 | 2 | . | 252 |
| 1.50-1.99 | . | . | 14 | . | 3 | 12 | 3 | 1 | 3 | . | 36 |
| 2.00-2.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1492 | 3658 | 994 | 280 | 151 | 101 | 22 | 3 | 5 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.2 NO. OF CASES= 6280.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1137 | 1087 | 329 | 96 | 24 | 3 | . | 1 | . | . | 2677 |
| 0.50-0.99 | . | 1120 | 171 | 36 | 31 | 16 | . | 1 | . | . | 1375 |
| 1.00-1.49 | . | . | 75 | . | . | 10 | 5 | 1 | . | 1 | 92 |
| 1.50-1.99 | . | . | 3 | . | . | 1 | 3 | . | . | . | 7 |
| 2.00-2.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1137 | 2207 | 578 | 132 | 55 | 30 | 9 | 3 | 0 | 1 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 3889.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 849 | 942 | 158 | 65 | 12 | 2 | . | . | . | . | 2028 |
| 0.50-0.99 | . | 816 | 80 | 18 | 18 | 13 | . | . | . | . | 945 |
| 1.00-1.49 | . | . | 51 | . | . | 4 | . | . | . | . | 55 |
| 1.50-1.99 | . | . | 2 | . | . | 1 | . | . | . | . | 3 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 849 | 1758 | 291 | 84 | 30 | 20 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.0 NO. OF CASES= 2840.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 863 | 1014 | 148 | 66 | 16 | 5 | . | . | 1 | . | 2113 |
| 0.50-0.99 | . | 934 | 57 | 18 | 13 | 4 | . | . | . | . | 1026 |
| 1.00-1.49 | . | . | 132 | . | 1 | 1 | 2 | . | . | . | 136 |
| 1.50-1.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 2.00-2.49 | . | . | 1 | 1 | . | . | 1 | . | . | . | 3 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 863 | 1948 | 338 | 85 | 30 | 10 | 3 | 0 | 2 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.0 NO. OF CASES= 3072.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 714 | 1064 | 84 | 52 | 13 | 3 | . | . | . | . | 1930 |
| 0.50-0.99 | . | 1143 | 121 | 18 | 14 | 7 | 1 | . | . | . | 1304 |
| 1.00-1.49 | . | . | 191 | . | . | 4 | . | . | 1 | . | 196 |
| 1.50-1.99 | . | . | 23 | . | . | 1 | . | . | . | . | 24 |
| 2.00-2.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 714 | 2207 | 419 | 72 | 27 | 15 | 1 | 0 | 1 | 1 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 3239.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 747 | 1163 | 133 | 50 | 17 | 2 | . | . | . | . | 2112 |
| 0.50-0.99 | . | 1179 | 1068 | 16 | 9 | 11 | . | . | . | . | 2283 |
| 1.00-1.49 | . | . | 363 | 100 | 1 | 4 | 1 | 1 | 1 | . | 471 |
| 1.50-1.99 | . | . | 90 | 94 | . | . | . | 1 | . | . | 185 |
| 2.00-2.49 | . | . | . | 8 | . | . | . | . | . | . | 8 |
| 2.50-2.99 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 747 | 2342 | 1654 | 268 | 29 | 17 | 1 | 2 | 1 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 4740.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 790 | 1248 | 121 | 45 | 13 | 3 | 1 | . | . | . | 2221 |
| 0.50-0.99 | . | 966 | 1603 | 10 | 9 | 13 | 1 | . | . | . | 2602 |
| 1.00-1.49 | . | . | 1150 | 189 | 1 | 2 | . | 1 | 1 | . | 1344 |
| 1.50-1.99 | . | . | 53 | 456 | 3 | 1 | . | . | . | . | 513 |
| 2.00-2.49 | . | . | . | 109 | 16 | . | . | . | . | . | 125 |
| 2.50-2.99 | . | . | . | 2 | 45 | . | . | . | . | . | 47 |
| 3.00-3.49 | . | . | . | . | 4 | 7 | . | . | . | . | 11 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | 1 | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 790 | 2214 | 2927 | 811 | 91 | 29 | 3 | 1 | 1 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 6433.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1142 | 1765 | 159 | 60 | 11 | 5 | . | . | 1 | . | 3143 |
| 0.50-0.99 | . | 1072 | 1675 | 14 | 20 | 14 | 1 | 1 | . | . | 2797 |
| 1.00-1.49 | . | . | 1394 | 34 | 1 | 3 | 1 | . | . | . | 1433 |
| 1.50-1.99 | . | . | 98 | 478 | 2 | . | . | . | 1 | . | 579 |
| 2.00-2.49 | . | . | . | 233 | 1 | . | . | 1 | 1 | . | 236 |
| 2.50-2.99 | . | . | . | 17 | 58 | . | . | . | . | . | 75 |
| 3.00-3.49 | . | . | . | . | 18 | 1 | . | . | . | . | 19 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1142 | 2837 | 3326 | 836 | 111 | 26 | 2 | 2 | 3 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 7757.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1049 | 2077 | 105 | 43 | 14 | 4 | . | . | . | . | 3292 |
| 0.50-0.99 | . | 1159 | 2635 | 19 | 16 | 17 | . | 1 | . | . | 3847 |
| 1.00-1.49 | . | . | 2569 | 36 | . | 3 | 2 | . | . | . | 2610 |
| 1.50-1.99 | . | . | 124 | 1202 | . | . | . | . | . | . | 1326 |
| 2.00-2.49 | . | . | . | 671 | 1 | . | . | . | . | . | 672 |
| 2.50-2.99 | . | . | . | 16 | 117 | . | . | 1 | . | . | 134 |
| 3.00-3.49 | . | . | . | . | 28 | 2 | . | . | . | 1 | 31 |
| 3.50-3.99 | . | . | . | . | 2 | 1 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1049 | 3236 | 5433 | 1987 | 178 | 27 | 2 | 2 | 0 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 11150.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 938 | 1627 | 162 | 66 | 18 | 4 | . | . | . | . | 2815 |
| 0.50-0.99 | . | 1136 | 2282 | 56 | 40 | 37 | 2 | . | . | . | 3553 |
| 1.00-1.49 | . | . | 2294 | 9 | 7 | 9 | . | 4 | . | . | 2323 |
| 1.50-1.99 | . | . | 133 | 1024 | . | 1 | . | 1 | 1 | . | 1160 |
| 2.00-2.49 | . | . | . | 536 | 3 | . | . | . | . | . | 539 |
| 2.50-2.99 | . | . | . | 31 | 43 | . | . | . | 1 | 1 | 76 |
| 3.00-3.49 | . | . | . | . | 10 | . | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | 1 | 1 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 938 | 2763 | 4871 | 1722 | 122 | 52 | 2 | 5 | 2 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.9 NO. OF CASES= 9809.

STATION S19 46.95N 91.13W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

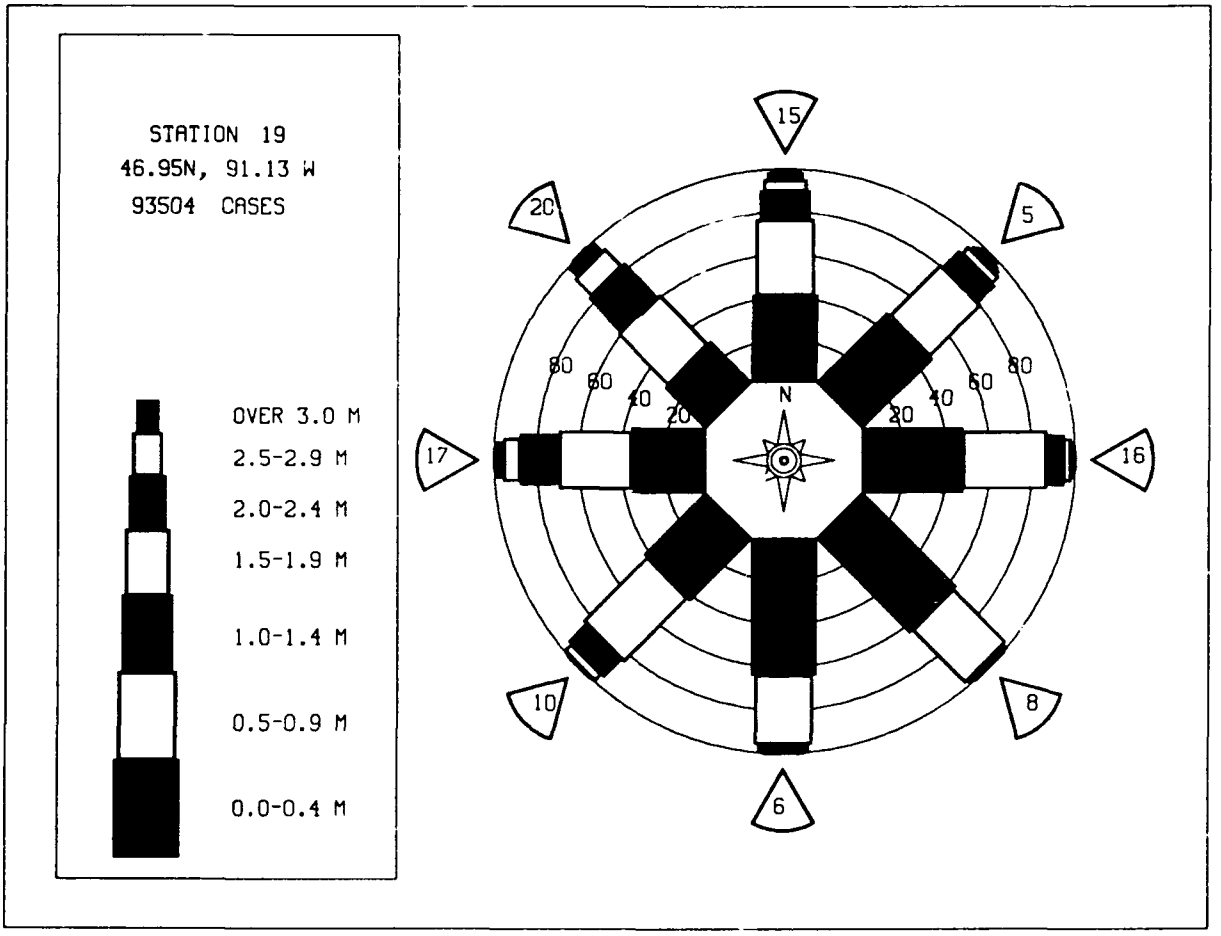
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 842 | 1230 | 173 | 67 | 40 | 9 | . | . | . | . | 2361 |
| 0.50-0.99 | . | 687 | 1449 | 63 | 64 | 38 | 4 | . | . | . | 2305 |
| 1.00-1.49 | . | . | 1134 | 50 | 12 | 8 | 2 | . | . | . | 1206 |
| 1.50-1.99 | . | . | 84 | 496 | . | 1 | 2 | 3 | 3 | . | 589 |
| 2.00-2.49 | . | . | . | 244 | 13 | . | 1 | . | 2 | . | 260 |
| 2.50-2.99 | . | . | . | 10 | 40 | . | . | . | 1 | . | 51 |
| 3.00-3.49 | . | . | . | . | 6 | . | . | . | . | 1 | 7 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 842 | 1917 | 2840 | 930 | 175 | 56 | 9 | 3 | 6 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 6351.

STATION S19 46.95N 91.13W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1507 | 2087 | 409 | 123 | 32 | 7 | . | . | . | . | 4165 |
| 0.50-0.99 | . | 1758 | 1549 | 149 | 69 | 39 | 2 | . | . | . | 3566 |
| 1.00-1.49 | . | . | 1164 | 88 | 41 | 32 | 7 | 2 | . | . | 1334 |
| 1.50-1.99 | . | . | 81 | 434 | 17 | 24 | 8 | 2 | 2 | . | 568 |
| 2.00-2.49 | . | . | 1 | 213 | 11 | 9 | 10 | 3 | 1 | . | 248 |
| 2.50-2.99 | . | . | . | 9 | 45 | 2 | 3 | 5 | 1 | . | 65 |
| 3.00-3.49 | . | . | . | . | 9 | 4 | . | 2 | 1 | . | 16 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1507 | 3845 | 3204 | 1016 | 224 | 119 | 30 | 14 | 5 | 0 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S19 (46.95N 91.13W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 0.8 | 0.9 | 0.9 | 0.8 | 0.5 | 0.4 | 0.5 | 0.6 | 0.9 | 1.2 | 1.1 | 0.8 |
| 1957 | 1.1 | 0.9 | 0.8 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 1.1 | 0.9 | 0.7 |
| 1958 | 0.7 | 1.1 | 0.6 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 1.2 | 1.0 | 0.7 |
| 1959 | 1.0 | 0.9 | 0.8 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 1.1 | 1.0 | 0.7 |
| 1960 | 0.9 | 0.9 | 0.8 | 1.0 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 1.2 | 1.0 | 0.7 |
| 1961 | 1.0 | 0.8 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 |
| 1962 | 1.1 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 1.1 | 0.7 |
| 1963 | 1.0 | 1.0 | 0.9 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 1.1 | 0.7 |
| 1964 | 1.1 | 0.9 | 0.9 | 0.7 | 0.7 | 0.4 | 0.3 | 0.5 | 0.5 | 0.7 | 0.9 | 0.7 | 0.7 |
| 1965 | 1.0 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.6 | 0.8 | 1.0 | 1.2 | 0.7 |
| 1966 | 1.1 | 0.9 | 1.4 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.9 | 0.9 | 0.9 | 0.8 |
| 1967 | 1.2 | 0.9 | 0.8 | 0.7 | 0.7 | 0.4 | 0.4 | 0.5 | 0.5 | 0.9 | 0.9 | 1.0 | 0.7 |
| 1968 | 0.8 | 1.1 | 0.9 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 1.0 | 0.7 |
| 1969 | 1.0 | 0.7 | 0.8 | 0.6 | 0.6 | 0.6 | 0.4 | 0.6 | 0.5 | 0.8 | 0.9 | 0.8 | 0.7 |
| 1970 | 0.9 | 1.1 | 0.8 | 0.9 | 0.8 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 0.8 | 0.9 | 0.8 |
| 1971 | 1.1 | 1.2 | 0.9 | 0.8 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.9 | 0.8 | 0.7 |
| 1972 | 1.1 | 0.8 | 0.9 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.8 | 0.6 | 0.7 | 0.6 |
| 1973 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1974 | 0.8 | 0.6 | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.7 | 1.1 | 0.9 | 0.7 |
| 1975 | 1.0 | 0.9 | 1.2 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.9 | 0.8 | 0.7 |
| 1976 | 1.0 | 0.9 | 1.2 | 0.7 | 0.6 | 0.6 | 0.4 | 0.3 | 0.4 | 0.5 | 0.8 | 0.8 | 0.7 |
| 1977 | 0.8 | 1.0 | 1.2 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.8 | 1.0 | 0.7 |
| 1978 | 1.0 | 0.6 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.7 | 0.8 | 0.9 | 0.6 |
| 1979 | 0.7 | 0.6 | 0.9 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.7 | 0.8 | 0.9 | 0.6 |
| 1980 | 0.9 | 0.7 | 0.8 | 0.5 | 0.5 | 0.6 | 0.4 | 0.4 | 0.6 | 0.9 | 0.7 | 0.9 | 0.6 |
| 1981 | 0.8 | 0.8 | 0.8 | 0.6 | 0.4 | 0.5 | 0.3 | 0.3 | 0.6 | 0.7 | 0.7 | 0.7 | 0.6 |
| 1982 | 1.1 | 0.8 | 1.0 | 0.7 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1983 | 0.9 | 0.8 | 1.0 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 1.1 | 1.0 | 0.7 |
| 1984 | 0.9 | 0.8 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 0.9 | 1.0 | 0.7 |
| 1985 | 1.1 | 0.8 | 1.2 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.8 | 1.1 | 0.7 |
| 1986 | 1.0 | 0.6 | 0.9 | 0.8 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 1.0 | 0.9 | 0.7 |
| 1987 | 0.7 | 0.8 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.8 | 0.8 | 0.8 | 0.6 |
| MEAN | 0.9 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.9 | 0.9 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S19 (46.95N 91.13W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.6 | 2.5 | 3.2 | 2.9 | 2.3 | 2.1 | 1.2 | 1.2 | 2.1 | 2.9 | 4.5 | 3.1 |
| 1957 | 2.6 | 2.5 | 4.2 | 4.2 | 2.6 | 1.9 | 2.3 | 1.5 | 2.1 | 2.0 | 3.1 | 3.3 |
| 1958 | 3.3 | 2.9 | 1.5 | 3.4 | 2.3 | 1.8 | 1.7 | 1.7 | 2.6 | 2.6 | 4.9 | 2.9 |
| 1959 | 2.9 | 2.8 | 3.0 | 2.4 | 3.1 | 2.3 | 1.7 | 1.6 | 2.1 | 3.0 | 3.3 | 4.1 |
| 1960 | 2.5 | 3.1 | 3.6 | 3.2 | 2.4 | 2.0 | 1.4 | 1.4 | 2.0 | 3.0 | 7.3 | 2.7 |
| 1961 | 3.1 | 2.1 | 2.5 | 2.6 | 2.9 | 1.5 | 2.2 | 1.1 | 1.8 | 2.2 | 3.0 | 2.2 |
| 1962 | 2.9 | 2.2 | 4.1 | 2.5 | 1.8 | 1.4 | 1.2 | 1.6 | 2.0 | 3.0 | 2.8 | 2.9 |
| 1963 | 2.5 | 2.8 | 3.0 | 2.2 | 1.8 | 1.5 | 1.3 | 1.2 | 1.6 | 1.9 | 2.9 | 3.9 |
| 1964 | 3.5 | 2.8 | 2.5 | 3.0 | 2.5 | 2.1 | 1.1 | 1.7 | 2.4 | 3.1 | 2.6 | 2.2 |
| 1965 | 2.9 | 3.0 | 2.7 | 2.2 | 1.7 | 1.8 | 1.2 | 1.1 | 2.0 | 2.9 | 3.9 | 4.1 |
| 1966 | 3.0 | 2.7 | 5.1 | 3.1 | 2.2 | 1.8 | 1.2 | 1.2 | 2.1 | 3.1 | 2.4 | 2.5 |
| 1967 | 5.2 | 2.8 | 2.0 | 2.4 | 3.2 | 1.7 | 1.7 | 1.6 | 2.0 | 3.2 | 2.4 | 2.9 |
| 1968 | 2.2 | 3.1 | 2.9 | 2.8 | 2.1 | 1.3 | 2.5 | 2.0 | 1.7 | 2.5 | 3.8 | 3.7 |
| 1969 | 3.3 | 2.7 | 2.7 | 2.5 | 1.7 | 1.7 | 1.5 | 2.8 | 1.6 | 2.8 | 2.3 | 2.6 |
| 1970 | 2.4 | 2.6 | 3.6 | 2.9 | 2.1 | 2.0 | 1.5 | 1.5 | 2.1 | 2.8 | 2.7 | 2.8 |
| 1971 | 2.7 | 3.5 | 3.1 | 2.3 | 2.1 | 1.4 | 1.6 | 1.1 | 1.2 | 2.9 | 2.8 | 2.5 |
| 1972 | 3.4 | 2.5 | 3.2 | 2.7 | 1.8 | 1.6 | 1.3 | 1.1 | 1.7 | 2.6 | 3.6 | 3.1 |
| 1973 | 2.2 | 1.6 | 1.9 | 1.6 | 1.8 | 1.0 | 1.2 | 0.9 | 1.5 | 2.5 | 2.0 | 2.8 |
| 1974 | 2.8 | 2.1 | 2.9 | 2.4 | 1.8 | 1.4 | 2.1 | 1.5 | 1.9 | 2.0 | 3.9 | 2.3 |
| 1975 | 4.0 | 3.3 | 5.8 | 2.1 | 1.3 | 1.3 | 1.6 | 2.1 | 2.0 | 2.3 | 4.0 | 2.6 |
| 1976 | 2.5 | 3.0 | 4.3 | 2.1 | 2.0 | 2.6 | 1.1 | 1.1 | 1.8 | 1.9 | 2.1 | 2.3 |
| 1977 | 2.5 | 5.9 | 5.6 | 2.0 | 2.0 | 1.5 | 1.6 | 1.2 | 2.7 | 2.5 | 3.0 | 3.1 |
| 1978 | 2.7 | 2.1 | 2.3 | 2.1 | 1.2 | 1.4 | 1.1 | 1.2 | 2.3 | 2.0 | 2.2 | 2.1 |
| 1979 | 1.7 | 2.1 | 2.9 | 2.0 | 1.3 | 1.4 | 1.4 | 1.6 | 1.8 | 2.2 | 2.2 | 2.4 |
| 1980 | 2.8 | 2.1 | 3.7 | 1.7 | 1.4 | 1.7 | 1.1 | 1.4 | 2.2 | 2.4 | 2.1 | 2.9 |
| 1981 | 2.2 | 2.4 | 2.1 | 1.9 | 1.9 | 2.3 | 0.9 | 0.9 | 2.8 | 2.3 | 2.2 | 2.2 |
| 1982 | 3.7 | 2.1 | 3.5 | 2.5 | 1.2 | 2.4 | 1.3 | 1.1 | 1.7 | 2.4 | 2.8 | 3.5 |
| 1983 | 2.5 | 3.1 | 2.9 | 2.4 | 1.5 | 1.3 | 1.3 | 1.5 | 2.1 | 2.1 | 3.7 | 3.0 |
| 1984 | 2.4 | 2.3 | 3.0 | 3.2 | 2.3 | 2.3 | 1.7 | 1.6 | 1.8 | 2.9 | 2.6 | 2.5 |
| 1985 | 2.8 | 3.7 | 7.9 | 2.6 | 1.7 | 2.4 | 1.1 | 2.3 | 2.3 | 2.4 | 2.4 | 3.2 |
| 1986 | 3.4 | 2.2 | 3.7 | 2.6 | 2.4 | 1.3 | 1.4 | 1.2 | 1.8 | 2.2 | 4.8 | 3.0 |
| 1987 | 2.5 | 2.8 | 2.6 | 2.2 | 1.9 | 1.5 | 1.3 | 1.4 | 1.7 | 2.5 | 2.4 | 2.8 |

32 YR. STATISTICS FOR WIS STATION S19

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.7 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 7.9 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 59.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 85030421 |

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 961 | 1384 | 331 | 54 | 19 | 6 | . | . | . | . | 2755 |
| 0.50-0.99 | . | 702 | 1558 | 213 | 83 | 41 | 3 | . | . | . | 2600 |
| 1.00-1.49 | . | . | 809 | 98 | 84 | 32 | 14 | 1 | . | . | 1038 |
| 1.50-1.99 | . | . | 71 | 173 | 37 | 37 | 5 | 6 | . | . | 329 |
| 2.00-2.49 | . | . | 1 | 154 | 9 | 22 | 5 | 8 | . | . | 199 |
| 2.50-2.99 | . | . | . | 10 | 9 | 9 | 13 | 6 | 4 | . | 51 |
| 3.00-3.49 | . | . | . | . | 3 | . | 5 | . | 4 | 3 | 15 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | 3 | 1 | 2 | 7 |
| 4.00-4.49 | . | . | . | . | . | . | . | 1 | 3 | 1 | 5 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 961 | 2086 | 2770 | 702 | 244 | 147 | 46 | 25 | 13 | 7 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 6564.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 436 | 739 | 148 | 31 | 11 | 2 | . | . | . | . | 1367 |
| 0.50-0.99 | . | 339 | 780 | 130 | 31 | 6 | . | . | . | . | 1286 |
| 1.00-1.49 | . | . | 176 | 143 | 41 | 25 | 2 | 1 | . | . | 388 |
| 1.50-1.99 | . | . | 4 | 77 | 53 | 36 | 3 | 2 | . | . | 175 |
| 2.00-2.49 | . | . | . | 37 | 23 | 24 | 2 | 9 | . | . | 95 |
| 2.50-2.99 | . | . | . | 2 | 22 | 18 | 12 | 12 | 1 | . | 67 |
| 3.00-3.49 | . | . | . | . | 5 | 17 | 7 | 2 | 3 | . | 34 |
| 3.50-3.99 | . | . | . | . | . | 11 | . | 3 | 3 | 1 | 18 |
| 4.00-4.49 | . | . | . | . | . | 2 | 4 | 4 | 1 | . | 11 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | 2 | 1 | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | 1 | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 436 | 1078 | 1108 | 420 | 186 | 141 | 31 | 33 | 11 | 3 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 3238.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 340 | 495 | 146 | 19 | 10 | 2 | . | . | . | . | 1012 |
| 0.50-0.99 | . | 212 | 664 | 93 | 19 | 7 | . | . | . | . | 995 |
| 1.00-1.49 | . | . | 134 | 191 | 36 | 14 | 1 | . | . | . | 376 |
| 1.50-1.99 | . | . | 8 | 75 | 50 | 25 | 1 | . | . | . | 159 |
| 2.00-2.49 | . | . | . | 9 | 21 | 17 | 3 | 2 | . | . | 52 |
| 2.50-2.99 | . | . | . | . | 19 | 11 | 8 | 1 | 1 | . | 40 |
| 3.00-3.49 | . | . | . | . | 1 | 13 | 8 | 5 | . | . | 27 |
| 3.50-3.99 | . | . | . | . | . | 5 | 2 | 4 | . | . | 11 |
| 4.00-4.49 | . | . | . | . | . | . | 5 | 8 | . | . | 13 |
| 4.50-4.99 | . | . | . | . | . | . | . | 2 | 3 | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 2 | . | 2 | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | 2 | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 340 | 707 | 952 | 387 | 156 | 94 | 29 | 24 | 10 | 6 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 2545.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 377 | 596 | 161 | 18 | 3 | . | . | . | . | . | 1155 |
| 0.50-0.99 | . | 408 | 1197 | 110 | 22 | 12 | . | . | . | . | 1749 |
| 1.00-1.49 | . | . | 393 | 383 | 35 | 18 | 1 | . | . | . | 831 |
| 1.50-1.99 | . | . | 21 | 259 | 109 | 24 | 2 | . | . | . | 415 |
| 2.00-2.49 | . | . | . | 58 | 71 | 29 | 3 | . | . | . | 161 |
| 2.50-2.99 | . | . | . | 2 | 88 | 24 | 8 | 1 | . | . | 123 |
| 3.00-3.49 | . | . | . | . | 7 | 48 | 12 | 3 | . | . | 70 |
| 3.50-3.99 | . | . | . | . | . | 42 | 19 | 1 | 5 | . | 67 |
| 4.00-4.49 | . | . | . | . | . | 2 | 31 | 3 | 4 | . | 40 |
| 4.50-4.99 | . | . | . | . | . | . | 17 | 9 | 2 | 1 | 29 |
| 5.00-5.49 | . | . | . | . | . | . | . | 14 | 3 | 1 | 18 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 5 | . | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | 2 | 6 | . | 8 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 4 | 5 |
| TOTAL | 377 | 1004 | 1772 | 830 | 335 | 200 | 93 | 34 | 27 | 6 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 8.4 MEAN TP(SEC)= 4.5 NO. OF CASES= 4394.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 851 | 1487 | 351 | 53 | 17 | 1 | . | . | . | . | 2760 |
| 0.50-0.99 | . | 959 | 2825 | 182 | 20 | 13 | . | . | . | . | 3999 |
| 1.00-1.49 | . | . | 948 | 844 | 54 | 13 | . | . | . | . | 1859 |
| 1.50-1.99 | . | . | 40 | 525 | 165 | 21 | 2 | 3 | . | . | 756 |
| 2.00-2.49 | . | . | . | 148 | 89 | 65 | 3 | 2 | . | . | 307 |
| 2.50-2.99 | . | . | . | 3 | 143 | 68 | 7 | 3 | 2 | . | 226 |
| 3.00-3.49 | . | . | . | . | 12 | 133 | 19 | . | 4 | . | 168 |
| 3.50-3.99 | . | . | . | . | . | 58 | 32 | 3 | 2 | . | 95 |
| 4.00-4.49 | . | . | . | . | . | 6 | 38 | 1 | . | . | 45 |
| 4.50-4.99 | . | . | . | . | . | . | 13 | 18 | 1 | . | 32 |
| 5.00-5.49 | . | . | . | . | . | . | . | 25 | . | . | 25 |
| 5.50-5.99 | . | . | . | . | . | . | . | 6 | 3 | . | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 851 | 2446 | 4164 | 1755 | 500 | 378 | 114 | 62 | 15 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 9637.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 960 | 1438 | 345 | 58 | 10 | . | . | 1 | . | . | 2812 |
| 0.50-0.99 | . | 925 | 1379 | 101 | 18 | 7 | . | . | . | . | 2430 |
| 1.00-1.49 | . | . | 268 | 219 | 32 | 16 | . | 1 | . | . | 536 |
| 1.50-1.99 | . | . | 8 | 103 | 27 | 16 | 1 | 2 | . | . | 157 |
| 2.00-2.49 | . | . | . | 18 | 11 | 12 | 3 | 1 | . | . | 45 |
| 2.50-2.99 | . | . | . | . | 12 | 2 | 1 | 2 | . | . | 17 |
| 3.00-3.49 | . | . | . | . | . | 2 | 2 | . | 1 | . | 5 |
| 3.50-3.99 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 960 | 2363 | 2000 | 499 | 110 | 58 | 7 | 7 | 1 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 5626.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 885 | 1275 | 372 | 60 | 13 | 1 | . | 1 | . | . | 2607 |
| 0.50-0.99 | . | 756 | 611 | 91 | 19 | 4 | . | . | . | . | 1481 |
| 1.00-1.49 | . | . | 105 | 133 | 12 | 7 | . | . | . | . | 257 |
| 1.50-1.99 | . | . | 8 | 24 | 6 | 6 | 1 | . | . | . | 45 |
| 2.00-2.49 | . | . | 1 | . | 6 | 2 | . | . | . | . | 9 |
| 2.50-2.99 | . | . | . | . | 1 | 4 | 1 | . | . | . | 6 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 885 | 2031 | 1097 | 308 | 57 | 24 | 2 | 1 | 0 | 1 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 4131.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 680 | 930 | 222 | 27 | 6 | 1 | . | . | . | . | 1866 |
| 0.50-0.99 | . | 537 | 267 | 84 | 13 | 2 | . | . | . | . | 903 |
| 1.00-1.49 | . | . | 72 | 58 | 8 | 1 | . | . | . | . | 139 |
| 1.50-1.99 | . | . | 2 | 5 | 3 | 3 | . | . | . | . | 13 |
| 2.00-2.49 | . | . | . | . | . | . | 1 | . | 1 | . | 2 |
| 2.50-2.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | 1 | . | . | 1 | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 680 | 1467 | 563 | 174 | 30 | 9 | 2 | 0 | 2 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 2745.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 629 | 904 | 260 | 52 | 7 | 3 | 1 | . | . | . | 1856 |
| 0.50-0.99 | . | 566 | 242 | 58 | 12 | 1 | . | . | 1 | . | 880 |
| 1.00-1.49 | . | . | 71 | 33 | 8 | 2 | . | . | . | . | 114 |
| 1.50-1.99 | . | . | 5 | 2 | 4 | . | . | . | . | . | 11 |
| 2.00-2.49 | . | . | 1 | . | . | 1 | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 629 | 1470 | 579 | 145 | 31 | 8 | 1 | 0 | 1 | 1 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 2688.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 543 | 1120 | 225 | 34 | 5 | . | . | . | . | . | 1927 |
| 0.50-0.99 | . | 888 | 376 | 48 | 7 | 2 | . | . | . | . | 1321 |
| 1.00-1.49 | . | . | 176 | 23 | 10 | 3 | 1 | . | . | . | 213 |
| 1.50-1.99 | . | . | 13 | 13 | 2 | 3 | . | 1 | 1 | . | 33 |
| 2.00-2.49 | . | . | 1 | 5 | . | . | . | . | . | . | 6 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 543 | 2008 | 791 | 124 | 25 | 8 | 1 | 1 | 1 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.2 NO. OF CASES= 3283.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 653 | 1202 | 270 | 45 | 13 | 2 | . | . | . | . | 2185 |
| 0.50-0.99 | . | 675 | 1549 | 66 | 13 | 4 | . | . | . | . | 2307 |
| 1.00-1.49 | . | . | 778 | 176 | 6 | 7 | . | . | . | . | 967 |
| 1.50-1.99 | . | . | 90 | 295 | 6 | 5 | . | 1 | . | . | 397 |
| 2.00-2.49 | . | . | . | 119 | 14 | . | . | . | . | . | 133 |
| 2.50-2.99 | . | . | . | 6 | 1 | . | . | . | . | . | 7 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 653 | 1877 | 2687 | 707 | 54 | 18 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 5619.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 746 | 1330 | 199 | 33 | 11 | . | . | . | . | . | 2319 |
| 0.50-0.99 | . | 565 | 1932 | 52 | 14 | 4 | 1 | . | . | . | 2568 |
| 1.00-1.49 | . | . | 950 | 327 | 8 | 8 | . | 1 | . | . | 1294 |
| 1.50-1.99 | . | . | 41 | 481 | 27 | 1 | 1 | . | . | . | 551 |
| 2.00-2.49 | . | . | . | 168 | 77 | 2 | . | 1 | 1 | . | 249 |
| 2.50-2.99 | . | . | . | 5 | 62 | 5 | . | . | . | . | 72 |
| 3.00-3.49 | . | . | . | . | 8 | 24 | . | . | . | . | 32 |
| 3.50-3.99 | . | . | . | . | . | 10 | . | . | 1 | . | 11 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 746 | 1895 | 3122 | 1066 | 207 | 56 | 4 | 3 | 2 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 6653.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1071 | 2087 | 218 | 59 | 12 | 3 | . | . | . | . | 3450 |
| 0.50-0.99 | . | 860 | 2487 | 55 | 26 | 20 | 1 | 1 | . | . | 3450 |
| 1.00-1.49 | . | . | 1269 | 189 | 11 | 4 | 1 | . | . | . | 1474 |
| 1.50-1.99 | . | . | 59 | 776 | 6 | 4 | . | . | . | . | 845 |
| 2.00-2.49 | . | . | 1 | 442 | 62 | 1 | 1 | . | . | . | 507 |
| 2.50-2.99 | . | . | . | 5 | 154 | . | . | 1 | . | . | 160 |
| 3.00-3.49 | . | . | . | . | 35 | 22 | . | . | . | . | 57 |
| 3.50-3.99 | . | . | . | . | . | 7 | . | . | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1071 | 2947 | 4034 | 1526 | 306 | 62 | 4 | 2 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 9318.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 993 | 2125 | 141 | 49 | 12 | 3 | . | . | . | . | 3323 |
| 0.50-0.99 | . | 1033 | 2302 | 68 | 22 | 23 | . | 1 | . | . | 3449 |
| 1.00-1.49 | . | . | 1410 | 97 | 14 | 4 | 1 | . | . | . | 1526 |
| 1.50-1.99 | . | . | 110 | 713 | 4 | 3 | . | . | . | . | 830 |
| 2.00-2.49 | . | . | . | 404 | 54 | 1 | 1 | . | . | . | 460 |
| 2.50-2.99 | . | . | . | 11 | 129 | . | . | . | . | . | 140 |
| 3.00-3.49 | . | . | . | . | 27 | 4 | . | . | . | . | 31 |
| 3.50-3.99 | . | . | . | . | 1 | 5 | . | . | 2 | . | 8 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 993 | 3158 | 3963 | 1342 | 263 | 43 | 2 | 1 | 2 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 9143.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 927 | 1678 | 242 | 65 | 27 | 6 | . | . | . | . | 2945 |
| 0.50-0.99 | . | 1105 | 2451 | 141 | 64 | 47 | 2 | . | . | . | 3810 |
| 1.00-1.49 | . | . | 2462 | 18 | 20 | 12 | . | . | . | . | 2512 |
| 1.50-1.99 | . | . | 167 | 1085 | 3 | 7 | 1 | 2 | . | . | 1265 |
| 2.00-2.49 | . | . | . | 542 | . | 1 | 1 | 1 | . | . | 545 |
| 2.50-2.99 | . | . | . | 24 | 33 | . | 1 | . | . | . | 58 |
| 3.00-3.49 | . | . | . | . | 10 | . | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 927 | 2783 | 5322 | 1875 | 157 | 73 | 5 | 3 | 0 | 2 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 10433.

STATION S20 47.08N 90.92W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

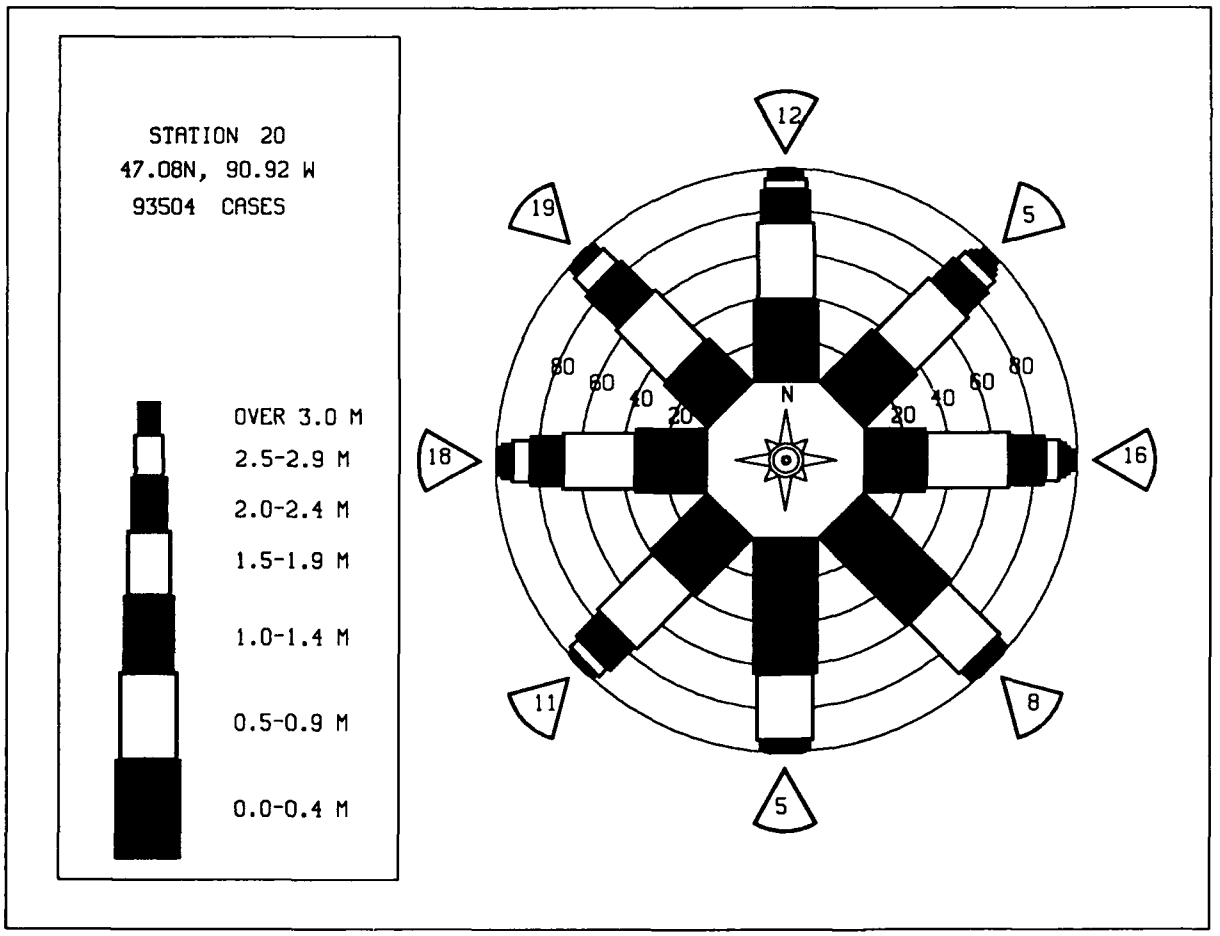
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 917 | 1404 | 254 | 71 | 33 | 5 | . | . | . | . | 2684 |
| 0.50-0.99 | . | 690 | 1699 | 121 | 64 | 52 | 1 | . | . | . | 2627 |
| 1.00-1.49 | . | . | 1404 | 56 | 52 | 25 | 5 | 1 | . | . | 1543 |
| 1.50-1.99 | . | . | 97 | 594 | 18 | 14 | 2 | 4 | 1 | . | 730 |
| 2.00-2.49 | . | . | . | 318 | 5 | 8 | 1 | 7 | 1 | . | 340 |
| 2.50-2.99 | . | . | . | 20 | 27 | 1 | 1 | 4 | 3 | . | 56 |
| 3.00-3.49 | . | . | . | . | 5 | . | 1 | 2 | 1 | . | 9 |
| 3.50-3.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 917 | 2094 | 3454 | 1180 | 204 | 105 | 11 | 19 | 7 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 7487.

STATION S20 47.08N 90.92W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1197 | 2020 | 389 | 73 | 21 | 3 | . | . | . | . | 3703 |
| 0.50-0.99 | . | 1122 | 2232 | 162 | 45 | 25 | . | . | . | . | 3586 |
| 1.00-1.49 | . | . | 1143 | 299 | 43 | 19 | 2 | . | . | . | 1506 |
| 1.50-1.99 | . | . | 75 | 520 | 52 | 21 | 2 | 2 | . | . | 672 |
| 2.00-2.49 | . | . | . | 242 | 44 | 18 | 2 | 3 | . | . | 309 |
| 2.50-2.99 | . | . | . | 9 | 70 | 14 | 5 | 3 | 1 | . | 102 |
| 3.00-3.49 | . | . | . | . | 11 | 26 | 5 | 1 | 1 | . | 44 |
| 3.50-3.99 | . | . | . | . | . | 14 | 5 | 1 | 1 | . | 21 |
| 4.00-4.49 | . | . | . | . | . | 1 | 8 | 1 | . | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 2 | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1197 | 3142 | 3839 | 1305 | 286 | 141 | 32 | 17 | 5 | 0 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 8.4 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S20 (47.08N 90.92W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.7 | 0.9 | 1.1 | 1.0 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 1.0 | 1.3 | 1.2 | 0.9 |
| 1957 | 1.1 | 1.0 | 0.8 | 0.8 | 0.9 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.1 | 0.9 | 0.8 |
| 1958 | 0.8 | 1.1 | 0.6 | 1.0 | 0.7 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 1.3 | 1.0 | 0.8 |
| 1959 | 1.0 | 0.9 | 0.8 | 0.8 | 0.8 | 0.5 | 0.5 | 0.4 | 0.7 | 0.9 | 1.1 | 1.2 | 0.8 |
| 1960 | 0.9 | 0.9 | 0.9 | 1.0 | 0.7 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 1.2 | 1.0 | 0.8 |
| 1961 | 0.9 | 0.9 | 1.1 | 0.8 | 0.7 | 0.6 | 0.4 | 0.3 | 0.5 | 0.6 | 0.7 | 0.8 | 0.7 |
| 1962 | 1.2 | 1.0 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 | 1.1 | 0.8 |
| 1963 | 1.0 | 1.1 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 1.0 | 1.1 | 0.7 |
| 1964 | 1.2 | 1.0 | 1.0 | 0.9 | 0.8 | 0.5 | 0.4 | 0.6 | 0.6 | 0.7 | 1.0 | 0.8 | 0.8 |
| 1965 | 1.1 | 1.1 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.9 | 1.2 | 1.3 | 0.8 |
| 1966 | 1.1 | 1.1 | 1.7 | 1.0 | 0.8 | 0.6 | 0.5 | 0.6 | 0.6 | 1.0 | 1.0 | 1.0 | 0.9 |
| 1967 | 1.3 | 1.0 | 1.0 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 1.1 | 0.9 | 1.2 | 0.9 |
| 1968 | 1.0 | 1.3 | 1.1 | 1.0 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 1.1 | 1.2 | 0.9 |
| 1969 | 1.1 | 0.8 | 0.9 | 0.8 | 0.7 | 0.6 | 0.4 | 0.6 | 0.5 | 0.8 | 0.9 | 0.8 | 0.7 |
| 1970 | 0.9 | 1.2 | 0.9 | 1.1 | 1.0 | 0.6 | 0.5 | 0.5 | 0.8 | 0.7 | 0.9 | 1.0 | 0.8 |
| 1971 | 1.1 | 1.3 | 1.0 | 0.9 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.8 | 1.0 | 0.8 | 0.8 |
| 1972 | 1.2 | 0.9 | 1.1 | 0.8 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.9 | 0.7 | 0.8 | 0.7 |
| 1973 | 0.9 | 0.8 | 0.8 | 0.7 | 0.7 | 0.5 | 0.4 | 0.3 | 0.6 | 0.7 | 1.0 | 0.9 | 0.7 |
| 1974 | 0.9 | 0.7 | 1.0 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 1.1 | 1.0 | 0.7 |
| 1975 | 1.1 | 0.9 | 1.3 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 1.1 | 0.8 | 0.8 |
| 1976 | 1.1 | 1.0 | 1.4 | 0.8 | 0.7 | 0.7 | 0.4 | 0.3 | 0.4 | 0.5 | 0.8 | 0.8 | 0.7 |
| 1977 | 0.9 | 1.2 | 1.4 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.7 | 0.8 | 0.9 | 1.1 | 0.8 |
| 1978 | 1.0 | 0.7 | 0.6 | 0.8 | 0.5 | 0.4 | 0.4 | 0.5 | 0.9 | 0.7 | 0.9 | 1.0 | 0.7 |
| 1979 | 0.8 | 0.7 | 1.0 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1980 | 0.9 | 0.7 | 0.8 | 0.6 | 0.6 | 0.6 | 0.4 | 0.5 | 0.7 | 1.0 | 0.7 | 1.0 | 0.7 |
| 1981 | 0.8 | 0.9 | 0.9 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.7 | 0.8 | 0.7 | 0.7 | 0.7 |
| 1982 | 1.2 | 0.9 | 1.2 | 0.8 | 0.7 | 0.4 | 0.3 | 0.3 | 0.6 | 0.8 | 0.9 | 1.0 | 0.8 |
| 1983 | 0.9 | 0.9 | 1.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.7 | 1.3 | 1.1 | 0.8 |
| 1984 | 0.9 | 0.9 | 1.0 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 1.0 | 0.9 | 1.1 | 0.8 |
| 1985 | 1.1 | 0.9 | 1.4 | 0.8 | 0.6 | 0.6 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 1.1 | 0.8 |
| 1986 | 1.1 | 0.7 | 1.0 | 1.0 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.7 | 1.1 | 0.9 | 0.8 |
| 1987 | 0.8 | 0.9 | 1.3 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.8 | 0.9 | 0.8 | 0.7 |
| MEAN | 1.0 | 0.9 | 1.0 | 0.8 | 0.7 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 1.0 | 1.0 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S20 (47.08N 90.92W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.0 | 3.8 | 6.3 | 3.8 | 3.6 | 2.7 | 1.2 | 1.8 | 2.3 | 3.1 | 4.8 | 4.9 |
| 1957 | 2.8 | 2.4 | 3.8 | 4.4 | 3.0 | 2.1 | 2.4 | 1.4 | 2.3 | 1.9 | 3.2 | 3.4 |
| 1958 | 3.0 | 4.6 | 2.4 | 5.3 | 2.6 | 2.0 | 1.6 | 1.7 | 2.6 | 2.9 | 4.4 | 2.9 |
| 1959 | 2.9 | 3.0 | 3.3 | 2.7 | 2.8 | 2.5 | 1.7 | 1.7 | 2.5 | 3.4 | 3.5 | 6.1 |
| 1960 | 2.7 | 4.1 | 3.9 | 3.0 | 2.7 | 2.3 | 1.3 | 2.4 | 2.0 | 3.2 | 6.3 | 2.6 |
| 1961 | 2.7 | 2.4 | 2.5 | 2.9 | 2.6 | 1.8 | 2.4 | 1.1 | 2.0 | 2.3 | 3.3 | 2.6 |
| 1962 | 3.2 | 3.3 | 4.6 | 2.4 | 1.9 | 2.2 | 1.3 | 1.6 | 2.0 | 3.3 | 2.8 | 3.3 |
| 1963 | 2.8 | 3.9 | 2.8 | 2.5 | 2.1 | 2.6 | 1.4 | 1.6 | 2.0 | 2.2 | 2.6 | 4.2 |
| 1964 | 4.2 | 3.2 | 3.4 | 2.8 | 2.8 | 2.1 | 1.2 | 3.1 | 3.0 | 3.3 | 3.9 | 3.6 |
| 1965 | 3.5 | 4.6 | 4.2 | 2.3 | 2.2 | 2.0 | 1.2 | 1.2 | 1.9 | 2.7 | 5.9 | 5.1 |
| 1966 | 3.4 | 3.9 | 7.0 | 5.1 | 2.6 | 2.1 | 1.2 | 2.1 | 2.3 | 3.5 | 4.2 | 2.8 |
| 1967 | 7.4 | 2.7 | 3.8 | 2.5 | 4.1 | 2.6 | 1.7 | 1.6 | 2.2 | 3.4 | 2.3 | 3.5 |
| 1968 | 3.6 | 3.1 | 3.3 | 3.7 | 2.1 | 1.9 | 2.8 | 1.9 | 2.1 | 2.5 | 4.6 | 4.8 |
| 1969 | 4.0 | 2.6 | 3.3 | 3.5 | 2.0 | 1.9 | 1.4 | 3.1 | 1.6 | 2.9 | 2.4 | 3.6 |
| 1970 | 2.2 | 3.1 | 4.2 | 3.5 | 3.4 | 1.8 | 1.6 | 1.6 | 2.6 | 3.0 | 2.8 | 4.1 |
| 1971 | 2.8 | 4.9 | 4.1 | 3.0 | 2.5 | 1.7 | 1.5 | 1.3 | 1.3 | 3.9 | 4.0 | 2.4 |
| 1972 | 3.4 | 4.2 | 3.8 | 3.0 | 3.0 | 1.8 | 1.4 | 1.2 | 2.0 | 2.8 | 3.4 | 5.4 |
| 1973 | 3.3 | 2.1 | 3.1 | 1.8 | 2.4 | 1.3 | 1.7 | 0.9 | 1.7 | 2.6 | 3.3 | 3.2 |
| 1974 | 3.2 | 2.7 | 4.1 | 3.5 | 2.6 | 1.7 | 2.2 | 1.5 | 1.6 | 2.0 | 3.8 | 3.8 |
| 1975 | 4.8 | 3.5 | 5.5 | 3.6 | 1.5 | 1.3 | 1.7 | 2.3 | 1.8 | 2.6 | 4.5 | 2.6 |
| 1976 | 3.2 | 3.4 | 5.5 | 3.0 | 2.0 | 2.3 | 1.1 | 1.2 | 2.1 | 2.1 | 2.4 | 2.8 |
| 1977 | 2.8 | 6.0 | 5.5 | 1.8 | 1.9 | 1.3 | 1.8 | 1.3 | 3.2 | 3.4 | 4.0 | 5.7 |
| 1978 | 2.8 | 2.1 | 2.6 | 2.4 | 1.8 | 1.6 | 1.3 | 1.7 | 3.9 | 2.3 | 2.7 | 3.5 |
| 1979 | 2.0 | 3.6 | 3.1 | 3.7 | 2.1 | 1.5 | 1.4 | 1.3 | 2.1 | 2.0 | 2.8 | 2.4 |
| 1980 | 3.4 | 3.6 | 3.3 | 1.8 | 2.5 | 2.4 | 1.0 | 1.6 | 2.6 | 2.8 | 2.1 | 3.1 |
| 1981 | 2.0 | 2.4 | 3.5 | 2.8 | 1.9 | 2.5 | 1.0 | 1.2 | 3.2 | 2.6 | 2.4 | 2.2 |
| 1982 | 4.9 | 3.2 | 4.2 | 3.3 | 1.7 | 2.6 | 1.4 | 1.2 | 1.9 | 3.4 | 3.5 | 2.9 |
| 1983 | 3.0 | 3.9 | 4.9 | 2.6 | 2.2 | 1.5 | 1.4 | 1.8 | 2.2 | 2.1 | 4.6 | 3.7 |
| 1984 | 2.6 | 3.1 | 3.6 | 3.4 | 2.4 | 2.6 | 1.8 | 1.6 | 2.2 | 4.6 | 2.8 | 2.8 |
| 1985 | 3.9 | 4.1 | 8.4 | 2.9 | 1.8 | 2.6 | 1.1 | 2.2 | 2.4 | 2.6 | 3.9 | 3.5 |
| 1986 | 3.8 | 3.2 | 3.6 | 4.1 | 2.6 | 1.3 | 2.0 | 1.2 | 2.9 | 2.3 | 5.3 | 3.2 |
| 1987 | 2.4 | 4.8 | 4.7 | 2.2 | 3.2 | 1.6 | 1.4 | 1.3 | 1.6 | 2.4 | 2.6 | 3.1 |

32 YR. STATISTICS FOR WIS STATION S20

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 3.9 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.3 |
| LARGEST WAVE HS . . . . . | (METERS) | 8.4 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 65.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 85030421 |

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 401 | 861 | 211 | 35 | 5 | . | . | . | . | . | 1513 |
| 0.50-0.99 | . | 318 | 1150 | 117 | 63 | 19 | . | . | . | . | 1667 |
| 1.00-1.49 | . | . | 350 | 376 | 44 | 39 | 1 | . | . | . | 810 |
| 1.50-1.99 | . | . | 10 | 264 | 55 | 22 | 9 | . | . | . | 360 |
| 2.00-2.49 | . | . | . | 89 | 65 | 14 | 3 | 4 | . | . | 175 |
| 2.50-2.99 | . | . | . | 4 | 130 | 8 | 4 | 7 | 1 | . | 154 |
| 3.00-3.49 | . | . | . | . | 11 | 23 | 1 | 5 | 2 | . | 42 |
| 3.50-3.99 | . | . | . | . | 1 | 7 | 1 | . | 1 | . | 10 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | 1 | 2 | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 3 | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 401 | 1179 | 1721 | 885 | 374 | 132 | 20 | 16 | 6 | 5 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 4448.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 349 | 652 | 186 | 23 | 1 | . | . | . | . | . | 1211 |
| 0.50-0.99 | . | 255 | 761 | 110 | 32 | 7 | . | . | . | . | 1165 |
| 1.00-1.49 | . | . | 132 | 231 | 50 | 33 | . | . | . | . | 446 |
| 1.50-1.99 | . | . | 5 | 106 | 62 | 26 | 4 | 1 | . | . | 204 |
| 2.00-2.49 | . | . | . | 25 | 33 | 42 | 4 | 3 | . | . | 107 |
| 2.50-2.99 | . | . | . | . | 41 | 10 | 12 | 2 | . | . | 65 |
| 3.00-3.49 | . | . | . | . | 5 | 29 | 5 | 4 | 2 | . | 45 |
| 3.50-3.99 | . | . | . | . | . | 13 | 6 | 1 | 4 | . | 24 |
| 4.00-4.49 | . | . | . | . | . | 3 | 6 | 3 | 1 | . | 13 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 1 | 3 | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 2 | 1 | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 349 | 907 | 1084 | 495 | 224 | 163 | 40 | 16 | 12 | 3 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 3095.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 449 | 833 | 221 | 21 | 3 | . | . | . | . | . | 1527 |
| 0.50-0.99 | . | 233 | 873 | 128 | 33 | 9 | . | . | . | . | 1276 |
| 1.00-1.49 | . | . | 172 | 270 | 42 | 12 | . | . | . | . | 496 |
| 1.50-1.99 | . | . | 2 | 85 | 71 | 33 | 1 | 3 | . | . | 195 |
| 2.00-2.49 | . | . | . | 18 | 44 | 32 | 2 | . | . | . | 96 |
| 2.50-2.99 | . | . | . | . | 22 | 18 | 7 | 6 | . | . | 53 |
| 3.00-3.49 | . | . | . | . | 1 | 25 | 9 | 3 | . | . | 38 |
| 3.50-3.99 | . | . | . | . | . | 12 | 3 | 3 | . | . | 18 |
| 4.00-4.49 | . | . | . | . | . | 1 | 4 | 3 | 2 | 2 | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 4 | 3 | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 449 | 1066 | 1268 | 522 | 216 | 142 | 28 | 22 | 10 | 6 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 3501.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 427 | 867 | 170 | 37 | 2 | . | . | . | . | . | 1503 |
| 0.50-0.99 | . | 441 | 1244 | 121 | 18 | 3 | . | . | . | . | 1827 |
| 1.00-1.49 | . | . | 305 | 375 | 34 | 13 | . | . | . | . | 727 |
| 1.50-1.99 | . | . | 6 | 186 | 78 | 22 | . | . | . | . | 292 |
| 2.00-2.49 | . | . | . | 51 | 51 | 29 | 6 | . | . | . | 137 |
| 2.50-2.99 | . | . | . | . | 51 | 33 | 9 | 2 | . | . | 95 |
| 3.00-3.49 | . | . | . | . | 7 | 68 | 6 | 1 | 2 | . | 84 |
| 3.50-3.99 | . | . | . | . | . | 42 | 7 | 5 | 2 | . | 56 |
| 4.00-4.49 | . | . | . | . | . | 6 | 28 | 2 | 4 | . | 40 |
| 4.50-4.99 | . | . | . | . | . | . | 11 | 5 | 4 | 2 | 22 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 16 | 4 | . | 21 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 3 | 1 | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 427 | 1308 | 1725 | 770 | 241 | 216 | 68 | 34 | 22 | 5 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 4521.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 775 | 1525 | 329 | 41 | 3 | . | . | 1 | . | . | 2674 |
| 0.50-0.99 | . | 920 | 2591 | 136 | 33 | 5 | . | . | . | . | 3685 |
| 1.00-1.49 | . | . | 731 | 759 | 35 | 14 | 1 | . | . | . | 1540 |
| 1.50-1.99 | . | . | 22 | 405 | 120 | 27 | 1 | 2 | . | . | 577 |
| 2.00-2.49 | . | . | . | 78 | 90 | 48 | 5 | 2 | . | . | 223 |
| 2.50-2.99 | . | . | . | 3 | 110 | 57 | . | 4 | . | . | 174 |
| 3.00-3.49 | . | . | . | . | 7 | 124 | 2 | 3 | 2 | . | 138 |
| 3.50-3.99 | . | . | . | . | . | 75 | 2 | . | . | . | 77 |
| 4.00-4.49 | . | . | . | . | . | 12 | 34 | . | . | . | 46 |
| 4.50-4.99 | . | . | . | . | . | . | 14 | 6 | . | . | 20 |
| 5.00-5.49 | . | . | . | . | . | . | . | 6 | . | 1 | 7 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 1 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 775 | 2445 | 3673 | 1422 | 398 | 362 | 59 | 27 | 4 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.2 NO. OF CASES= 8587.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 710 | 1350 | 234 | 39 | 1 | 2 | . | . | . | . | 2336 |
| 0.50-0.99 | . | 624 | 1497 | 79 | 17 | 5 | . | . | . | . | 2222 |
| 1.00-1.49 | . | . | 394 | 243 | 20 | 17 | . | 1 | . | . | 675 |
| 1.50-1.99 | . | . | 8 | 131 | 41 | 18 | 2 | 2 | . | . | 202 |
| 2.00-2.49 | . | . | . | 23 | 16 | 6 | 1 | 1 | . | . | 47 |
| 2.50-2.99 | . | . | . | . | 16 | 12 | . | 1 | 1 | . | 30 |
| 3.00-3.49 | . | . | . | . | 1 | 12 | . | . | . | . | 13 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 710 | 1974 | 2133 | 515 | 112 | 73 | 3 | 5 | 1 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 5178.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 750 | 1155 | 224 | 32 | 6 | . | . | . | . | . | 2167 |
| 0.50-0.99 | . | 450 | 905 | 59 | 13 | . | . | . | . | . | 1427 |
| 1.00-1.49 | . | . | 188 | 72 | 7 | 6 | 1 | . | . | . | 274 |
| 1.50-1.99 | . | . | 3 | 63 | 5 | 4 | . | . | . | . | 75 |
| 2.00-2.49 | . | . | . | 14 | 5 | . | 2 | . | . | . | 21 |
| 2.50-2.99 | . | . | . | 1 | 3 | 1 | . | 1 | 1 | . | 7 |
| 3.00-3.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 750 | 1605 | 1320 | 241 | 39 | 12 | 3 | 1 | 1 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 3723.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 680 | 1160 | 193 | 28 | 4 | . | . | . | . | . | 2065 |
| 0.50-0.99 | . | 422 | 900 | 23 | 6 | 1 | . | . | . | . | 1352 |
| 1.00-1.49 | . | . | 212 | 41 | 8 | 1 | . | . | . | . | 262 |
| 1.50-1.99 | . | . | 7 | 78 | 2 | 2 | . | . | 1 | . | 90 |
| 2.00-2.49 | . | . | . | 24 | 1 | . | . | . | . | . | 25 |
| 2.50-2.99 | . | . | . | . | 6 | . | . | . | . | . | 6 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 680 | 1582 | 1312 | 194 | 27 | 4 | 0 | 0 | 2 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 3562.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 678 | 1176 | 193 | 39 | 6 | . | 1 | 1 | . | . | 2094 |
| 0.50-0.99 | . | 414 | 987 | 36 | 11 | 1 | . | . | . | . | 1449 |
| 1.00-1.49 | . | . | 418 | 39 | 6 | 2 | . | . | . | . | 465 |
| 1.50-1.99 | . | . | 25 | 163 | 2 | 2 | . | . | . | . | 192 |
| 2.00-2.49 | . | . | . | 72 | 9 | . | . | . | . | . | 81 |
| 2.50-2.99 | . | . | . | . | 4 | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 678 | 1590 | 1623 | 349 | 38 | 8 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 4018.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 526 | 960 | 144 | 31 | 2 | . | . | . | . | . | 1663 |
| 0.50-0.99 | . | 568 | 466 | 24 | 7 | 4 | . | . | 1 | . | 1070 |
| 1.00-1.49 | . | . | 216 | 36 | 3 | 2 | . | . | . | . | 257 |
| 1.50-1.99 | . | . | 23 | 79 | . | . | . | 1 | . | . | 103 |
| 2.00-2.49 | . | . | . | 37 | 2 | . | . | . | . | . | 39 |
| 2.50-2.99 | . | . | . | . | 5 | . | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | 1 | 1 | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 526 | 1528 | 849 | 207 | 20 | 7 | 0 | 1 | 1 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 2941.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 573 | 1261 | 209 | 39 | 6 | 1 | . | . | . | . | 2089 |
| 0.50-0.99 | . | 946 | 507 | 82 | 18 | 4 | . | . | . | . | 1557 |
| 1.00-1.49 | . | . | 198 | 66 | 8 | 5 | . | . | . | . | 277 |
| 1.50-1.99 | . | . | 69 | 41 | 6 | 1 | . | . | . | . | 117 |
| 2.00-2.49 | . | . | 1 | 1 | 2 | . | . | 2 | . | . | 6 |
| 2.50-2.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 573 | 2207 | 984 | 229 | 40 | 13 | 0 | 2 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 3794.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 698 | 1582 | 342 | 56 | 9 | . | . | . | . | . | 2687 |
| 0.50-0.99 | . | 1075 | 1688 | 157 | 13 | 9 | . | . | . | . | 2942 |
| 1.00-1.49 | . | . | 467 | 563 | 9 | 2 | . | . | . | . | 1041 |
| 1.50-1.99 | . | . | 38 | 257 | 70 | 3 | . | 1 | . | . | 369 |
| 2.00-2.49 | . | . | . | 41 | 42 | 5 | . | . | . | . | 88 |
| 2.50-2.99 | . | . | . | 3 | 25 | 9 | . | . | . | . | 37 |
| 3.00-3.49 | . | . | . | . | 1 | 10 | . | . | . | . | 11 |
| 3.50-3.99 | . | . | . | . | . | 4 | 1 | 1 | 1 | . | 7 |
| 4.00-4.49 | . | . | . | . | . | . | 4 | 1 | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 698 | 2657 | 2535 | 1077 | 169 | 42 | 5 | 3 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 6734.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1156 | 2612 | 333 | 79 | 12 | . | . | . | . | . | 4192 |
| 0.50-0.99 | . | 1002 | 3019 | 64 | 40 | 10 | . | . | . | . | 4135 |
| 1.00-1.49 | . | . | 993 | 771 | 13 | 7 | 1 | . | . | . | 1785 |
| 1.50-1.99 | . | . | 71 | 759 | 102 | 3 | . | 1 | . | . | 936 |
| 2.00-2.49 | . | . | . | 279 | 172 | 6 | . | . | 1 | . | 458 |
| 2.50-2.99 | . | . | . | 8 | 283 | 21 | . | . | . | . | 312 |
| 3.00-3.49 | . | . | . | . | 23 | 102 | . | . | . | . | 125 |
| 3.50-3.99 | . | . | . | . | . | 48 | 1 | . | . | . | 49 |
| 4.00-4.49 | . | . | . | . | . | 2 | 2 | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1156 | 3614 | 4416 | 1960 | 645 | 199 | 7 | 1 | 1 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 11231.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1052 | 2748 | 306 | 55 | 12 | . | . | . | . | . | 4173 |
| 0.50-0.99 | . | 994 | 3123 | 83 | 35 | 21 | 1 | . | . | . | 4257 |
| 1.00-1.49 | . | . | 1198 | 560 | 11 | 6 | 1 | . | . | . | 1776 |
| 1.50-1.99 | . | . | 60 | 999 | 42 | 5 | . | . | . | . | 1106 |
| 2.00-2.49 | . | . | . | 447 | 238 | 1 | . | . | . | . | 686 |
| 2.50-2.99 | . | . | . | 2 | 410 | 9 | . | 1 | . | . | 422 |
| 3.00-3.49 | . | . | . | . | 37 | 106 | . | . | . | . | 143 |
| 3.50-3.99 | . | . | . | . | 1 | 33 | 1 | . | . | . | 35 |
| 4.00-4.49 | . | . | . | . | . | 6 | 2 | . | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1052 | 3742 | 4687 | 2146 | 786 | 187 | 7 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.1 NO. OF CASES= 11804.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 760 | 1788 | 305 | 74 | 21 | 3 | . | . | . | . | 2951 |
| 0.50-0.99 | . | 802 | 3071 | 115 | 56 | 35 | . | . | . | . | 4079 |
| 1.00-1.49 | . | . | 1367 | 402 | 12 | 21 | . | 1 | . | . | 1803 |
| 1.50-1.99 | . | . | 44 | 1029 | 5 | 1 | 1 | . | . | . | 1080 |
| 2.00-2.49 | . | . | . | 591 | 183 | 2 | . | . | . | . | 776 |
| 2.50-2.99 | . | . | . | 1 | 346 | . | . | . | . | . | 347 |
| 3.00-3.49 | . | . | . | . | 37 | 12 | . | . | . | . | 49 |
| 3.50-3.99 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 760 | 2590 | 4787 | 2212 | 660 | 78 | 1 | 1 | 0 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.2 NO. OF CASES= 10382.

STATION S21 47.08N 90.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

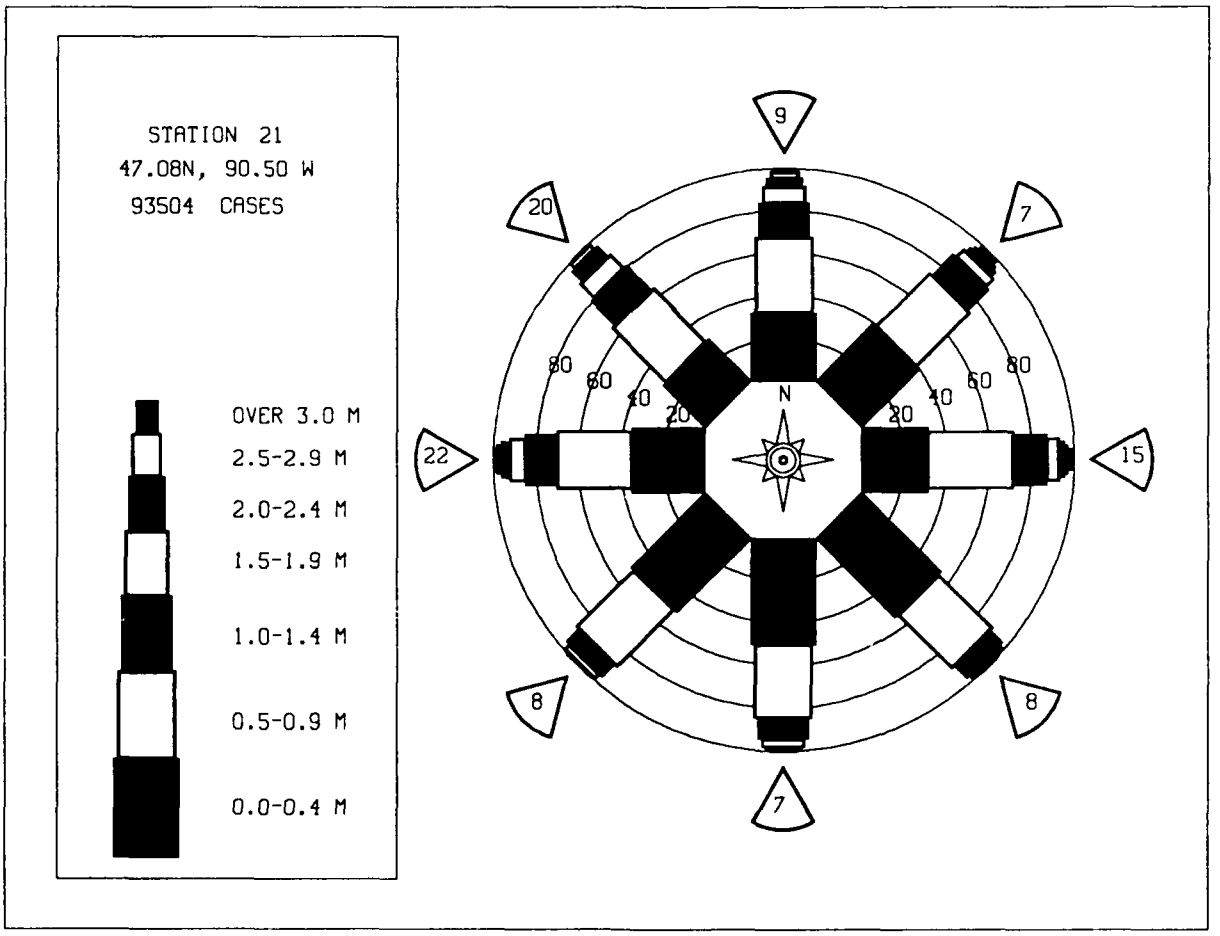
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 474 | 967 | 221 | 41 | 17 | . | . | . | . | . | 1720 |
| 0.50-0.99 | . | 460 | 1753 | 83 | 51 | 20 | . | . | . | . | 2367 |
| 1.00-1.49 | . | . | 752 | 288 | 37 | 35 | 2 | . | . | . | 1114 |
| 1.50-1.99 | . | . | 28 | 512 | 18 | 11 | 2 | . | . | . | 571 |
| 2.00-2.49 | . | . | . | 248 | 112 | 3 | . | . | . | . | 363 |
| 2.50-2.99 | . | . | . | 4 | 206 | 1 | . | 1 | . | . | 212 |
| 3.00-3.49 | . | . | . | . | 22 | 14 | . | . | 1 | . | 37 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 474 | 1427 | 2754 | 1176 | 463 | 87 | 4 | 1 | 1 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 5985.

STATION S21 47.08N 90.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1046 | 2150 | 382 | 67 | 11 | . | . | . | . | . | 3656 |
| 0.50-0.99 | . | 993 | 2454 | 142 | 45 | 15 | . | . | . | . | 3648 |
| 1.00-1.49 | . | . | 810 | 509 | 34 | 22 | . | . | . | . | 1375 |
| 1.50-1.99 | . | . | 42 | 516 | 68 | 18 | 2 | 1 | . | . | 647 |
| 2.00-2.49 | . | . | . | 204 | 107 | 19 | 2 | 1 | . | . | 333 |
| 2.50-2.99 | . | . | . | 2 | 166 | 18 | 3 | 2 | . | . | 191 |
| 3.00-3.49 | . | . | . | . | 15 | 53 | 2 | 1 | 1 | . | 72 |
| 3.50-3.99 | . | . | . | . | . | 24 | 2 | 1 | . | . | 27 |
| 4.00-4.49 | . | . | . | . | . | 3 | 8 | . | . | . | 11 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 1 | 1 | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1046 | 3143 | 3688 | 1440 | 446 | 172 | 22 | 9 | 3 | 0 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S21 (47.08N 90.50W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.7 | 1.0 | 1.1 | 1.0 | 0.8 | 0.6 | 0.5 | 0.5 | 0.7 | 1.1 | 1.4 | 1.2 | 0.9 |
| 1957 | 1.2 | 1.1 | 0.8 | 0.8 | 0.9 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.2 | 1.0 | 0.8 |
| 1958 | 0.8 | 1.2 | 0.6 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 0.9 | 1.3 | 1.0 | 0.8 |
| 1959 | 1.0 | 0.9 | 0.8 | 0.8 | 0.8 | 0.5 | 0.4 | 0.4 | 0.7 | 0.9 | 1.2 | 1.2 | 0.8 |
| 1960 | 1.0 | 1.0 | 0.9 | 1.0 | 0.7 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 1.2 | 1.1 | 0.8 |
| 1961 | 0.9 | 0.9 | 1.1 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1962 | 1.3 | 0.9 | 0.9 | 0.8 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 0.9 | 1.2 | 0.8 |
| 1963 | 1.1 | 1.1 | 1.0 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 1.0 | 1.1 | 0.8 |
| 1964 | 1.2 | 1.0 | 1.1 | 0.9 | 0.8 | 0.5 | 0.4 | 0.6 | 0.7 | 0.8 | 1.0 | 0.8 | 0.8 |
| 1965 | 1.2 | 1.2 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.9 | 1.3 | 1.3 | 0.8 |
| 1966 | 1.3 | 1.2 | 1.8 | 1.0 | 0.9 | 0.6 | 0.5 | 0.6 | 0.7 | 1.2 | 1.1 | 1.1 | 1.0 |
| 1967 | 1.4 | 1.1 | 1.1 | 0.9 | 0.8 | 0.6 | 0.6 | 0.6 | 0.7 | 1.2 | 1.1 | 1.4 | 1.0 |
| 1968 | 1.0 | 1.5 | 1.2 | 1.0 | 0.7 | 0.7 | 0.6 | 0.6 | 0.7 | 0.9 | 1.3 | 1.3 | 1.0 |
| 1969 | 1.3 | 0.8 | 1.0 | 0.8 | 0.7 | 0.6 | 0.4 | 0.6 | 0.6 | 0.9 | 0.9 | 0.8 | 0.8 |
| 1970 | 0.9 | 1.2 | 0.9 | 1.0 | 0.9 | 0.6 | 0.5 | 0.5 | 0.8 | 0.7 | 1.0 | 1.0 | 0.8 |
| 1971 | 1.2 | 1.3 | 1.0 | 0.9 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.8 | 1.0 | 0.8 | 0.8 |
| 1972 | 1.3 | 0.9 | 1.1 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.9 | 0.7 | 0.9 | 0.7 |
| 1973 | 0.9 | 0.9 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.3 | 0.6 | 0.8 | 1.1 | 1.0 | 0.7 |
| 1974 | 0.9 | 0.7 | 1.0 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 1.1 | 0.9 | 0.7 |
| 1975 | 1.1 | 0.9 | 1.3 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.9 | 1.1 | 0.8 | 0.8 |
| 1976 | 1.1 | 1.1 | 1.4 | 0.7 | 0.6 | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.9 | 0.9 | 0.7 |
| 1977 | 1.0 | 1.2 | 1.4 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 0.9 | 1.2 | 0.8 |
| 1978 | 1.0 | 0.7 | 0.7 | 0.8 | 0.5 | 0.4 | 0.4 | 0.5 | 0.9 | 0.7 | 0.9 | 1.0 | 0.7 |
| 1979 | 0.8 | 0.7 | 1.1 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.7 | 0.7 | 0.9 | 1.0 | 0.7 |
| 1980 | 1.0 | 0.8 | 0.8 | 0.6 | 0.5 | 0.6 | 0.3 | 0.5 | 0.7 | 1.0 | 0.7 | 1.1 | 0.7 |
| 1981 | 0.9 | 0.9 | 0.9 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.7 | 0.8 | 0.8 | 0.8 | 0.7 |
| 1982 | 1.3 | 0.9 | 1.2 | 0.8 | 0.7 | 0.5 | 0.3 | 0.3 | 0.6 | 0.8 | 0.9 | 1.1 | 0.8 |
| 1983 | 1.0 | 0.9 | 1.3 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.6 | 0.7 | 1.3 | 1.2 | 0.8 |
| 1984 | 0.9 | 0.9 | 1.1 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.9 | 1.1 | 1.2 | 0.8 |
| 1985 | 1.2 | 0.9 | 1.4 | 0.8 | 0.6 | 0.6 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 | 1.2 | 0.8 |
| 1986 | 1.1 | 0.7 | 1.1 | 1.0 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.7 | 1.0 | 0.9 | 0.8 |
| 1987 | 0.8 | 0.9 | 1.2 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.8 | 0.9 | 0.8 | 0.7 |
| MEAN | 1.1 | 1.0 | 1.1 | 0.8 | 0.7 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 1.0 | 1.0 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S21 (47.08N 90.50W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.3 | 3.9 | 6.0 | 3.6 | 3.1 | 2.1 | 1.2 | 1.6 | 2.3 | 3.6 | 4.6 | 4.6 |
| 1957 | 3.1 | 2.7 | 3.2 | 4.2 | 2.8 | 1.9 | 2.2 | 2.0 | 2.6 | 2.3 | 4.1 | 3.9 |
| 1958 | 3.7 | 3.9 | 2.0 | 4.3 | 3.1 | 2.1 | 2.0 | 1.6 | 2.8 | 3.3 | 3.9 | 3.4 |
| 1959 | 3.3 | 3.4 | 4.1 | 3.1 | 3.2 | 2.7 | 1.7 | 2.1 | 3.0 | 3.2 | 3.6 | 5.5 |
| 1960 | 3.1 | 3.2 | 3.5 | 3.2 | 3.2 | 2.1 | 1.9 | 2.0 | 2.5 | 3.1 | 5.2 | 3.0 |
| 1961 | 3.1 | 2.8 | 2.7 | 3.2 | 2.0 | 1.6 | 2.7 | 1.5 | 2.0 | 2.3 | 3.8 | 2.9 |
| 1962 | 3.6 | 3.0 | 4.1 | 2.7 | 2.0 | 1.5 | 2.0 | 1.4 | 2.2 | 4.0 | 3.1 | 3.4 |
| 1963 | 3.3 | 3.4 | 3.1 | 2.9 | 2.2 | 2.2 | 1.5 | 1.5 | 2.3 | 2.4 | 3.0 | 4.2 |
| 1964 | 4.1 | 3.6 | 3.4 | 3.2 | 3.2 | 1.7 | 1.1 | 2.6 | 2.5 | 3.8 | 3.5 | 3.0 |
| 1965 | 3.5 | 4.1 | 3.7 | 2.3 | 2.1 | 1.9 | 1.3 | 1.4 | 2.4 | 3.1 | 5.7 | 4.6 |
| 1966 | 4.1 | 3.5 | 6.3 | 4.3 | 3.0 | 2.7 | 1.4 | 2.2 | 2.8 | 4.6 | 4.0 | 3.5 |
| 1967 | 6.9 | 3.4 | 3.8 | 3.0 | 3.5 | 2.5 | 2.8 | 1.9 | 2.8 | 3.9 | 3.0 | 3.5 |
| 1968 | 3.1 | 4.1 | 4.2 | 3.9 | 2.5 | 2.0 | 2.5 | 2.3 | 2.5 | 2.9 | 4.8 | 5.3 |
| 1969 | 3.9 | 3.4 | 4.1 | 3.4 | 1.8 | 1.9 | 1.3 | 3.6 | 1.9 | 3.1 | 2.7 | 3.3 |
| 1970 | 2.8 | 3.1 | 3.7 | 3.8 | 2.9 | 1.7 | 1.6 | 1.7 | 2.8 | 3.6 | 3.1 | 3.7 |
| 1971 | 3.0 | 4.4 | 4.8 | 2.7 | 2.7 | 1.4 | 1.5 | 1.4 | 1.4 | 3.5 | 3.8 | 2.9 |
| 1972 | 3.9 | 3.8 | 3.7 | 2.9 | 2.5 | 1.9 | 1.6 | 1.1 | 2.5 | 3.3 | 3.5 | 5.0 |
| 1973 | 3.2 | 2.2 | 3.5 | 2.4 | 2.6 | 1.3 | 1.8 | 0.9 | 2.3 | 2.8 | 3.1 | 4.0 |
| 1974 | 3.2 | 2.8 | 3.7 | 3.2 | 2.4 | 1.5 | 2.4 | 1.5 | 1.4 | 2.5 | 3.3 | 3.5 |
| 1975 | 4.6 | 4.2 | 5.5 | 3.2 | 1.3 | 1.4 | 1.8 | 2.1 | 2.0 | 3.0 | 4.8 | 2.6 |
| 1976 | 2.9 | 3.6 | 5.5 | 2.8 | 1.9 | 1.7 | 1.1 | 1.7 | 2.5 | 2.0 | 2.9 | 3.4 |
| 1977 | 3.4 | 5.3 | 5.2 | 2.1 | 1.6 | 1.4 | 2.4 | 1.6 | 3.5 | 3.2 | 3.6 | 5.1 |
| 1978 | 3.0 | 2.3 | 3.1 | 2.4 | 1.8 | 1.2 | 1.2 | 1.5 | 3.4 | 2.6 | 2.9 | 3.0 |
| 1979 | 2.4 | 3.8 | 3.1 | 3.6 | 2.5 | 1.4 | 1.5 | 1.5 | 2.0 | 2.7 | 2.4 | 2.6 |
| 1980 | 4.2 | 3.6 | 3.2 | 1.9 | 2.0 | 1.7 | 0.9 | 1.6 | 2.6 | 3.3 | 2.5 | 3.8 |
| 1981 | 2.5 | 2.3 | 3.3 | 3.0 | 1.3 | 2.8 | 1.1 | 1.1 | 3.8 | 2.8 | 2.9 | 2.4 |
| 1982 | 4.4 | 2.7 | 4.9 | 3.5 | 1.8 | 2.8 | 1.3 | 1.2 | 1.9 | 3.2 | 3.2 | 3.2 |
| 1983 | 3.0 | 4.2 | 4.2 | 2.7 | 1.5 | 1.7 | 1.4 | 1.6 | 2.0 | 2.5 | 4.2 | 3.5 |
| 1984 | 3.3 | 2.8 | 3.5 | 3.1 | 2.5 | 2.5 | 2.0 | 1.6 | 1.7 | 3.9 | 3.5 | 3.1 |
| 1985 | 3.7 | 3.5 | 7.1 | 3.3 | 1.8 | 3.2 | 1.2 | 2.4 | 3.0 | 2.8 | 3.2 | 3.9 |
| 1986 | 4.3 | 3.3 | 3.6 | 3.7 | 2.5 | 1.4 | 1.6 | 1.2 | 2.9 | 2.7 | 4.2 | 2.6 |
| 1987 | 2.5 | 4.2 | 4.4 | 2.1 | 2.8 | 1.5 | 1.5 | 1.5 | 1.5 | 3.0 | 2.9 | 2.8 |

32 YR. STATISTICS FOR WIS STATION S21

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.0 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 7.1 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 71.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 85030421 |

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 505 | 1057 | 290 | 51 | 7 | . | . | . | . | . | 1910 |
| 0.50-0.99 | . | 343 | 1232 | 140 | 71 | 19 | . | . | . | . | 1805 |
| 1.00-1.49 | . | . | 352 | 462 | 74 | 62 | 2 | . | . | . | 952 |
| 1.50-1.99 | . | . | 10 | 243 | 122 | 36 | 11 | . | . | . | 422 |
| 2.00-2.49 | . | . | . | 72 | 77 | 23 | 4 | 4 | . | . | 180 |
| 2.50-2.99 | . | . | . | 5 | 145 | 16 | 3 | 6 | 1 | . | 176 |
| 3.00-3.49 | . | . | . | . | 8 | 78 | 1 | 5 | 1 | . | 93 |
| 3.50-3.99 | . | . | . | . | . | 11 | 1 | . | 2 | . | 14 |
| 4.00-4.49 | . | . | . | . | . | 4 | 1 | . | 2 | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 505 | 1400 | 1884 | 973 | 504 | 249 | 23 | 15 | 7 | 4 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 5218.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 456 | 737 | 247 | 23 | 3 | . | . | . | . | . | 1466 |
| 0.50-0.99 | . | 276 | 747 | 127 | 47 | 8 | . | . | . | . | 1205 |
| 1.00-1.49 | . | . | 136 | 228 | 47 | 31 | 1 | . | . | . | 443 |
| 1.50-1.99 | . | . | 5 | 95 | 70 | 33 | 3 | 1 | . | . | 207 |
| 2.00-2.49 | . | . | . | 23 | 27 | 43 | 2 | 2 | . | . | 97 |
| 2.50-2.99 | . | . | . | 1 | 39 | 19 | 11 | 7 | 1 | . | 78 |
| 3.00-3.49 | . | . | . | . | 2 | 38 | 5 | 3 | . | . | 48 |
| 3.50-3.99 | . | . | . | . | . | 16 | 9 | 3 | 3 | 1 | 32 |
| 4.00-4.49 | . | . | . | . | . | 2 | 5 | 3 | 3 | 1 | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | 3 | 1 | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 2 | 1 | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 456 | 1013 | 1135 | 497 | 235 | 190 | 37 | 21 | 12 | 7 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.2 NO. OF CASES= 3385.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 499 | 850 | 288 | 33 | 3 | 1 | . | . | . | . | 1674 |
| 0.50-0.99 | . | 236 | 811 | 158 | 32 | 10 | . | . | . | . | 1247 |
| 1.00-1.49 | . | . | 160 | 260 | 43 | 22 | . | 1 | . | . | 486 |
| 1.50-1.99 | . | . | 1 | 83 | 73 | 31 | 3 | 3 | . | . | 194 |
| 2.00-2.49 | . | . | . | 13 | 28 | 33 | 5 | 3 | . | . | 82 |
| 2.50-2.99 | . | . | . | . | 20 | 20 | 9 | 6 | . | . | 55 |
| 3.00-3.49 | . | . | . | . | 2 | 27 | 4 | 3 | . | . | 36 |
| 3.50-3.99 | . | . | . | . | . | 10 | 5 | 1 | . | 1 | 17 |
| 4.00-4.49 | . | . | . | . | . | 2 | 3 | 3 | . | 2 | 10 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 4 | 6 | 1 | 12 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 499 | 1086 | 1260 | 547 | 201 | 156 | 30 | 26 | 11 | 5 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.1 NO. OF CASES= 3589.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 449 | 888 | 225 | 37 | 1 | 1 | . | . | . | . | 1601 |
| 0.50-0.99 | . | 454 | 1228 | 145 | 27 | 5 | . | . | . | . | 1859 |
| 1.00-1.49 | . | . | 364 | 379 | 45 | 26 | . | . | . | . | 814 |
| 1.50-1.99 | . | . | 8 | 226 | 58 | 27 | 2 | . | . | . | 321 |
| 2.00-2.49 | . | . | . | 80 | 53 | 27 | 5 | 2 | 1 | . | 168 |
| 2.50-2.99 | . | . | . | . | 90 | 23 | 3 | . | . | . | 116 |
| 3.00-3.49 | . | . | . | . | 8 | 67 | 2 | 3 | 2 | . | 82 |
| 3.50-3.99 | . | . | . | . | . | 41 | 5 | 2 | 3 | . | 51 |
| 4.00-4.49 | . | . | . | . | . | 6 | 12 | 1 | 3 | 1 | 23 |
| 4.50-4.99 | . | . | . | . | . | 1 | 6 | 5 | 6 | . | 18 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 10 | 2 | 1 | 14 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 2 | 1 | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 449 | 1342 | 1825 | 867 | 282 | 224 | 36 | 24 | 23 | 4 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 4767.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 819 | 1552 | 405 | 50 | 5 | 1 | . | . | . | . | 2832 |
| 0.50-0.99 | . | 938 | 2518 | 182 | 44 | 6 | . | . | . | . | 3688 |
| 1.00-1.49 | . | . | 756 | 624 | 47 | 20 | 3 | . | . | . | 1450 |
| 1.50-1.99 | . | . | 25 | 454 | 65 | 24 | 4 | 1 | 1 | . | 574 |
| 2.00-2.49 | . | . | . | 114 | 67 | 36 | 3 | 3 | 1 | . | 224 |
| 2.50-2.99 | . | . | . | 1 | 178 | 12 | 2 | 3 | 2 | . | 198 |
| 3.00-3.49 | . | . | . | . | 13 | 90 | . | 2 | . | . | 105 |
| 3.50-3.99 | . | . | . | . | . | 62 | 1 | . | . | . | 63 |
| 4.00-4.49 | . | . | . | . | . | 17 | 3 | . | . | . | 20 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | . | . | 1 | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 819 | 2490 | 3704 | 1425 | 419 | 268 | 23 | 11 | 4 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 8584.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 860 | 1366 | 290 | 45 | 4 | 1 | . | 1 | . | . | 2567 |
| 0.50-0.99 | . | 687 | 1336 | 85 | 27 | 8 | . | . | . | . | 2143 |
| 1.00-1.49 | . | . | 432 | 113 | 28 | 21 | 1 | 1 | . | . | 596 |
| 1.50-1.99 | . | . | 18 | 90 | 17 | 16 | 3 | 2 | . | . | 146 |
| 2.00-2.49 | . | . | . | 20 | 5 | 4 | . | 1 | 1 | . | 31 |
| 2.50-2.99 | . | . | . | 1 | 13 | 2 | . | . | . | . | 16 |
| 3.00-3.49 | . | . | . | . | 2 | . | . | . | 1 | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 860 | 2053 | 2076 | 354 | 96 | 52 | 4 | 5 | 2 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 5157.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 931 | 1211 | 303 | 41 | 3 | 1 | . | . | . | . | 2490 |
| 0.50-0.99 | . | 507 | 777 | 75 | 20 | 3 | . | . | . | . | 1382 |
| 1.00-1.49 | . | . | 286 | 21 | 8 | 13 | . | 1 | . | . | 329 |
| 1.50-1.99 | . | . | 7 | 36 | . | 4 | 1 | . | 1 | . | 49 |
| 2.00-2.49 | . | . | . | 5 | 1 | . | . | 1 | 1 | . | 8 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 931 | 1718 | 1373 | 178 | 32 | 21 | 1 | 2 | 2 | 1 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 3992.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 810 | 1196 | 224 | 32 | 8 | . | . | 1 | . | . | 2271 |
| 0.50-0.99 | . | 514 | 777 | 36 | 12 | 2 | . | 1 | . | . | 1342 |
| 1.00-1.49 | . | . | 314 | 6 | 4 | 2 | 1 | . | . | . | 327 |
| 1.50-1.99 | . | . | 9 | 65 | 2 | 2 | . | . | . | . | 78 |
| 2.00-2.49 | . | . | . | 9 | . | 1 | . | . | . | . | 10 |
| 2.50-2.99 | . | . | . | 1 | 1 | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 810 | 1710 | 1324 | 149 | 27 | 7 | 1 | 3 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.3 NO. OF CASES= 3777.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 913 | 1367 | 241 | 40 | 4 | . | 1 | . | . | . | 2566 |
| 0.50-0.99 | . | 620 | 1023 | 40 | 13 | 2 | . | . | . | . | 1698 |
| 1.00-1.49 | . | . | 652 | 2 | 6 | 2 | . | . | 1 | . | 663 |
| 1.50-1.99 | . | . | 27 | 134 | 1 | 1 | 1 | . | . | . | 164 |
| 2.00-2.49 | . | . | . | 38 | . | . | 1 | . | . | . | 39 |
| 2.50-2.99 | . | . | . | 1 | 2 | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 913 | 1987 | 1943 | 255 | 27 | 5 | 3 | 0 | 1 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.4 NO. OF CASES= 4809.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 683 | 1304 | 194 | 45 | 3 | 2 | . | . | 1 | . | 2232 |
| 0.50-0.99 | . | 1266 | 497 | 45 | 14 | 5 | . | . | . | . | 1827 |
| 1.00-1.49 | . | . | 308 | 8 | 2 | 2 | . | . | . | . | 320 |
| 1.50-1.99 | . | . | 72 | 48 | . | 1 | . | 1 | . | . | 122 |
| 2.00-2.49 | . | . | 1 | 19 | . | . | . | . | . | . | 20 |
| 2.50-2.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 683 | 2570 | 1072 | 165 | 21 | 10 | 0 | 1 | 1 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.2 NO. OF CASES= 4237.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 845 | 1271 | 266 | 63 | 11 | 3 | . | . | . | . | 2459 |
| 0.50-0.99 | . | 1352 | 310 | 60 | 23 | 3 | . | 1 | . | . | 1749 |
| 1.00-1.49 | . | . | 239 | 2 | 4 | 8 | . | . | . | . | 253 |
| 1.50-1.99 | . | . | 50 | 2 | . | 3 | . | . | . | . | 55 |
| 2.00-2.49 | . | . | . | 5 | . | . | . | . | . | . | 5 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 845 | 2623 | 865 | 132 | 38 | 17 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 4235.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 964 | 1170 | 335 | 87 | 20 | 3 | . | . | . | . | 2579 |
| 0.50-0.99 | . | 1095 | 242 | 54 | 31 | 14 | 1 | . | . | . | 1437 |
| 1.00-1.49 | . | . | 154 | 2 | 6 | 7 | . | . | . | . | 169 |
| 1.50-1.99 | . | . | 36 | 6 | 1 | . | 1 | 1 | 1 | . | 46 |
| 2.00-2.49 | . | . | . | 8 | . | . | . | 1 | . | . | 9 |
| 2.50-2.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 964 | 2265 | 767 | 157 | 58 | 24 | 2 | 3 | 2 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 3974.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1544 | 2098 | 647 | 126 | 21 | 2 | 1 | 1 | . | . | 4440 |
| 0.50-0.99 | . | 1361 | 347 | 127 | 54 | 23 | 1 | 1 | . | . | 1914 |
| 1.00-1.49 | . | 1 | 290 | 34 | 27 | 16 | 2 | . | . | . | 370 |
| 1.50-1.99 | . | . | 72 | 1 | 5 | 2 | . | 1 | . | . | 81 |
| 2.00-2.49 | . | . | 4 | 1 | . | . | . | . | . | . | 5 |
| 2.50-2.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1544 | 3460 | 1360 | 289 | 107 | 43 | 5 | 3 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 6376.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1601 | 2610 | 915 | 81 | 22 | 3 | . | . | . | . | 5232 |
| 0.50-0.99 | . | 2499 | 808 | 368 | 90 | 26 | 1 | . | . | . | 3792 |
| 1.00-1.49 | . | . | 588 | 160 | 119 | 16 | 1 | . | . | . | 884 |
| 1.50-1.99 | . | . | 185 | 63 | 93 | 41 | 1 | . | . | . | 383 |
| 2.00-2.49 | . | . | 11 | 39 | 21 | 20 | . | 1 | . | . | 92 |
| 2.50-2.99 | . | . | . | 2 | 23 | 7 | . | . | . | . | 32 |
| 3.00-3.49 | . | . | . | . | 1 | 9 | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | 1 | 2 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1601 | 5109 | 2507 | 713 | 370 | 124 | 5 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 9764.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1119 | 2066 | 957 | 99 | 24 | 1 | . | . | . | . | 4266 |
| 0.50-0.99 | . | 1555 | 3129 | 479 | 71 | 31 | . | . | . | . | 5265 |
| 1.00-1.49 | . | . | 1242 | 1239 | 157 | 26 | 2 | 1 | . | . | 2667 |
| 1.50-1.99 | . | . | 156 | 1134 | 183 | 25 | . | 1 | . | . | 1499 |
| 2.00-2.49 | . | . | 8 | 393 | 303 | 39 | . | . | . | . | 743 |
| 2.50-2.99 | . | . | . | 8 | 502 | 80 | . | . | . | . | 590 |
| 3.00-3.49 | . | . | . | . | 19 | 163 | . | . | 1 | . | 183 |
| 3.50-3.99 | . | . | . | . | . | 17 | . | . | . | . | 17 |
| 4.00-4.49 | . | . | . | . | . | 4 | . | . | . | 1 | 5 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1119 | 3621 | 5492 | 3352 | 1259 | 386 | 4 | 2 | 1 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 14260.

STATION S22 46.95N 90.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

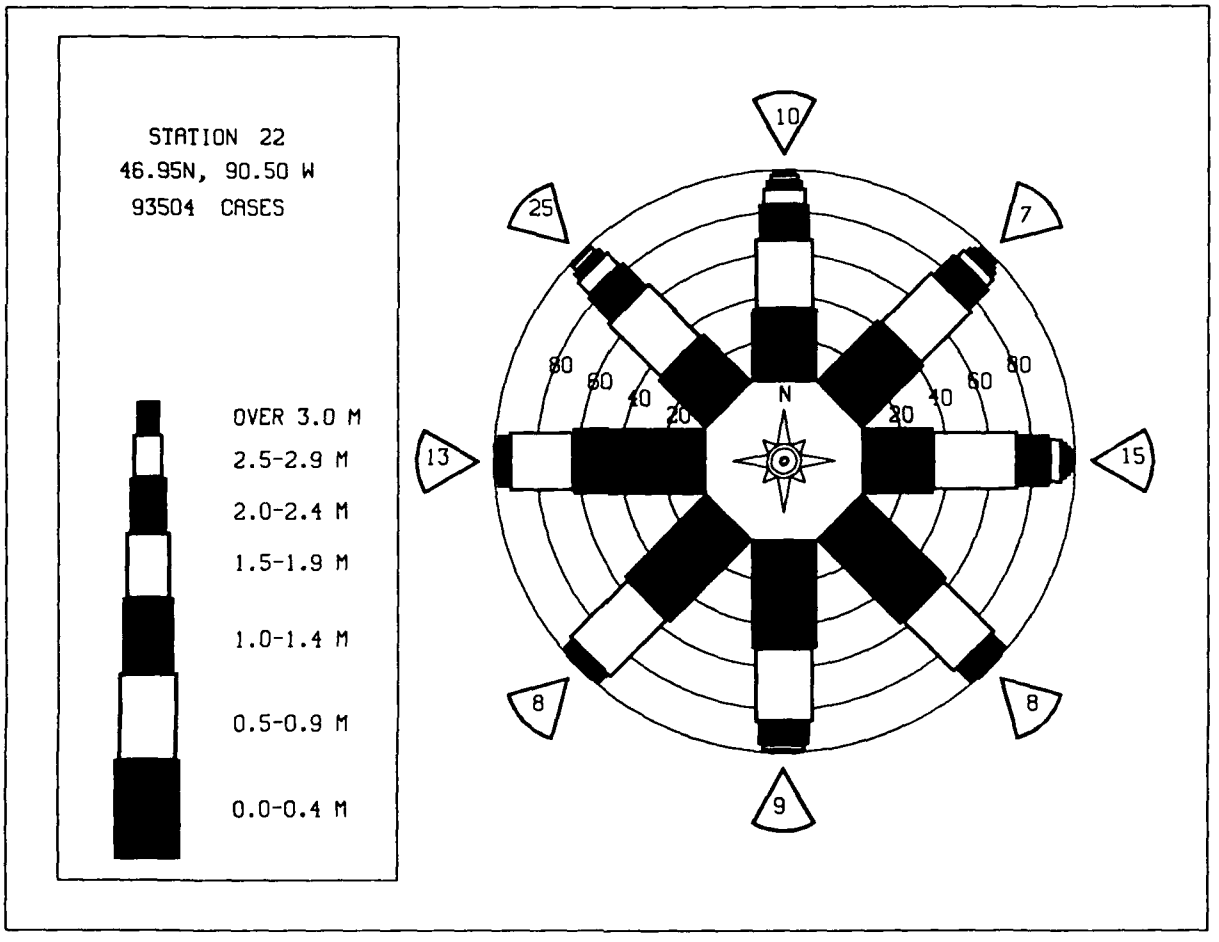
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 666 | 1131 | 403 | 56 | 22 | 5 | . | . | . | . | 2283 |
| 0.50-0.99 | . | 536 | 1885 | 120 | 74 | 23 | . | . | . | . | 2638 |
| 1.00-1.49 | . | . | 576 | 685 | 55 | 42 | 2 | . | . | . | 1360 |
| 1.50-1.99 | . | . | 37 | 577 | 90 | 12 | 4 | . | . | . | 720 |
| 2.00-2.49 | . | . | . | 214 | 155 | 5 | 1 | . | . | . | 375 |
| 2.50-2.99 | . | . | . | . | 337 | 16 | . | 1 | . | . | 354 |
| 3.00-3.49 | . | . | . | . | 23 | 102 | . | . | . | . | 125 |
| 3.50-3.99 | . | . | . | . | . | 19 | . | . | . | 1 | 20 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 666 | 1667 | 2901 | 1652 | 756 | 225 | 8 | 1 | 0 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.4 NO. OF CASES= 7380.

STATION S22 46.95N 90.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1367 | 2188 | 623 | 91 | 16 | 2 | . | . | . | . | 4287 |
| 0.50-0.99 | . | 1424 | 1767 | 225 | 65 | 19 | . | . | . | . | 3500 |
| 1.00-1.49 | . | . | 685 | 423 | 68 | 32 | 1 | . | . | . | 1209 |
| 1.50-1.99 | . | . | 72 | 326 | 78 | 26 | 3 | 1 | . | . | 506 |
| 2.00-2.49 | . | . | 2 | 106 | 74 | 23 | 2 | 1 | . | . | 208 |
| 2.50-2.99 | . | . | . | 2 | 135 | 19 | 3 | 2 | . | . | 161 |
| 3.00-3.49 | . | . | . | . | 8 | 57 | 1 | 1 | . | . | 67 |
| 3.50-3.99 | . | . | . | . | . | 18 | 2 | . | . | . | 20 |
| 4.00-4.49 | . | . | . | . | . | 3 | 2 | . | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | 1 | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1367 | 3612 | 3149 | 1173 | 444 | 199 | 15 | 7 | 1 | 0 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S22 (46.95N 90.50W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 0.8 | 1.0 | 1.0 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.9 | 1.2 | 1.0 | 0.8 |
| 1957 | 1.0 | 0.9 | 0.8 | 0.7 | 0.8 | 0.5 | 0.4 | 0.5 | 0.6 | 0.6 | 1.1 | 0.9 | 0.7 |
| 1958 | 0.7 | 1.2 | 0.5 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 1.1 | 0.8 | 0.7 |
| 1959 | 0.9 | 0.8 | 0.8 | 0.6 | 0.7 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 1.0 | 1.1 | 0.7 |
| 1960 | 0.9 | 1.0 | 0.8 | 0.9 | 0.7 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 1.1 | 0.9 | 0.7 |
| 1961 | 0.8 | 0.7 | 1.0 | 0.7 | 0.6 | 0.5 | 0.3 | 0.3 | 0.5 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1962 | 1.1 | 0.9 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 1.1 | 0.7 |
| 1963 | 0.9 | 1.0 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 1.0 | 1.1 | 0.7 |
| 1964 | 1.1 | 0.8 | 1.0 | 0.8 | 0.7 | 0.4 | 0.4 | 0.6 | 0.6 | 0.7 | 0.9 | 0.7 | 0.7 |
| 1965 | 1.1 | 1.0 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.9 | 1.1 | 1.2 | 0.8 |
| 1966 | 1.2 | 1.1 | 1.7 | 0.9 | 0.8 | 0.5 | 0.4 | 0.5 | 0.6 | 1.0 | 1.1 | 1.0 | 0.9 |
| 1967 | 1.3 | 1.1 | 1.0 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 1.1 | 1.0 | 1.1 | 0.9 |
| 1968 | 1.0 | 1.5 | 1.1 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.8 | 1.2 | 1.3 | 0.9 |
| 1969 | 1.2 | 0.7 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.8 | 0.9 | 0.8 | 0.7 |
| 1970 | 0.8 | 1.0 | 0.8 | 0.9 | 0.9 | 0.5 | 0.5 | 0.4 | 0.7 | 0.6 | 1.0 | 0.9 | 0.7 |
| 1971 | 1.1 | 1.2 | 1.0 | 0.9 | 0.7 | 0.4 | 0.4 | 0.3 | 0.4 | 0.7 | 0.8 | 0.7 | 0.7 |
| 1972 | 1.0 | 0.9 | 1.0 | 0.7 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.9 | 0.7 | 0.8 | 0.7 |
| 1973 | 0.8 | 0.8 | 0.9 | 0.7 | 0.7 | 0.4 | 0.4 | 0.3 | 0.5 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1974 | 0.8 | 0.6 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 1.0 | 0.9 | 0.7 |
| 1975 | 1.0 | 0.8 | 1.2 | 0.7 | 0.4 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 1.0 | 0.7 | 0.7 |
| 1976 | 1.0 | 0.9 | 1.3 | 0.7 | 0.6 | 0.6 | 0.3 | 0.3 | 0.4 | 0.4 | 0.7 | 0.8 | 0.7 |
| 1977 | 0.9 | 1.1 | 1.2 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 | 0.8 | 1.0 | 0.7 |
| 1978 | 1.0 | 0.6 | 0.6 | 0.8 | 0.5 | 0.4 | 0.3 | 0.4 | 0.7 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1979 | 0.7 | 0.7 | 1.0 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.7 | 0.8 | 0.8 | 0.6 |
| 1980 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.9 | 0.6 | 0.9 | 0.6 |
| 1981 | 0.8 | 0.9 | 0.8 | 0.7 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.8 | 0.7 | 0.6 | 0.6 |
| 1982 | 1.2 | 0.7 | 1.0 | 0.7 | 0.6 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 | 0.8 | 1.0 | 0.7 |
| 1983 | 0.9 | 0.8 | 1.3 | 0.7 | 0.6 | 0.4 | 0.4 | 0.3 | 0.5 | 0.6 | 1.1 | 1.0 | 0.7 |
| 1984 | 0.8 | 0.8 | 1.0 | 0.8 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.8 | 0.9 | 1.0 | 0.7 |
| 1985 | 1.1 | 0.8 | 1.2 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.5 | 0.6 | 0.8 | 1.0 | 0.7 |
| 1986 | 0.9 | 0.6 | 0.9 | 0.9 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.8 | 0.8 | 0.7 |
| 1987 | 0.7 | 0.8 | 1.2 | 0.5 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.7 | 0.9 | 0.7 | 0.6 |
| MEAN | 0.9 | 0.9 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.9 | 0.9 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S22 (46.95N 90.50W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.8 | 3.6 | 5.1 | 3.4 | 2.7 | 2.0 | 1.2 | 1.5 | 2.2 | 3.5 | 4.6 | 3.8 |
| 1957 | 2.8 | 3.2 | 2.9 | 3.6 | 2.7 | 1.3 | 2.0 | 1.8 | 2.8 | 2.4 | 4.4 | 3.8 |
| 1958 | 3.9 | 3.9 | 2.2 | 4.5 | 2.4 | 2.1 | 1.3 | 1.7 | 2.9 | 2.9 | 3.4 | 3.4 |
| 1959 | 3.4 | 2.5 | 4.4 | 2.3 | 2.0 | 1.5 | 1.2 | 2.0 | 2.3 | 3.1 | 3.7 | 5.5 |
| 1960 | 3.1 | 2.9 | 3.9 | 2.3 | 3.2 | 1.4 | 1.5 | 1.7 | 2.1 | 3.1 | 4.5 | 3.2 |
| 1961 | 3.6 | 2.7 | 3.2 | 2.5 | 2.1 | 1.6 | 2.0 | 1.4 | 2.2 | 2.3 | 3.1 | 3.1 |
| 1962 | 3.3 | 2.8 | 3.5 | 3.0 | 2.1 | 1.5 | 1.6 | 1.2 | 1.8 | 2.3 | 3.2 | 3.2 |
| 1963 | 2.9 | 3.7 | 3.7 | 2.7 | 1.8 | 1.7 | 1.2 | 1.4 | 2.2 | 2.3 | 3.1 | 3.7 |
| 1964 | 4.2 | 3.0 | 2.9 | 2.6 | 3.2 | 1.3 | 0.9 | 2.4 | 2.6 | 2.6 | 3.1 | 2.8 |
| 1965 | 3.4 | 3.6 | 3.7 | 1.8 | 1.7 | 1.5 | 1.2 | 1.2 | 1.7 | 3.5 | 4.9 | 4.0 |
| 1966 | 4.1 | 3.1 | 6.3 | 3.9 | 2.2 | 1.6 | 1.2 | 1.9 | 2.5 | 4.5 | 3.9 | 3.0 |
| 1967 | 6.6 | 3.7 | 3.2 | 2.3 | 3.8 | 2.3 | 2.9 | 1.8 | 2.8 | 4.0 | 3.1 | 3.2 |
| 1968 | 3.3 | 4.5 | 4.2 | 3.8 | 2.9 | 1.9 | 2.1 | 1.5 | 1.5 | 3.0 | 4.9 | 5.3 |
| 1969 | 3.7 | 3.6 | 4.3 | 3.4 | 1.5 | 1.7 | 1.4 | 1.8 | 1.7 | 2.6 | 3.1 | 3.5 |
| 1970 | 3.1 | 3.3 | 3.3 | 2.8 | 2.6 | 1.7 | 1.3 | 1.4 | 3.0 | 2.9 | 3.2 | 3.7 |
| 1971 | 3.5 | 4.3 | 4.9 | 2.8 | 2.4 | 1.3 | 1.4 | 1.2 | 1.2 | 3.1 | 3.1 | 2.8 |
| 1972 | 4.5 | 3.3 | 3.6 | 2.7 | 2.6 | 1.4 | 1.1 | 1.1 | 2.0 | 3.4 | 3.2 | 5.1 |
| 1973 | 2.8 | 2.3 | 3.1 | 1.6 | 2.6 | 1.2 | 1.1 | 0.9 | 1.7 | 2.8 | 2.7 | 3.9 |
| 1974 | 2.5 | 2.9 | 3.2 | 2.8 | 2.1 | 1.7 | 1.4 | 1.2 | 1.5 | 2.2 | 3.3 | 3.1 |
| 1975 | 4.0 | 3.8 | 5.9 | 2.9 | 1.3 | 1.5 | 1.4 | 1.4 | 2.3 | 2.0 | 5.1 | 2.9 |
| 1976 | 3.1 | 3.2 | 5.6 | 2.6 | 2.1 | 1.8 | 1.0 | 1.2 | 1.5 | 1.8 | 2.8 | 2.8 |
| 1977 | 3.0 | 5.0 | 5.2 | 2.1 | 1.2 | 1.2 | 1.4 | 1.3 | 3.1 | 2.8 | 3.0 | 4.5 |
| 1978 | 3.5 | 2.5 | 2.6 | 2.4 | 1.7 | 1.1 | 1.2 | 1.1 | 3.4 | 2.0 | 2.1 | 2.6 |
| 1979 | 2.0 | 3.3 | 3.2 | 3.2 | 2.2 | 1.1 | 0.9 | 1.2 | 1.7 | 2.9 | 2.7 | 2.9 |
| 1980 | 3.1 | 3.6 | 3.1 | 1.7 | 2.0 | 1.6 | 0.8 | 1.2 | 2.5 | 2.7 | 2.8 | 2.8 |
| 1981 | 2.7 | 2.7 | 3.3 | 2.6 | 1.3 | 1.6 | 1.0 | 1.2 | 2.6 | 3.0 | 2.7 | 2.2 |
| 1982 | 3.8 | 2.4 | 3.2 | 3.1 | 1.6 | 1.5 | 1.0 | 1.0 | 1.9 | 2.9 | 3.3 | 3.5 |
| 1983 | 3.2 | 4.3 | 3.6 | 2.5 | 1.8 | 1.3 | 1.2 | 1.0 | 1.4 | 2.6 | 4.0 | 3.6 |
| 1984 | 2.9 | 2.7 | 3.8 | 3.1 | 2.4 | 1.3 | 1.2 | 1.4 | 1.7 | 3.4 | 3.8 | 3.1 |
| 1985 | 3.7 | 3.1 | 6.8 | 3.3 | 1.7 | 1.9 | 1.1 | 1.3 | 1.8 | 2.2 | 2.8 | 4.2 |
| 1986 | 3.4 | 3.2 | 3.4 | 3.2 | 2.4 | 1.2 | 1.6 | 1.2 | 2.7 | 2.9 | 2.9 | 2.6 |
| 1987 | 2.5 | 3.7 | 3.9 | 2.0 | 2.8 | 1.1 | 1.3 | 1.5 | 1.5 | 3.2 | 2.6 | 3.0 |

32 YR. STATISTICS FOR WIS STATION S22

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.8 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 6.8 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 68.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 85030421 |

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 675 | 1045 | 397 | 65 | 14 | 1 | . | . | . | . | 2197 |
| 0.50-0.99 | . | 413 | 1233 | 162 | 79 | 23 | . | . | . | . | 1910 |
| 1.00-1.49 | . | . | 404 | 448 | 94 | 62 | 1 | . | . | . | 1009 |
| 1.50-1.99 | . | . | 24 | 249 | 131 | 47 | 12 | . | . | . | 463 |
| 2.00-2.49 | . | . | . | 51 | 85 | 56 | 5 | 3 | . | . | 200 |
| 2.50-2.99 | . | . | . | 3 | 109 | 37 | 3 | 7 | 1 | . | 160 |
| 3.00-3.49 | . | . | . | . | 8 | 114 | . | 4 | . | . | 126 |
| 3.50-3.99 | . | . | . | . | . | 25 | 1 | . | 1 | . | 27 |
| 4.00-4.49 | . | . | . | . | . | 4 | 6 | . | 2 | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | 1 | 2 | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 675 | 1458 | 2058 | 978 | 520 | 369 | 29 | 15 | 5 | 4 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 5729.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 500 | 726 | 305 | 45 | 7 | . | . | . | . | . | 1583 |
| 0.50-0.99 | . | 267 | 712 | 145 | 45 | 11 | 1 | . | . | . | 1180 |
| 1.00-1.49 | . | . | 131 | 224 | 48 | 35 | 1 | 1 | . | . | 440 |
| 1.50-1.99 | . | . | 5 | 85 | 73 | 43 | 3 | . | 1 | . | 210 |
| 2.00-2.49 | . | . | . | 20 | 21 | 40 | 7 | 3 | . | . | 91 |
| 2.50-2.99 | . | . | . | 1 | 24 | 25 | 7 | 7 | . | . | 64 |
| 3.00-3.49 | . | . | . | . | 3 | 47 | 6 | 6 | 1 | . | 63 |
| 3.50-3.99 | . | . | . | . | . | 17 | 6 | 4 | 1 | 1 | 29 |
| 4.00-4.49 | . | . | . | . | . | 1 | 6 | 3 | 2 | 2 | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 2 | 2 | 1 | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 500 | 993 | 1153 | 520 | 221 | 219 | 39 | 26 | 10 | 8 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 3467.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 541 | 777 | 407 | 45 | 5 | 2 | 1 | . | . | . | 1778 |
| 0.50-0.99 | . | 239 | 730 | 177 | 42 | 16 | . | . | . | . | 1204 |
| 1.00-1.49 | . | . | 167 | 240 | 49 | 20 | 2 | 2 | . | . | 480 |
| 1.50-1.99 | . | . | 3 | 86 | 63 | 42 | 5 | 2 | . | . | 201 |
| 2.00-2.49 | . | . | . | 18 | 20 | 33 | 7 | 3 | . | . | 81 |
| 2.50-2.99 | . | . | . | 1 | 24 | 13 | 10 | 2 | . | . | 50 |
| 3.00-3.49 | . | . | . | . | 6 | 23 | 4 | 4 | . | 1 | 38 |
| 3.50-3.99 | . | . | . | . | . | 7 | 4 | 1 | . | 3 | 15 |
| 4.00-4.49 | . | . | . | . | . | 2 | 6 | 1 | 2 | 1 | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 3 | 1 | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 541 | 1016 | 1307 | 567 | 209 | 158 | 42 | 19 | 6 | 8 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.1 NO. OF CASES= 3638.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 500 | 806 | 322 | 51 | 3 | 1 | . | . | . | . | 1683 |
| 0.50-0.99 | . | 499 | 1130 | 181 | 37 | 11 | . | 1 | . | . | 1859 |
| 1.00-1.49 | . | . | 557 | 174 | 45 | 31 | 1 | 1 | . | . | 809 |
| 1.50-1.99 | . | . | 47 | 160 | 48 | 29 | 4 | . | . | . | 288 |
| 2.00-2.49 | . | . | . | 86 | 31 | 21 | 7 | 3 | 1 | . | 149 |
| 2.50-2.99 | . | . | . | 18 | 37 | 22 | 7 | 3 | 2 | . | 89 |
| 3.00-3.49 | . | . | . | 1 | 11 | 36 | 5 | 2 | 4 | . | 59 |
| 3.50-3.99 | . | . | . | . | 4 | 17 | 2 | 3 | 3 | 1 | 30 |
| 4.00-4.49 | . | . | . | . | . | 3 | 7 | 4 | 2 | 1 | 17 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 2 | 4 | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | 4 | . | 7 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 500 | 1305 | 2056 | 671 | 216 | 171 | 35 | 22 | 21 | 3 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 4692.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 958 | 1535 | 583 | 72 | 3 | 1 | . | . | . | . | 3152 |
| 0.50-0.99 | . | 1111 | 2162 | 222 | 54 | 10 | . | . | . | . | 3559 |
| 1.00-1.49 | . | . | 1377 | 57 | 47 | 31 | 8 | 1 | 1 | . | 1522 |
| 1.50-1.99 | . | . | 152 | 179 | 45 | 33 | 5 | 1 | 2 | . | 417 |
| 2.00-2.49 | . | . | . | 214 | 9 | 18 | 5 | 6 | . | 1 | 253 |
| 2.50-2.99 | . | . | . | 67 | 28 | 8 | 1 | 6 | 3 | . | 113 |
| 3.00-3.49 | . | . | . | 4 | 34 | 3 | 3 | 2 | 2 | 1 | 49 |
| 3.50-3.99 | . | . | . | . | 6 | 2 | 1 | . | . | 1 | 10 |
| 4.00-4.49 | . | . | . | . | 1 | . | . | . | 1 | 1 | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 958 | 2646 | 4274 | 815 | 227 | 106 | 23 | 16 | 11 | 4 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 8507.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1012 | 1265 | 413 | 50 | 7 | 2 | . | . | 1 | . | 2750 |
| 0.50-0.99 | . | 775 | 1104 | 122 | 41 | 10 | 1 | . | . | . | 2053 |
| 1.00-1.49 | . | . | 580 | 13 | 29 | 23 | 1 | 3 | . | . | 649 |
| 1.50-1.99 | . | . | 45 | 60 | 3 | 7 | 3 | . | 1 | . | 119 |
| 2.00-2.49 | . | . | . | 36 | . | 2 | 1 | 2 | . | . | 41 |
| 2.50-2.99 | . | . | . | 1 | 1 | 1 | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1012 | 2040 | 2142 | 282 | 82 | 45 | 6 | 5 | 2 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 5265.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1049 | 1177 | 397 | 55 | 4 | 1 | . | . | . | . | 2683 |
| 0.50-0.99 | . | 577 | 671 | 74 | 31 | 12 | . | . | . | . | 1365 |
| 1.00-1.49 | . | . | 285 | 3 | 5 | 11 | . | . | . | . | 304 |
| 1.50-1.99 | . | . | 8 | 26 | 1 | . | 2 | . | 1 | . | 38 |
| 2.00-2.49 | . | . | . | 6 | . | 1 | . | . | . | . | 7 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1049 | 1754 | 1361 | 164 | 41 | 25 | 2 | 0 | 2 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 4121.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 895 | 900 | 274 | 48 | 13 | . | . | . | 1 | . | 2131 |
| 0.50-0.99 | . | 728 | 565 | 32 | 20 | 4 | 1 | 1 | . | . | 1351 |
| 1.00-1.49 | . | . | 245 | . | 2 | . | . | . | . | . | 247 |
| 1.50-1.99 | . | . | 23 | 24 | . | 2 | . | . | . | . | 49 |
| 2.00-2.49 | . | . | . | 6 | . | . | . | . | . | . | 6 |
| 2.50-2.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 895 | 1628 | 1107 | 110 | 35 | 6 | 1 | 2 | 1 | 1 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 3547.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 990 | 952 | 309 | 52 | 6 | . | 1 | . | . | . | 2310 |
| 0.50-0.99 | . | 1034 | 762 | 39 | 13 | 4 | . | . | . | . | 1852 |
| 1.00-1.49 | . | . | 379 | 1 | 5 | 3 | . | . | . | . | 388 |
| 1.50-1.99 | . | . | 66 | 24 | . | . | 1 | . | . | . | 91 |
| 2.00-2.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 990 | 1986 | 1516 | 120 | 24 | 7 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.2 NO. OF CASES= 4350.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 798 | 1160 | 234 | 51 | 6 | 2 | . | . | 1 | . | 2252 |
| 0.50-0.99 | . | 1509 | 503 | 35 | 17 | 7 | . | . | . | . | 2071 |
| 1.00-1.49 | . | . | 324 | 2 | . | 3 | . | 1 | 1 | . | 331 |
| 1.50-1.99 | . | . | 101 | 16 | . | . | . | . | . | . | 117 |
| 2.00-2.49 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 798 | 2669 | 1162 | 108 | 23 | 12 | 0 | 1 | 2 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 4470.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 914 | 1214 | 325 | 91 | 10 | 2 | . | . | 1 | . | 2557 |
| 0.50-0.99 | . | 1584 | 373 | 52 | 22 | 7 | . | . | . | . | 2038 |
| 1.00-1.49 | . | . | 276 | . | 2 | 9 | . | . | 1 | . | 288 |
| 1.50-1.99 | . | . | 52 | 4 | . | . | . | . | . | . | 56 |
| 2.00-2.49 | . | . | . | 5 | . | . | . | . | . | . | 5 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 914 | 2798 | 1026 | 152 | 34 | 18 | 0 | 0 | 2 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 4631.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1107 | 1282 | 368 | 110 | 26 | 5 | . | . | . | . | 2898 |
| 0.50-0.99 | . | 1404 | 237 | 47 | 37 | 16 | 1 | . | . | . | 1742 |
| 1.00-1.49 | . | . | 239 | . | 2 | 6 | 1 | . | . | . | 248 |
| 1.50-1.99 | . | . | 51 | 6 | . | 1 | 1 | . | . | . | 59 |
| 2.00-2.49 | . | . | 1 | 4 | . | . | . | 1 | . | . | 6 |
| 2.50-2.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1107 | 2686 | 896 | 167 | 65 | 28 | 3 | 3 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.1 NO. OF CASES= 4640.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1742 | 1983 | 792 | 175 | 29 | 4 | 1 | 1 | . | . | 4727 |
| 0.50-0.99 | . | 1882 | 233 | 208 | 94 | 39 | 3 | . | 1 | . | 2460 |
| 1.00-1.49 | . | . | 494 | 25 | 41 | 21 | 2 | 1 | . | . | 584 |
| 1.50-1.99 | . | . | 62 | 1 | 5 | 4 | 1 | 1 | . | . | 74 |
| 2.00-2.49 | . | . | 4 | 1 | . | 1 | . | . | . | . | 6 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1742 | 3865 | 1585 | 410 | 169 | 69 | 7 | 3 | 2 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 7350.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1762 | 2322 | 799 | 122 | 16 | 4 | . | . | . | . | 5025 |
| 0.50-0.99 | . | 2765 | 671 | 549 | 84 | 26 | 2 | . | . | . | 4097 |
| 1.00-1.49 | . | . | 690 | 404 | 223 | 28 | 1 | . | . | . | 1346 |
| 1.50-1.99 | . | . | 192 | 50 | 237 | 101 | 2 | . | . | . | 582 |
| 2.00-2.49 | . | . | 3 | 3 | 18 | 79 | . | 1 | . | . | 104 |
| 2.50-2.99 | . | . | . | . | . | 2 | 3 | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1762 | 5087 | 2355 | 1128 | 578 | 240 | 8 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.6 NO. OF CASES= 10446.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1335 | 2205 | 828 | 106 | 26 | 3 | . | . | . | . | 4503 |
| 0.50-0.99 | . | 2809 | 1490 | 521 | 96 | 34 | . | 1 | . | . | 4951 |
| 1.00-1.49 | . | . | 671 | 809 | 165 | 38 | 2 | . | . | . | 1685 |
| 1.50-1.99 | . | . | 242 | 248 | 379 | 28 | 2 | 1 | . | . | 900 |
| 2.00-2.49 | . | . | 7 | 16 | 217 | 192 | 2 | . | . | . | 434 |
| 2.50-2.99 | . | . | . | 1 | 3 | 43 | . | . | 1 | . | 48 |
| 3.00-3.49 | . | . | . | . | . | 2 | 2 | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1335 | 5014 | 3238 | 1701 | 886 | 340 | 8 | 2 | 1 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 11726.

STATION S23 46.80N 90.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

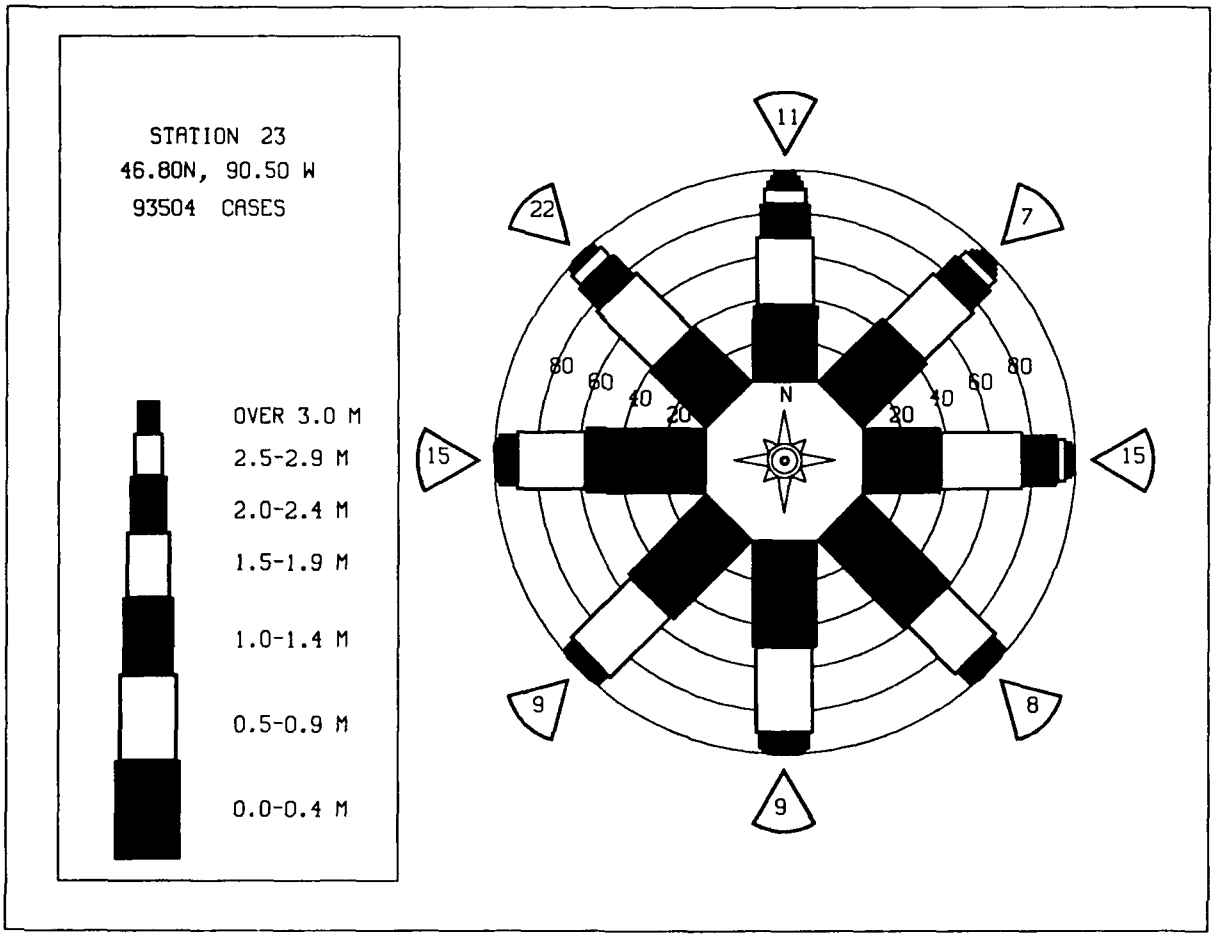
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 805 | 1150 | 572 | 72 | 17 | 2 | . | . | . | . | 2618 |
| 0.50-0.99 | . | 875 | 1436 | 219 | 77 | 31 | . | . | . | . | 2638 |
| 1.00-1.49 | . | . | 340 | 639 | 71 | 44 | 3 | . | . | . | 1097 |
| 1.50-1.99 | . | . | 44 | 293 | 163 | 20 | 4 | . | . | . | 524 |
| 2.00-2.49 | . | . | . | 57 | 204 | 41 | . | 2 | . | . | 304 |
| 2.50-2.99 | . | . | . | . | 74 | 60 | . | . | 1 | . | 135 |
| 3.00-3.49 | . | . | . | . | 4 | 49 | . | . | . | 1 | 54 |
| 3.50-3.99 | . | . | . | . | . | 17 | . | . | . | . | 17 |
| 4.00-4.49 | . | . | . | . | . | 1 | 3 | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 805 | 2025 | 2392 | 1280 | 610 | 265 | 12 | 2 | 1 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 6925.

STATION S23 46.80N 90.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1559 | 2050 | 733 | 121 | 19 | 3 | . | . | . | . | 4485 |
| 0.50-0.99 | . | 1847 | 1401 | 279 | 79 | 26 | . | . | . | . | 3632 |
| 1.00-1.49 | . | . | 716 | 304 | 83 | 37 | 2 | 1 | . | . | 1143 |
| 1.50-1.99 | . | . | 112 | 151 | 115 | 36 | 4 | . | . | . | 418 |
| 2.00-2.49 | . | . | 1 | 53 | 60 | 48 | 3 | 2 | . | . | 167 |
| 2.50-2.99 | . | . | . | 9 | 30 | 21 | 3 | 2 | . | . | 65 |
| 3.00-3.49 | . | . | . | . | 6 | 27 | 2 | 1 | . | . | 36 |
| 3.50-3.99 | . | . | . | . | 1 | 8 | 1 | . | . | . | 10 |
| 4.00-4.49 | . | . | . | . | . | 1 | 2 | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | 1 | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1559 | 3897 | 2963 | 917 | 393 | 207 | 18 | 6 | 1 | 0 | |

MEAN HS(M)= 0.6 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S23 (46.80N 90.50W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 0.7 | 0.9 | 0.9 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.8 | 1.2 | 0.9 | 0.7 |
| 1957 | 0.9 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 1.0 | 0.8 | 0.7 |
| 1958 | 0.7 | 1.1 | 0.5 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.9 | 0.7 | 0.6 |
| 1959 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.4 | 0.3 | 0.4 | 0.6 | 0.7 | 0.9 | 0.9 | 0.6 |
| 1960 | 0.8 | 0.9 | 0.8 | 0.8 | 0.7 | 0.4 | 0.3 | 0.4 | 0.5 | 0.6 | 1.0 | 0.8 | 0.7 |
| 1961 | 0.7 | 0.7 | 0.9 | 0.7 | 0.6 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 |
| 1962 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.4 | 0.6 | 0.7 | 1.0 | 0.6 |
| 1963 | 0.8 | 0.9 | 0.9 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.5 | 0.9 | 0.9 | 0.6 |
| 1964 | 0.9 | 0.8 | 0.9 | 0.7 | 0.6 | 0.4 | 0.3 | 0.5 | 0.5 | 0.6 | 0.8 | 0.6 | 0.6 |
| 1965 | 0.9 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 1.0 | 1.1 | 0.7 |
| 1966 | 1.0 | 0.9 | 1.5 | 0.8 | 0.8 | 0.5 | 0.4 | 0.5 | 0.6 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1967 | 1.2 | 1.0 | 0.9 | 0.7 | 0.7 | 0.5 | 0.4 | 0.5 | 0.6 | 1.0 | 0.9 | 1.0 | 0.8 |
| 1968 | 0.9 | 1.3 | 1.0 | 0.9 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 1.1 | 1.2 | 0.8 |
| 1969 | 1.0 | 0.7 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.7 | 0.7 | 0.6 |
| 1970 | 0.8 | 0.9 | 0.7 | 0.8 | 0.8 | 0.5 | 0.5 | 0.4 | 0.6 | 0.6 | 0.9 | 0.8 | 0.7 |
| 1971 | 0.9 | 1.0 | 0.9 | 0.8 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.8 | 0.7 | 0.7 |
| 1972 | 0.9 | 0.8 | 1.0 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | 0.8 | 0.6 | 0.8 | 0.6 |
| 1973 | 0.7 | 0.8 | 0.8 | 0.7 | 0.6 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1974 | 0.7 | 0.6 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 0.8 | 0.6 |
| 1975 | 0.9 | 0.7 | 1.1 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 1.0 | 0.7 | 0.7 |
| 1976 | 0.9 | 0.8 | 1.2 | 0.7 | 0.6 | 0.5 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.7 | 0.6 |
| 1977 | 0.7 | 1.0 | 1.1 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.6 | 0.7 | 0.9 | 0.6 |
| 1978 | 0.9 | 0.6 | 0.5 | 0.7 | 0.5 | 0.3 | 0.3 | 0.4 | 0.7 | 0.6 | 0.7 | 0.7 | 0.6 |
| 1979 | 0.7 | 0.6 | 0.9 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.7 | 0.7 | 0.6 |
| 1980 | 0.8 | 0.6 | 0.7 | 0.6 | 0.4 | 0.5 | 0.3 | 0.4 | 0.5 | 0.7 | 0.6 | 0.8 | 0.6 |
| 1981 | 0.7 | 0.8 | 0.8 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 |
| 1982 | 1.0 | 0.7 | 0.9 | 0.7 | 0.6 | 0.4 | 0.3 | 0.3 | 0.5 | 0.7 | 0.8 | 0.9 | 0.6 |
| 1983 | 0.9 | 0.8 | 1.2 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 1.0 | 0.9 | 0.7 |
| 1984 | 0.7 | 0.8 | 1.0 | 0.8 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | 0.7 | 0.8 | 0.8 | 0.6 |
| 1985 | 1.0 | 0.8 | 1.1 | 0.7 | 0.5 | 0.4 | 0.3 | 0.4 | 0.4 | 0.6 | 0.7 | 0.9 | 0.6 |
| 1986 | 0.9 | 0.6 | 0.9 | 0.8 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 0.8 | 0.7 | 0.6 |
| 1987 | 0.7 | 0.7 | 1.0 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.4 | 0.7 | 0.8 | 0.7 | 0.6 |
| MEAN | 0.8 | 0.8 | 0.9 | 0.7 | 0.6 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.8 | 0.8 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S23 (46.80N 90.50W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.4 | 2.7 | 3.9 | 3.3 | 2.0 | 1.6 | 1.2 | 1.3 | 1.7 | 2.2 | 4.7 | 2.9 |
| 1957 | 2.1 | 2.3 | 2.2 | 3.3 | 2.4 | 1.2 | 1.4 | 1.4 | 1.9 | 2.6 | 4.7 | 4.1 |
| 1958 | 4.0 | 4.1 | 1.7 | 3.7 | 1.6 | 1.6 | 1.1 | 1.3 | 1.9 | 2.1 | 2.7 | 2.4 |
| 1959 | 2.7 | 2.5 | 4.7 | 1.7 | 1.6 | 1.2 | 1.0 | 1.3 | 2.0 | 3.3 | 3.6 | 4.6 |
| 1960 | 3.1 | 3.1 | 3.2 | 2.4 | 3.2 | 1.0 | 1.0 | 1.4 | 1.6 | 2.5 | 3.8 | 3.1 |
| 1961 | 3.3 | 2.8 | 2.5 | 2.3 | 2.0 | 1.5 | 1.4 | 1.1 | 1.6 | 1.7 | 2.5 | 2.8 |
| 1962 | 2.9 | 3.0 | 2.8 | 1.8 | 1.6 | 1.2 | 1.3 | 1.1 | 1.4 | 2.0 | 2.5 | 2.9 |
| 1963 | 2.6 | 2.8 | 3.9 | 2.6 | 1.7 | 1.5 | 0.9 | 1.4 | 1.9 | 1.6 | 2.8 | 3.3 |
| 1964 | 3.6 | 3.2 | 2.8 | 2.8 | 1.8 | 1.3 | 0.9 | 1.9 | 1.7 | 2.7 | 2.4 | 2.1 |
| 1965 | 3.3 | 2.9 | 3.7 | 1.7 | 1.6 | 1.3 | 1.0 | 1.2 | 1.6 | 3.5 | 3.9 | 3.2 |
| 1966 | 2.6 | 2.6 | 5.5 | 3.1 | 2.0 | 1.4 | 1.1 | 1.6 | 2.3 | 4.4 | 3.5 | 2.3 |
| 1967 | 6.6 | 3.0 | 2.6 | 2.3 | 3.4 | 2.1 | 2.7 | 1.9 | 2.2 | 3.1 | 3.4 | 2.7 |
| 1968 | 3.5 | 3.4 | 4.2 | 3.7 | 2.0 | 1.8 | 1.6 | 1.4 | 1.4 | 3.2 | 4.6 | 5.3 |
| 1969 | 3.4 | 3.4 | 4.4 | 3.6 | 1.3 | 1.4 | 1.2 | 1.6 | 1.4 | 1.8 | 2.1 | 2.9 |
| 1970 | 3.0 | 3.4 | 3.2 | 2.2 | 2.5 | 1.4 | 1.3 | 1.2 | 1.9 | 2.2 | 3.3 | 3.2 |
| 1971 | 3.2 | 3.4 | 4.7 | 2.8 | 2.2 | 1.2 | 1.1 | 0.9 | 1.1 | 3.1 | 2.4 | 2.0 |
| 1972 | 3.3 | 3.3 | 3.8 | 2.7 | 2.4 | 1.3 | 0.9 | 1.1 | 1.8 | 2.3 | 3.2 | 5.3 |
| 1973 | 2.5 | 2.4 | 2.5 | 1.6 | 2.4 | 1.2 | 1.0 | 0.8 | 1.3 | 2.1 | 2.2 | 4.0 |
| 1974 | 1.8 | 2.9 | 2.6 | 2.3 | 1.7 | 1.6 | 1.3 | 1.1 | 1.2 | 1.9 | 3.5 | 2.5 |
| 1975 | 3.3 | 2.3 | 6.1 | 2.2 | 1.2 | 1.1 | 1.1 | 1.4 | 1.7 | 1.7 | 5.3 | 2.6 |
| 1976 | 2.4 | 3.4 | 4.9 | 2.6 | 2.2 | 2.0 | 0.9 | 0.9 | 1.3 | 1.5 | 2.1 | 2.9 |
| 1977 | 2.0 | 4.3 | 5.2 | 2.2 | 1.2 | 1.2 | 1.2 | 0.9 | 2.4 | 2.3 | 2.4 | 3.6 |
| 1978 | 3.5 | 2.3 | 2.0 | 1.9 | 1.7 | 1.0 | 1.1 | 1.1 | 3.5 | 1.9 | 2.1 | 2.1 |
| 1979 | 2.0 | 2.6 | 3.5 | 2.6 | 1.7 | 1.1 | 0.7 | 1.1 | 1.8 | 3.1 | 2.4 | 2.5 |
| 1980 | 2.6 | 3.0 | 2.5 | 1.7 | 1.6 | 1.3 | 0.8 | 1.1 | 1.8 | 2.0 | 1.8 | 2.2 |
| 1981 | 2.3 | 2.2 | 2.6 | 2.2 | 1.3 | 1.4 | 0.9 | 1.1 | 1.8 | 2.7 | 2.7 | 1.9 |
| 1982 | 3.7 | 1.9 | 3.2 | 3.3 | 1.4 | 1.3 | 1.0 | 0.8 | 1.8 | 3.2 | 3.5 | 3.8 |
| 1983 | 3.4 | 4.2 | 3.2 | 2.1 | 1.5 | 1.2 | 1.2 | 1.0 | 1.2 | 1.7 | 3.9 | 3.8 |
| 1984 | 2.1 | 2.9 | 4.0 | 3.0 | 1.7 | 1.3 | 1.0 | 1.1 | 1.4 | 2.7 | 2.4 | 2.2 |
| 1985 | 3.4 | 2.5 | 6.8 | 3.2 | 1.7 | 1.5 | 0.8 | 1.3 | 1.4 | 2.4 | 2.4 | 4.6 |
| 1986 | 3.6 | 2.8 | 3.6 | 2.6 | 2.1 | 1.1 | 1.2 | 1.1 | 2.1 | 2.2 | 2.4 | 1.8 |
| 1987 | 2.5 | 3.8 | 3.2 | 1.6 | 2.8 | 0.8 | 1.1 | 1.0 | 1.4 | 3.5 | 2.8 | 3.2 |

32 YR. STATISTICS FOR WIS STATION S23

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.6 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.7 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 6.8 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 64.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 85030421 |

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 836 | 1036 | 475 | 77 | 10 | 1 | . | . | . | . | 2435 |
| 0.50-0.99 | . | 472 | 1245 | 168 | 82 | 28 | 2 | . | . | . | 1997 |
| 1.00-1.49 | . | . | 442 | 443 | 115 | 51 | 4 | . | . | . | 1055 |
| 1.50-1.99 | . | . | 25 | 250 | 135 | 42 | 8 | . | . | . | 460 |
| 2.00-2.49 | . | . | . | 79 | 77 | 73 | 3 | 6 | . | . | 238 |
| 2.50-2.99 | . | . | . | 5 | 80 | 40 | 2 | 4 | 1 | . | 132 |
| 3.00-3.49 | . | . | . | . | 10 | 122 | . | 2 | . | . | 134 |
| 3.50-3.99 | . | . | . | . | . | 53 | 5 | . | 1 | . | 59 |
| 4.00-4.49 | . | . | . | . | . | 3 | 10 | . | 2 | . | 15 |
| 4.50-4.99 | . | . | . | . | . | 1 | 2 | 2 | 1 | 1 | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 836 | 1508 | 2187 | 1022 | 509 | 414 | 36 | 14 | 5 | 2 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 6127.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 577 | 675 | 347 | 65 | 8 | 1 | . | . | . | . | 1673 |
| 0.50-0.99 | . | 295 | 675 | 133 | 41 | 17 | 1 | . | . | . | 1162 |
| 1.00-1.49 | . | . | 140 | 211 | 57 | 36 | 2 | 1 | . | . | 447 |
| 1.50-1.99 | . | . | 3 | 80 | 67 | 32 | 9 | 3 | . | . | 194 |
| 2.00-2.49 | . | . | . | 23 | 16 | 33 | 12 | 5 | . | . | 89 |
| 2.50-2.99 | . | . | . | 3 | 28 | 19 | 8 | 5 | 1 | . | 64 |
| 3.00-3.49 | . | . | . | . | 4 | 35 | 3 | 6 | . | 1 | 49 |
| 3.50-3.99 | . | . | . | . | . | 13 | 11 | 9 | 1 | . | 34 |
| 4.00-4.49 | . | . | . | . | . | . | 7 | 2 | 6 | 2 | 17 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 4 | 1 | 1 | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 577 | 970 | 1165 | 515 | 221 | 186 | 54 | 35 | 10 | 8 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 3516.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 623 | 790 | 447 | 69 | 7 | 3 | 1 | . | . | . | 1940 |
| 0.50-0.99 | . | 291 | 665 | 137 | 49 | 19 | 1 | 1 | . | . | 1163 |
| 1.00-1.49 | . | . | 189 | 190 | 51 | 23 | 2 | 2 | . | . | 457 |
| 1.50-1.99 | . | . | 2 | 86 | 36 | 38 | 7 | 2 | . | . | 171 |
| 2.00-2.49 | . | . | . | 22 | 17 | 24 | 7 | 4 | . | 1 | 75 |
| 2.50-2.99 | . | . | . | 5 | 23 | 7 | 4 | 4 | 1 | . | 44 |
| 3.00-3.49 | . | . | . | . | 2 | 24 | 6 | . | . | 3 | 35 |
| 3.50-3.99 | . | . | . | . | . | 2 | 3 | 3 | 1 | . | 9 |
| 4.00-4.49 | . | . | . | . | . | 3 | 5 | 2 | 1 | . | 11 |
| 4.50-4.99 | . | . | . | . | . | . | . | 3 | 5 | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 623 | 1081 | 1303 | 509 | 185 | 143 | 36 | 22 | 12 | 7 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.0 NO. OF CASES= 3682.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 598 | 788 | 421 | 74 | 5 | 1 | . | . | . | . | 1887 |
| 0.50-0.99 | . | 819 | 1023 | 179 | 49 | 18 | . | 2 | . | . | 2090 |
| 1.00-1.49 | . | . | 376 | 109 | 44 | 38 | 4 | . | . | . | 571 |
| 1.50-1.99 | . | . | 90 | 101 | 32 | 23 | 6 | 1 | 1 | . | 254 |
| 2.00-2.49 | . | . | 1 | 71 | 21 | 12 | 9 | 3 | 3 | . | 120 |
| 2.50-2.99 | . | . | . | 16 | 21 | 14 | 3 | 2 | 2 | 1 | 59 |
| 3.00-3.49 | . | . | . | 1 | 8 | 14 | 3 | 1 | 4 | . | 31 |
| 3.50-3.99 | . | . | . | . | 1 | 9 | 1 | 5 | 1 | 1 | 18 |
| 4.00-4.49 | . | . | . | . | . | . | 6 | . | 4 | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 598 | 1607 | 1911 | 551 | 181 | 129 | 32 | 15 | 16 | 2 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 4732.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1148 | 1371 | 612 | 108 | 8 | 1 | . | . | . | . | 3248 |
| 0.50-0.99 | . | 2329 | 1732 | 195 | 75 | 25 | 2 | . | . | . | 4358 |
| 1.00-1.49 | . | . | 719 | 37 | 56 | 37 | 13 | 2 | 2 | . | 866 |
| 1.50-1.99 | . | . | 226 | 100 | 17 | 24 | 8 | 7 | 1 | . | 383 |
| 2.00-2.49 | . | . | 6 | 115 | . | 5 | 4 | 6 | 3 | . | 139 |
| 2.50-2.99 | . | . | . | 42 | . | 2 | 2 | 1 | 1 | . | 48 |
| 3.00-3.49 | . | . | . | 2 | 3 | . | . | . | . | 2 | 7 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | . | 1 | 1 | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1148 | 3700 | 3295 | 599 | 159 | 94 | 30 | 17 | 9 | 3 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 8481.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1197 | 1229 | 444 | 72 | 12 | 1 | . | . | 1 | . | 2956 |
| 0.50-0.99 | . | 1559 | 585 | 91 | 50 | 24 | 2 | 1 | . | . | 2312 |
| 1.00-1.49 | . | . | 268 | 2 | 17 | 2 | 3 | 4 | . | . | 316 |
| 1.50-1.99 | . | . | 39 | 21 | . | 5 | 1 | 2 | . | 1 | 69 |
| 2.00-2.49 | . | . | . | 2 | . | 1 | . | . | . | . | 3 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1197 | 2788 | 1336 | 189 | 79 | 53 | 6 | 7 | 1 | 2 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 5300.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1219 | 1192 | 442 | 79 | 9 | 3 | . | . | . | . | 2944 |
| 0.50-0.99 | . | 1133 | 162 | 52 | 36 | 20 | 1 | . | . | . | 1404 |
| 1.00-1.49 | . | . | 51 | 1 | 4 | 9 | . | . | . | . | 65 |
| 1.50-1.99 | . | . | 4 | . | . | 1 | 1 | . | . | . | 6 |
| 2.00-2.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1219 | 2325 | 659 | 132 | 49 | 33 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 4139.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1072 | 1106 | 279 | 70 | 14 | 1 | . | 1 | 1 | . | 2544 |
| 0.50-0.99 | . | 798 | 65 | 27 | 13 | 4 | . | . | . | . | 907 |
| 1.00-1.49 | . | . | 67 | 1 | . | 3 | . | . | . | . | 71 |
| 1.50-1.99 | . | . | 7 | . | . | . | . | . | . | . | 7 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1072 | 1904 | 418 | 98 | 27 | 8 | 0 | 1 | 1 | 1 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 3308.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1167 | 1255 | 334 | 74 | 8 | . | 1 | . | . | . | 2839 |
| 0.50-0.99 | . | 1012 | 67 | 24 | 17 | 5 | . | . | . | . | 1125 |
| 1.00-1.49 | . | . | 148 | . | 1 | 4 | . | . | . | . | 153 |
| 1.50-1.99 | . | . | 2 | . | . | 1 | 1 | . | . | . | 4 |
| 2.00-2.49 | . | . | 1 | . | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1167 | 2267 | 552 | 98 | 26 | 10 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 3861.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 904 | 1117 | 242 | 79 | 14 | 2 | . | . | 1 | . | 2359 |
| 0.50-0.99 | . | 1404 | 245 | 20 | 14 | 3 | . | . | 1 | . | 1687 |
| 1.00-1.49 | . | . | 212 | 1 | . | 1 | . | 1 | . | . | 215 |
| 1.50-1.99 | . | . | 44 | 1 | . | . | 1 | . | . | . | 46 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 904 | 2521 | 743 | 102 | 28 | 6 | 1 | 1 | 2 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 4036.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1008 | 1090 | 333 | 102 | 12 | 4 | . | . | . | . | 2549 |
| 0.50-0.99 | . | 1628 | 376 | 28 | 21 | 13 | . | . | 1 | . | 2067 |
| 1.00-1.49 | . | . | 262 | . | . | 5 | . | . | . | . | 267 |
| 1.50-1.99 | . | . | 54 | 3 | . | . | . | . | . | . | 57 |
| 2.00-2.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1008 | 2718 | 1025 | 135 | 33 | 22 | 0 | 0 | 1 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 4629.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1220 | 1276 | 339 | 100 | 24 | 8 | . | . | 1 | . | 2968 |
| 0.50-0.99 | . | 1676 | 286 | 36 | 34 | 16 | 2 | . | . | . | 2050 |
| 1.00-1.49 | . | . | 305 | . | . | 4 | 1 | . | . | . | 310 |
| 1.50-1.99 | . | . | 64 | 8 | . | . | 1 | . | . | . | 73 |
| 2.00-2.49 | . | . | 1 | 5 | . | . | . | 1 | . | . | 7 |
| 2.50-2.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1220 | 2952 | 995 | 149 | 58 | 28 | 4 | 2 | 1 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 5065.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1909 | 2073 | 725 | 203 | 38 | 5 | 1 | 1 | . | . | 4955 |
| 0.50-0.99 | . | 2188 | 203 | 173 | 98 | 40 | 2 | | . | . | 2704 |
| 1.00-1.49 | . | . | 590 | 8 | 33 | 23 | 2 | 2 | . | . | 658 |
| 1.50-1.99 | . | . | 66 | | 2 | 5 | 1 | . | . | . | 74 |
| 2.00-2.49 | . | . | 2 | 1 | . | . | 1 | . | . | . | 4 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1909 | 4261 | 1586 | 385 | 171 | 73 | 7 | 3 | 1 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.2 NO. OF CASES= 7857.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1824 | 2311 | 711 | 137 | 18 | 4 | . | . | . | . | 5005 |
| 0.50-0.99 | . | 3081 | 559 | 519 | 83 | 29 | 1 | . | . | . | 4272 |
| 1.00-1.49 | . | . | 803 | 140 | 235 | 52 | . | . | . | . | 1230 |
| 1.50-1.99 | . | . | 257 | 14 | 93 | 101 | 2 | 1 | . | . | 468 |
| 2.00-2.49 | . | . | 3 | 6 | . | 20 | 4 | . | 1 | . | 34 |
| 2.50-2.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1824 | 5392 | 2333 | 816 | 429 | 206 | 9 | 1 | 1 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 10305.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1468 | 2029 | 821 | 125 | 20 | 5 | . | . | . | . | 4468 |
| 0.50-0.99 | . | 3087 | 1157 | 716 | 63 | 34 | 2 | 1 | . | . | 5060 |
| 1.00-1.49 | . | . | 758 | 466 | 228 | 34 | 6 | | . | . | 1492 |
| 1.50-1.99 | . | . | 336 | 69 | 365 | 130 | 1 | 1 | . | . | 902 |
| 2.00-2.49 | . | . | 5 | 17 | 33 | 130 | 2 | . | . | . | 187 |
| 2.50-2.99 | . | . | . | . | . | 13 | 4 | . | . | . | 17 |
| 3.00-3.49 | . | . | . | . | . | 1 | . | . | . | 1 | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1468 | 5116 | 3077 | 1393 | 709 | 347 | 15 | 2 | 0 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 11351.

STATION S24 46.65N 90.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

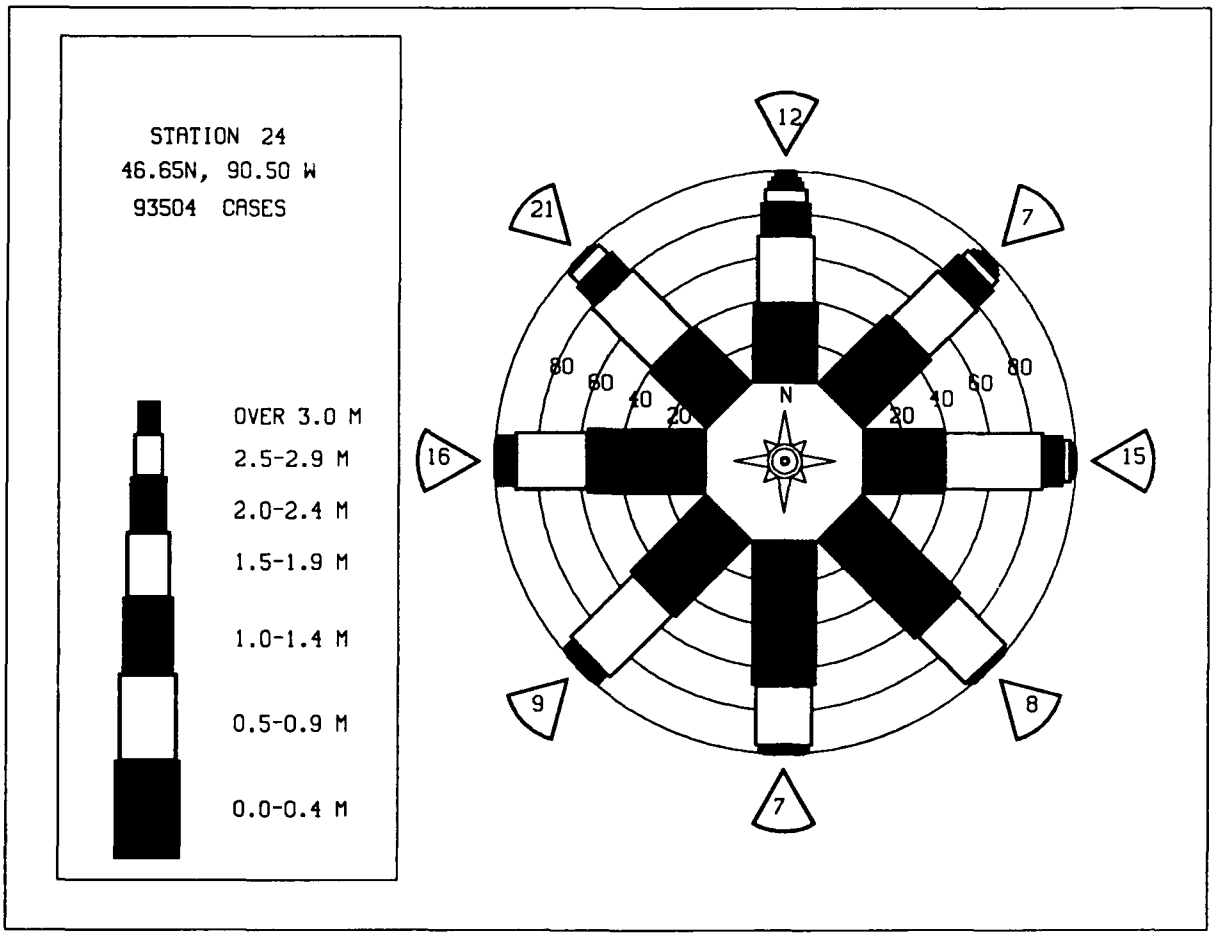
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 982 | 1129 | 599 | 84 | 23 | . | . | . | . | . | 2817 |
| 0.50-0.99 | . | 1132 | 1248 | 329 | 69 | 35 | . | . | . | . | 2813 |
| 1.00-1.49 | . | . | 353 | 517 | 104 | 35 | 4 | 1 | . | . | 1014 |
| 1.50-1.99 | . | . | 82 | 178 | 222 | 29 | 2 | | . | . | 513 |
| 2.00-2.49 | . | . | 2 | 48 | 110 | 99 | 1 | 2 | . | 1 | 263 |
| 2.50-2.99 | . | . | . | 6 | 50 | 33 | . | . | 1 | . | 90 |
| 3.00-3.49 | . | . | . | . | 3 | 56 | . | . | . | . | 59 |
| 3.50-3.99 | . | . | . | . | . | 17 | 2 | . | . | . | 19 |
| 4.00-4.49 | . | . | . | . | . | 1 | 4 | . | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 982 | 2261 | 2284 | 1162 | 581 | 305 | 13 | 5 | 1 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 7115.

STATION S24 46.65N 90.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1776 | 2047 | 757 | 152 | 23 | 4 | . | . | . | . | 4759 |
| 0.50-0.99 | . | 2291 | 1030 | 283 | 80 | 33 | 1 | . | . | . | 3718 |
| 1.00-1.49 | . | . | 569 | 213 | 95 | 38 | 4 | 1 | . | . | 920 |
| 1.50-1.99 | . | . | 130 | 91 | 97 | 43 | 5 | 1 | . | . | 367 |
| 2.00-2.49 | . | . | 2 | 39 | 27 | 40 | 4 | 2 | . | . | 114 |
| 2.50-2.99 | . | . | . | 8 | 20 | 13 | 2 | 1 | . | . | 44 |
| 3.00-3.49 | . | . | . | . | 3 | 25 | 1 | . | . | . | 29 |
| 3.50-3.99 | . | . | . | . | . | 9 | 2 | 1 | . | . | 12 |
| 4.00-4.49 | . | . | . | . | . | . | 3 | . | 1 | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1776 | 4338 | 2488 | 786 | 345 | 205 | 22 | 7 | 1 | 0 | |

MEAN HS(M)= 0.6 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S24 (46.65N 90.50W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 0.7 | 0.8 | 0.8 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 1.1 | 0.9 | 0.7 |
| 1957 | 0.8 | 0.7 | 0.6 | 0.6 | 0.7 | 0.4 | 0.3 | 0.4 | 0.5 | 0.6 | 0.9 | 0.7 | 0.6 |
| 1958 | 0.6 | 1.0 | 0.5 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 0.7 | 0.6 |
| 1959 | 0.7 | 0.7 | 0.7 | 0.5 | 0.6 | 0.4 | 0.3 | 0.3 | 0.5 | 0.7 | 0.8 | 0.8 | 0.6 |
| 1960 | 0.8 | 0.9 | 0.7 | 0.7 | 0.6 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.9 | 0.7 | 0.6 |
| 1961 | 0.7 | 0.6 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.6 | 0.5 |
| 1962 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.6 | 0.9 | 0.6 |
| 1963 | 0.8 | 0.8 | 0.8 | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.8 | 0.9 | 0.6 |
| 1964 | 0.8 | 0.8 | 0.9 | 0.7 | 0.6 | 0.4 | 0.3 | 0.5 | 0.5 | 0.6 | 0.7 | 0.6 | 0.6 |
| 1965 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | 0.8 | 0.9 | 1.0 | 0.6 |
| 1966 | 0.9 | 0.9 | 1.4 | 0.7 | 0.7 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 1.0 | 0.8 | 0.8 |
| 1967 | 1.1 | 0.9 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.9 | 0.8 | 0.9 | 0.7 |
| 1968 | 0.8 | 1.3 | 0.9 | 0.8 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 1.0 | 1.2 | 0.7 |
| 1969 | 0.9 | 0.7 | 0.8 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.4 | 0.6 | 0.7 | 0.7 | 0.6 |
| 1970 | 0.7 | 0.9 | 0.7 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.8 | 0.7 | 0.6 |
| 1971 | 0.9 | 1.0 | 0.9 | 0.7 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.6 | 0.7 | 0.6 | 0.6 |
| 1972 | 0.9 | 0.8 | 0.9 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | 0.7 | 0.6 | 0.7 | 0.6 |
| 1973 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.3 | 0.3 | 0.2 | 0.4 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1974 | 0.7 | 0.5 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 0.7 | 0.6 |
| 1975 | 0.8 | 0.6 | 1.0 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 0.6 | 0.6 |
| 1976 | 0.8 | 0.8 | 1.1 | 0.6 | 0.6 | 0.5 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.7 | 0.6 |
| 1977 | 0.7 | 0.9 | 1.0 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.6 | 0.6 | 0.8 | 0.6 |
| 1978 | 0.9 | 0.6 | 0.5 | 0.6 | 0.4 | 0.3 | 0.3 | 0.4 | 0.6 | 0.5 | 0.6 | 0.6 | 0.5 |
| 1979 | 0.6 | 0.6 | 0.9 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 0.7 | 0.7 | 0.5 |
| 1980 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.6 | 0.7 | 0.5 |
| 1981 | 0.7 | 0.7 | 0.7 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 |
| 1982 | 1.0 | 0.7 | 0.8 | 0.7 | 0.5 | 0.3 | 0.3 | 0.3 | 0.5 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1983 | 0.8 | 0.7 | 1.1 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.9 | 0.9 | 0.6 |
| 1984 | 0.7 | 0.8 | 0.9 | 0.7 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1985 | 0.9 | 0.7 | 1.0 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.7 | 0.9 | 0.6 |
| 1986 | 0.8 | 0.5 | 0.8 | 0.7 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | 0.5 | 0.7 | 0.6 | 0.6 |
| 1987 | 0.6 | 0.7 | 0.9 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 | 0.7 | 0.7 | 0.5 |
| MEAN | 0.8 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 0.8 | 0.8 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S24 (46.65N 90.50W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.3 | 2.2 | 3.0 | 3.6 | 1.9 | 1.5 | 1.2 | 1.1 | 1.5 | 2.2 | 4.7 | 2.8 |
| 1957 | 2.1 | 2.2 | 1.9 | 2.8 | 2.3 | 1.1 | 1.3 | 1.3 | 1.8 | 2.7 | 4.8 | 4.4 |
| 1958 | 4.1 | 3.6 | 1.5 | 3.3 | 1.4 | 1.5 | 1.0 | 1.2 | 1.7 | 1.9 | 2.3 | 2.2 |
| 1959 | 2.4 | 2.6 | 4.8 | 1.5 | 1.5 | 1.2 | 1.0 | 1.3 | 1.6 | 3.5 | 3.6 | 4.3 |
| 1960 | 3.1 | 3.2 | 3.2 | 2.4 | 3.1 | 1.0 | 0.9 | 1.2 | 1.5 | 2.2 | 3.7 | 3.3 |
| 1961 | 3.6 | 2.7 | 2.4 | 2.1 | 1.6 | 1.3 | 1.3 | 1.0 | 1.3 | 1.7 | 2.3 | 3.0 |
| 1962 | 2.8 | 3.2 | 2.7 | 1.8 | 1.4 | 1.1 | 1.2 | 1.0 | 1.4 | 1.9 | 2.5 | 3.1 |
| 1963 | 2.8 | 3.2 | 4.3 | 2.5 | 1.4 | 1.2 | 0.9 | 1.4 | 1.9 | 1.4 | 3.0 | 3.2 |
| 1964 | 3.6 | 3.3 | 2.8 | 3.0 | 1.6 | 1.3 | 0.7 | 1.7 | 1.5 | 2.8 | 2.0 | 1.8 |
| 1965 | 3.2 | 2.8 | 3.7 | 1.8 | 1.3 | 1.1 | 0.9 | 1.2 | 1.4 | 3.6 | 3.2 | 3.2 |
| 1966 | 2.7 | 2.7 | 5.1 | 2.6 | 1.9 | 1.4 | 1.0 | 1.3 | 2.3 | 4.3 | 3.7 | 2.3 |
| 1967 | 6.4 | 3.0 | 2.4 | 2.5 | 3.4 | 1.8 | 2.6 | 1.7 | 2.2 | 2.9 | 3.6 | 2.4 |
| 1968 | 3.0 | 3.5 | 4.1 | 3.5 | 1.7 | 1.5 | 1.8 | 1.3 | 1.3 | 3.0 | 4.3 | 4.9 |
| 1969 | 3.1 | 3.5 | 4.3 | 4.0 | 1.3 | 1.2 | 1.2 | 1.5 | 1.2 | 1.5 | 1.9 | 3.1 |
| 1970 | 3.2 | 3.6 | 3.3 | 1.8 | 2.3 | 1.2 | 1.3 | 1.2 | 1.7 | 2.2 | 3.3 | 3.0 |
| 1971 | 3.4 | 3.4 | 4.4 | 2.2 | 2.2 | 1.1 | 0.9 | 0.9 | 0.9 | 2.4 | 2.1 | 2.0 |
| 1972 | 2.9 | 3.4 | 4.3 | 2.3 | 2.3 | 1.3 | 0.7 | 0.9 | 1.3 | 2.1 | 3.2 | 4.1 |
| 1973 | 2.6 | 2.0 | 2.4 | 1.6 | 2.2 | 0.9 | 1.0 | 0.8 | 1.2 | 1.9 | 1.8 | 4.1 |
| 1974 | 1.7 | 3.0 | 2.1 | 2.2 | 1.2 | 1.4 | 1.3 | 1.0 | 1.1 | 1.5 | 3.6 | 2.3 |
| 1975 | 3.5 | 2.0 | 6.3 | 1.8 | 1.1 | 1.0 | 0.9 | 1.4 | 1.9 | 1.6 | 5.6 | 2.9 |
| 1976 | 2.4 | 3.5 | 4.9 | 2.6 | 2.3 | 2.0 | 0.9 | 0.8 | 1.2 | 1.5 | 1.8 | 3.1 |
| 1977 | 1.9 | 4.2 | 5.1 | 2.3 | 1.0 | 1.1 | 1.2 | 0.8 | 2.1 | 2.1 | 2.0 | 3.0 |
| 1978 | 3.6 | 2.2 | 1.8 | 1.6 | 1.7 | 0.8 | 0.9 | 1.1 | 3.5 | 1.9 | 2.3 | 2.2 |
| 1979 | 2.1 | 2.1 | 3.7 | 2.0 | 1.4 | 0.9 | 0.7 | 1.1 | 1.7 | 3.3 | 3.0 | 2.5 |
| 1980 | 2.4 | 2.9 | 2.1 | 1.6 | 1.4 | 1.2 | 0.8 | 0.9 | 1.8 | 1.9 | 1.7 | 1.9 |
| 1981 | 2.3 | 2.2 | 2.7 | 1.7 | 1.4 | 1.4 | 0.7 | 0.9 | 1.7 | 2.6 | 2.7 | 1.8 |
| 1982 | 3.7 | 1.8 | 3.3 | 3.6 | 1.2 | 1.3 | 0.9 | 0.7 | 1.7 | 3.3 | 3.6 | 3.9 |
| 1983 | 3.6 | 4.1 | 3.4 | 2.1 | 1.5 | 1.1 | 1.2 | 1.0 | 1.2 | 1.6 | 3.4 | 3.7 |
| 1984 | 1.9 | 3.0 | 4.3 | 3.0 | 1.6 | 1.3 | 1.0 | 1.0 | 1.4 | 2.3 | 2.1 | 2.1 |
| 1985 | 3.4 | 2.7 | 6.2 | 3.0 | 1.7 | 1.4 | 0.7 | 1.1 | 1.3 | 2.6 | 2.0 | 4.7 |
| 1986 | 3.6 | 2.3 | 3.7 | 2.1 | 2.0 | 1.1 | 1.3 | 1.1 | 1.8 | 2.2 | 2.3 | 1.6 |
| 1987 | 2.7 | 4.0 | 3.1 | 1.5 | 2.2 | 0.7 | 0.9 | 0.9 | 1.3 | 3.7 | 3.0 | 3.4 |

32 YR. STATISTICS FOR WIS STATION S24

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.6 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 6.4 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 31.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 67010712 |

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 691 | 909 | 418 | 65 | 10 | 2 | 1 | . | . | . | 2096 |
| 0.50-0.99 | . | 380 | 1141 | 132 | 38 | 14 | 1 | . | . | . | 1706 |
| 1.00-1.49 | . | . | 333 | 459 | 60 | 23 | 3 | . | . | . | 878 |
| 1.50-1.99 | . | . | 18 | 209 | 131 | 25 | 4 | . | . | 1 | 388 |
| 2.00-2.49 | . | . | . | 53 | 49 | 42 | 1 | 7 | . | . | 152 |
| 2.50-2.99 | . | . | . | 1 | 81 | 26 | 2 | 2 | . | . | 112 |
| 3.00-3.49 | . | . | . | . | 3 | 126 | . | 1 | 1 | . | 131 |
| 3.50-3.99 | . | . | . | . | . | 49 | 12 | 1 | 1 | . | 63 |
| 4.00-4.49 | . | . | . | . | . | 1 | 14 | 1 | 1 | . | 17 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 2 | 2 | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | 1 | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 691 | 1289 | 1910 | 919 | 372 | 308 | 41 | 15 | 5 | 2 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 5208.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 601 | 724 | 373 | 55 | 8 | 2 | . | . | . | . | 1763 |
| 0.50-0.99 | . | 274 | 712 | 108 | 38 | 18 | 2 | . | . | . | 1152 |
| 1.00-1.49 | . | . | 156 | 201 | 41 | 33 | 4 | . | . | . | 435 |
| 1.50-1.99 | . | . | 6 | 80 | 56 | 31 | 8 | 2 | . | . | 183 |
| 2.00-2.49 | . | . | . | 16 | 9 | 20 | 8 | 5 | 1 | . | 59 |
| 2.50-2.99 | . | . | . | 1 | 26 | 17 | 3 | . | 1 | . | 48 |
| 3.00-3.49 | . | . | . | . | 1 | 28 | 9 | 3 | . | . | 41 |
| 3.50-3.99 | . | . | . | . | . | 3 | 7 | 10 | 1 | . | 21 |
| 4.00-4.49 | . | . | . | . | . | 1 | 5 | 3 | 2 | . | 11 |
| 4.50-4.99 | . | . | . | . | . | . | . | 3 | 2 | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 3 | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 601 | 998 | 1247 | 461 | 179 | 153 | 46 | 27 | 8 | 5 | |

MEAN HS(M) = 0.7 LARGEST HS(M;= 6.1 MEAN TP(SEC)= 4.1 NO. OF CASES= 3497.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 746 | 813 | 439 | 81 | 13 | 7 | . | . | . | . | 2099 |
| 0.50-0.99 | . | 315 | 632 | 117 | 44 | 16 | . | 1 | . | . | 1125 |
| 1.00-1.49 | . | . | 179 | 181 | 32 | 25 | 5 | 2 | . | . | 424 |
| 1.50-1.99 | . | . | 12 | 91 | 32 | 23 | 5 | 2 | . | 1 | 166 |
| 2.00-2.49 | . | . | 1 | 26 | 16 | 11 | 7 | 5 | 1 | 2 | 69 |
| 2.50-2.99 | . | . | . | 1 | 22 | 11 | 3 | 1 | 1 | 2 | 41 |
| 3.00-3.49 | . | . | . | . | 1 | 9 | 3 | 1 | . | . | 14 |
| 3.50-3.99 | . | . | . | . | 1 | 4 | 5 | 2 | . | . | 12 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | 2 | 1 | 3 | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 746 | 1128 | 1263 | 497 | 161 | 106 | 29 | 18 | 7 | 10 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 3725.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 801 | 1052 | 583 | 121 | 11 | 4 | . | . | . | . | 2572 |
| 0.50-0.99 | . | 773 | 501 | 152 | 44 | 33 | 4 | 2 | . | . | 1509 |
| 1.00-1.49 | . | . | 149 | 59 | 41 | 32 | 8 | 1 | 1 | . | 291 |
| 1.50-1.99 | . | . | 35 | 49 | 18 | 27 | 9 | 4 | 2 | . | 144 |
| 2.00-2.49 | . | . | 10 | 14 | 3 | 20 | 5 | 6 | 2 | 1 | 61 |
| 2.50-2.99 | . | . | . | 4 | 10 | 5 | 4 | 4 | 3 | 1 | 31 |
| 3.00-3.49 | . | . | . | . | 2 | 6 | . | 2 | 3 | . | 13 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 801 | 1825 | 1278 | 399 | 129 | 129 | 31 | 19 | 11 | 2 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 4341.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1628 | 2382 | 729 | 201 | 26 | 3 | . | . | . | . | 4969 |
| 0.50-0.99 | . | 2480 | 186 | 219 | 103 | 51 | 9 | 1 | . | . | 3049 |
| 1.00-1.49 | . | . | 316 | 26 | 73 | 54 | 18 | 7 | 2 | . | 496 |
| 1.50-1.99 | . | . | 148 | 1 | 6 | 19 | 9 | 11 | 8 | . | 202 |
| 2.00-2.49 | . | . | 19 | 1 | 1 | 4 | 5 | 1 | . | 1 | 32 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | 1 | 1 | 1 | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1628 | 4862 | 1398 | 449 | 209 | 131 | 41 | 21 | 16 | 2 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 8201.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1423 | 1426 | 484 | 98 | 21 | 7 | . | . | . | . | 3459 |
| 0.50-0.99 | . | 1435 | 111 | 56 | 58 | 33 | 4 | 3 | . | . | 1700 |
| 1.00-1.49 | . | . | 120 | . | 2 | 12 | 6 | 5 | 1 | 1 | 147 |
| 1.50-1.99 | . | . | 19 | . | . | . | 1 | 2 | . | . | 22 |
| 2.00-2.49 | . | . | 1 | . | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1423 | 2861 | 735 | 154 | 81 | 52 | 11 | 10 | 1 | 2 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 4992.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1295 | 1143 | 370 | 96 | 18 | 3 | . | . | . | . | 2925 |
| 0.50-0.99 | . | 1040 | 139 | 22 | 28 | 23 | 2 | . | . | . | 1254 |
| 1.00-1.49 | . | . | 47 | 1 | 1 | 1 | . | . | . | . | 50 |
| 1.50-1.99 | . | . | 7 | . | . | 1 | . | 1 | . | . | 9 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1295 | 2183 | 563 | 119 | 47 | 28 | 2 | 1 | 0 | 1 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.0 NO. OF CASES= 3968.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1138 | 1081 | 271 | 60 | 10 | 2 | . | . | . | . | 2562 |
| 0.50-0.99 | . | 768 | 68 | 3 | 8 | 3 | . | 1 | . | . | 851 |
| 1.00-1.49 | . | . | 63 | . | . | 3 | 2 | 1 | . | . | 69 |
| 1.50-1.99 | . | . | 5 | . | . | . | . | . | . | . | 5 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1138 | 1849 | 407 | 63 | 18 | 8 | 2 | 2 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.9 NO. OF CASES= 3267.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1296 | 1252 | 284 | 65 | 21 | 3 | 1 | . | . | . | 2922 |
| 0.50-0.99 | . | 856 | 53 | 6 | 6 | 8 | . | . | . | . | 929 |
| 1.00-1.49 | . | . | 130 | . | 1 | . | . | . | . | . | 131 |
| 1.50-1.99 | . | . | 1 | . | . | . | . | 1 | . | . | 2 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1296 | 2108 | 468 | 71 | 28 | 11 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 2.9 NO. OF CASES= 3730.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 998 | 1151 | 224 | 62 | 12 | 1 | . | . | . | . | 2448 |
| 0.50-0.99 | . | 1176 | 115 | 5 | 5 | 3 | . | 1 | . | . | 1305 |
| 1.00-1.49 | . | . | 183 | . | . | 1 | . | 1 | . | . | 185 |
| 1.50-1.99 | . | . | 28 | . | . | . | . | . | . | . | 28 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 998 | 2327 | 550 | 68 | 17 | 5 | 0 | 2 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 3716.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1088 | 1258 | 271 | 81 | 11 | 3 | . | . | . | . | 2712 |
| 0.50-0.99 | . | 1531 | 335 | 14 | 7 | 9 | . | . | . | . | 1896 |
| 1.00-1.49 | . | . | 281 | 1 | . | 3 | 1 | 1 | . | . | 287 |
| 1.50-1.99 | . | . | 57 | 3 | . | . | . | . | . | . | 60 |
| 2.00-2.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1088 | 2789 | 944 | 101 | 18 | 15 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 4643.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1163 | 1326 | 296 | 82 | 17 | 2 | . | 1 | . | . | 2887 |
| 0.50-0.99 | . | 1793 | 643 | 34 | 16 | 16 | 2 | . | . | . | 2504 |
| 1.00-1.49 | . | . | 489 | . | . | . | . | . | . | . | 489 |
| 1.50-1.99 | . | . | 112 | 47 | . | . | . | 1 | . | . | 160 |
| 2.00-2.49 | . | . | . | 38 | . | . | . | . | . | . | 38 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1163 | 3119 | 1540 | 203 | 33 | 18 | 2 | 2 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.2 NO. OF CASES= 5690.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1765 | 1405 | 572 | 93 | 21 | 2 | . | . | . | . | 3858 |
| 0.50-0.99 | . | 2138 | 1410 | 156 | 36 | 12 | 1 | . | . | . | 3753 |
| 1.00-1.49 | . | . | 855 | 22 | 29 | 6 | 1 | . | . | . | 913 |
| 1.50-1.99 | . | . | 249 | 181 | 13 | 4 | . | . | . | . | 447 |
| 2.00-2.49 | . | . | . | 58 | . | 3 | . | . | . | . | 61 |
| 2.50-2.99 | . | . | . | 2 | 3 | . | 1 | . | . | . | 6 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1765 | 3543 | 3086 | 512 | 102 | 27 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 8461.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1707 | 1735 | 586 | 83 | 11 | 6 | . | 1 | . | . | 4129 |
| 0.50-0.99 | . | 2182 | 2215 | 268 | 49 | 7 | . | . | . | . | 4721 |
| 1.00-1.49 | . | . | 1517 | 128 | 71 | 7 | 1 | 1 | . | . | 1725 |
| 1.50-1.99 | . | . | 366 | 293 | 186 | 50 | . | . | . | . | 895 |
| 2.00-2.49 | . | . | . | 187 | 39 | 142 | 1 | . | . | . | 369 |
| 2.50-2.99 | . | . | . | 22 | 1 | 55 | 3 | . | . | . | 81 |
| 3.00-3.49 | . | . | . | 1 | 1 | 3 | 2 | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | 2 | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1707 | 3917 | 4684 | 982 | 359 | 270 | 7 | 4 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.7 NO. OF CASES= 11167.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1248 | 1774 | 649 | 87 | 9 | 2 | . | . | . | . | 3769 |
| 0.50-0.99 | . | 1251 | 2758 | 345 | 31 | 18 | . | . | . | . | 4403 |
| 1.00-1.49 | . | . | 1982 | 376 | 62 | 9 | 2 | . | . | . | 2431 |
| 1.50-1.99 | . | . | 287 | 571 | 324 | 16 | . | . | . | . | 1198 |
| 2.00-2.49 | . | . | . | 295 | 226 | 198 | . | . | . | . | 719 |
| 2.50-2.99 | . | . | . | 42 | 23 | 284 | 6 | . | . | 1 | 356 |
| 3.00-3.49 | . | . | . | 1 | 1 | 47 | 10 | . | . | . | 59 |
| 3.50-3.99 | . | . | . | . | 1 | 2 | 1 | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1248 | 3025 | 5676 | 1717 | 677 | 576 | 19 | 1 | 0 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 12110.

STATION S25 46.65N 90.28W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

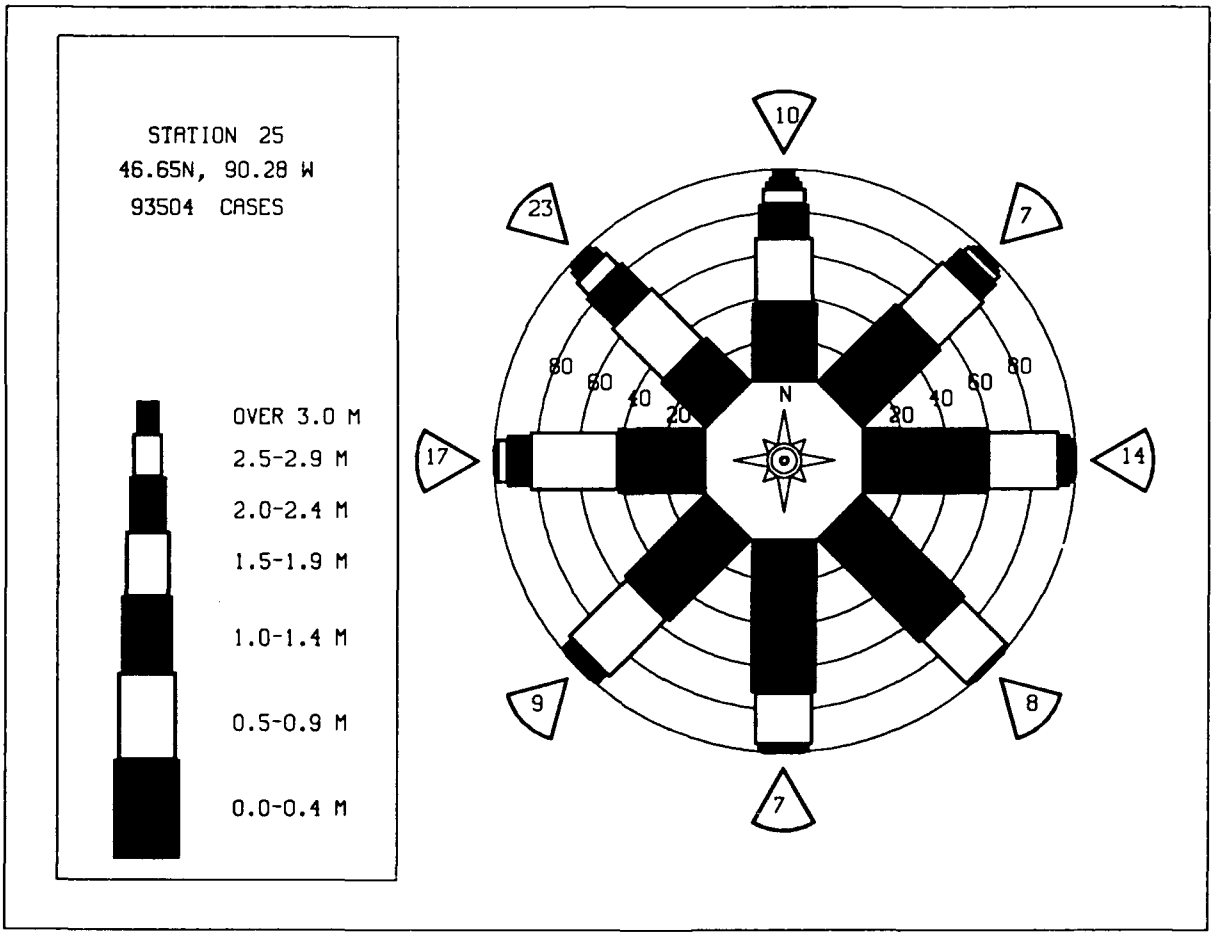
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 727 | 968 | 425 | 70 | 17 | 3 | . | . | . | . | 2210 |
| 0.50-0.99 | . | 473 | 1550 | 202 | 31 | 17 | . | . | . | . | 2273 |
| 1.00-1.49 | . | . | 666 | 555 | 47 | 18 | 2 | . | . | . | 1288 |
| 1.50-1.99 | . | . | 64 | 367 | 217 | 12 | 1 | . | 1 | . | 662 |
| 2.00-2.49 | . | . | . | 116 | 164 | 62 | 2 | 1 | . | . | 345 |
| 2.50-2.99 | . | . | . | 3 | 112 | 146 | . | . | . | . | 261 |
| 3.00-3.49 | . | . | . | . | 5 | 143 | . | . | . | . | 148 |
| 3.50-3.99 | . | . | . | . | . | 39 | 9 | . | . | . | 48 |
| 4.00-4.49 | . | . | . | . | . | . | 8 | . | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 1 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 727 | 1441 | 2705 | 1313 | 593 | 440 | 24 | 3 | 1 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.4 NO. OF CASES= 6788.

STATION S25 46.65N 90.28W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1832 | 2040 | 698 | 140 | 24 | 5 | . | . | . | . | 4739 |
| 0.50-0.99 | . | 1887 | 1257 | 184 | 54 | 28 | 2 | . | . | . | 3412 |
| 1.00-1.49 | . | . | 747 | 201 | 46 | 23 | 5 | 2 | . | . | 1024 |
| 1.50-1.99 | . | . | 142 | 189 | 98 | 21 | 3 | 2 | 1 | . | 456 |
| 2.00-2.49 | . | . | 3 | 81 | 51 | 50 | 3 | 2 | . | . | 190 |
| 2.50-2.99 | . | . | . | 8 | 28 | 54 | 2 | . | . | . | 92 |
| 3.00-3.49 | . | . | . | . | 1 | 36 | 2 | . | . | . | 39 |
| 3.50-3.99 | . | . | . | . | . | 10 | 3 | 1 | . | . | 14 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1832 | 3927 | 2847 | 803 | 302 | 227 | 22 | 7 | 1 | 0 | |

MEAN HS(M)= 0.6 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S25 (46.65N 90.28W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 0.8 | 0.8 | 0.9 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 1.2 | 1.0 | 0.7 |
| 1957 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 1.1 | 0.9 | 0.7 |
| 1958 | 0.7 | 1.2 | 0.5 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 1.0 | 0.8 | 0.7 |
| 1959 | 0.9 | 0.7 | 0.7 | 0.6 | 0.6 | 0.4 | 0.4 | 0.3 | 0.5 | 0.7 | 1.0 | 0.9 | 0.6 |
| 1960 | 0.9 | 1.0 | 0.7 | 0.7 | 0.6 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 1.0 | 0.9 | 0.7 |
| 1961 | 0.8 | 0.7 | 0.9 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1962 | 1.1 | 0.7 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.7 | 1.0 | 0.6 |
| 1963 | 0.9 | 1.0 | 0.8 | 0.6 | 0.5 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.9 | 1.0 | 0.6 |
| 1964 | 0.9 | 0.8 | 0.9 | 0.7 | 0.6 | 0.4 | 0.3 | 0.5 | 0.5 | 0.7 | 0.8 | 0.6 | 0.6 |
| 1965 | 1.0 | 0.9 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.5 | 0.9 | 1.0 | 1.1 | 0.7 |
| 1966 | 1.1 | 1.0 | 1.4 | 0.7 | 0.8 | 0.4 | 0.4 | 0.4 | 0.6 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1967 | 1.1 | 1.0 | 0.8 | 0.7 | 0.6 | 0.4 | 0.5 | 0.5 | 0.5 | 1.0 | 0.9 | 1.0 | 0.8 |
| 1968 | 0.8 | 1.5 | 1.0 | 0.8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 1.1 | 1.2 | 0.8 |
| 1969 | 1.0 | 0.7 | 0.9 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.8 | 0.7 | 0.6 |
| 1970 | 0.8 | 1.0 | 0.7 | 0.7 | 0.7 | 0.4 | 0.4 | 0.4 | 0.6 | 0.5 | 0.9 | 0.7 | 0.7 |
| 1971 | 1.0 | 1.0 | 0.9 | 0.7 | 0.6 | 0.3 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 | 0.7 | 0.6 |
| 1972 | 1.0 | 0.8 | 0.8 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | 0.8 | 0.6 | 0.7 | 0.6 |
| 1973 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.3 | 0.4 | 0.2 | 0.5 | 0.6 | 0.9 | 0.8 | 0.6 |
| 1974 | 0.7 | 0.6 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 0.7 | 0.6 |
| 1975 | 0.9 | 0.7 | 1.0 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 1.0 | 0.7 | 0.6 |
| 1976 | 0.9 | 0.9 | 1.1 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.5 | 0.4 | 0.7 | 0.8 | 0.6 |
| 1977 | 0.9 | 1.0 | 1.0 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1978 | 1.0 | 0.7 | 0.5 | 0.6 | 0.4 | 0.3 | 0.3 | 0.4 | 0.6 | 0.6 | 0.7 | 0.7 | 0.6 |
| 1979 | 0.8 | 0.6 | 0.9 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1980 | 0.8 | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.8 | 0.6 | 0.9 | 0.6 |
| 1981 | 0.8 | 0.8 | 0.8 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 |
| 1982 | 1.1 | 0.7 | 0.9 | 0.7 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 0.8 | 0.9 | 0.6 |
| 1983 | 0.8 | 0.7 | 1.0 | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.5 | 0.6 | 0.9 | 1.0 | 0.6 |
| 1984 | 0.8 | 0.8 | 0 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 0.8 | 0.9 | 0.6 |
| 1985 | 1.1 | 0 | 1 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.6 | 0.7 | 1.0 | 0.6 |
| 1986 | 0.9 | 0.9 | 0.9 | 0.7 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 0.8 | 0.7 | 0.6 |
| 1987 | 0.7 | 0.7 | 0.8 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.7 | 0.8 | 0.7 | 0.5 |
| MEAN | 0.9 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.8 | 0.8 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S25 (46.65N 90.28W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.7 | 2.6 | 2.3 | 3.7 | 2.2 | 1.8 | 1.2 | 1.1 | 2.0 | 2.7 | 5.0 | 2.6 |
| 1957 | 2.5 | 2.8 | 2.4 | 2.7 | 2.4 | 1.6 | 1.8 | 1.5 | 2.5 | 2.8 | 5.0 | 4.5 |
| 1958 | 4.3 | 3.2 | 1.7 | 2.7 | 1.9 | 1.9 | 1.4 | 1.5 | 2.5 | 2.5 | 2.8 | 2.8 |
| 1959 | 3.1 | 2.3 | 5.0 | 2.1 | 2.1 | 1.6 | 1.2 | 1.3 | 2.2 | 3.5 | 3.7 | 3.2 |
| 1960 | 3.2 | 3.3 | 3.6 | 2.5 | 3.0 | 1.4 | 1.3 | 1.6 | 1.9 | 2.8 | 3.4 | 3.8 |
| 1961 | 3.5 | 2.7 | 3.0 | 2.2 | 2.0 | 1.2 | 1.7 | 1.5 | 2.1 | 2.0 | 3.0 | 3.3 |
| 1962 | 3.1 | 3.3 | 2.8 | 2.3 | 1.7 | 1.1 | 1.7 | 1.2 | 1.8 | 2.6 | 2.7 | 3.1 |
| 1963 | 2.6 | 3.3 | 4.3 | 2.9 | 1.7 | 1.2 | 1.1 | 1.3 | 2.4 | 1.9 | 3.0 | 3.3 |
| 1964 | 2.9 | 3.4 | 2.9 | 2.3 | 2.0 | 1.4 | 1.0 | 1.6 | 2.2 | 3.0 | 2.3 | 2.3 |
| 1965 | 3.5 | 3.1 | 3.2 | 1.6 | 1.5 | 1.5 | 1.2 | 1.2 | 1.6 | 3.8 | 3.3 | 3.4 |
| 1966 | 3.5 | 2.8 | 5.3 | 2.3 | 2.2 | 1.7 | 1.3 | 1.4 | 2.4 | 4.4 | 4.1 | 2.8 |
| 1967 | 6.1 | 3.4 | 2.8 | 2.3 | 3.2 | 1.5 | 2.9 | 1.7 | 2.5 | 3.5 | 3.7 | 3.0 |
| 1968 | 3.6 | 4.0 | 4.4 | 3.6 | 2.4 | 1.5 | 1.9 | 1.6 | 1.7 | 3.0 | 3.9 | 4.6 |
| 1969 | 3.2 | 3.7 | 4.2 | 3.1 | 1.4 | 1.5 | 1.3 | 1.9 | 1.6 | 2.2 | 2.6 | 3.4 |
| 1970 | 3.4 | 3.7 | 2.9 | 2.2 | 1.7 | 1.2 | 1.3 | 1.4 | 2.4 | 2.7 | 3.5 | 2.8 |
| 1971 | 3.3 | 3.6 | 4.5 | 2.4 | 2.2 | 0.8 | 1.3 | 1.1 | 1.1 | 2.0 | 2.6 | 2.5 |
| 1972 | 3.7 | 3.5 | 4.2 | 1.9 | 1.5 | 1.3 | 1.1 | 0.8 | 1.7 | 3.1 | 3.1 | 3.3 |
| 1973 | 3.1 | 2.5 | 3.0 | 1.7 | 2.3 | 1.0 | 1.4 | 0.9 | 1.7 | 2.5 | 2.3 | 3.9 |
| 1974 | 2.3 | 3.0 | 2.2 | 2.6 | 1.2 | 1.2 | 1.8 | 1.3 | 1.2 | 2.0 | 3.0 | 3.0 |
| 1975 | 3.4 | 2.8 | 6.4 | 1.4 | 1.1 | 1.4 | 1.3 | 1.7 | 1.9 | 2.1 | 5.6 | 3.1 |
| 1976 | 2.8 | 3.8 | 4.8 | 2.4 | 1.7 | 1.4 | 0.9 | 1.2 | 1.7 | 1.9 | 2.5 | 3.3 |
| 1977 | 2.5 | 3.4 | 4.9 | 2.7 | 1.3 | 1.2 | 1.6 | 1.1 | 2.2 | 2.4 | 2.6 | 3.0 |
| 1978 | 3.9 | 2.7 | 2.5 | 1.8 | 1.8 | 1.0 | 1.0 | 1.0 | 3.0 | 2.5 | 2.1 | 1.8 |
| 1979 | 2.7 | 2.3 | 3.8 | 2.6 | 1.3 | 1.1 | 1.1 | 1.2 | 1.9 | 3.5 | 2.8 | 2.7 |
| 1980 | 3.0 | 2.8 | 2.7 | 2.0 | 1.2 | 1.1 | 0.8 | 1.3 | 2.2 | 2.5 | 2.4 | 2.5 |
| 1981 | 2.5 | 2.6 | 2.7 | 2.0 | 1.3 | 1.9 | 0.7 | 1.1 | 2.4 | 2.9 | 3.1 | 2.3 |
| 1982 | 3.8 | 2.0 | 3.0 | 3.6 | 1.2 | 1.8 | 1.1 | 1.0 | 1.8 | 3.4 | 3.4 | 3.4 |
| 1983 | 3.8 | 4.0 | 3.5 | 2.0 | 1.3 | 1.3 | 1.3 | 1.4 | 1.6 | 2.2 | 3.0 | 3.7 |
| 1984 | 2.6 | 3.4 | 4.4 | 3.1 | 2.2 | 1.6 | 1.4 | 1.2 | 1.6 | 2.1 | 2.8 | 2.6 |
| 1985 | 3.7 | 3.0 | 5.0 | 2.6 | 1.7 | 2.0 | 1.0 | 1.3 | 1.8 | 2.7 | 1.6 | 4.8 |
| 1986 | 3.6 | 2.1 | 3.7 | 1.8 | 2.6 | 1.1 | 0.9 | 1.1 | 2.2 | 2.7 | 2.2 | 2.3 |
| 1987 | 2.6 | 4.5 | 3.0 | 2.0 | 1.8 | 0.9 | 1.0 | 1.4 | 1.5 | 3.7 | 3.3 | 3.4 |

32 YR. STATISTICS FOR WIS STATION S25

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 0.6 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 3.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.3 |
| LARGEST WAVE HS . . . . . | (METERS) | 6.4 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 42.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 75032421 |

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 524 | 896 | 313 | 48 | 4 | . | . | . | . | . | 1785 |
| 0.50-0.99 | . | 314 | 1100 | 88 | 48 | 14 | . | . | . | . | 1564 |
| 1.00-1.49 | . | . | 275 | 420 | 34 | 39 | 2 | . | . | . | 770 |
| 1.50-1.99 | . | . | 22 | 244 | 114 | 13 | 8 | 1 | . | . | 402 |
| 2.00-2.49 | . | . | . | 59 | 67 | 36 | 1 | 4 | . | . | 167 |
| 2.50-2.99 | . | . | . | 1 | 93 | 36 | 1 | 2 | . | . | 133 |
| 3.00-3.49 | . | . | . | . | 3 | 98 | 1 | 1 | . | . | 103 |
| 3.50-3.99 | . | . | . | . | . | 45 | 6 | 1 | 1 | . | 53 |
| 4.00-4.49 | . | . | . | . | . | 5 | 8 | . | 2 | . | 15 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | 1 | 1 | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 524 | 1210 | 1710 | 860 | 363 | 286 | 28 | 11 | 6 | 2 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.3 NO. OF CASES= 4690.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 420 | 689 | 299 | 54 | 4 | . | . | . | . | . | 1466 |
| 0.50-0.99 | . | 239 | 772 | 114 | 43 | 14 | . | . | . | . | 1182 |
| 1.00-1.49 | . | . | 159 | 211 | 43 | 28 | 3 | . | . | . | 444 |
| 1.50-1.99 | . | . | 3 | 97 | 71 | 29 | 4 | 1 | . | . | 205 |
| 2.00-2.49 | . | . | . | 10 | 12 | 21 | 7 | 4 | . | 1 | 55 |
| 2.50-2.99 | . | . | . | 1 | 26 | 16 | 4 | 6 | 1 | . | 54 |
| 3.00-3.49 | . | . | . | . | 3 | 28 | 10 | 3 | . | . | 44 |
| 3.50-3.99 | . | . | . | . | . | 13 | 4 | 6 | . | . | 23 |
| 4.00-4.49 | . | . | . | . | . | . | 8 | 3 | 2 | . | 13 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 5 | 1 | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 2 | 1 | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 420 | 928 | 1233 | 487 | 202 | 149 | 42 | 29 | 7 | 7 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 3296.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 611 | 839 | 447 | 87 | 4 | 2 | . | 1 | . | . | 1991 |
| 0.50-0.99 | . | 301 | 747 | 142 | 39 | 12 | 2 | . | . | . | 1243 |
| 1.00-1.49 | . | . | 204 | 221 | 45 | 25 | 3 | 1 | . | . | 499 |
| 1.50-1.99 | . | . | 9 | 99 | 43 | 37 | 9 | 1 | . | . | 198 |
| 2.00-2.49 | . | . | . | 37 | 24 | 23 | 7 | 5 | . | . | 96 |
| 2.50-2.99 | . | . | . | 2 | 26 | 16 | 1 | 2 | 2 | 1 | 50 |
| 3.00-3.49 | . | . | . | . | 2 | 20 | 7 | . | 2 | 3 | 34 |
| 3.50-3.99 | . | . | . | . | . | 5 | 6 | 6 | . | . | 17 |
| 4.00-4.49 | . | . | . | . | . | 1 | 3 | 2 | 1 | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | 5 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 611 | 1140 | 1407 | 588 | 183 | 141 | 38 | 19 | 15 | 6 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 3896.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 752 | 1043 | 566 | 108 | 6 | 3 | . | . | . | . | 2478 |
| 0.50-0.99 | . | 624 | 564 | 177 | 47 | 19 | 2 | . | . | . | 1433 |
| 1.00-1.49 | . | . | 119 | 125 | 38 | 35 | 5 | 2 | 1 | . | 325 |
| 1.50-1.99 | . | . | 10 | 42 | 40 | 24 | 12 | 4 | 1 | . | 133 |
| 2.00-2.49 | . | . | 1 | 13 | 11 | 22 | 7 | 5 | 6 | 1 | 66 |
| 2.50-2.99 | . | . | . | 3 | 11 | 12 | 7 | 1 | 1 | 2 | 37 |
| 3.00-3.49 | . | . | . | . | 1 | 5 | 2 | 6 | 2 | . | 16 |
| 3.50-3.99 | . | . | . | 1 | . | 2 | . | . | 4 | . | 7 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | 1 | 2 | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 752 | 1667 | 1260 | 469 | 154 | 122 | 36 | 21 | 18 | 3 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 4228.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1438 | 2075 | 960 | 156 | 17 | 2 | . | . | . | . | 4648 |
| 0.50-0.99 | . | 1963 | 410 | 465 | 109 | 45 | 7 | . | 1 | . | 3000 |
| 1.00-1.49 | . | . | 198 | 143 | 126 | 54 | 16 | 6 | 2 | . | 545 |
| 1.50-1.99 | . | . | 81 | 8 | 83 | 24 | 27 | 5 | 4 | . | 232 |
| 2.00-2.49 | . | . | 22 | . | 6 | 19 | 8 | 10 | 9 | 1 | 75 |
| 2.50-2.99 | . | . | 2 | 1 | . | 2 | 3 | . | . | 2 | 10 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1438 | 4038 | 1673 | 773 | 341 | 146 | 61 | 21 | 19 | 6 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 7977.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1263 | 1366 | 501 | 95 | 8 | 5 | . | . | . | . | 3238 |
| 0.50-0.99 | . | 1414 | 143 | 139 | 68 | 25 | 2 | 2 | . | . | 1793 |
| 1.00-1.49 | . | . | 111 | 8 | 20 | 10 | 7 | 4 | 1 | 1 | 162 |
| 1.50-1.99 | . | . | 45 | 1 | 4 | 4 | 3 | 3 | . | . | 60 |
| 2.00-2.49 | . | . | 1 | 1 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1263 | 2780 | 801 | 245 | 100 | 44 | 12 | 9 | 1 | 1 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 4924.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1115 | 1150 | 378 | 83 | 5 | 3 | 1 | . | . | . | 2735 |
| 0.50-0.99 | . | 983 | 159 | 38 | 31 | 20 | 1 | 2 | . | . | 1234 |
| 1.00-1.49 | . | . | 63 | . | 4 | 7 | 1 | 1 | . | . | 76 |
| 1.50-1.99 | . | . | 8 | . | . | . | . | 3 | . | . | 11 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1115 | 2133 | 608 | 121 | 40 | 30 | 3 | 6 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.1 NO. OF CASES= 3799.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1026 | 1033 | 276 | 42 | 17 | 1 | . | . | . | . | 2395 |
| 0.50-0.99 | . | 732 | 81 | 16 | 18 | 3 | . | 1 | . | . | 851 |
| 1.00-1.49 | . | . | 51 | . | . | 4 | . | . | . | . | 55 |
| 1.50-1.99 | . | . | 7 | . | . | . | . | . | . | . | 7 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1026 | 1765 | 415 | 58 | 35 | 8 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.9 NO. OF CASES= 3098.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1147 | 1213 | 285 | 65 | 8 | 1 | . | . | . | . | 2719 |
| 0.50-0.99 | . | 667 | 47 | 9 | 14 | 2 | . | . | . | . | 739 |
| 1.00-1.49 | . | . | 95 | . | . | 2 | . | 1 | . | . | 98 |
| 1.50-1.99 | . | . | 2 | . | . | . | . | . | . | . | 2 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1147 | 1880 | 429 | 74 | 22 | 5 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 2.9 NO. OF CASES= 3332.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 861 | 1463 | 221 | 49 | 6 | . | . | . | 1 | . | 2601 |
| 0.50-0.99 | . | 1017 | 279 | 10 | 11 | 5 | . | . | . | . | 1322 |
| 1.00-1.49 | . | . | 255 | . | . | . | 1 | . | . | . | 256 |
| 1.50-1.99 | . | . | 16 | 22 | . | . | 1 | . | . | . | 39 |
| 2.00-2.49 | . | . | . | 8 | . | . | . | . | . | . | 8 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 861 | 2480 | 771 | 89 | 17 | 5 | 2 | 0 | 1 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 3957.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 883 | 1365 | 266 | 73 | 10 | 1 | . | . | . | . | 2598 |
| 0.50-0.99 | . | 701 | 942 | 9 | 14 | 6 | . | . | . | . | 1672 |
| 1.00-1.49 | . | . | 623 | 7 | . | 3 | . | 1 | . | . | 634 |
| 1.50-1.99 | . | . | 59 | 177 | . | . | . | 1 | . | . | 237 |
| 2.00-2.49 | . | . | . | 57 | . | . | . | . | . | . | 57 |
| 2.50-2.99 | . | . | . | 1 | 4 | . | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 883 | 2066 | 1890 | 324 | 28 | 10 | 0 | 2 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 4874.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1059 | 1407 | 235 | 71 | 4 | . | . | . | . | . | 2776 |
| 0.50-0.99 | . | 697 | 1279 | 23 | 16 | 5 | . | . | . | . | 2020 |
| 1.00-1.49 | . | . | 903 | 14 | 1 | 5 | . | . | . | . | 923 |
| 1.50-1.99 | . | . | 60 | 272 | . | . | . | 1 | . | . | 333 |
| 2.00-2.49 | . | . | . | 96 | . | . | . | . | . | . | 96 |
| 2.50-2.99 | . | . | . | 8 | 28 | . | . | 1 | . | . | 37 |
| 3.00-3.49 | . | . | . | . | 6 | . | . | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1059 | 2104 | 2477 | 484 | 55 | 10 | 0 | 2 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 5798.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1544 | 2008 | 453 | 100 | 10 | 3 | 1 | . | . | . | 4119 |
| 0.50-0.99 | . | 1118 | 1788 | 72 | 28 | 12 | . | . | . | . | 3018 |
| 1.00-1.49 | . | . | 1358 | 5 | 2 | 2 | . | . | . | . | 1367 |
| 1.50-1.99 | . | . | 96 | 382 | . | . | . | . | . | . | 478 |
| 2.00-2.49 | . | . | . | 239 | . | . | . | . | . | . | 239 |
| 2.50-2.99 | . | . | . | 19 | 26 | . | . | . | . | . | 45 |
| 3.00-3.49 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | 2 | 3 | . | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1544 | 3126 | 3695 | 817 | 70 | 20 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 8680.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1437 | 2418 | 542 | 69 | 4 | 1 | 1 | . | . | . | 4472 |
| 0.50-0.99 | . | 1316 | 2728 | 166 | 48 | 6 | . | . | . | . | 4264 |
| 1.00-1.49 | . | . | 1804 | 255 | 21 | 9 | 2 | . | . | . | 2091 |
| 1.50-1.99 | . | . | 260 | 636 | 86 | 4 | . | . | . | . | 986 |
| 2.00-2.49 | . | . | . | 423 | 47 | 9 | . | . | . | . | 479 |
| 2.50-2.99 | . | . | . | 49 | 133 | 17 | . | . | . | . | 199 |
| 3.00-3.49 | . | . | . | . | 13 | 51 | 1 | . | . | . | 65 |
| 3.50-3.99 | . | . | . | . | . | 22 | 1 | . | . | . | 23 |
| 4.00-4.49 | . | . | . | . | . | 1 | 2 | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1437 | 3734 | 5334 | 1598 | 352 | 120 | 8 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 11777.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 855 | 1802 | 634 | 87 | 18 | 1 | . | . | . | . | 3397 |
| 0.50-0.99 | . | 817 | 3167 | 229 | 41 | 10 | . | . | . | . | 4264 |
| 1.00-1.49 | . | . | 1096 | 1434 | 43 | 17 | . | 1 | . | . | 2591 |
| 1.50-1.99 | . | . | 64 | 1013 | 453 | 4 | . | . | . | . | 1534 |
| 2.00-2.49 | . | . | . | 274 | 392 | 32 | 1 | . | . | . | 699 |
| 2.50-2.99 | . | . | . | 5 | 466 | 178 | . | . | 1 | . | 650 |
| 3.00-3.49 | . | . | . | . | 18 | 467 | . | . | . | . | 485 |
| 3.50-3.99 | . | . | . | . | . | 144 | 3 | . | . | . | 147 |
| 4.00-4.49 | . | . | . | . | . | 6 | 9 | . | . | . | 15 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 2 | . | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 855 | 2619 | 4961 | 3042 | 1431 | 859 | 16 | 3 | 1 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.6 NO. OF CASES= 12904.

STATION S26 46.80N 90.07W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

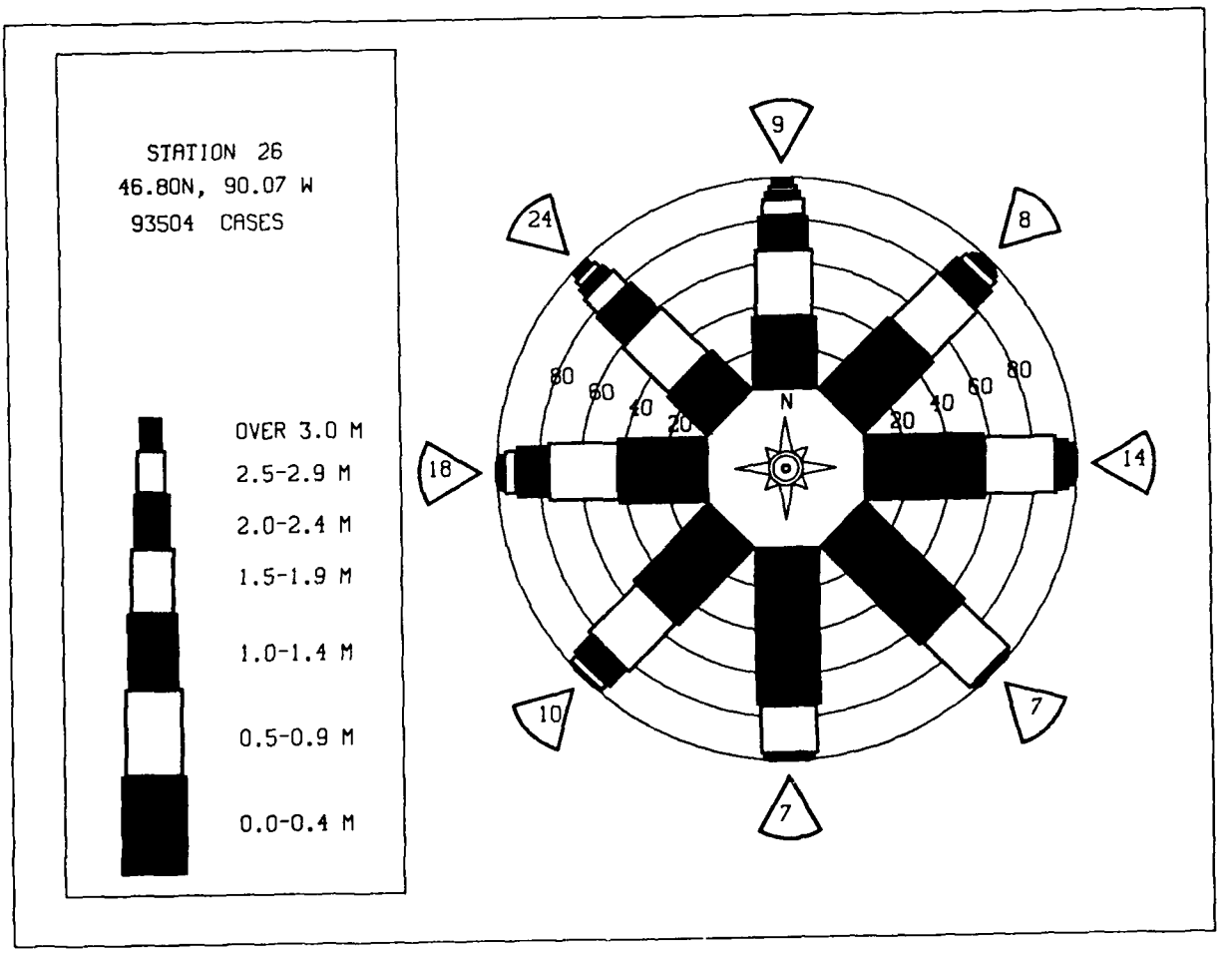
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 537 | 847 | 345 | 41 | 4 | 1 | . | . | . | . | 1775 |
| 0.50-0.99 | . | 392 | 1552 | 98 | 40 | 13 | . | . | . | . | 2095 |
| 1.00-1.49 | . | . | 394 | 760 | 21 | 21 | 1 | . | . | . | 1197 |
| 1.50-1.99 | . | . | 26 | 443 | 224 | 7 | 2 | . | . | . | 702 |
| 2.00-2.49 | . | . | . | 115 | 148 | 47 | . | 2 | . | . | 312 |
| 2.50-2.99 | . | . | . | . | 198 | 93 | . | . | . | . | 291 |
| 3.00-3.49 | . | . | . | . | 4 | 226 | . | . | . | . | 230 |
| 3.50-3.99 | . | . | . | . | . | 78 | 3 | . | . | . | 81 |
| 4.00-4.49 | . | . | . | . | . | 2 | 7 | . | . | . | 9 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 1 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 537 | 1239 | 2317 | 1457 | 639 | 488 | 15 | 3 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.6 NO. OF CASES= 6274.

STATION S26 46.80N 90.07W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1548 | 2162 | 672 | 123 | 13 | 2 | . | . | . | . | 4520 |
| 0.50-0.99 | . | 1330 | 1576 | 180 | 62 | 22 | 1 | . | . | . | 3171 |
| 1.00-1.49 | . | . | 771 | 360 | 40 | 26 | 4 | 1 | . | . | 1202 |
| 1.50-1.99 | . | . | 77 | 344 | 112 | 15 | 6 | 2 | . | . | 556 |
| 2.00-2.49 | . | . | 2 | 133 | 71 | 21 | 3 | 3 | 1 | . | 234 |
| 2.50-2.99 | . | . | . | 9 | 101 | 37 | 1 | 1 | . | . | 149 |
| 3.00-3.49 | . | . | . | . | 5 | 89 | 2 | 1 | . | . | 97 |
| 3.50-3.99 | . | . | . | . | . | 31 | 2 | 1 | . | . | 34 |
| 4.00-4.49 | . | . | . | . | . | 1 | 4 | . | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1548 | 3492 | 3098 | 1149 | 404 | 244 | 23 | 10 | 1 | 0 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S26 (46.80N 90.07W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 0.9 | 0.9 | 1.0 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.9 | 1.3 | 1.1 | 0.8 |
| 1957 | 1.2 | 1.0 | 0.7 | 0.7 | 0.7 | 0.5 | 0.4 | 0.5 | 0.6 | 0.6 | 1.2 | 1.0 | 0.8 |
| 1958 | 0.7 | 1.3 | 0.5 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 1.2 | 0.9 | 0.7 |
| 1959 | 1.0 | 0.8 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 1.1 | 1.0 | 0.7 |
| 1960 | 1.0 | 1.0 | 0.8 | 0.8 | 0.7 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 1.2 | 1.0 | 0.8 |
| 1961 | 0.9 | 0.8 | 1.0 | 0.7 | 0.6 | 0.5 | 0.3 | 0.3 | 0.6 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1962 | 1.2 | 0.8 | 0.6 | 0.7 | 0.5 | 0.3 | 0.4 | 0.3 | 0.5 | 0.6 | 0.7 | 1.1 | 0.6 |
| 1963 | 1.0 | 1.1 | 0.9 | 0.6 | 0.5 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 1.0 | 1.1 | 0.7 |
| 1964 | 1.1 | 0.9 | 1.0 | 0.7 | 0.6 | 0.4 | 0.4 | 0.6 | 0.6 | 0.8 | 0.9 | 0.7 | 0.7 |
| 1965 | 1.2 | 1.1 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 1.0 | 1.2 | 1.2 | 0.8 |
| 1966 | 1.3 | 1.1 | 1.5 | 0.8 | 0.9 | 0.5 | 0.4 | 0.5 | 0.7 | 1.1 | 1.2 | 1.1 | 0.9 |
| 1967 | 1.3 | 1.2 | 0.9 | 0.8 | 0.7 | 0.4 | 0.5 | 0.5 | 0.6 | 1.1 | 1.1 | 1.2 | 0.9 |
| 1968 | 0.9 | 1.8 | 1.1 | 0.8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.8 | 1.3 | 1.3 | 0.9 |
| 1969 | 1.2 | 0.7 | 1.0 | 0.6 | 0.6 | 0.5 | 0.3 | 0.5 | 0.5 | 0.8 | 0.9 | 0.8 | 0.7 |
| 1970 | 0.9 | 1.2 | 0.8 | 0.8 | 0.7 | 0.4 | 0.5 | 0.4 | 0.6 | 0.6 | 1.0 | 0.8 | 0.7 |
| 1971 | 1.2 | 1.1 | 1.0 | 0.8 | 0.6 | 0.3 | 0.4 | 0.3 | 0.4 | 0.6 | 0.8 | 0.7 | 0.7 |
| 1972 | 1.2 | 0.9 | 0.9 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.6 | 0.9 | 0.7 | 0.8 | 0.7 |
| 1973 | 0.9 | 0.8 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.3 | 0.6 | 0.7 | 1.0 | 0.9 | 0.7 |
| 1974 | 0.8 | 0.6 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 1.0 | 0.8 | 0.7 |
| 1975 | 1.0 | 0.9 | 1.1 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 1.0 | 0.8 | 0.7 |
| 1976 | 1.0 | 1.0 | 1.2 | 0.6 | 0.6 | 0.4 | 0.3 | 0.4 | 0.5 | 0.5 | 0.8 | 0.9 | 0.7 |
| 1977 | 1.1 | 1.2 | 1.1 | 0.5 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1978 | 1.1 | 0.8 | 0.7 | 0.7 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.7 | 0.8 | 0.9 | 0.6 |
| 1979 | 0.9 | 0.6 | 0.9 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.7 | 0.9 | 0.9 | 0.6 |
| 1980 | 0.9 | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.9 | 0.7 | 1.0 | 0.7 |
| 1981 | 0.9 | 0.9 | 0.9 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 | 0.8 | 0.7 | 0.6 |
| 1982 | 1.3 | 0.9 | 1.0 | 0.8 | 0.5 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 | 0.9 | 1.0 | 0.7 |
| 1983 | 0.9 | 0.7 | 1.1 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.6 | 1.0 | 1.1 | 0.7 |
| 1984 | 0.9 | 0.8 | 1.0 | 0.7 | 0.5 | 0.4 | 0.4 | 0.3 | 0.6 | 0.7 | 1.0 | 1.1 | 0.7 |
| 1985 | 1.3 | 0.9 | 1.1 | 0.6 | 0.5 | 0.5 | 0.3 | 0.4 | 0.4 | 0.6 | 0.8 | 1.2 | 0.7 |
| 1986 | 1.0 | 0.6 | 1.0 | 0.8 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.6 | 0.9 | 0.8 | 0.7 |
| 1987 | 0.8 | 0.8 | 0.9 | 0.5 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.8 | 0.9 | 0.8 | 0.6 |
| MEAN | 1.0 | 0.9 | 0.9 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 1.0 | 1.0 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S26 (46.80N 90.07W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.9 | 3.4 | 3.0 | 3.6 | 2.5 | 1.7 | 1.3 | 1.2 | 2.6 | 4.4 | 4.9 | 3.2 |
| 1957 | 3.2 | 3.4 | 3.2 | 2.8 | 2.4 | 1.9 | 2.3 | 1.6 | 3.2 | 2.6 | 4.7 | 4.0 |
| 1958 | 3.8 | 3.3 | 2.4 | 2.7 | 2.4 | 1.9 | 1.5 | 1.7 | 3.1 | 3.0 | 3.6 | 4.0 |
| 1959 | 3.4 | 2.6 | 5.2 | 3.3 | 2.4 | 1.8 | 1.4 | 1.6 | 2.6 | 3.3 | 3.7 | 3.5 |
| 1960 | 3.6 | 3.7 | 4.0 | 2.2 | 3.5 | 1.5 | 1.7 | 1.9 | 2.3 | 3.3 | 3.6 | 3.6 |
| 1961 | 3.7 | 3.1 | 3.7 | 2.6 | 2.0 | 1.3 | 2.2 | 1.7 | 2.8 | 2.7 | 3.6 | 3.5 |
| 1962 | 3.6 | 3.2 | 2.8 | 3.1 | 2.0 | 1.1 | 2.0 | 1.5 | 2.4 | 3.1 | 3.3 | 3.6 |
| 1963 | 3.2 | 4.0 | 3.8 | 3.4 | 1.8 | 1.5 | 1.3 | 1.6 | 2.4 | 2.3 | 3.7 | 3.2 |
| 1964 | 3.9 | 3.1 | 3.4 | 2.6 | 2.2 | 1.8 | 1.3 | 1.8 | 2.7 | 2.9 | 2.7 | 2.8 |
| 1965 | 4.2 | 3.6 | 3.2 | 2.1 | 1.8 | 1.8 | 1.3 | 1.2 | 2.0 | 3.9 | 4.3 | 3.9 |
| 1966 | 5.1 | 3.2 | 6.0 | 2.8 | 3.0 | 2.2 | 1.7 | 1.8 | 2.8 | 5.1 | 4.1 | 3.5 |
| 1967 | 6.7 | 4.1 | 3.3 | 3.0 | 3.2 | 1.8 | 3.3 | 1.8 | 3.1 | 3.9 | 3.8 | 3.8 |
| 1968 | 3.7 | 5.0 | 4.9 | 3.8 | 2.9 | 2.1 | 2.7 | 2.0 | 2.0 | 3.3 | 4.3 | 5.0 |
| 1969 | 3.5 | 3.8 | 4.8 | 3.0 | 1.6 | 1.8 | 1.7 | 2.3 | 1.9 | 2.8 | 3.5 | 4.0 |
| 1970 | 3.3 | 3.9 | 3.1 | 2.9 | 2.2 | 1.5 | 1.8 | 1.7 | 3.0 | 3.4 | 3.8 | 3.7 |
| 1971 | 3.7 | 3.8 | 4.7 | 2.8 | 2.1 | 0.9 | 1.4 | 1.3 | 1.3 | 2.7 | 3.2 | 3.2 |
| 1972 | 4.2 | 3.9 | 3.8 | 2.3 | 1.4 | 1.7 | 1.2 | 1.1 | 2.4 | 4.2 | 3.2 | 5.2 |
| 1973 | 3.4 | 2.7 | 3.0 | 2.1 | 2.6 | 1.2 | 1.8 | 1.0 | 2.2 | 3.1 | 3.1 | 4.2 |
| 1974 | 3.0 | 3.1 | 2.8 | 2.7 | 1.3 | 1.3 | 2.1 | 1.7 | 1.4 | 2.1 | 2.7 | 3.3 |
| 1975 | 3.2 | 4.3 | 6.0 | 1.7 | 1.2 | 1.6 | 1.8 | 2.2 | 2.4 | 2.7 | 5.6 | 3.4 |
| 1976 | 3.3 | 3.8 | 4.6 | 2.1 | 1.8 | 1.7 | 1.0 | 1.6 | 2.0 | 2.3 | 3.1 | 3.4 |
| 1977 | 3.3 | 3.4 | 5.0 | 2.6 | 1.5 | 1.3 | 2.0 | 1.5 | 3.2 | 2.6 | 3.2 | 2.8 |
| 1978 | 4.1 | 2.9 | 3.1 | 2.4 | 1.8 | 1.2 | 1.2 | 1.2 | 2.6 | 2.6 | 2.4 | 2.3 |
| 1979 | 2.8 | 2.8 | 3.6 | 3.1 | 1.7 | 1.3 | 1.3 | 1.5 | 1.9 | 3.4 | 2.7 | 2.9 |
| 1980 | 3.5 | 2.8 | 3.6 | 2.2 | 1.3 | 1.3 | 1.0 | 1.5 | 3.0 | 3.2 | 3.2 | 3.1 |
| 1981 | 2.9 | 3.0 | 2.9 | 2.5 | 1.3 | 2.4 | 0.9 | 1.1 | 3.6 | 3.4 | 3.5 | 2.7 |
| 1982 | 4.0 | 2.2 | 4.0 | 3.3 | 1.2 | 2.1 | 1.5 | 1.2 | 1.8 | 3.3 | 3.7 | 3.3 |
| 1983 | 3.7 | 4.2 | 3.7 | 1.9 | 1.5 | 1.6 | 1.9 | 1.6 | 1.8 | 2.9 | 3.5 | 4.0 |
| 1984 | 3.5 | 3.2 | 4.3 | 3.3 | 2.7 | 2.2 | 1.8 | 1.6 | 2.1 | 2.6 | 4.5 | 3.5 |
| 1985 | 4.0 | 3.4 | 4.1 | 3.0 | 1.6 | 2.5 | 1.1 | 1.6 | 2.3 | 2.6 | 2.0 | 5.4 |
| 1986 | 3.9 | 2.4 | 3.5 | 2.2 | 3.2 | 1.4 | 1.1 | 1.2 | 3.0 | 3.5 | 2.8 | 3.1 |
| 1987 | 2.8 | 4.6 | 3.1 | 2.2 | 2.7 | 1.2 | 1.1 | 1.9 | 2.1 | 3.9 | 3.1 | 3.3 |

32 YR. STATISTICS FOR WIS STATION S26

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.8 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 6.7 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 23.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 67010715 |

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 357 | 792 | 239 | 34 | 2 | . | . | . | . | . | 1424 |
| 0.50-0.99 | . | 271 | 1061 | 119 | 45 | 1 | . | . | . | . | 1497 |
| 1.00-1.49 | . | . | 280 | 388 | 40 | 33 | . | . | . | . | 741 |
| 1.50-1.99 | . | . | 25 | 252 | 114 | 28 | 5 | . | . | . | 424 |
| 2.00-2.49 | . | . | . | 68 | 88 | 26 | 2 | 1 | . | . | 185 |
| 2.50-2.99 | . | . | . | 2 | 89 | 48 | 1 | 3 | . | . | 143 |
| 3.00-3.49 | . | . | . | . | 8 | 122 | 1 | 2 | . | . | 133 |
| 3.50-3.99 | . | . | . | . | . | 37 | 4 | . | . | . | 41 |
| 4.00-4.49 | . | . | . | . | . | 4 | 20 | 1 | 1 | . | 26 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | 1 | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 357 | 1063 | 1605 | 863 | 386 | 299 | 35 | 9 | 3 | 2 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 4337.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 317 | 589 | 190 | 22 | 1 | . | . | . | . | . | 1119 |
| 0.50-0.99 | . | 254 | 794 | 109 | 26 | 3 | . | . | . | . | 1186 |
| 1.00-1.49 | . | . | 164 | 228 | 42 | 21 | . | . | . | . | 455 |
| 1.50-1.99 | . | . | 5 | 113 | 83 | 27 | 2 | . | . | . | 230 |
| 2.00-2.49 | . | . | . | 20 | 27 | 33 | 6 | . | . | . | 86 |
| 2.50-2.99 | . | . | . | . | 27 | 14 | 3 | 2 | . | . | 46 |
| 3.00-3.49 | . | . | . | . | 2 | 34 | 5 | 6 | 1 | . | 48 |
| 3.50-3.99 | . | . | . | . | . | 14 | 10 | 7 | . | . | 31 |
| 4.00-4.49 | . | . | . | . | . | 1 | 5 | 7 | 1 | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 1 | 3 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | 2 | 2 | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 317 | 843 | 1153 | 492 | 208 | 147 | 33 | 27 | 10 | 6 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.3 NO. OF CASES= 3043.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 434 | 869 | 305 | 49 | . | . | . | . | . | . | 1657 |
| 0.50-0.99 | . | 301 | 974 | 152 | 47 | 1 | . | . | . | . | 1475 |
| 1.00-1.49 | . | . | 243 | 340 | 39 | 17 | 1 | . | . | . | 640 |
| 1.50-1.99 | . | . | 11 | 139 | 81 | 40 | 3 | . | . | . | 274 |
| 2.00-2.49 | . | . | . | 28 | 37 | 42 | 5 | 4 | . | . | 116 |
| 2.50-2.99 | . | . | . | 2 | 53 | 33 | 9 | 7 | . | . | 104 |
| 3.00-3.49 | . | . | . | . | 5 | 27 | 7 | 2 | 1 | 1 | 43 |
| 3.50-3.99 | . | . | . | . | . | 14 | 9 | 6 | 1 | . | 30 |
| 4.00-4.49 | . | . | . | . | . | . | 6 | 4 | 3 | 1 | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 5 | 1 | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | 3 | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 434 | 1170 | 1533 | 710 | 262 | 174 | 41 | 31 | 11 | 5 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.3 NO. OF CASES= 4104.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 514 | 922 | 288 | 24 | 2 | . | . | . | . | . | 1750 |
| 0.50-0.99 | . | 505 | 1151 | 137 | 38 | 8 | . | . | . | . | 1839 |
| 1.00-1.49 | . | . | 536 | 162 | 33 | 17 | 2 | . | . | . | 750 |
| 1.50-1.99 | . | . | 47 | 149 | 42 | 23 | 7 | 4 | . | . | 272 |
| 2.00-2.49 | . | . | . | 91 | 16 | 17 | 13 | 2 | . | . | 139 |
| 2.50-2.99 | . | . | . | 17 | 36 | 19 | 3 | 3 | 1 | . | 79 |
| 3.00-3.49 | . | . | . | 1 | 14 | 19 | 2 | 3 | . | 1 | 40 |
| 3.50-3.99 | . | . | . | . | 3 | 14 | 4 | 2 | 3 | . | 26 |
| 4.00-4.49 | . | . | . | . | . | 1 | 8 | . | 3 | 2 | 14 |
| 4.50-4.99 | . | . | . | . | . | 1 | 3 | 3 | 7 | . | 14 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 3 | 4 | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 514 | 1427 | 2022 | 581 | 184 | 119 | 44 | 20 | 21 | 3 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 4634.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 976 | 1663 | 426 | 32 | 5 | . | . | . | . | . | 3102 |
| 0.50-0.99 | . | 1119 | 2068 | 129 | 48 | 9 | 2 | . | . | . | 3375 |
| 1.00-1.49 | . | . | 1254 | 43 | 26 | 34 | 2 | 1 | . | . | 1360 |
| 1.50-1.99 | . | . | 118 | 254 | 8 | 14 | 7 | 1 | . | . | 402 |
| 2.00-2.49 | . | . | . | 211 | 1 | 7 | 7 | 8 | . | . | 234 |
| 2.50-2.99 | . | . | . | 58 | 27 | 1 | 2 | 5 | . | . | 93 |
| 3.00-3.49 | . | . | . | 1 | 29 | . | 1 | 3 | 1 | 1 | 36 |
| 3.50-3.99 | . | . | . | . | 7 | 2 | . | . | . | 1 | 10 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 976 | 2782 | 3866 | 728 | 151 | 69 | 21 | 18 | 1 | 2 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 8070.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 883 | 1245 | 297 | 38 | 3 | . | . | . | . | . | 2466 |
| 0.50-0.99 | . | 1030 | 765 | 85 | 29 | 8 | 2 | . | . | . | 1919 |
| 1.00-1.49 | . | . | 436 | 8 | 10 | 13 | 3 | 1 | . | . | 471 |
| 1.50-1.99 | . | . | 42 | 59 | 1 | 4 | 3 | 1 | . | . | 110 |
| 2.00-2.49 | . | . | . | 49 | . | . | . | 1 | . | . | 50 |
| 2.50-2.99 | . | . | . | 6 | 11 | . | . | 1 | . | . | 18 |
| 3.00-3.49 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 883 | 2275 | 1540 | 245 | 56 | 27 | 8 | 4 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.4 NO. OF CASES= 4723.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 931 | 1247 | 324 | 44 | 3 | 1 | . | . | . | . | 2550 |
| 0.50-0.99 | . | 1076 | 249 | 62 | 24 | 6 | 1 | 1 | . | . | 1419 |
| 1.00-1.49 | . | . | 141 | 8 | 8 | 9 | 1 | . | . | . | 167 |
| 1.50-1.99 | . | . | 25 | 2 | . | 2 | 1 | . | 1 | . | 31 |
| 2.00-2.49 | . | . | . | 1 | . | . | 1 | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 931 | 2323 | 739 | 117 | 35 | 18 | 4 | 2 | 1 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 3906.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 912 | 1101 | 235 | 22 | 5 | 2 | . | . | . | . | 2277 |
| 0.50-0.99 | . | 714 | 116 | 21 | 22 | 1 | . | . | . | . | 874 |
| 1.00-1.49 | . | . | 56 | 2 | 2 | 4 | . | . | . | . | 64 |
| 1.50-1.99 | . | . | 8 | . | . | . | . | . | . | . | 8 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 912 | 1815 | 415 | 45 | 29 | 7 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 2.9 NO. OF CASES= 3019.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 914 | 1106 | 305 | 48 | 3 | . | . | . | . | . | 2376 |
| 0.50-0.99 | . | 639 | 91 | 27 | 9 | 1 | . | . | . | . | 767 |
| 1.00-1.49 | . | . | 97 | 1 | 2 | 7 | . | 1 | . | . | 108 |
| 1.50-1.99 | . | . | 5 | 1 | . | . | 1 | . | . | . | 7 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 914 | 1745 | 498 | 77 | 14 | 8 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 3053.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 702 | 1292 | 274 | 33 | 4 | . | . | . | . | . | 2305 |
| 0.50-0.99 | . | 903 | 317 | 26 | 14 | 3 | . | . | . | . | 1263 |
| 1.00-1.49 | . | . | 227 | 16 | 2 | 2 | 1 | . | . | . | 248 |
| 1.50-1.99 | . | . | 22 | 21 | . | . | . | 1 | . | . | 44 |
| 2.00-2.49 | . | . | . | 16 | 1 | . | . | . | . | . | 17 |
| 2.50-2.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 702 | 2195 | 840 | 112 | 22 | 5 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 3634.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 680 | 1316 | 306 | 60 | 5 | 1 | 1 | . | . | . | 2369 |
| 0.50-0.99 | . | 645 | 1151 | 33 | 12 | 7 | . | . | . | . | 1848 |
| 1.00-1.49 | . | . | 464 | 81 | 3 | 3 | . | . | . | . | 551 |
| 1.50-1.99 | . | . | 47 | 188 | 3 | . | . | . | . | . | 238 |
| 2.00-2.49 | . | . | . | 106 | 17 | . | . | . | . | . | 123 |
| 2.50-2.99 | . | . | . | 2 | 35 | . | . | . | . | . | 37 |
| 3.00-3.49 | . | . | . | . | 2 | 2 | . | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 680 | 1961 | 1968 | 470 | 77 | 14 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 4844.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 849 | 1485 | 284 | 52 | 3 | . | . | . | . | . | 2673 |
| 0.50-0.99 | . | 664 | 1384 | 50 | 18 | 4 | . | . | . | . | 2120 |
| 1.00-1.49 | . | . | 698 | 137 | 3 | 6 | . | . | . | . | 844 |
| 1.50-1.99 | . | . | 26 | 326 | . | . | . | . | . | . | 352 |
| 2.00-2.49 | . | . | . | 147 | 33 | . | . | 1 | . | . | 181 |
| 2.50-2.99 | . | . | . | 3 | 55 | . | . | . | . | . | 58 |
| 3.00-3.49 | . | . | . | . | 10 | 12 | . | . | . | . | 22 |
| 3.50-3.99 | . | . | . | . | . | 8 | . | . | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 849 | 2149 | 2392 | 715 | 122 | 30 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.7 NO. OF CASES= 5861.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1290 | 2167 | 412 | 83 | 2 | . | . | . | . | . | 3954 |
| 0.50-0.99 | . | 983 | 2374 | 68 | 38 | 6 | . | . | . | . | 3469 |
| 1.00-1.49 | . | . | 1304 | 87 | 5 | 9 | . | . | . | . | 1405 |
| 1.50-1.99 | . | . | 68 | 527 | . | 1 | . | . | . | . | 596 |
| 2.00-2.49 | . | . | . | 332 | 35 | . | . | . | . | . | 367 |
| 2.50-2.99 | . | . | . | 3 | 134 | . | . | 1 | . | . | 138 |
| 3.00-3.49 | . | . | . | . | 31 | 1 | . | . | . | . | 32 |
| 3.50-3.99 | . | . | . | . | . | 5 | . | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1290 | 3150 | 4158 | 1100 | 245 | 26 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 9333.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1067 | 2573 | 549 | 59 | 3 | 1 | . | . | . | . | 4252 |
| 0.50-0.99 | . | 1142 | 3730 | 199 | 47 | 7 | . | . | . | . | 5125 |
| 1.00-1.49 | . | . | 1656 | 682 | 38 | 9 | . | . | . | . | 2385 |
| 1.50-1.99 | . | . | 128 | 1079 | 244 | 14 | 1 | . | . | . | 1466 |
| 2.00-2.49 | . | . | . | 580 | 165 | 45 | . | . | . | . | 790 |
| 2.50-2.99 | . | . | . | 51 | 374 | 58 | . | . | . | . | 483 |
| 3.00-3.49 | . | . | . | . | 90 | 178 | 3 | . | . | . | 271 |
| 3.50-3.99 | . | . | . | . | 6 | 78 | 5 | . | . | . | 89 |
| 4.00-4.49 | . | . | . | . | . | 6 | 11 | . | . | . | 17 |
| 4.50-4.99 | . | . | . | . | . | 1 | 5 | . | . | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1067 | 3715 | 6063 | 2650 | 967 | 397 | 25 | 2 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 13935.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 632 | 1651 | 522 | 55 | 4 | . | . | . | . | . | 2864 |
| 0.50-0.99 | . | 640 | 3164 | 150 | 50 | 7 | . | . | . | . | 4011 |
| 1.00-1.49 | . | 1 | 774 | 1368 | 26 | 18 | . | . | . | . | 2187 |
| 1.50-1.99 | . | . | 47 | 906 | 409 | 6 | . | . | . | . | 1368 |
| 2.00-2.49 | . | . | . | 243 | 364 | 33 | . | . | . | . | 640 |
| 2.50-2.99 | . | . | . | 3 | 397 | 172 | . | . | . | . | 572 |
| 3.00-3.49 | . | . | . | . | 5 | 479 | . | . | . | . | 484 |
| 3.50-3.99 | . | . | . | . | . | 146 | 2 | . | . | . | 148 |
| 4.00-4.49 | . | . | . | . | . | 17 | 24 | . | . | . | 41 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 632 | 2292 | 4507 | 2725 | 1255 | 878 | 29 | 4 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 11535.

STATION S27 46.95N 89.45W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

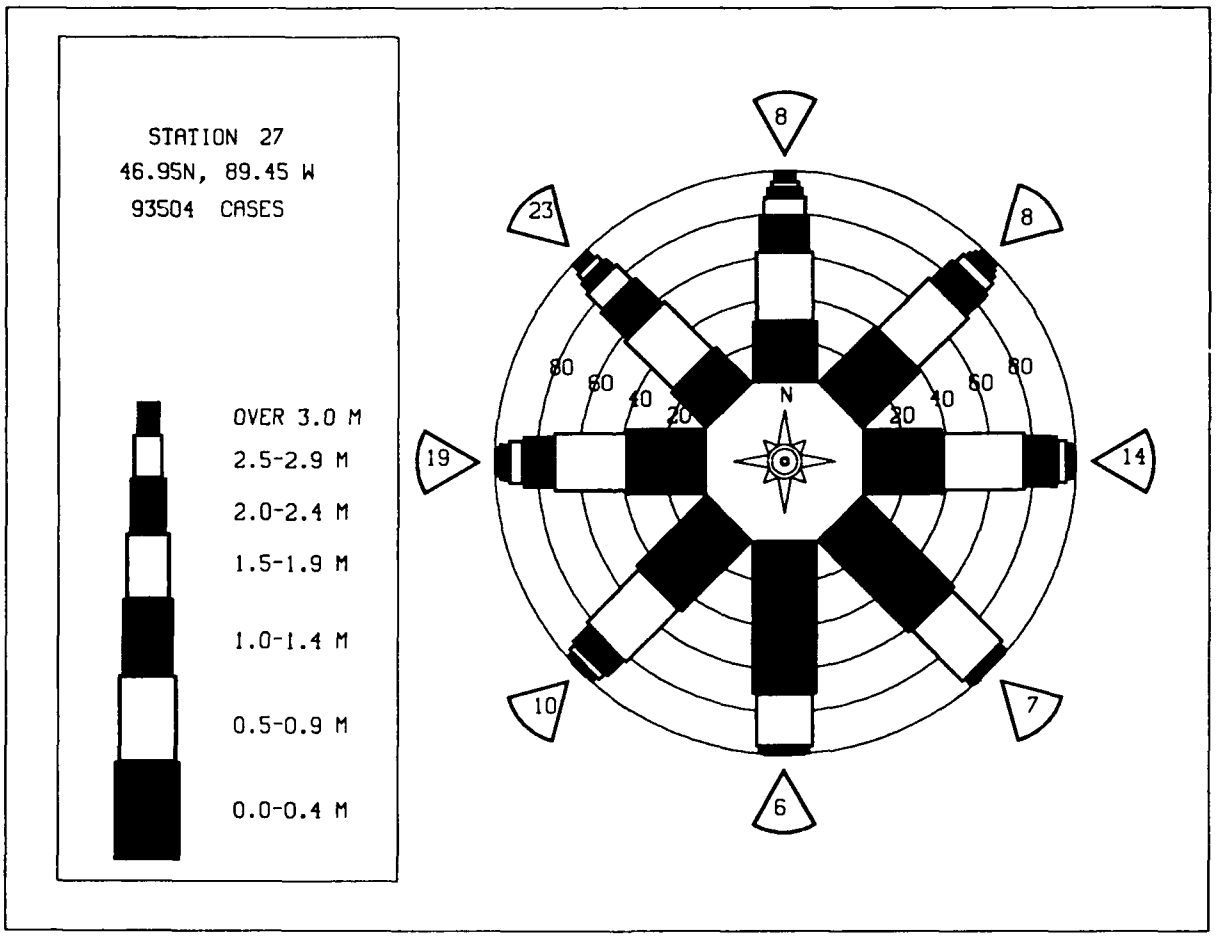
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 351 | 707 | 241 | 32 | 1 | . | . | . | . | . | 1332 |
| 0.50-0.99 | . | 360 | 1394 | 101 | 31 | 3 | . | . | . | . | 1889 |
| 1.00-1.49 | . | . | 385 | 653 | 18 | 31 | . | . | . | . | 1087 |
| 1.50-1.99 | . | . | 21 | 390 | 189 | 13 | 1 | 1 | . | . | 615 |
| 2.00-2.49 | . | . | . | 110 | 168 | 39 | 1 | 1 | . | . | 319 |
| 2.50-2.99 | . | . | . | 3 | 186 | 82 | . | . | . | . | 271 |
| 3.00-3.49 | . | . | . | . | 4 | 217 | . | . | . | . | 221 |
| 3.50-3.99 | . | . | . | . | . | 84 | 4 | . | 1 | . | 89 |
| 4.00-4.49 | . | . | . | . | . | 4 | 10 | . | . | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 3 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 351 | 1067 | 2041 | 1289 | 597 | 473 | 17 | 5 | 1 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 5473.

STATION S27 46.95N 89.45W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1181 | 2073 | 520 | 69 | 4 | . | . | . | . | . | 3847 |
| 0.50-0.99 | . | 1125 | 2079 | 147 | 50 | 8 | . | . | . | . | 3409 |
| 1.00-1.49 | . | . | 872 | 421 | 30 | 23 | 1 | . | . | . | 1347 |
| 1.50-1.99 | . | . | 65 | 441 | 117 | 17 | 3 | . | . | . | 643 |
| 2.00-2.49 | . | . | . | 200 | 95 | 24 | 3 | 1 | . | . | 323 |
| 2.50-2.99 | . | . | . | 15 | 143 | 42 | 1 | 2 | . | . | 203 |
| 3.00-3.49 | . | . | . | . | 20 | 109 | 2 | 1 | . | . | 132 |
| 3.50-3.99 | . | . | . | . | 1 | 40 | 4 | 1 | . | . | 46 |
| 4.00-4.49 | . | . | . | . | . | 4 | 8 | 1 | . | . | 13 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | 1 | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1181 | 3198 | 3536 | 1293 | 460 | 267 | 23 | 8 | 1 | 0 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S27 (46.95N 89.45W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.7 | 1.0 | 1.1 | 1.1 | 0.8 | 0.6 | 0.6 | 0.5 | 0.7 | 1.0 | 1.4 | 1.2 | 0.9 |
| 1957 | 1.3 | 1.2 | 0.9 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.2 | 1.1 | 0.9 |
| 1958 | 0.8 | 1.4 | 0.5 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 0.9 | 1.3 | 1.0 | 0.8 |
| 1959 | 1.0 | 0.9 | 0.8 | 0.8 | 0.8 | 0.5 | 0.4 | 0.4 | 0.7 | 0.9 | 1.2 | 1.2 | 0.8 |
| 1960 | 1.1 | 1.1 | 0.9 | 0.9 | 0.8 | 0.5 | 0.4 | 0.5 | 0.6 | 0.9 | 1.3 | 1.1 | 0.8 |
| 1961 | 0.9 | 0.9 | 1.1 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.6 | 0.8 | 0.9 | 1.0 | 0.7 |
| 1962 | 1.3 | 0.9 | 0.7 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.8 | 1.1 | 0.7 |
| 1963 | 1.1 | 1.2 | 1.0 | 0.7 | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 1.1 | 1.2 | 0.8 |
| 1964 | 1.2 | 1.0 | 1.1 | 0.9 | 0.7 | 0.5 | 0.4 | 0.6 | 0.7 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1965 | 1.3 | 1.2 | 0.9 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 1.1 | 1.4 | 1.3 | 0.9 |
| 1966 | 1.4 | 1.3 | 1.7 | 1.0 | 1.0 | 0.6 | 0.5 | 0.6 | 0.8 | 1.3 | 1.3 | 1.2 | 1.0 |
| 1967 | 1.4 | 1.3 | 1.1 | 0.9 | 0.8 | 0.6 | 0.6 | 0.6 | 0.7 | 1.3 | 1.2 | 1.4 | 1.0 |
| 1968 | 1.0 | 2.0 | 1.3 | 1.0 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.9 | 1.5 | 1.5 | 1.0 |
| 1969 | 1.3 | 0.8 | 1.1 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1970 | 0.9 | 1.2 | 0.8 | 0.9 | 0.8 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 1.1 | 0.9 | 0.8 |
| 1971 | 1.2 | 1.2 | 1.0 | 0.9 | 0.7 | 0.4 | 0.5 | 0.4 | 0.4 | 0.8 | 0.9 | 0.8 | 0.8 |
| 1972 | 1.3 | 1.0 | 1.0 | 0.6 | 0.4 | 0.5 | 0.3 | 0.3 | 0.6 | 1.0 | 0.7 | 0.9 | 0.7 |
| 1973 | 1.0 | 1.0 | 1.0 | 0.8 | 0.8 | 0.5 | 0.4 | 0.3 | 0.7 | 0.8 | 1.1 | 1.0 | 0.8 |
| 1974 | 0.9 | 0.7 | 0.9 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 1.1 | 0.9 | 0.7 |
| 1975 | 1.1 | 1.0 | 1.2 | 0.7 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 1.1 | 0.8 | 0.7 |
| 1976 | 1.1 | 1.1 | 1.3 | 0.7 | 0.6 | 0.5 | 0.3 | 0.4 | 0.6 | 0.5 | 0.9 | 1.0 | 0.8 |
| 1977 | 1.2 | 1.3 | 1.3 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 0.9 | 1.1 | 0.8 |
| 1978 | 1.2 | 0.9 | 0.8 | 0.9 | 0.5 | 0.4 | 0.4 | 0.5 | 0.8 | 0.7 | 1.0 | 1.0 | 0.7 |
| 1979 | 1.0 | 0.7 | 1.0 | 0.7 | 0.5 | 0.5 | 0.3 | 0.5 | 0.6 | 0.7 | 1.0 | 1.0 | 0.7 |
| 1980 | 1.0 | 0.8 | 0.9 | 0.7 | 0.6 | 0.5 | 0.3 | 0.5 | 0.7 | 1.0 | 0.8 | 1.1 | 0.7 |
| 1981 | 1.0 | 1.0 | 1.0 | 0.7 | 0.4 | 0.5 | 0.3 | 0.4 | 0.8 | 0.8 | 0.9 | 0.8 | 0.7 |
| 1982 | 1.4 | 1.0 | 1.2 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 1.0 | 1.1 | 0.8 |
| 1983 | 1.0 | 0.8 | 1.3 | 0.7 | 0.6 | 0.4 | 0.4 | 0.3 | 0.6 | 0.7 | 1.2 | 1.2 | 0.8 |
| 1984 | 1.0 | 0.9 | 1.1 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 1.1 | 1.2 | 0.8 |
| 1985 | 1.3 | 1.0 | 1.2 | 0.8 | 0.6 | 0.6 | 0.3 | 0.4 | 0.5 | 0.7 | 0.9 | 1.2 | 0.8 |
| 1986 | 1.1 | 0.7 | 1.1 | 0.9 | 0.5 | 0.5 | 0.4 | 0.4 | 0.7 | 0.7 | 1.0 | 0.9 | 0.7 |
| 1987 | 0.9 | 0.9 | 1.1 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.9 | 1.0 | 0.9 | 0.7 |
| MEAN | 1.1 | 1.0 | 1.0 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 1.1 | 1.1 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S27 (46.95N 89.45W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.9 | 3.4 | 4.0 | 3.8 | 2.1 | 1.9 | 1.4 | 1.4 | 2.8 | 4.4 | 4.9 | 3.3 |
| 1957 | 3.4 | 3.5 | 3.1 | 2.9 | 2.6 | 2.2 | 2.3 | 1.8 | 3.2 | 2.7 | 4.7 | 3.7 |
| 1958 | 3.8 | 3.6 | 2.6 | 3.1 | 2.9 | 1.8 | 1.8 | 2.3 | 3.3 | 3.2 | 4.1 | 4.1 |
| 1959 | 3.3 | 3.1 | 5.8 | 3.3 | 2.7 | 1.7 | 1.5 | 1.7 | 3.0 | 3.5 | 3.9 | 4.2 |
| 1960 | 3.6 | 3.8 | 4.0 | 2.6 | 3.5 | 1.6 | 1.7 | 2.3 | 2.8 | 3.5 | 3.9 | 3.6 |
| 1961 | 3.7 | 3.0 | 3.9 | 2.8 | 2.1 | 1.7 | 2.6 | 1.9 | 2.8 | 3.1 | 3.7 | 3.7 |
| 1962 | 3.9 | 3.3 | 3.2 | 3.3 | 2.3 | 1.3 | 2.3 | 1.6 | 2.4 | 3.7 | 3.2 | 3.7 |
| 1963 | 3.3 | 3.9 | 3.7 | 3.5 | 1.9 | 1.5 | 1.6 | 1.5 | 1.8 | 2.4 | 3.7 | 3.8 |
| 1964 | 4.0 | 3.1 | 3.7 | 3.0 | 2.4 | 1.9 | 1.5 | 2.3 | 3.5 | 3.1 | 3.4 | 2.9 |
| 1965 | 4.3 | 3.9 | 3.7 | 2.6 | 2.1 | 1.8 | 1.4 | 1.5 | 2.4 | 4.2 | 5.0 | 3.9 |
| 1966 | 5.7 | 3.5 | 6.5 | 3.2 | 3.1 | 2.7 | 1.9 | 2.6 | 3.1 | 5.6 | 4.4 | 3.8 |
| 1967 | 7.4 | 4.2 | 3.8 | 3.4 | 3.4 | 2.1 | 3.9 | 2.2 | 3.4 | 3.7 | 3.8 | 4.2 |
| 1968 | 3.9 | 5.4 | 5.2 | 4.2 | 3.1 | 2.3 | 3.1 | 2.6 | 2.4 | 3.4 | 4.9 | 5.6 |
| 1969 | 3.7 | 4.0 | 5.4 | 3.5 | 1.8 | 2.2 | 1.8 | 2.6 | 2.2 | 2.8 | 3.5 | 4.1 |
| 1970 | 3.4 | 4.1 | 3.2 | 3.1 | 2.6 | 1.5 | 1.8 | 2.0 | 3.4 | 3.4 | 3.9 | 4.0 |
| 1971 | 3.5 | 4.1 | 5.3 | 3.0 | 2.3 | 1.2 | 1.7 | 1.4 | 1.7 | 3.4 | 3.5 | 3.3 |
| 1972 | 4.3 | 3.9 | 3.6 | 2.6 | 1.7 | 2.1 | 1.4 | 1.2 | 2.7 | 4.6 | 3.2 | 4.8 |
| 1973 | 3.2 | 2.8 | 3.2 | 2.4 | 3.1 | 1.3 | 2.1 | 1.2 | 2.6 | 3.2 | 3.1 | 4.2 |
| 1974 | 3.1 | 3.3 | 3.1 | 3.0 | 1.6 | 1.5 | 2.4 | 1.7 | 1.7 | 2.5 | 2.8 | 3.2 |
| 1975 | 3.5 | 4.1 | 6.1 | 2.1 | 1.2 | 1.6 | 2.1 | 2.1 | 2.2 | 3.2 | 5.8 | 3.4 |
| 1976 | 3.4 | 4.0 | 5.4 | 2.5 | 2.1 | 1.7 | 1.0 | 1.7 | 2.2 | 2.7 | 3.2 | 3.3 |
| 1977 | 3.4 | 4.0 | 5.8 | 2.4 | 1.7 | 1.3 | 2.5 | 1.7 | 3.9 | 2.9 | 3.5 | 3.4 |
| 1978 | 4.1 | 3.0 | 3.1 | 2.7 | 1.8 | 1.4 | 1.3 | 1.5 | 2.6 | 2.5 | 2.8 | 2.5 |
| 1979 | 2.9 | 2.9 | 3.7 | 3.2 | 1.8 | 1.7 | 1.7 | 1.7 | 2.0 | 3.4 | 2.8 | 3.0 |
| 1980 | 4.1 | 3.8 | 3.7 | 2.2 | 1.5 | 1.6 | 1.0 | 1.9 | 3.2 | 3.4 | 3.4 | 3.4 |
| 1981 | 2.9 | 3.1 | 3.2 | 2.6 | 1.3 | 2.8 | 1.0 | 1.1 | 3.8 | 3.5 | 3.8 | 2.9 |
| 1982 | 4.1 | 2.7 | 4.8 | 3.3 | 1.7 | 2.4 | 1.7 | 1.3 | 2.0 | 3.4 | 3.7 | 3.3 |
| 1983 | 3.8 | 4.6 | 3.5 | 2.3 | 1.8 | 1.8 | 2.1 | 1.7 | 2.1 | 3.0 | 4.1 | 4.1 |
| 1984 | 3.7 | 3.4 | 4.5 | 3.6 | 3.0 | 2.2 | 2.0 | 1.6 | 2.1 | 2.9 | 4.7 | 3.6 |
| 1985 | 3.9 | 3.6 | 5.4 | 3.4 | 2.1 | 3.0 | 1.2 | 1.9 | 2.8 | 2.9 | 2.3 | 5.3 |
| 1986 | 3.8 | 3.5 | 3.6 | 2.6 | 3.5 | 1.4 | 1.2 | 1.1 | 3.2 | 3.7 | 3.3 | 3.1 |
| 1987 | 2.9 | 4.6 | 3.7 | 2.3 | 2.2 | 1.3 | 1.3 | 2.2 | 2.1 | 3.8 | 3.2 | 3.4 |

32 YR. STATISTICS FOR WIS STATION S27

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.9 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 7.4 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 32.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 67010715 |

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 347 | 735 | 258 | 28 | 3 | . | . | . | . | . | 1371 |
| 0.50-0.99 | . | 316 | 1112 | 116 | 38 | . | . | . | . | . | 1582 |
| 1.00-1.49 | . | . | 318 | 398 | 34 | 26 | . | . | . | . | 776 |
| 1.50-1.99 | . | . | 24 | 271 | 111 | 19 | 3 | . | . | . | 428 |
| 2.00-2.49 | . | . | . | 80 | 82 | 32 | 2 | 1 | . | . | 197 |
| 2.50-2.99 | . | . | . | 1 | 121 | 35 | 2 | 2 | . | . | 161 |
| 3.00-3.49 | . | . | . | . | 9 | 108 | . | 1 | . | . | 118 |
| 3.50-3.99 | . | . | . | . | . | 55 | 4 | 1 | . | . | 60 |
| 4.00-4.49 | . | . | . | . | . | 8 | 20 | 1 | . | . | 29 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | . | 2 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 347 | 1051 | 1712 | 894 | 398 | 283 | 35 | 7 | 3 | 2 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 4439.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 264 | 545 | 186 | 23 | 1 | . | . | . | . | . | 1019 |
| 0.50-0.99 | . | 299 | 759 | 91 | 28 | 1 | . | . | . | . | 1178 |
| 1.00-1.49 | . | . | 173 | 240 | 39 | 13 | . | . | . | . | 465 |
| 1.50-1.99 | . | . | 9 | 113 | 78 | 26 | 2 | . | . | . | 228 |
| 2.00-2.49 | . | . | . | 23 | 28 | 19 | 3 | . | . | . | 73 |
| 2.50-2.99 | . | . | . | . | 36 | 18 | 2 | 2 | . | . | 58 |
| 3.00-3.49 | . | . | . | . | 1 | 33 | 7 | 7 | . | . | 48 |
| 3.50-3.99 | . | . | . | . | . | 7 | 5 | 10 | . | . | 22 |
| 4.00-4.49 | . | . | . | . | . | 2 | 7 | 5 | 2 | . | 16 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 4 | 1 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 6 | 1 | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 3 | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 264 | 844 | 1127 | 490 | 211 | 119 | 27 | 30 | 13 | 6 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 2943.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 447 | 854 | 309 | 35 | 2 | . | . | . | . | . | 1647 |
| 0.50-0.99 | . | 378 | 1027 | 179 | 39 | 2 | . | . | . | . | 1625 |
| 1.00-1.49 | . | . | 254 | 329 | 41 | 18 | 1 | . | . | . | 643 |
| 1.50-1.99 | . | . | 18 | 167 | 82 | 43 | 4 | . | . | . | 314 |
| 2.00-2.49 | . | . | . | 37 | 37 | 44 | 7 | 3 | . | . | 128 |
| 2.50-2.99 | . | . | . | 1 | 48 | 36 | 10 | 4 | 1 | . | 100 |
| 3.00-3.49 | . | . | . | . | 5 | 33 | 6 | 4 | 1 | . | 49 |
| 3.50-3.99 | . | . | . | . | . | 12 | 14 | 4 | 1 | . | 31 |
| 4.00-4.49 | . | . | . | . | . | . | 6 | 7 | 4 | . | 17 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 7 | 1 | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 0 | 0 |
| TOTAL | 447 | 1232 | 1608 | 748 | 254 | 188 | 49 | 31 | 13 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 4291.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 547 | 874 | 328 | 36 | 2 | . | . | . | . | . | 1787 |
| 0.50-0.99 | . | 826 | 1012 | 139 | 42 | 6 | . | . | . | . | 2025 |
| 1.00-1.49 | . | . | 342 | 152 | 31 | 11 | 2 | . | . | . | 538 |
| 1.50-1.99 | . | . | 72 | 81 | 29 | 21 | 11 | 5 | . | . | 219 |
| 2.00-2.49 | . | . | . | 57 | 28 | 12 | 12 | 4 | . | . | 113 |
| 2.50-2.99 | . | . | . | 13 | 28 | 12 | 2 | 5 | 1 | 1 | 62 |
| 3.00-3.49 | . | . | . | 2 | 2 | 11 | 2 | 4 | 1 | 1 | 23 |
| 3.50-3.99 | . | . | . | . | 1 | 9 | 3 | 2 | 1 | 1 | 17 |
| 4.00-4.49 | . | . | . | . | 1 | 4 | 3 | 2 | 2 | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 3 | 8 | . | 13 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 4 | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 547 | 1700 | 1754 | 480 | 164 | 86 | 37 | 27 | 18 | 3 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 4524.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1090 | 1396 | 460 | 49 | 3 | . | . | . | . | . | 2998 |
| 0.50-0.99 | . | 1882 | 1707 | 130 | 55 | 20 | 2 | . | . | . | 3796 |
| 1.00-1.49 | . | . | 786 | 52 | 34 | 42 | 7 | . | . | . | 921 |
| 1.50-1.99 | . | . | 223 | 85 | 8 | 31 | 6 | 7 | . | . | 360 |
| 2.00-2.49 | . | . | . | 129 | 8 | 7 | 10 | 5 | . | . | 159 |
| 2.50-2.99 | . | . | . | 38 | . | 3 | 5 | 2 | 2 | 1 | 51 |
| 3.00-3.49 | . | . | . | 5 | 4 | . | . | 2 | . | 1 | 12 |
| 3.50-3.99 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1090 | 3278 | 3176 | 488 | 114 | 103 | 30 | 16 | 2 | 3 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.6 NO. OF CASES= 7775.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 957 | 1104 | 319 | 37 | 3 | 1 | . | . | . | . | 2421 |
| 0.50-0.99 | . | 1348 | 727 | 58 | 47 | 7 | 3 | . | . | . | 2190 |
| 1.00-1.49 | . | . | 360 | 7 | 5 | 17 | 3 | . | . | . | 392 |
| 1.50-1.99 | . | . | 88 | 53 | . | 2 | 5 | 2 | . | . | 150 |
| 2.00-2.49 | . | . | . | 35 | . | . | 2 | 2 | . | . | 39 |
| 2.50-2.99 | . | . | . | 6 | . | . | . | . | . | . | 6 |
| 3.00-3.49 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 957 | 2452 | 1494 | 196 | 58 | 27 | 13 | 4 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 4872.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 926 | 1211 | 316 | 52 | 4 | 2 | . | . | . | . | 2511 |
| 0.50-0.99 | . | 1121 | 242 | 65 | 28 | 8 | . | 1 | . | . | 1465 |
| 1.00-1.49 | . | . | 152 | 6 | 1 | 5 | . | 1 | . | . | 165 |
| 1.50-1.99 | . | . | 32 | . | . | 1 | 2 | . | . | . | 35 |
| 2.00-2.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 926 | 2332 | 742 | 123 | 33 | 16 | 2 | 2 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 3913.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 929 | 1064 | 237 | 23 | 3 | 1 | . | . | . | . | 2257 |
| 0.50-0.99 | . | 835 | 110 | 19 | 16 | 2 | . | . | . | . | 982 |
| 1.00-1.49 | . | . | 101 | 1 | 1 | 3 | . | . | . | . | 106 |
| 1.50-1.99 | . | . | 13 | . | . | 1 | . | . | . | . | 14 |
| 2.00-2.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 929 | 1899 | 461 | 43 | 20 | 7 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 2.9 NO. OF CASES= 3146.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =160.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 958 | 1075 | 271 | 40 | 4 | . | . | . | . | . | 2348 |
| 0.50-0.99 | . | 792 | 77 | 22 | 16 | 2 | . | . | . | . | 909 |
| 1.00-1.49 | . | . | 134 | 1 | 2 | 1 | 1 | . | . | . | 139 |
| 1.50-1.99 | . | . | 8 | . | . | 1 | 1 | . | . | . | 10 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | |
| TOTAL | 958 | 1867 | 490 | 63 | 22 | 4 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 3190.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 742 | 1076 | 222 | 40 | 2 | . | 1 | . | . | . | 2083 |
| 0.50-0.99 | . | 881 | 95 | 17 | 10 | 2 | . | . | . | . | 1005 |
| 1.00-1.49 | . | . | 166 | . | 1 | 2 | . | . | . | . | 169 |
| 1.50-1.99 | . | . | 22 | 1 | . | . | . | 1 | . | . | 24 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | |
| TOTAL | 742 | 1957 | 505 | 59 | 13 | 4 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 3074.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 668 | 1236 | 330 | 52 | 4 | 1 | . | . | . | . | 2291 |
| 0.50-0.99 | . | 1098 | 561 | 40 | 17 | 8 | . | . | . | . | 1724 |
| 1.00-1.49 | . | . | 192 | 111 | 3 | 6 | . | . | . | . | 312 |
| 1.50-1.99 | . | . | 56 | 71 | 9 | 4 | . | . | . | . | 140 |
| 2.00-2.49 | . | . | 1 | 6 | 23 | . | . | 1 | . | . | 31 |
| 2.50-2.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | |
| TOTAL | 668 | 2334 | 1140 | 280 | 57 | 19 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 4215.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 763 | 1460 | 297 | 40 | 3 | . | . | . | . | . | 2563 |
| 0.50-0.99 | . | 973 | 1266 | 44 | 17 | 2 | . | . | . | . | 2302 |
| 1.00-1.49 | . | . | 607 | 269 | 2 | 3 | . | . | . | . | 881 |
| 1.50-1.99 | . | . | 33 | 311 | 4 | . | . | . | . | . | 348 |
| 2.00-2.49 | . | . | . | 72 | 69 | . | . | . | . | . | 141 |
| 2.50-2.99 | . | . | . | . | 24 | 7 | . | . | . | . | 31 |
| 3.00-3.49 | . | . | . | . | 5 | 13 | . | . | . | . | 18 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | |
| TOTAL | 763 | 2433 | 2203 | 736 | 125 | 25 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 5886.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1150 | 2222 | 439 | 59 | 2 | . | . | . | . | . | 3872 |
| 0.50-0.99 | . | 1130 | 2700 | 78 | 28 | 1 | . | . | . | . | 3937 |
| 1.00-1.49 | . | . | 1197 | 455 | 6 | 6 | . | . | . | . | 1664 |
| 1.50-1.99 | . | . | 73 | 747 | 9 | . | . | . | . | . | 829 |
| 2.00-2.49 | . | . | . | 309 | 94 | 1 | . | . | . | . | 404 |
| 2.50-2.99 | . | . | . | 3 | 191 | . | . | 1 | . | . | 195 |
| 3.00-3.49 | . | . | . | . | 38 | 40 | . | . | . | . | 78 |
| 3.50-3.99 | . | . | . | . | . | 14 | . | . | . | . | 14 |
| 4.00-4.49 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1150 | 3352 | 4409 | 1651 | 368 | 65 | 3 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 10296.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 984 | 2562 | 577 | 60 | . | 1 | . | . | . | . | 4184 |
| 0.50-0.99 | . | 1127 | 3976 | 206 | 36 | 6 | . | . | . | . | 5351 |
| 1.00-1.49 | . | 1 | 1176 | 1162 | 45 | 8 | . | . | . | . | 2392 |
| 1.50-1.99 | . | . | 83 | 1189 | 306 | 27 | . | . | . | . | 1605 |
| 2.00-2.49 | . | . | . | 501 | 304 | 71 | . | . | . | . | 876 |
| 2.50-2.99 | . | . | . | 6 | 537 | 97 | . | . | . | . | 640 |
| 3.00-3.49 | . | . | . | . | 83 | 280 | 2 | . | . | . | 365 |
| 3.50-3.99 | . | . | . | . | . | 148 | 16 | . | . | . | 164 |
| 4.00-4.49 | . | . | . | . | . | 10 | 33 | 3 | . | . | 46 |
| 4.50-4.99 | . | . | . | . | . | . | 10 | 2 | . | . | 12 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 984 | 3690 | 5812 | 3124 | 1311 | 648 | 63 | 7 | 1 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 14640.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 617 | 1573 | 484 | 51 | 2 | . | . | . | . | . | 2727 |
| 0.50-0.99 | . | 629 | 2958 | 149 | 39 | 5 | . | . | . | . | 3780 |
| 1.00-1.49 | . | . | 690 | 1376 | 29 | 18 | . | . | . | . | 2113 |
| 1.50-1.99 | . | . | 41 | 774 | 473 | 8 | . | . | . | . | 1296 |
| 2.00-2.49 | . | . | . | 234 | 348 | 96 | . | . | . | . | 678 |
| 2.50-2.99 | . | . | . | 1 | 355 | 188 | . | . | . | . | 544 |
| 3.00-3.49 | . | . | . | . | 6 | 462 | . | . | . | . | 468 |
| 3.50-3.99 | . | . | . | . | . | 171 | 2 | . | . | . | 173 |
| 4.00-4.49 | . | . | . | . | . | 8 | 29 | . | . | . | 37 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | . | . | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 617 | 2202 | 4173 | 2585 | 1252 | 956 | 39 | 4 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 11072.

STATION S28 46.95N 89.63W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

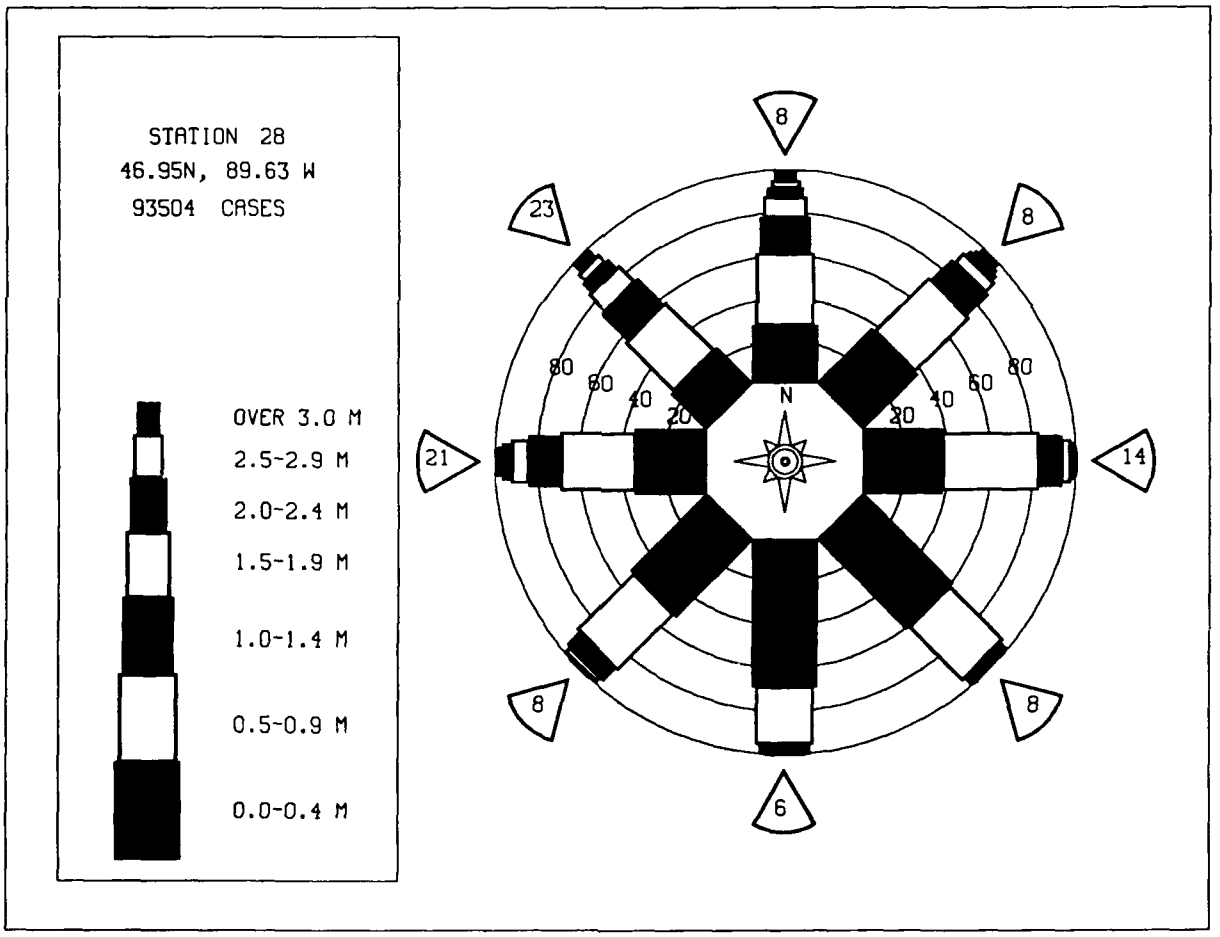
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 303 | 642 | 212 | 23 | . | . | . | . | . | . | 1180 |
| 0.50-0.99 | . | 340 | 1325 | 91 | 23 | 3 | . | . | . | . | 1782 |
| 1.00-1.49 | . | . | 373 | 635 | 20 | 20 | . | . | . | . | 1048 |
| 1.50-1.99 | . | . | 20 | 403 | 213 | 7 | 1 | . | . | . | 644 |
| 2.00-2.49 | . | . | . | 108 | 148 | 58 | 1 | 1 | . | . | 316 |
| 2.50-2.99 | . | . | . | 1 | 182 | 79 | . | . | . | . | 262 |
| 3.00-3.49 | . | . | . | . | 12 | 211 | . | . | 1 | . | 224 |
| 3.50-3.99 | . | . | . | . | . | 88 | 3 | . | . | . | 91 |
| 4.00-4.49 | . | . | . | . | . | 6 | 17 | . | . | . | 23 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 2 | . | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 303 | 982 | 1930 | 1261 | 598 | 472 | 26 | 4 | 1 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.7 NO. OF CASES= 5228.

STATION S28 46.95N 89.63W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1169 | 1963 | 525 | 65 | 4 | . | . | . | . | . | 3726 |
| 0.50-0.99 | . | 1398 | 1966 | 145 | 48 | 7 | . | . | . | . | 3564 |
| 1.00-1.49 | . | . | 702 | 520 | 29 | 20 | 1 | . | . | . | 1272 |
| 1.50-1.99 | . | . | 82 | 427 | 132 | 19 | 3 | 1 | . | . | 664 |
| 2.00-2.49 | . | . | . | 159 | 117 | 34 | 3 | 2 | . | . | 315 |
| 2.50-2.99 | . | . | . | 7 | 152 | 47 | 2 | 1 | . | . | 209 |
| 3.00-3.49 | . | . | . | . | 17 | 119 | 1 | 1 | . | . | 138 |
| 3.50-3.99 | . | . | . | . | . | 50 | 4 | 1 | . | . | 55 |
| 4.00-4.49 | . | . | . | . | . | 4 | 11 | 1 | . | . | 16 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 1 | 1 | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1169 | 3361 | 3275 | 1323 | 499 | 300 | 28 | 9 | 2 | 0 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S28 (46.95N 89.63W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.7 | 1.0 | 1.1 | 1.1 | 0.8 | 0.6 | 0.6 | 0.5 | 0.7 | 1.0 | 1.4 | 1.2 | 0.9 |
| 1957 | 1.4 | 1.2 | 0.9 | 0.9 | 0.8 | 0.6 | 0.5 | 0.6 | 0.7 | 0.7 | 1.3 | 1.1 | 0.9 |
| 1958 | 0.8 | 1.4 | 0.5 | 0.9 | 0.8 | 0.6 | 0.5 | 0.5 | 0.8 | 0.9 | 1.3 | 1.0 | 0.8 |
| 1959 | 1.0 | 0.9 | 0.8 | 0.8 | 0.8 | 0.5 | 0.4 | 0.5 | 0.7 | 0.8 | 1.3 | 1.2 | 0.8 |
| 1960 | 1.1 | 1.2 | 0.9 | 0.9 | 0.8 | 0.5 | 0.4 | 0.5 | 0.7 | 0.9 | 1.3 | 1.1 | 0.9 |
| 1961 | 0.9 | 0.9 | 1.1 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.7 | 0.8 | 0.9 | 1.1 | 0.8 |
| 1962 | 1.4 | 0.9 | 0.7 | 0.7 | 0.[illegible] | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.7 | 1.1 | 0.7 |
| 1963 | 1.1 | 1.2 | 1.0 | 0.7 | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.7 | 1.1 | 1.1 | 0.8 |
| 1964 | 1.2 | 1.0 | 1.2 | 0.9 | 0.7 | 0.5 | 0.5 | 0.7 | 0.7 | 0.9 | 1.1 | 0.9 | 0.8 |
| 1965 | 1.3 | 1.3 | 0.9 | 0.7 | 0.5 | 0.5 | 0.5 | 0.4 | 0.6 | 1.1 | 1.4 | 1.3 | 0.9 |
| 1966 | 1.4 | 1.3 | 1.7 | 1.0 | 1.0 | 0.6 | 0.5 | 0.6 | 0.8 | 1.3 | 1.4 | 1.3 | 1.1 |
| 1967 | 1.4 | 1.4 | 1.1 | 0.9 | 0.9 | 0.5 | 0.6 | 0.6 | 0.7 | 1.4 | 1.3 | 1.5 | 1.0 |
| 1968 | 1.1 | 2.1 | 1.3 | 1.0 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 1.0 | 1.6 | 1.5 | 1.1 |
| 1969 | 1.3 | 0.8 | 1.1 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.9 | 1.1 | 0.9 | 0.8 |
| 1970 | 1.0 | 1.2 | 0.8 | 0.9 | 0.8 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 1.1 | 0.9 | 0.8 |
| 1971 | 1.2 | 1.2 | 1.0 | 0.9 | 0.7 | 0.4 | 0.5 | 0.4 | 0.5 | 0.8 | 0.9 | 0.9 | 0.8 |
| 1972 | 1.3 | 1.0 | 1.0 | 0.6 | 0.4 | 0.5 | 0.3 | 0.3 | 0.6 | 1.0 | 0.7 | 1.0 | 0.7 |
| 1973 | 1.1 | 1.0 | 1.0 | 0.8 | 0.8 | 0.5 | 0.5 | 0.4 | 0.7 | 0.8 | 1.2 | 1.0 | 0.8 |
| 1974 | 0.9 | 0.7 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.8 | 1.1 | 1.0 | 0.8 |
| 1975 | 1.1 | 1.0 | 1.2 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 1.1 | 0.8 | 0.7 |
| 1976 | 1.1 | 1.1 | 1.3 | 0.7 | 0.6 | 0.5 | 0.3 | 0.5 | 0.6 | 0.5 | 0.9 | 1.0 | 0.8 |
| 1977 | 1.3 | 1.4 | 1.3 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 0.9 | 1.1 | 0.8 |
| 1978 | 1.2 | 0.9 | 0.8 | 0.9 | 0.5 | 0.4 | 0.4 | 0.5 | 0.8 | 0.7 | 1.0 | 1.0 | 0.8 |
| 1979 | 1.0 | 0.8 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 1.0 | 1.0 | 0.7 |
| 1980 | 1.0 | 0.8 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.8 | 1.1 | 0.9 | 1.1 | 0.8 |
| 1981 | 1.0 | 1.0 | 1.0 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.8 | 0.8 | 0.9 | 0.8 | 0.7 |
| 1982 | 1.5 | 1.1 | 1.2 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 1.0 | 1.1 | 0.9 |
| 1983 | 1.0 | 0.8 | 1.2 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 1.2 | 1.3 | 0.8 |
| 1984 | 1.0 | 0.9 | 1.1 | 0.9 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 0.8 | 1.1 | 1.3 | 0.8 |
| 1985 | 1.4 | 1.1 | 1.2 | 0.8 | 0.6 | 0.6 | 0.4 | 0.4 | 0.5 | 0.7 | 0.9 | 1.2 | 0.8 |
| 1986 | 1.1 | 0.7 | 1.1 | 0.9 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 1.0 | 0.9 | 0.7 |
| 1987 | 0.9 | 0.9 | 1.0 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.9 | 1.0 | 0.9 | 0.7 |
| MEAN | 1.1 | 1.1 | 1.1 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 1.1 | 1.1 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S28 (46.95N 89.63W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.8 | 3.8 | 3.6 | 3.8 | 2.4 | 2.2 | 1.4 | 1.5 | 2.9 | 4.4 | 4.8 | 3.5 |
| 1957 | 3.4 | 3.5 | 3.2 | 2.9 | 2.6 | 2.0 | 2.5 | 2.0 | 3.3 | 2.8 | 4.7 | 3.8 |
| 1958 | 3.7 | 3.5 | 2.7 | 3.4 | 2.9 | 1.8 | 1.9 | 2.4 | 3.2 | 3.1 | 4.3 | 4.3 |
| 1959 | 3.1 | 3.3 | 5.8 | 3.2 | 3.1 | 1.7 | 1.7 | 1.8 | 3.0 | 3.5 | 4.2 | 4.8 |
| 1960 | 3.6 | 3.8 | 4.2 | 2.9 | 3.6 | 1.6 | 1.7 | 2.6 | 2.7 | 3.6 | 3.9 | 3.9 |
| 1961 | 3.6 | 3.1 | 4.1 | 3.0 | 2.6 | 1.9 | 2.7 | 2.0 | 3.0 | 3.1 | 3.7 | 3.7 |
| 1962 | 3.9 | 3.6 | 3.2 | 3.3 | 2.1 | 1.5 | 2.5 | 2.1 | 2.3 | 4.0 | 3.3 | 3.6 |
| 1963 | 3.5 | 4.1 | 3.6 | 3.8 | 1.8 | 1.5 | 1.6 | 1.5 | 1.8 | 2.4 | 3.7 | 3.7 |
| 1964 | 4.4 | 3.1 | 4.0 | 3.3 | 2.3 | 2.0 | 1.6 | 2.5 | 3.7 | 3.2 | 3.6 | 2.9 |
| 1965 | 4.3 | 4.2 | 3.7 | 2.7 | 2.4 | 1.9 | 1.6 | 1.5 | 2.6 | 4.2 | 5.4 | 4.0 |
| 1966 | 6.2 | 3.6 | 6.7 | 3.2 | 3.5 | 3.0 | 2.3 | 2.9 | 3.2 | 6.0 | 4.7 | 3.9 |
| 1967 | 7.3 | 4.4 | 3.9 | 3.6 | 3.4 | 2.2 | 4.1 | 2.2 | 3.6 | 3.8 | 4.0 | 4.4 |
| 1968 | 4.2 | 5.7 | 5.4 | 4.5 | 3.1 | 2.5 | 3.2 | 2.7 | 2.7 | 3.7 | 4.8 | 5.7 |
| 1969 | 3.8 | 4.1 | 5.6 | 3.3 | 1.8 | 2.1 | 1.8 | 2.5 | 2.3 | 2.9 | 3.6 | 4.0 |
| 1970 | 3.5 | 4.2 | 3.2 | 3.4 | 2.7 | 1.6 | 1.8 | 2.1 | 3.3 | 3.5 | 3.9 | 4.2 |
| 1971 | 3.7 | 4.4 | 5.3 | 2.9 | 2.2 | 1.1 | 1.7 | 1.4 | 1.8 | 3.2 | 3.5 | 3.4 |
| 1972 | 4.4 | 4.0 | 3.6 | 2.9 | 1.4 | 2.2 | 1.5 | 1.2 | 2.8 | 4.9 | 3.1 | 4.7 |
| 1973 | 3.4 | 2.9 | 3.3 | 2.8 | 3.1 | 1.3 | 2.2 | 1.2 | 2.8 | 3.3 | 3.2 | 3.9 |
| 1974 | 3.2 | 3.5 | 3.5 | 2.9 | 1.6 | 1.6 | 2.4 | 1.9 | 2.0 | 2.6 | 2.9 | 3.1 |
| 1975 | 3.1 | 4.3 | 6.0 | 2.1 | 1.2 | 1.6 | 2.1 | 2.4 | 2.2 | 3.3 | 6.1 | 3.7 |
| 1976 | 3.2 | 4.0 | 5.2 | 2.7 | 2.3 | 1.4 | 1.0 | 1.7 | 2.3 | 2.7 | 3.2 | 3.7 |
| 1977 | 3.6 | 3.5 | 5.4 | 2.4 | 1.7 | 1.4 | 2.7 | 1.9 | 3.3 | 3.2 | 3.3 | 3.0 |
| 1978 | 4.6 | 3.2 | 3.2 | 2.9 | 2.4 | 1.3 | 1.2 | 1.4 | 2.6 | 2.7 | 2.9 | 2.6 |
| 1979 | 3.0 | 2.9 | 3.7 | 3.2 | 1.7 | 1.6 | 1.6 | 1.7 | 2.0 | 3.5 | 2.9 | 2.7 |
| 1980 | 4.8 | 4.0 | 3.8 | 2.4 | 1.7 | 1.4 | 1.1 | 1.8 | 3.3 | 3.6 | 3.6 | 3.7 |
| 1981 | 2.8 | 3.1 | 3.4 | 2.6 | 1.4 | 2.7 | 0.9 | 1.1 | 4.0 | 3.6 | 4.1 | 2.9 |
| 1982 | 4.7 | 2.9 | 5.5 | 3.6 | 1.6 | 2.7 | 1.7 | 1.7 | 2.6 | 3.3 | 3.6 | 3.4 |
| 1983 | 3.9 | 4.6 | 3.5 | 2.6 | 1.9 | 2.3 | 2.0 | 1.5 | 2.3 | 2.9 | 3.9 | 4.1 |
| 1984 | 3.9 | 3.4 | 4.5 | 3.7 | 3.1 | 2.1 | 2.2 | 1.6 | 2.1 | 3.1 | 4.8 | 4.0 |
| 1985 | 4.0 | 3.3 | 4.3 | 3.3 | 2.1 | 3.2 | 1.1 | 1.9 | 2.9 | 2.9 | 2.5 | 5.3 |
| 1986 | 4.0 | 3.4 | 3.6 | 3.0 | 3.7 | 1.5 | 1.2 | 1.1 | 3.2 | 3.8 | 3.2 | 3.3 |
| 1987 | 2.9 | 4.8 | 3.7 | 2.3 | 2.6 | 1.4 | 1.2 | 2.5 | 2.2 | 3.9 | 3.4 | 3.4 |

32 YR. STATISTICS FOR WIS STATION S28

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 4.0 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.4 |
| LARGEST WAVE HS . . . . . | (METERS) | 7.3 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 30.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 67010715 |

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 350 | 721 | 255 | 34 | 1 | . | . | . | . | . | 1361 |
| 0.50-0.99 | . | 336 | 1230 | 112 | 32 | 1 | . | . | . | . | 1711 |
| 1.00-1.49 | . | . | 350 | 436 | 26 | 18 | 1 | . | . | . | 831 |
| 1.50-1.99 | . | . | 24 | 256 | 168 | 10 | 1 | . | . | . | 459 |
| 2.00-2.49 | . | . | . | 68 | 79 | 50 | . | 1 | . | . | 198 |
| 2.50-2.99 | . | . | . | 1 | 106 | 55 | 1 | . | . | . | 163 |
| 3.00-3.49 | . | . | . | . | 9 | 101 | . | . | . | . | 110 |
| 3.50-3.99 | . | . | . | . | . | 65 | 7 | . | . | . | 72 |
| 4.00-4.49 | . | . | . | . | . | 4 | 24 | 4 | . | . | 32 |
| 4.50-4.99 | . | . | . | . | . | . | 17 | 5 | 2 | . | 24 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | 2 | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 350 | 1057 | 1859 | 907 | 421 | 304 | 51 | 11 | 4 | 3 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.5 NO. OF CASES= 4660.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 250 | 525 | 180 | 24 | 2 | . | . | . | . | . | 981 |
| 0.50-0.99 | . | 357 | 748 | 87 | 20 | 2 | . | . | . | . | 1214 |
| 1.00-1.49 | . | . | 191 | 243 | 32 | 14 | 1 | . | . | . | 481 |
| 1.50-1.99 | . | . | 12 | 121 | 74 | 13 | 2 | . | . | . | 222 |
| 2.00-2.49 | . | . | . | 26 | 31 | 24 | 4 | 1 | . | . | 86 |
| 2.50-2.99 | . | . | . | . | 35 | 19 | 3 | 2 | . | . | 59 |
| 3.00-3.49 | . | . | . | . | 2 | 31 | 8 | 9 | . | . | 50 |
| 3.50-3.99 | . | . | . | . | . | 17 | 6 | 5 | . | . | 28 |
| 4.00-4.49 | . | . | . | . | . | . | 6 | 7 | 3 | . | 16 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | 3 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 3 | 1 | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 3 | 1 | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 3 | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 250 | 882 | 1131 | 501 | 196 | 120 | 32 | 30 | 12 | 6 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.3 NO. OF CASES= 2971.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 457 | 869 | 368 | 39 | 4 | . | . | . | . | . | 1737 |
| 0.50-0.99 | . | 412 | 958 | 191 | 29 | 4 | . | . | . | . | 1594 |
| 1.00-1.49 | . | . | 262 | 288 | 50 | 13 | 2 | . | . | . | 615 |
| 1.50-1.99 | . | . | 23 | 145 | 60 | 37 | 4 | 3 | . | . | 272 |
| 2.00-2.49 | . | . | 1 | 50 | 29 | 22 | 8 | 3 | 1 | . | 114 |
| 2.50-2.99 | . | . | . | 3 | 40 | 42 | 6 | 4 | 1 | . | 96 |
| 3.00-3.49 | . | . | . | . | 5 | 22 | 9 | 2 | . | . | 38 |
| 3.50-3.99 | . | . | . | . | . | 11 | 12 | 3 | 2 | . | 28 |
| 4.00-4.49 | . | . | . | . | . | 1 | 4 | 9 | 4 | . | 18 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 5 | 4 | . | 10 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 2 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 457 | 1281 | 1612 | 716 | 217 | 152 | 46 | 31 | 17 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 4255.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 730 | 1120 | 468 | 58 | 8 | . | . | . | . | . | 2384 |
| 0.50-0.99 | . | 900 | 633 | 165 | 37 | 10 | . | . | . | . | 1745 |
| 1.00-1.49 | . | . | 164 | 134 | 33 | 31 | 11 | 4 | . | . | 377 |
| 1.50-1.99 | . | . | 40 | 42 | 37 | 11 | 13 | 5 | 2 | . | 150 |
| 2.00-2.49 | . | . | 5 | 17 | 13 | 13 | 7 | 5 | . | 1 | 61 |
| 2.50-2.99 | . | . | . | 1 | 8 | 8 | 1 | 4 | 4 | 2 | 28 |
| 3.00-3.49 | . | . | . | 1 | 1 | 4 | 3 | 3 | 1 | . | 13 |
| 3.50-3.99 | . | . | . | . | . | 2 | 1 | 2 | 3 | . | 8 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | 3 | 1 | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | . | 2 | 2 | 2 | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 730 | 2020 | 1310 | 418 | 137 | 79 | 38 | 29 | 15 | 5 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 4489.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1361 | 2063 | 712 | 106 | 10 | 2 | . | . | . | . | 4254 |
| 0.50-0.99 | . | 2168 | 394 | 218 | 65 | 43 | 4 | . | . | . | 2892 |
| 1.00-1.49 | . | . | 336 | 62 | 34 | 70 | 16 | 7 | . | . | 525 |
| 1.50-1.99 | . | . | 142 | 5 | 13 | 25 | 27 | 10 | 3 | . | 225 |
| 2.00-2.49 | . | . | 31 | 1 | . | 6 | 6 | 5 | 1 | 2 | 52 |
| 2.50-2.99 | . | . | . | 8 | . | . | 1 | 1 | . | 1 | 11 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1361 | 4231 | 1615 | 400 | 122 | 146 | 54 | 23 | 4 | 5 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 7457.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1023 | 1291 | 361 | 70 | 8 | 4 | 1 | . | . | . | 2758 |
| 0.50-0.99 | . | 1454 | 233 | 83 | 41 | 10 | 2 | . | . | . | 1823 |
| 1.00-1.49 | . | . | 221 | 8 | 5 | 21 | 5 | 2 | . | . | 262 |
| 1.50-1.99 | . | . | 74 | 3 | . | 4 | 1 | 4 | . | . | 86 |
| 2.00-2.49 | . | . | 4 | 1 | . | . | . | . | . | . | 5 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1023 | 2745 | 893 | 166 | 54 | 39 | 9 | 6 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 4624.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 907 | 1119 | 297 | 52 | 7 | 1 | . | . | . | . | 2383 |
| 0.50-0.99 | . | 1112 | 225 | 36 | 20 | 6 | 1 | 1 | . | . | 1401 |
| 1.00-1.49 | . | . | 135 | 3 | . | 5 | 1 | 1 | . | . | 145 |
| 1.50-1.99 | . | . | 32 | 1 | . | . | 1 | 1 | . | . | 35 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 907 | 2231 | 689 | 92 | 27 | 12 | 3 | 3 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.1 NO. OF CASES= 3713.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 856 | 1099 | 221 | 31 | 1 | . | . | . | . | . | 2208 |
| 0.50-0.99 | . | 962 | 150 | 18 | 8 | 3 | . | . | . | . | 1141 |
| 1.00-1.49 | . | . | 133 | 2 | 1 | 3 | . | . | . | . | 139 |
| 1.50-1.99 | . | . | 17 | . | 1 | . | . | 1 | . | . | 19 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | 1 | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 856 | 2061 | 521 | 52 | 11 | 6 | 0 | 2 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 3286.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 974 | 1145 | 250 | 35 | 5 | . | . | . | . | . | 2409 |
| 0.50-0.99 | . | 952 | 89 | 18 | 12 | 2 | 1 | . | . | . | 1074 |
| 1.00-1.49 | . | . | 188 | . | 3 | . | . | . | . | . | 191 |
| 1.50-1.99 | . | . | 11 | . | . | 1 | . | . | . | . | 12 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 974 | 2097 | 538 | 53 | 20 | 3 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 3452.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 745 | 1045 | 201 | 31 | 1 | . | . | . | . | . | 2023 |
| 0.50-0.99 | . | 949 | 111 | 9 | 10 | 2 | . | . | . | . | 1081 |
| 1.00-1.49 | . | . | 197 | . | . | 1 | . | 1 | . | . | 199 |
| 1.50-1.99 | . | . | 36 | 1 | 1 | 1 | . | . | . | . | 39 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 745 | 1994 | 545 | 42 | 12 | 4 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 3131.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 650 | 1121 | 269 | 39 | 2 | 3 | . | . | . | . | 2084 |
| 0.50-0.99 | . | 1183 | 333 | 39 | 12 | 7 | . | . | . | . | 1574 |
| 1.00-1.49 | . | . | 201 | 29 | 7 | 6 | . | . | . | . | 243 |
| 1.50-1.99 | . | . | 98 | 9 | 4 | 1 | . | 1 | . | . | 113 |
| 2.00-2.49 | . | . | 3 | 5 | . | . | . | . | . | . | 8 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 650 | 2304 | 904 | 121 | 25 | 17 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 3770.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 707 | 1271 | 285 | 32 | 7 | . | . | . | . | . | 2302 |
| 0.50-0.99 | . | 1238 | 1168 | 64 | 7 | 1 | . | . | . | . | 2478 |
| 1.00-1.49 | . | . | 449 | 290 | 2 | 2 | . | . | . | . | 743 |
| 1.50-1.99 | . | . | 69 | 218 | 23 | . | . | . | . | . | 310 |
| 2.00-2.49 | . | . | 1 | 54 | 44 | 3 | . | . | . | . | 102 |
| 2.50-2.99 | . | . | . | 6 | 16 | 6 | . | . | . | . | 28 |
| 3.00-3.49 | . | . | . | . | 4 | 6 | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 707 | 2509 | 1972 | 664 | 103 | 19 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.6 NO. OF CASES= 5596.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1026 | 2215 | 407 | 45 | | | | | | | 3693 |
| 0.50-0.99 | . | 1170 | 3008 | 75 | 19 | 1 | . | . | . | . | 4273 |
| 1.00-1.49 | . | . | 1159 | 721 | 7 | 3 | . | . | . | . | 1890 |
| 1.50-1.99 | . | . | 114 | 813 | 71 | 1 | . | . | . | . | 999 |
| 2.00-2.49 | . | . | . | 327 | 124 | 6 | . | . | . | . | 457 |
| 2.50-2.99 | . | . | . | 6 | 240 | 7 | . | 1 | . | . | 254 |
| 3.00-3.49 | . | . | . | . | 25 | 75 | . | . | . | . | 100 |
| 3.50-3.99 | . | . | . | . | . | 47 | . | . | . | . | 47 |
| 4.00-4.49 | . | . | . | . | . | 6 | . | . | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1026 | 3385 | 4688 | 1987 | 486 | 146 | 3 | 4 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 10976.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 885 | 2644 | 532 | 40 | 3 | | | | | | 4104 |
| 0.50-0.99 | . | 1060 | 4151 | 179 | 25 | 3 | . | . | . | . | 5418 |
| 1.00-1.49 | . | . | 1032 | 1424 | 70 | 4 | . | . | . | . | 2530 |
| 1.50-1.99 | . | . | 98 | 1059 | 441 | 33 | . | . | . | . | 1631 |
| 2.00-2.49 | . | . | . | 388 | 361 | 156 | . | . | . | . | 905 |
| 2.50-2.99 | . | . | . | 9 | 572 | 124 | . | . | . | . | 705 |
| 3.00-3.49 | . | . | . | . | 40 | 362 | 8 | . | . | . | 410 |
| 3.50-3.99 | . | . | . | . | . | 198 | 45 | . | . | . | 243 |
| 4.00-4.49 | . | . | . | . | . | 31 | 56 | 5 | . | . | 92 |
| 4.50-4.99 | . | . | . | . | . | . | 19 | 9 | . | . | 28 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 4 | . | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 885 | 3704 | 5813 | 3099 | 1512 | 911 | 130 | 21 | 1 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.5 NO. OF CASES= 15048.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 580 | 1528 | 438 | 31 | 2 | | . | . | . | . | 2579 |
| 0.50-0.99 | . | 645 | 2962 | 135 | 24 | 4 | . | . | . | . | 3770 |
| 1.00-1.49 | . | . | 658 | 1300 | 34 | 7 | 1 | . | . | . | 2000 |
| 1.50-1.99 | . | . | 41 | 635 | 617 | 11 | . | 1 | . | . | 1305 |
| 2.00-2.49 | . | . | . | 202 | 240 | 167 | . | . | . | . | 609 |
| 2.50-2.99 | . | . | . | 1 | 312 | 179 | . | . | . | . | 492 |
| 3.00-3.49 | . | . | . | . | 6 | 386 | 2 | . | . | . | 394 |
| 3.50-3.99 | . | . | . | . | . | 241 | 53 | . | . | . | 294 |
| 4.00-4.49 | . | . | . | . | . | 7 | 74 | . | . | . | 81 |
| 4.50-4.99 | . | . | . | . | . | . | 19 | 14 | . | . | 33 |
| 5.00-5.49 | . | . | . | . | . | . | . | 6 | . | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 580 | 2173 | 4099 | 2304 | 1235 | 1002 | 149 | 23 | 3 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.7 NO. OF CASES= 10832.

STATION S29 46.95N 89.42W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

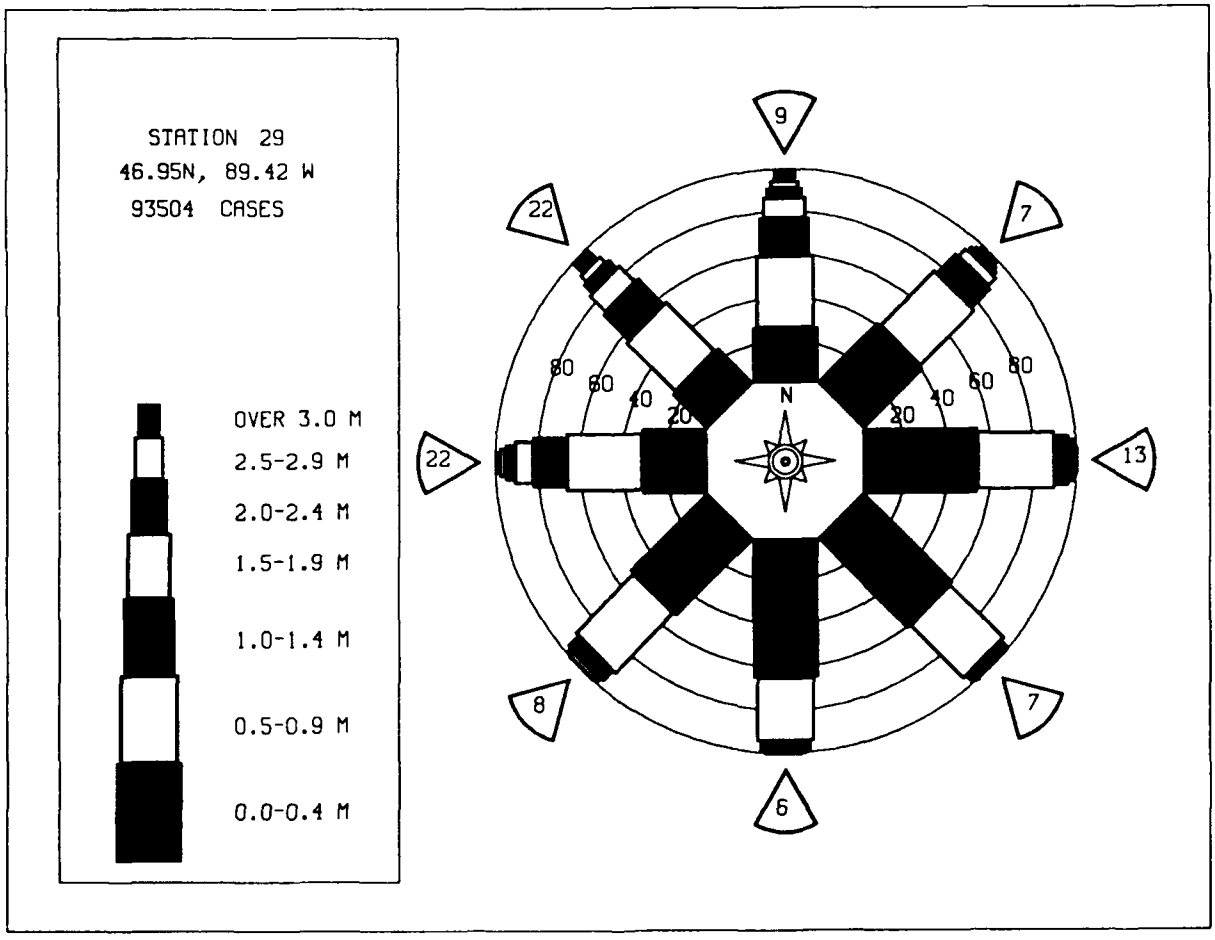
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 287 | 635 | 220 | 19 | | | . | . | . | . | 1161 |
| 0.50-0.99 | . | 362 | 1249 | 84 | 22 | 2 | . | . | . | . | 1719 |
| 1.00-1.49 | . | . | 396 | 649 | 22 | 8 | . | . | . | . | 1075 |
| 1.50-1.99 | . | . | 31 | 349 | 267 | 5 | 1 | . | . | . | 653 |
| 2.00-2.49 | . | . | . | 80 | 146 | 85 | . | . | . | . | 311 |
| 2.50-2.99 | . | . | . | 2 | 179 | 80 | 1 | . | 1 | . | 263 |
| 3.00-3.49 | . | . | . | . | 9 | 201 | 4 | . | . | . | 214 |
| 3.50-3.99 | . | . | . | . | . | 119 | 24 | . | . | . | 143 |
| 4.00-4.49 | . | . | . | . | . | 2 | 38 | . | . | . | 40 |
| 4.50-4.99 | . | . | . | . | . | . | 9 | 4 | . | . | 13 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 287 | 997 | 1896 | 1183 | 645 | 502 | 77 | 6 | 2 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.8 NO. OF CASES= 5244.

STATION S29 46.95N 89.42W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1179 | 2042 | 547 | 69 | 6 | 1 | . | . | . | . | 3844 |
| 0.50-0.99 | . | 1526 | 1765 | 152 | 39 | 10 | . | . | . | . | 3492 |
| 1.00-1.49 | . | . | 607 | 559 | 33 | 21 | 3 | 1 | . | . | 1224 |
| 1.50-1.99 | . | . | 86 | 366 | 178 | 15 | 5 | 2 | . | . | 652 |
| 2.00-2.49 | . | . | 4 | 122 | 107 | 53 | 2 | 1 | . | . | 289 |
| 2.50-2.99 | . | . | . | 4 | 151 | 52 | 1 | 1 | . | . | 209 |
| 3.00-3.49 | . | . | . | . | 10 | 119 | 3 | 1 | . | . | 133 |
| 3.50-3.99 | . | . | . | . | . | 70 | 15 | 1 | . | . | 86 |
| 4.00-4.49 | . | . | . | . | . | 5 | 20 | 2 | . | . | 27 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 4 | 1 | . | 11 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1179 | 3568 | 3009 | 1272 | 524 | 346 | 55 | 15 | 1 | 0 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S29 (46.95N 89.42W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.7 | 1.0 | 1.0 | 1.1 | 0.7 | 0.6 | 0.6 | 0.5 | 0.7 | 1.0 | 1.4 | 1.3 | 0.9 |
| 1957 | 1.4 | 1.3 | 0.9 | 0.9 | 0.8 | 0.6 | 0.5 | 0.6 | 0.7 | 0.7 | 1.3 | 1.2 | 0.9 |
| 1958 | 0.8 | 1.4 | 0.5 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.8 | 0.9 | 1.3 | 1.0 | 0.8 |
| 1959 | 1.0 | 0.9 | 0.8 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 1.3 | 1.2 | 0.8 |
| 1960 | 1.2 | 1.2 | 0.9 | 1.0 | 0.8 | 0.5 | 0.4 | 0.5 | 0.7 | 0.9 | 1.3 | 1.2 | 0.9 |
| 1961 | 1.0 | 0.9 | 1.1 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.7 | 0.8 | 0.9 | 1.1 | 0.8 |
| 1962 | 1.4 | 0.9 | 0.7 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.7 | 1.1 | 0.7 |
| 1963 | 1.2 | 1.2 | 1.0 | 0.7 | 0.6 | 0.4 | 0.5 | 0.5 | 0.6 | 0.7 | 1.1 | 1.1 | 0.8 |
| 1964 | 1.2 | 1.0 | 1.2 | 0.8 | 0.7 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1965 | 1.4 | 1.3 | 0.9 | 0.6 | 0.5 | 0.4 | 0.5 | 0.4 | 0.6 | 1.1 | 1.5 | 1.3 | 0.9 |
| 1966 | 1.5 | 1.4 | 1.7 | 1.0 | 1.1 | 0.5 | 0.5 | 0.5 | 0.8 | 1.4 | 1.4 | 1.3 | 1.1 |
| 1967 | 1.4 | 1.4 | 1.1 | 0.9 | 0.8 | 0.5 | 0.6 | 0.6 | 0.7 | 1.4 | 1.3 | 1.5 | 1.0 |
| 1968 | 1.1 | 2.3 | 1.3 | 1.0 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 1.0 | 1.6 | 1.5 | 1.1 |
| 1969 | 1.4 | 0.8 | 1.2 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 1.0 | 1.1 | 0.9 | 0.8 |
| 1970 | 1.0 | 1.3 | 0.8 | 0.8 | 0.7 | 0.4 | 0.5 | 0.5 | 0.7 | 0.8 | 1.1 | 0.9 | 0.8 |
| 1971 | 1.2 | 1.1 | 1.0 | 0.9 | 0.6 | 0.3 | 0.5 | 0.4 | 0.5 | 0.7 | 0.9 | 0.9 | 0.8 |
| 1972 | 1.3 | 1.0 | 1.0 | 0.6 | 0.4 | 0.4 | 0.4 | 0.3 | 0.7 | 1.0 | 0.8 | 1.0 | 0.7 |
| 1973 | 1.1 | 1.0 | 1.0 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.7 | 0.8 | 1.2 | 1.0 | 0.8 |
| 1974 | 0.9 | 0.8 | 0.9 | 0.7 | 0.6 | 0.6 | 0.5 | 0.6 | 0.7 | 0.8 | 1.1 | 0.9 | 0.8 |
| 1975 | 1.0 | 1.0 | 1.2 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 1.1 | 0.8 | 0.7 |
| 1976 | 1.1 | 1.1 | 1.2 | 0.7 | 0.6 | 0.4 | 0.3 | 0.5 | 0.6 | 0.5 | 0.9 | 1.0 | 0.8 |
| 1977 | 1.3 | 1.4 | 1.2 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.8 | 1.0 | 0.8 |
| 1978 | 1.3 | 1.0 | 0.8 | 0.8 | 0.5 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 | 1.0 | 1.1 | 0.8 |
| 1979 | 1.0 | 0.7 | 1.0 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 1.0 | 1.0 | 0.7 |
| 1980 | 1.0 | 0.9 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.8 | 1.1 | 0.9 | 1.2 | 0.8 |
| 1981 | 1.1 | 1.0 | 1.0 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.8 | 0.8 | 0.9 | 0.8 | 0.7 |
| 1982 | 1.5 | 1.1 | 1.2 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 1.0 | 1.2 | 0.9 |
| 1983 | 1.0 | 0.8 | 1.1 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 1.1 | 1.3 | 0.8 |
| 1984 | 1.0 | 0.9 | 1.1 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 0.7 | 1.1 | 1.3 | 0.8 |
| 1985 | 1.4 | 1.1 | 1.2 | 0.7 | 0.6 | 0.6 | 0.4 | 0.4 | 0.5 | 0.7 | 0.9 | 1.3 | 0.8 |
| 1986 | 1.1 | 0.7 | 1.1 | 0.9 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 1.0 | 1.0 | 0.7 |
| 1987 | 1.0 | 0.9 | 1.0 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.9 | 1.0 | 0.9 | 0.7 |
| MEAN | 1.2 | 1.1 | 1.0 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.7 | 0.9 | 1.1 | 1.1 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S29 (46.95N 89.42W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.0 | 4.0 | 3.5 | 4.0 | 2.5 | 2.4 | 1.4 | 1.5 | 2.8 | 4.4 | 4.8 | 4.2 |
| 1957 | 3.8 | 3.8 | 3.5 | 3.2 | 2.6 | 2.1 | 2.2 | 2.1 | 3.6 | 3.0 | 5.1 | 4.2 |
| 1958 | 3.7 | 3.8 | 2.7 | 3.6 | 3.0 | 1.8 | 1.9 | 2.4 | 3.5 | 3.3 | 4.5 | 4.4 |
| 1959 | 3.2 | 3.5 | 5.5 | 3.1 | 3.2 | 1.7 | 2.0 | 1.8 | 3.0 | 3.4 | 4.2 | 5.1 |
| 1960 | 3.6 | 4.2 | 4.6 | 3.0 | 3.5 | 1.7 | 1.6 | 2.8 | 2.9 | 3.9 | 4.0 | 4.2 |
| 1961 | 3.9 | 3.2 | 4.6 | 3.1 | 2.8 | 2.2 | 2.7 | 2.0 | 3.4 | 3.4 | 4.1 | 4.0 |
| 1962 | 4.3 | 3.5 | 3.0 | 3.7 | 2.2 | 1.5 | 2.7 | 2.1 | 2.3 | 4.3 | 3.6 | 3.7 |
| 1963 | 3.7 | 4.5 | 3.9 | 4.0 | 1.8 | 1.3 | 1.7 | 1.5 | 1.8 | 2.4 | 3.9 | 3.6 |
| 1964 | 4.7 | 3.3 | 4.1 | 3.7 | 2.5 | 2.3 | 1.6 | 2.7 | 3.8 | 3.5 | 3.8 | 2.9 |
| 1965 | 4.6 | 4.4 | 3.8 | 2.9 | 2.4 | 1.9 | 1.9 | 1.7 | 2.7 | 4.5 | 6.1 | 4.5 |
| 1966 | 6.5 | 4.1 | 6.9 | 3.6 | 3.7 | 3.2 | 2.4 | 2.9 | 3.6 | 6.0 | 5.3 | 4.5 |
| 1967 | 6.7 | 4.4 | 4.2 | 3.9 | 3.6 | 2.2 | 4.1 | 2.4 | 3.8 | 4.1 | 4.1 | 4.9 |
| 1968 | 4.5 | 6.2 | 5.6 | 4.4 | 3.3 | 2.7 | 3.3 | 2.8 | 2.8 | 3.9 | 5.0 | 5.8 |
| 1969 | 4.1 | 4.5 | 5.9 | 3.6 | 2.0 | 2.1 | 2.5 | 2.4 | 2.7 | 3.2 | 4.0 | 4.2 |
| 1970 | 3.9 | 4.7 | 3.6 | 3.6 | 2.9 | 2.0 | 2.6 | 2.1 | 3.8 | 3.8 | 4.4 | 4.7 |
| 1971 | 3.7 | 4.6 | 5.3 | 3.2 | 2.1 | 1.2 | 1.7 | 1.4 | 1.8 | 3.5 | 3.9 | 3.7 |
| 1972 | 4.6 | 4.2 | 3.6 | 3.1 | 1.2 | 2.2 | 1.4 | 1.2 | 3.1 | 5.5 | 3.1 | 4.6 |
| 1973 | 3.5 | 2.9 | 3.4 | 3.0 | 3.3 | 1.4 | 2.4 | 1.3 | 3.1 | 3.6 | 3.2 | 3.9 |
| 1974 | 3.3 | 3.5 | 3.5 | 2.9 | 1.7 | 1.8 | 2.4 | 1.9 | 2.1 | 2.6 | 3.1 | 2.9 |
| 1975 | 3.2 | 4.3 | 6.0 | 2.1 | 1.5 | 1.8 | 2.1 | 2.2 | 2.4 | 3.6 | 6.2 | 3.8 |
| 1976 | 3.7 | 4.4 | 5.0 | 2.9 | 2.6 | 1.5 | 1.0 | 1.7 | 2.4 | 2.3 | 3.5 | 4.1 |
| 1977 | 3.9 | 3.8 | 4.3 | 2.2 | 1.8 | 1.5 | 3.1 | 2.1 | 3.2 | 3.4 | 3.6 | 3.1 |
| 1978 | 4.9 | 3.3 | 3.5 | 3.0 | 2.2 | 1.4 | 1.2 | 1.6 | 2.5 | 2.9 | 3.2 | 2.8 |
| 1979 | 3.1 | 3.0 | 3.8 | 3.3 | 1.9 | 1.8 | 1.8 | 2.0 | 2.1 | 3.8 | 3.2 | 2.8 |
| 1980 | 5.4 | 4.2 | 4.2 | 2.4 | 1.7 | 1.2 | 1.2 | 1.7 | 3.4 | 3.8 | 4.0 | 4.1 |
| 1981 | 3.1 | 3.3 | 3.6 | 2.8 | 1.5 | 2.8 | 0.9 | 1.1 | 4.5 | 3.7 | 4.5 | 3.1 |
| 1982 | 4.7 | 3.3 | 6.1 | 3.9 | 1.4 | 2.8 | 2.0 | 1.7 | 2.6 | 3.3 | 4.1 | 3.5 |
| 1983 | 3.9 | 4.6 | 3.5 | 2.8 | 1.9 | 2.6 | 1.9 | 1.6 | 2.6 | 3.1 | 4.0 | 4.6 |
| 1984 | 4.3 | 3.7 | 4.9 | 4.1 | 3.6 | 2.1 | 2.4 | 1.6 | 2.1 | 3.3 | 4.9 | 4.3 |
| 1985 | 4.3 | 3.6 | 3.6 | 3.0 | 2.3 | 3.3 | 1.2 | 1.9 | 3.0 | 3.1 | 2.7 | 4.5 |
| 1986 | 4.0 | 2.6 | 4.0 | 3.3 | 4.0 | 1.5 | 1.2 | 1.2 | 3.2 | 4.2 | 3.4 | 3.5 |
| 1987 | 3.2 | 4.9 | 3.5 | 2.2 | 2.0 | 1.5 | 1.0 | 2.7 | 2.4 | 4.1 | 3.7 | 3.6 |

32 YR. STATISTICS FOR WIS STATION S29

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.0 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 6.9 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 23.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66032321 |

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 237 | 625 | 226 | 19 | . | . | . | . | . | . | 1107 |
| 0.50-0.99 | . | 328 | 1141 | 142 | 28 | . | . | . | . | . | 1639 |
| 1.00-1.49 | . | . | 374 | 316 | 47 | 20 | 1 | . | . | . | 758 |
| 1.50-1.99 | . | . | 21 | 362 | 49 | 34 | . | . | . | . | 466 |
| 2.00-2.49 | . | . | . | 136 | 101 | 18 | 2 | . | . | . | 257 |
| 2.50-2.99 | . | . | . | 3 | 161 | 10 | 2 | . | . | . | 176 |
| 3.00-3.49 | . | . | . | . | 32 | 44 | . | 1 | 1 | . | 78 |
| 3.50-3.99 | . | . | . | . | . | 37 | 1 | 6 | . | . | 44 |
| 4.00-4.49 | . | . | . | . | . | 5 | 7 | 1 | 1 | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | 2 | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 237 | 953 | 1762 | 978 | 418 | 168 | 14 | 8 | 6 | 1 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 4262.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 208 | 480 | 133 | 10 | . | . | . | . | . | . | 831 |
| 0.50-0.99 | . | 319 | 750 | 98 | 24 | 1 | . | . | . | . | 1192 |
| 1.00-1.49 | . | . | 204 | 211 | 48 | 17 | . | . | . | . | 480 |
| 1.50-1.99 | . | . | 14 | 127 | 48 | 22 | . | . | . | . | 211 |
| 2.00-2.49 | . | . | . | 42 | 41 | 17 | 3 | . | . | . | 103 |
| 2.50-2.99 | . | . | . | . | 43 | 17 | 7 | . | . | . | 67 |
| 3.00-3.49 | . | . | . | . | 5 | 19 | 8 | 6 | . | . | 38 |
| 3.50-3.99 | . | . | . | . | . | 13 | 7 | 6 | . | . | 26 |
| 4.00-4.49 | . | . | . | . | . | . | 4 | 5 | 2 | . | 11 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 3 | 2 | 1 | 8 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 5 | 1 | 1 | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 3 | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 208 | 799 | 1101 | 488 | 209 | 106 | 32 | 25 | 13 | 6 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 2809.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 380 | 772 | 302 | 27 | . | . | . | . | . | . | 1481 |
| 0.50-0.99 | . | 419 | 1063 | 218 | 32 | 4 | . | . | . | . | 1736 |
| 1.00-1.49 | . | . | 302 | 310 | 47 | 14 | 2 | . | . | . | 675 |
| 1.50-1.99 | . | . | 16 | 189 | 66 | 44 | 2 | . | . | . | 317 |
| 2.00-2.49 | . | . | . | 54 | 45 | 34 | 10 | 1 | . | . | 144 |
| 2.50-2.99 | . | . | . | 2 | 57 | 37 | 10 | 4 | . | . | 110 |
| 3.00-3.49 | . | . | . | . | 5 | 37 | 7 | 5 | . | . | 54 |
| 3.50-3.99 | . | . | . | . | . | 17 | 17 | 2 | . | . | 36 |
| 4.00-4.49 | . | . | . | . | . | . | 13 | 9 | 2 | . | 24 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 5 | 4 | . | 10 |
| 5.00-5.49 | . | . | . | . | . | . | . | 6 | 1 | . | 7 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 380 | 1191 | 1683 | 800 | 252 | 187 | 62 | 33 | 12 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 4317.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 580 | 864 | 269 | 19 | 2 | . | . | . | . | . | 1734 |
| 0.50-0.99 | . | 960 | 1103 | 122 | 29 | 3 | . | . | . | . | 2217 |
| 1.00-1.49 | . | . | 393 | 119 | 20 | 14 | 2 | 1 | . | . | 549 |
| 1.50-1.99 | . | . | 77 | 111 | 33 | 36 | 10 | 2 | . | . | 269 |
| 2.00-2.49 | . | . | . | 68 | 14 | 8 | 10 | 3 | 1 | . | 104 |
| 2.50-2.99 | . | . | . | 7 | 47 | 6 | 2 | 4 | 3 | . | 69 |
| 3.00-3.49 | . | . | . | 3 | 4 | 10 | 2 | 3 | 4 | . | 26 |
| 3.50-3.99 | . | . | . | . | . | 10 | 2 | 1 | 2 | 1 | 16 |
| 4.00-4.49 | . | . | . | . | 1 | 2 | 4 | 2 | 2 | . | 11 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | 4 | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 580 | 1824 | 1842 | 449 | 150 | 89 | 33 | 20 | 18 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 4698.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 952 | 1268 | 379 | 27 | 6 | . | . | . | . | . | 2632 |
| 0.50-0.99 | . | 1880 | 1726 | 130 | 47 | 12 | . | . | . | . | 3795 |
| 1.00-1.49 | . | . | 867 | 31 | 24 | 41 | 3 | . | . | . | 966 |
| 1.50-1.99 | . | . | 239 | 137 | 5 | 16 | 8 | 2 | . | . | 407 |
| 2.00-2.49 | . | . | . | 115 | 1 | 9 | 18 | 3 | . | . | 146 |
| 2.50-2.99 | . | . | . | 39 | 2 | 1 | 5 | 3 | . | . | 50 |
| 3.00-3.49 | . | . | . | 4 | 6 | . | . | 1 | . | 1 | 12 |
| 3.50-3.99 | . | . | . | . | 3 | . | . | . | . | 1 | 4 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 952 | 3148 | 3211 | 483 | 94 | 79 | 34 | 9 | 0 | 3 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 7505.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 757 | 996 | 260 | 35 | . | 2 | . | . | . | . | 2050 |
| 0.50-0.99 | . | 1242 | 776 | 59 | 25 | 8 | 1 | . | . | . | 2111 |
| 1.00-1.49 | . | . | 397 | 6 | 8 | 7 | 4 | 2 | . | . | 424 |
| 1.50-1.99 | . | . | 109 | 77 | . | 5 | 3 | 1 | . | . | 195 |
| 2.00-2.49 | . | . | . | 51 | . | 2 | . | 2 | . | . | 55 |
| 2.50-2.99 | . | . | . | 5 | 3 | . | 1 | . | . | . | 9 |
| 3.00-3.49 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 757 | 2238 | 1542 | 233 | 39 | 24 | 9 | 5 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 4542.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 735 | 1148 | 254 | 22 | 1 | . | . | . | . | . | 2160 |
| 0.50-0.99 | . | 1208 | 234 | 42 | 14 | 2 | . | . | . | . | 1500 |
| 1.00-1.49 | . | . | 207 | 1 | 3 | 6 | 1 | . | . | . | 218 |
| 1.50-1.99 | . | . | 41 | . | . | 1 | . | . | . | . | 42 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 735 | 2356 | 736 | 6 | 18 | 9 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 3673.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 635 | 903 | 170 | 17 | 5 | . | . | . | . | . | 1730 |
| 0.50-0.99 | . | 809 | 132 | 21 | 6 | 1 | . | . | . | . | 969 |
| 1.00-1.49 | . | . | 121 | 1 | 2 | 3 | . | . | . | . | 127 |
| 1.50-1.99 | . | . | 18 | 1 | . | . | 2 | . | . | . | 21 |
| 2.00-2.49 | . | . | 1 | 1 | . | . | . | 1 | . | . | 3 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 635 | 1712 | 442 | 41 | 13 | 4 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.0 NO. OF CASES= 2670.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 702 | 951 | 189 | 29 | 3 | . | . | . | . | . | 1874 |
| 0.50-0.99 | . | 786 | 79 | 19 | 9 | 3 | . | . | . | . | 896 |
| 1.00-1.49 | . | . | 127 | . | 1 | 1 | 1 | . | . | . | 130 |
| 1.50-1.99 | . | . | 11 | . | . | . | 1 | . | . | . | 12 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 702 | 1737 | 406 | 48 | 13 | 4 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.0 NO. OF CASES= 2728.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 515 | 984 | 174 | 18 | . | . | . | . | . | . | 1691 |
| 0.50-0.99 | . | 867 | 242 | 18 | 10 | 3 | . | . | . | . | 1140 |
| 1.00-1.49 | . | . | 260 | 1 | . | 4 | . | . | . | . | 265 |
| 1.50-1.99 | . | . | 38 | 12 | 1 | . | . | . | . | . | 51 |
| 2.00-2.49 | . | . | . | 7 | . | . | . | . | . | . | 7 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 515 | 1851 | 714 | 56 | 11 | 7 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 2956.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 552 | 964 | 278 | 18 | . | . | . | . | . | . | 1812 |
| 0.50-0.99 | . | 775 | 759 | 42 | 12 | 3 | . | . | . | . | 1591 |
| 1.00-1.49 | . | . | 490 | 25 | 10 | 4 | . | . | . | . | 529 |
| 1.50-1.99 | . | . | 78 | 119 | 8 | . | . | . | . | . | 205 |
| 2.00-2.49 | . | . | 1 | 85 | 3 | . | . | . | . | . | 89 |
| 2.50-2.99 | . | . | . | 4 | 1 | . | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | 2 | 1 | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 552 | 1739 | 1606 | 293 | 36 | 8 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 3968.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 568 | 1230 | 442 | 50 | 1 | . | . | . | . | . | 2291 |
| 0.50-0.99 | . | 765 | 1594 | 166 | 19 | 1 | . | . | . | . | 2545 |
| 1.00-1.49 | . | . | 975 | 264 | 14 | 1 | . | . | . | . | 1254 |
| 1.50-1.99 | . | . | 89 | 394 | 104 | . | . | . | . | . | 587 |
| 2.00-2.49 | . | . | . | 143 | 94 | 16 | . | 1 | . | . | 254 |
| 2.50-2.99 | . | . | . | 9 | 62 | 22 | . | . | . | . | 93 |
| 3.00-3.49 | . | . | . | . | 5 | 31 | . | . | . | . | 36 |
| 3.50-3.99 | . | . | . | . | . | 5 | 5 | . | . | . | 10 |
| 4.00-4.49 | . | . | . | . | . | 3 | 1 | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 568 | 1995 | 3100 | 1026 | 299 | 79 | 6 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 6626.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 812 | 2403 | 823 | 52 | . | . | . | . | . | . | 4090 |
| 0.50-0.99 | . | 1096 | 4117 | 522 | 31 | . | . | . | . | . | 5766 |
| 1.00-1.49 | . | . | 1101 | 1220 | 62 | 5 | . | . | . | . | 2388 |
| 1.50-1.99 | . | . | 97 | 759 | 371 | 22 | . | . | . | . | 1249 |
| 2.00-2.49 | . | . | . | 313 | 208 | 142 | 1 | . | . | . | 664 |
| 2.50-2.99 | . | . | . | 7 | 339 | 137 | 10 | . | . | . | 493 |
| 3.00-3.49 | . | . | . | . | 24 | 211 | 36 | 2 | . | . | 273 |
| 3.50-3.99 | . | . | . | . | . | 108 | 48 | 6 | . | . | 162 |
| 4.00-4.49 | . | . | . | . | . | 8 | 83 | 9 | . | . | 100 |
| 4.50-4.99 | . | . | . | . | . | . | 14 | 38 | . | . | 52 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 36 | 1 | . | 38 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 3 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| TOTAL | 812 | 3499 | 6138 | 2873 | 1035 | 633 | 193 | 94 | 7 | 2 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 14308.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 643 | 2495 | 467 | 25 | 1 | 1 | . | . | . | . | 3632 |
| 0.50-0.99 | . | 917 | 4140 | 201 | 32 | . | . | . | . | . | 5290 |
| 1.00-1.49 | . | . | 900 | 1478 | 51 | 6 | . | . | . | . | 2435 |
| 1.50-1.99 | . | . | 74 | 750 | 670 | 13 | . | . | . | . | 1507 |
| 2.00-2.49 | . | . | . | 251 | 312 | 269 | 1 | . | . | . | 833 |
| 2.50-2.99 | . | . | . | . | 430 | 254 | 9 | . | . | . | 693 |
| 3.00-3.49 | . | . | . | . | 9 | 456 | 19 | 1 | . | . | 485 |
| 3.50-3.99 | . | . | . | . | . | 214 | 83 | 1 | 1 | . | 299 |
| 4.00-4.49 | . | . | . | . | . | 12 | 121 | 13 | . | . | 146 |
| 4.50-4.99 | . | . | . | . | . | . | 26 | 32 | . | . | 58 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 33 | . | . | 34 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | 2 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 643 | 3412 | 5581 | 2705 | 1505 | 1225 | 260 | 86 | 6 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 14439.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 435 | 1206 | 342 | 21 | 1 | . | . | . | . | . | 2005 |
| 0.50-0.99 | . | 587 | 2587 | 150 | 23 | 2 | . | . | . | . | 3349 |
| 1.00-1.49 | . | . | 627 | 1115 | 28 | 14 | 1 | . | . | . | 1785 |
| 1.50-1.99 | . | . | 36 | 671 | 438 | 4 | . | . | . | . | 1149 |
| 2.00-2.49 | . | . | . | 198 | 285 | 106 | . | . | . | . | 589 |
| 2.50-2.99 | . | . | . | 2 | 320 | 139 | . | . | . | . | 461 |
| 3.00-3.49 | . | . | . | . | 4 | 346 | . | . | . | . | 350 |
| 3.50-3.99 | . | . | . | . | . | 143 | 7 | . | . | . | 150 |
| 4.00-4.49 | . | . | . | . | . | 8 | 39 | . | . | . | 47 |
| 4.50-4.99 | . | . | . | . | . | . | 12 | 1 | . | . | 13 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 8 | . | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 435 | 1793 | 3592 | 2157 | 1099 | 762 | 60 | 11 | 1 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.7 NO. OF CASES= 9281.

STATION S30 47.08N 89.22W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

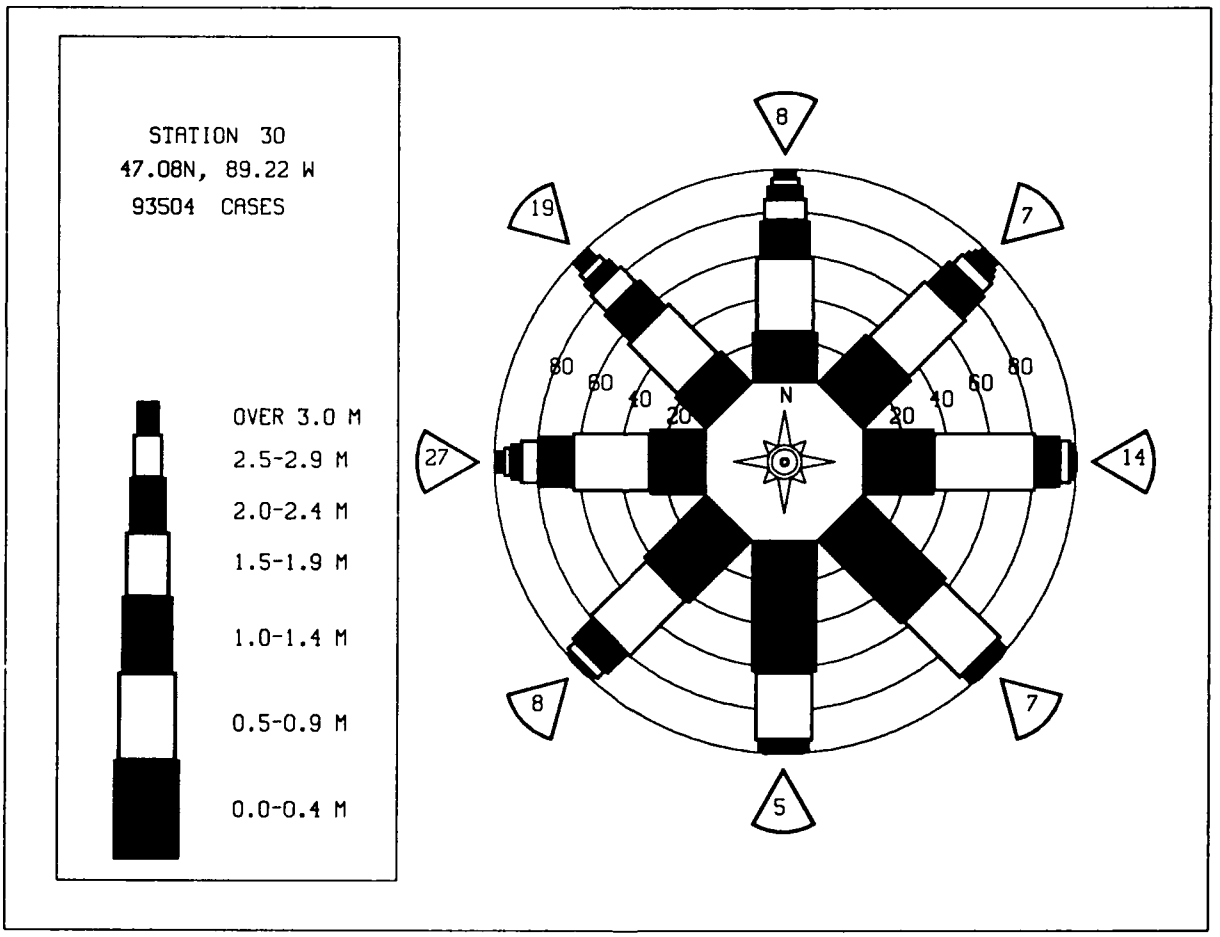
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 220 | 495 | 198 | 18 | . | . | . | . | . | . | 931 |
| 0.50-0.99 | . | 322 | 1124 | 94 | 35 | 1 | . | . | . | . | 1576 |
| 1.00-1.49 | . | . | 408 | 527 | 28 | 18 | . | . | . | . | 981 |
| 1.50-1.99 | . | . | 20 | 454 | 132 | 8 | . | . | . | . | 614 |
| 2.00-2.49 | . | . | . | 151 | 181 | 24 | . | . | . | . | 356 |
| 2.50-2.99 | . | . | . | 2 | 203 | 59 | . | . | . | . | 264 |
| 3.00-3.49 | . | . | . | . | 33 | 182 | 2 | . | . | . | 217 |
| 3.50-3.99 | . | . | . | . | . | 70 | 1 | . | . | . | 71 |
| 4.00-4.49 | . | . | . | . | . | 9 | 10 | . | . | . | 19 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 1 | . | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 220 | 817 | 1750 | 1246 | 612 | 371 | 19 | 1 | 0 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 4722.

STATION S30 47.08N 89.22W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 894 | 1779 | 491 | 41 | 2 | . | . | . | . | . | 3207 |
| 0.50-0.99 | . | 1328 | 2157 | 205 | 38 | 4 | . | . | . | . | 3732 |
| 1.00-1.49 | . | . | 776 | 562 | 39 | 18 | 1 | . | . | . | 1396 |
| 1.50-1.99 | . | . | 98 | 416 | 192 | 20 | 2 | . | . | . | 728 |
| 2.00-2.49 | . | . | . | 162 | 129 | 64 | 4 | 1 | . | . | 360 |
| 2.50-2.99 | . | . | . | 8 | 167 | 68 | 4 | 1 | . | . | 248 |
| 3.00-3.49 | . | . | . | . | 13 | 134 | 7 | 2 | . | . | 156 |
| 3.50-3.99 | . | . | . | . | . | 62 | 17 | 2 | . | . | 81 |
| 4.00-4.49 | . | . | . | . | . | 5 | 28 | 4 | . | . | 37 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 8 | 1 | . | 15 |
| 5.00-5.49 | . | . | . | . | . | . | . | 9 | . | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 894 | 3107 | 3522 | 1394 | 580 | 375 | 69 | 27 | 2 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S30 (47.08N 89.22W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.7 | 1.1 | 1.1 | 1.2 | 0.8 | 0.6 | 0.6 | 0.5 | 0.7 | 1.1 | 1.5 | 1.3 | 1.0 |
| 1957 | 1.5 | 1.3 | 1.0 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 0.8 | 1.3 | 1.2 | 1.0 |
| 1958 | 0.8 | 1.4 | 0.5 | 0.9 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 1.0 | 1.5 | 1.1 | 0.9 |
| 1959 | 1.1 | 1.0 | 0.9 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.8 | 0.9 | 1.4 | 1.4 | 0.9 |
| 1960 | 1.2 | 1.2 | 0.9 | 1.0 | 0.8 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.4 | 1.2 | 0.9 |
| 1961 | 1.0 | 1.0 | 1.2 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.7 | 0.9 | 1.0 | 1.2 | 0.9 |
| 1962 | 1.5 | 1.0 | 0.8 | 0.8 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 0.8 | 1.1 | 0.8 |
| 1963 | 1.3 | 1.2 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 1.2 | 1.2 | 0.8 |
| 1964 | 1.2 | 1.0 | 1.2 | 1.0 | 0.8 | 0.6 | 0.5 | 0.7 | 0.8 | 1.0 | 1.2 | 1.0 | 0.9 |
| 1965 | 1.5 | 1.5 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.7 | 1.1 | 1.6 | 1.4 | 1.0 |
| 1966 | 1.6 | 1.5 | 1.7 | 1.1 | 1.1 | 0.6 | 0.6 | 0.6 | 0.9 | 1.5 | 1.5 | 1.5 | 1.2 |
| 1967 | 1.5 | 1.5 | 1.3 | 1.0 | 0.9 | 0.6 | 0.7 | 0.7 | 0.8 | 1.5 | 1.4 | 1.8 | 1.1 |
| 1968 | 1.2 | 2.3 | 1.5 | 1.1 | 0.7 | 0.6 | 0.7 | 0.7 | 0.7 | 1.1 | 1.7 | 1.6 | 1.2 |
| 1969 | 1.5 | 0.9 | 1.2 | 0.8 | 0.7 | 0.6 | 0.4 | 0.6 | 0.6 | 1.0 | 1.2 | 0.9 | 0.9 |
| 1970 | 1.0 | 1.3 | 0.9 | 0.9 | 0.8 | 0.5 | 0.5 | 0.5 | 0.8 | 0.8 | 1.2 | 1.0 | 0.9 |
| 1971 | 1.3 | 1.3 | 1.1 | 0.9 | 0.7 | 0.4 | 0.5 | 0.5 | 0.5 | 0.9 | 1.1 | 1.0 | 0.8 |
| 1972 | 1.5 | 1.1 | 1.1 | 0.7 | 0.4 | 0.5 | 0.4 | 0.4 | 0.7 | 1.1 | 0.8 | 1.0 | 0.8 |
| 1973 | 1.2 | 1.1 | 1.1 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.8 | 0.9 | 1.3 | 1.0 | 0.9 |
| 1974 | 1.0 | 0.8 | 1.1 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.7 | 0.9 | 1.2 | 1.1 | 0.8 |
| 1975 | 1.2 | 1.2 | 1.3 | 0.7 | 0.4 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 1.2 | 0.9 | 0.8 |
| 1976 | 1.2 | 1.2 | 1.3 | 0.8 | 0.6 | 0.5 | 0.3 | 0.5 | 0.6 | 0.5 | 0.9 | 1.1 | 0.8 |
| 1977 | 1.5 | 1.5 | 1.4 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 0.9 | 1.2 | 0.9 |
| 1978 | 1.3 | 1.1 | 0.9 | 0.9 | 0.5 | 0.5 | 0.4 | 0.5 | 0.8 | 0.8 | 1.1 | 1.2 | 0.9 |
| 1979 | 1.1 | 0.8 | 1.1 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.7 | 0.8 | 1.1 | 1.1 | 0.8 |
| 1980 | 1.2 | 0.9 | 1.1 | 0.7 | 0.7 | 0.6 | 0.4 | 0.5 | 0.9 | 1.2 | 1.0 | 1.3 | 0.9 |
| 1981 | 1.2 | 1.1 | 1.1 | 0.8 | 0.5 | 0.6 | 0.4 | 0.4 | 0.8 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1982 | 1.6 | 1.2 | 1.4 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 1.1 | 1.3 | 1.0 |
| 1983 | 1.0 | 0.9 | 1.2 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.7 | 0.8 | 1.3 | 1.4 | 0.9 |
| 1984 | 1.1 | 0.9 | 1.2 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.7 | 0.9 | 1.3 | 1.4 | 0.9 |
| 1985 | 1.5 | 1.2 | 1.3 | 0.8 | 0.6 | 0.7 | 0.4 | 0.5 | 0.5 | 0.7 | 1.0 | 1.4 | 0.9 |
| 1986 | 1.2 | 0.8 | 1.2 | 1.0 | 0.6 | 0.6 | 0.4 | 0.4 | 0.7 | 0.8 | 1.1 | 1.0 | 0.8 |
| 1987 | 1.0 | 1.0 | 1.1 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 1.0 | 1.1 | 0.9 | 0.8 |
| MEAN | 1.2 | 1.2 | 1.1 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 1.2 | 1.2 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S30 (47.08N 89.22W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.2 | 3.9 | 3.9 | 4.0 | 2.7 | 2.5 | 1.6 | 1.8 | 2.8 | 4.3 | 4.7 | 4.4 |
| 1957 | 3.4 | 3.4 | 3.7 | 3.3 | 2.8 | 2.6 | 2.2 | 2.2 | 3.3 | 2.8 | 4.2 | 5.3 |
| 1958 | 3.4 | 3.6 | 2.8 | 4.5 | 3.2 | 1.8 | 2.2 | 2.2 | 3.4 | 4.1 | 5.3 | 4.6 |
| 1959 | 3.4 | 3.9 | 5.9 | 3.3 | 4.2 | 1.9 | 2.5 | 1.9 | 3.2 | 3.5 | 4.9 | 5.3 |
| 1960 | 3.9 | 4.1 | 4.2 | 3.5 | 3.4 | 1.8 | 1.6 | 2.9 | 2.8 | 4.0 | 4.2 | 4.3 |
| 1961 | 3.6 | 3.7 | 4.7 | 3.3 | 2.7 | 2.6 | 2.8 | 2.0 | 3.3 | 2.9 | 4.3 | 4.2 |
| 1962 | 4.3 | 3.6 | 3.1 | 3.4 | 2.5 | 1.6 | 2.9 | 1.9 | 2.4 | 5.5 | 4.1 | 4.0 |
| 1963 | 4.2 | 4.2 | 3.5 | 4.0 | 1.8 | 1.4 | 1.6 | 1.5 | 2.1 | 2.7 | 3.7 | 3.7 |
| 1964 | 4.7 | 4.7 | 4.1 | 4.3 | 2.7 | 2.4 | 2.0 | 2.8 | 3.9 | 4.1 | 5.0 | 3.6 |
| 1965 | 4.4 | 5.6 | 3.9 | 2.9 | 2.5 | 2.1 | 1.9 | 1.6 | 3.2 | 4.5 | 6.1 | 4.5 |
| 1966 | 6.9 | 4.3 | 6.9 | 3.7 | 3.9 | 4.0 | 2.8 | 3.1 | 3.3 | 6.2 | 5.1 | 5.0 |
| 1967 | 6.9 | 4.7 | 3.9 | 4.6 | 3.5 | 2.3 | 4.1 | 2.4 | 3.8 | 5.0 | 4.5 | 5.4 |
| 1968 | 4.0 | 6.0 | 5.8 | 4.7 | 3.4 | 2.8 | 3.5 | 3.3 | 3.3 | 4.5 | 5.2 | 5.7 |
| 1969 | 4.5 | 3.7 | 5.7 | 3.7 | 2.1 | 2.3 | 2.6 | 2.9 | 2.7 | 3.4 | 4.1 | 4.3 |
| 1970 | 3.6 | 4.6 | 3.3 | 5.0 | 3.6 | 2.1 | 2.3 | 2.2 | 3.8 | 3.5 | 4.0 | 4.5 |
| 1971 | 3.7 | 5.0 | 5.6 | 2.8 | 2.4 | 1.3 | 1.8 | 1.8 | 2.1 | 4.2 | 5.2 | 4.5 |
| 1972 | 4.7 | 3.9 | 3.6 | 3.3 | 1.2 | 2.2 | 1.5 | 1.3 | 3.8 | 5.3 | 3.1 | 4.4 |
| 1973 | 3.4 | 3.3 | 3.2 | 3.7 | 3.3 | 1.6 | 2.8 | 1.5 | 3.9 | 3.4 | 3.5 | 3.9 |
| 1974 | 3.9 | 3.2 | 4.2 | 2.9 | 2.2 | 2.1 | 2.9 | 2.2 | 2.3 | 2.8 | 3.9 | 3.0 |
| 1975 | 4.2 | 5.8 | 6.0 | 2.3 | 1.6 | 2.2 | 2.1 | 2.6 | 2.6 | 4.8 | 6.1 | 4.0 |
| 1976 | 4.5 | 4.6 | 5.2 | 3.7 | 2.7 | 1.8 | 0.9 | 1.8 | 2.8 | 2.4 | 3.3 | 5.1 |
| 1977 | 5.2 | 4.8 | 5.9 | 2.3 | 1.9 | 1.6 | 3.5 | 2.5 | 4.0 | 4.4 | 4.7 | 3.9 |
| 1978 | 4.5 | 3.5 | 3.7 | 3.2 | 2.0 | 1.6 | 1.3 | 1.8 | 3.0 | 3.9 | 3.7 | 3.6 |
| 1979 | 3.6 | 2.9 | 3.6 | 3.2 | 2.4 | 1.8 | 2.1 | 2.2 | 2.1 | 3.2 | 3.0 | 3.3 |
| 1980 | 6.5 | 4.4 | 4.4 | 2.4 | 2.5 | 1.6 | 1.4 | 2.1 | 3.6 | 5.0 | 4.3 | 5.2 |
| 1981 | 3.8 | 3.5 | 4.3 | 3.1 | 1.7 | 3.4 | 1.0 | 1.3 | 5.3 | 3.7 | 5.1 | 3.3 |
| 1982 | 5.1 | 4.0 | 8.2 | 5.2 | 1.8 | 3.1 | 2.4 | 1.9 | 2.6 | 3.2 | 5.1 | 4.3 |
| 1983 | 3.3 | 4.5 | 3.9 | 3.1 | 2.3 | 2.8 | 2.3 | 1.7 | 2.8 | 3.4 | 5.4 | 4.5 |
| 1984 | 4.8 | 3.2 | 4.5 | 3.8 | 3.5 | 2.4 | 2.7 | 1.6 | 2.1 | 4.1 | 5.4 | 5.2 |
| 1985 | 4.9 | 3.5 | 4.1 | 3.6 | 2.8 | 4.2 | 1.2 | 2.0 | 3.3 | 3.0 | 3.1 | 4.9 |
| 1986 | 4.5 | 3.7 | 3.8 | 4.2 | 3.9 | 1.8 | 1.2 | 1.2 | 3.2 | 4.4 | 4.4 | 3.6 |
| 1987 | 3.4 | 4.7 | 3.7 | 2.6 | 2.8 | 1.5 | 1.2 | 2.9 | 2.3 | 3.8 | 4.0 | 3.3 |

32 YR. STATISTICS FOR WIS STATION S30

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.1 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 8.2 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 272.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 82031400 |

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 294 | 640 | 216 | 20 | 1 | . | . | . | . | . | 1171 |
| 0.50-0.99 | . | 380 | 1163 | 135 | 22 | 1 | . | . | . | . | 1701 |
| 1.00-1.49 | . | . | 404 | 318 | 37 | 23 | 1 | . | . | . | 783 |
| 1.50-1.99 | . | . | 27 | 350 | 53 | 14 | 1 | . | . | . | 445 |
| 2.00-2.49 | . | . | . | 152 | 73 | 17 | . | . | . | . | 242 |
| 2.50-2.99 | . | . | . | 2 | 161 | 11 | 3 | . | . | . | 177 |
| 3.00-3.49 | . | . | . | . | 27 | 41 | . | 1 | . | . | 69 |
| 3.50-3.99 | . | . | . | . | . | 34 | 3 | 4 | . | . | 41 |
| 4.00-4.49 | . | . | . | . | . | 9 | 3 | 2 | . | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | 3 | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | 3 | 1 | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 294 | 1020 | 1810 | 977 | 374 | 150 | 14 | 7 | 7 | 1 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 4367.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 213 | 516 | 167 | 17 | 2 | . | . | . | . | . | 915 |
| 0.50-0.99 | . | 326 | 757 | 79 | 29 | 1 | . | . | . | . | 1192 |
| 1.00-1.49 | . | . | 210 | 205 | 33 | 17 | 1 | . | . | . | 466 |
| 1.50-1.99 | . | . | 13 | 130 | 48 | 20 | 1 | . | . | . | 212 |
| 2.00-2.49 | . | . | 1 | 42 | 31 | 11 | 4 | . | . | . | 89 |
| 2.50-2.99 | . | . | . | . | 47 | 11 | 6 | . | . | . | 64 |
| 3.00-3.49 | . | . | . | . | 6 | 19 | 5 | 9 | . | . | 39 |
| 3.50-3.99 | . | . | . | . | . | 13 | 8 | 3 | . | . | 24 |
| 4.00-4.49 | . | . | . | . | . | . | 7 | 5 | 2 | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | . | 3 | 1 | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 4 | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 4 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 3 | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 213 | 842 | 1148 | 473 | 196 | 92 | 32 | 27 | 13 | 3 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.3 NO. OF CASES= 2857.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 442 | 818 | 350 | 45 | 4 | . | . | . | . | . | 1659 |
| 0.50-0.99 | . | 438 | 945 | 189 | 24 | 7 | . | . | . | . | 1603 |
| 1.00-1.49 | . | . | 295 | 291 | 42 | 18 | 1 | . | . | . | 647 |
| 1.50-1.99 | . | . | 33 | 147 | 58 | 31 | 7 | . | . | . | 276 |
| 2.00-2.49 | . | . | . | 65 | 36 | 17 | 7 | 5 | . | . | 130 |
| 2.50-2.99 | . | . | . | 1 | 59 | 39 | 5 | 4 | . | . | 108 |
| 3.00-3.49 | . | . | . | . | 3 | 34 | 5 | 2 | 1 | . | 45 |
| 3.50-3.99 | . | . | . | . | . | 9 | 13 | 2 | 1 | . | 25 |
| 4.00-4.49 | . | . | . | . | . | 1 | 10 | 7 | 4 | . | 22 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 6 | 3 | . | 12 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 442 | 1256 | 1623 | 738 | 226 | 156 | 51 | 28 | 12 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 4256.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 780 | 1212 | 348 | 52 | 4 | . | . | . | . | . | 2396 |
| 0.50-0.99 | . | 1140 | 529 | 119 | 38 | 19 | . | . | . | . | 1845 |
| 1.00-1.49 | . | . | 201 | 79 | 25 | 44 | 11 | 3 | . | . | 363 |
| 1.50-1.99 | . | . | 44 | 37 | 31 | 21 | 19 | 8 | 1 | . | 161 |
| 2.00-2.49 | . | . | 3 | 16 | 5 | 5 | 8 | 3 | 5 | . | 45 |
| 2.50-2.99 | . | . | . | 2 | 14 | 1 | 3 | 3 | 3 | . | 26 |
| 3.00-3.49 | . | . | . | 1 | 3 | 6 | . | 2 | 3 | . | 15 |
| 3.50-3.99 | . | . | . | . | . | 2 | 1 | 1 | 1 | . | 5 |
| 4.00-4.49 | . | . | . | . | . | 1 | 4 | 2 | 1 | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 780 | 2352 | 1125 | 306 | 120 | 99 | 46 | 22 | 17 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.6 NO. OF CASES= 4567.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1283 | 2077 | 483 | 82 | 16 | 2 | | | | | 3943 |
| 0.50-0.99 | . | 2399 | 310 | 110 | 56 | 38 | 3 | | | | 2916 |
| 1.00-1.49 | . | . | 510 | 29 | 25 | 64 | 11 | 3 | | | 642 |
| 1.50-1.99 | . | . | 120 | 6 | 6 | 28 | 26 | 9 | 1 | | 196 |
| 2.00-2.49 | . | . | 24 | 7 | 1 | 3 | 5 | 7 | 1 | 1 | 49 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | 1 | . | 1 | 6 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1283 | 4476 | 1447 | 238 | 104 | 135 | 45 | 20 | 2 | 3 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 7263.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 843 | 1120 | 279 | 54 | 7 | 1 | | | | | 2304 |
| 0.50-0.99 | . | 1381 | 231 | 49 | 33 | 6 | 2 | | | | 1702 |
| 1.00-1.49 | . | . | 281 | 3 | 2 | 16 | 4 | 2 | | | 308 |
| 1.50-1.99 | . | . | 66 | 4 | . | 5 | 2 | 2 | | | 79 |
| 2.00-2.49 | . | . | 2 | 2 | . | . | 1 | . | | | 5 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | | | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | | | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | | | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | | | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | | | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | | | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | | | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | | | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | | | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | | | 0 |
| TOTAL | 843 | 2501 | 859 | 113 | 42 | 28 | 9 | 4 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 4120.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 801 | 1028 | 255 | 26 | 2 | | | | | | 2112 |
| 0.50-0.99 | . | 1124 | 201 | 22 | 11 | 8 | 1 | | | | 1367 |
| 1.00-1.49 | . | . | 159 | 3 | 1 | 3 | 1 | 2 | | | 169 |
| 1.50-1.99 | . | . | 41 | . | . | 2 | . | . | | | 43 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | | | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | | | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | | | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | | | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | | | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | | | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | | | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | | | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | | | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | | | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | | | 0 |
| TOTAL | 801 | 2152 | 656 | 52 | 14 | 13 | 2 | 2 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 3458.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 681 | 930 | 145 | 14 | 3 | | | | | | 1773 |
| 0.50-0.99 | . | 1015 | 164 | 17 | 12 | 4 | | | | | 1212 |
| 1.00-1.49 | . | . | 167 | 1 | 1 | 1 | 1 | | | | 171 |
| 1.50-1.99 | . | . | 29 | 3 | . | . | . | 1 | | | 34 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | | | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | | | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | | | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | | | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | | | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | | | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | | | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | | | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | | | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | | | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | | | 0 |
| TOTAL | 681 | 1945 | 505 | 36 | 16 | 5 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 2991.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 760 | 1018 | 166 | 25 | 1 | . | . | . | . | . | 1970 |
| 0.50-0.99 | . | 940 | 79 | 10 | 8 | 1 | . | . | . | . | 1038 |
| 1.00-1.49 | . | . | 205 | 2 | . | 1 | . | . | . | . | 208 |
| 1.50-1.99 | . | . | 23 | . | . | . | . | . | . | . | 23 |
| 2.00-2.49 | . | . | 1 | . | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 760 | 1958 | 474 | 37 | 9 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 3034.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 570 | 894 | 120 | 14 | 1 | 1 | . | . | . | . | 1600 |
| 0.50-0.99 | . | 909 | 102 | 11 | 6 | 4 | . | . | . | . | 1032 |
| 1.00-1.49 | . | . | 226 | . | . | 3 | . | . | . | . | 229 |
| 1.50-1.99 | . | . | 37 | 2 | . | . | . | . | . | . | 39 |
| 2.00-2.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 570 | 1803 | 485 | 29 | 7 | 8 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 2719.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 572 | 980 | 204 | 19 | 1 | . | . | . | . | . | 1776 |
| 0.50-0.99 | . | 1026 | 433 | 28 | 10 | 3 | . | . | . | . | 1500 |
| 1.00-1.49 | . | . | 243 | 27 | 7 | 2 | 1 | . | . | . | 280 |
| 1.50-1.99 | . | . | 87 | 48 | 3 | 1 | . | 1 | . | . | 140 |
| 2.00-2.49 | . | . | 3 | 16 | . | 1 | . | . | . | . | 20 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 572 | 2006 | 970 | 138 | 21 | 7 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 3482.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 526 | 1204 | 424 | 48 | 4 | 1 | . | . | . | . | 2207 |
| 0.50-0.99 | . | 1128 | 1275 | 137 | 7 | 1 | . | . | . | . | 2548 |
| 1.00-1.49 | . | . | 736 | 344 | 25 | 1 | . | . | . | . | 1106 |
| 1.50-1.99 | . | . | 81 | 270 | 133 | 2 | . | . | . | . | 486 |
| 2.00-2.49 | . | . | 1 | 94 | 75 | 22 | . | . | . | . | 192 |
| 2.50-2.99 | . | . | . | 5 | 35 | 21 | 1 | . | . | . | 62 |
| 3.00-3.49 | . | . | . | . | 6 | 14 | 1 | . | . | . | 21 |
| 3.50-3.99 | . | . | . | . | . | 6 | 2 | . | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 526 | 2332 | 2517 | 898 | 285 | 70 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 6213.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 753 | 2376 | 964 | 51 | . | . | . | . | . | . | 4144 |
| 0.50-0.99 | . | 1127 | 4095 | 560 | 25 | . | . | . | . | . | 5807 |
| 1.00-1.49 | . | . | 1275 | 1273 | 105 | 3 | . | . | . | . | 2656 |
| 1.50-1.99 | . | . | 131 | 798 | 407 | 25 | . | . | . | . | 1361 |
| 2.00-2.49 | . | . | 1 | 297 | 237 | 158 | 4 | . | . | . | 697 |
| 2.50-2.99 | . | . | . | 9 | 337 | 149 | 27 | . | . | . | 522 |
| 3.00-3.49 | . | . | . | . | 18 | 216 | 34 | 6 | . | . | 274 |
| 3.50-3.99 | . | . | . | . | . | 104 | 67 | 13 | 1 | . | 185 |
| 4.00-4.49 | . | . | . | . | . | 5 | 71 | 13 | . | . | 89 |
| 4.50-4.99 | . | . | . | . | . | 1 | 13 | 40 | . | . | 54 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 44 | . | . | 45 |
| 5.50-5.99 | . | . | . | . | . | . | . | 6 | 3 | . | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 3 | 3 |
| TOTAL | 753 | 3503 | 6466 | 2988 | 1129 | 661 | 217 | 123 | 8 | 3 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 8.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 14842.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 658 | 2550 | 511 | 31 | 2 | . | . | . | . | . | 3752 |
| 0.50-0.99 | . | 965 | 4442 | 245 | 19 | . | . | . | . | . | 5671 |
| 1.00-1.49 | . | . | 922 | 1589 | 60 | 4 | . | . | . | . | 2575 |
| 1.50-1.99 | . | . | 84 | 748 | 744 | 31 | . | . | . | . | 1607 |
| 2.00-2.49 | . | . | . | 274 | 310 | 299 | 1 | . | . | . | 884 |
| 2.50-2.99 | . | . | . | 5 | 462 | 257 | 24 | 1 | . | . | 749 |
| 3.00-3.49 | . | . | . | . | 13 | 455 | 37 | 5 | . | . | 510 |
| 3.50-3.99 | . | . | . | . | . | 194 | 103 | 7 | 1 | . | 305 |
| 4.00-4.49 | . | . | . | . | . | 13 | 113 | 24 | 1 | . | 151 |
| 4.50-4.99 | . | . | . | . | . | . | 31 | 42 | 1 | . | 74 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 29 | 2 | . | 32 |
| 5.50-5.99 | . | . | . | . | . | . | . | 8 | 4 | . | 12 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 658 | 3515 | 5959 | 2892 | 1610 | 1253 | 310 | 117 | 13 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.7 NO. OF CASES= 15286.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 438 | 1235 | 330 | 27 | . | . | . | . | . | . | 2030 |
| 0.50-0.99 | . | 601 | 2617 | 109 | 24 | 2 | . | . | . | . | 3353 |
| 1.00-1.49 | . | . | 605 | 1106 | 27 | 7 | . | . | . | . | 1745 |
| 1.50-1.99 | . | . | 36 | 649 | 450 | 3 | . | . | . | . | 1138 |
| 2.00-2.49 | . | . | . | 195 | 274 | 137 | . | . | . | . | 606 |
| 2.50-2.99 | . | . | . | 3 | 321 | 148 | . | . | . | . | 472 |
| 3.00-3.49 | . | . | . | . | 8 | 341 | 2 | . | . | . | 351 |
| 3.50-3.99 | . | . | . | . | . | 131 | 18 | . | . | . | 149 |
| 4.00-4.49 | . | . | . | . | . | 11 | 40 | . | . | . | 51 |
| 4.50-4.99 | . | . | . | . | . | . | 11 | 3 | . | . | 14 |
| 5.00-5.49 | . | . | . | . | . | . | . | 7 | . | . | 7 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 1 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 438 | 1836 | 3588 | 2089 | 1104 | 780 | 71 | 13 | 2 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.7 NO. OF CASES= 9291.

STATION S31 47.08N 89.00W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

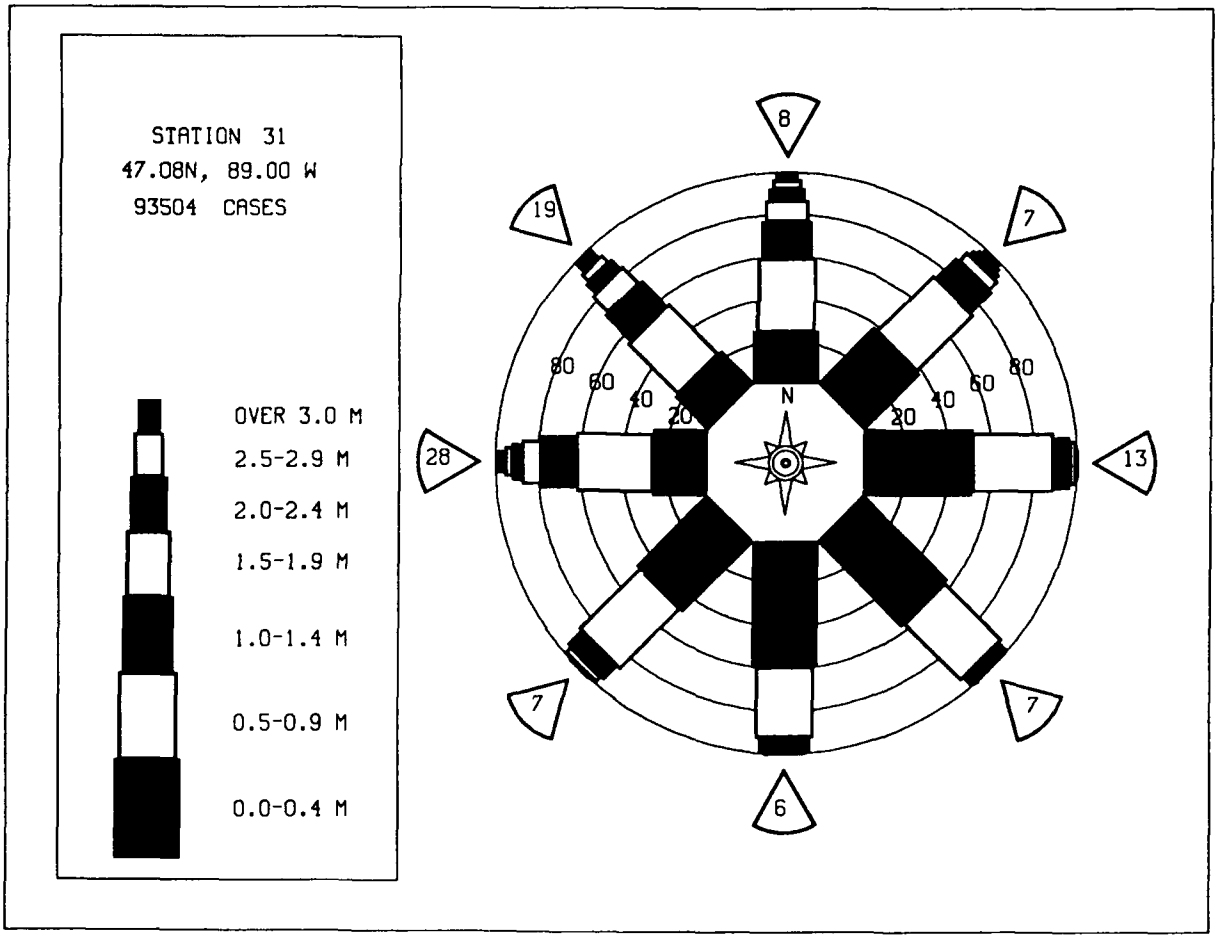
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 224 | 506 | 196 | 20 | . | . | . | . | . | . | 946 |
| 0.50-0.99 | . | 347 | 1084 | 77 | 32 | 1 | . | . | . | . | 1541 |
| 1.00-1.49 | . | . | 410 | 518 | 24 | 6 | . | . | . | . | 958 |
| 1.50-1.99 | . | . | 29 | 496 | 127 | 2 | . | . | . | . | 654 |
| 2.00-2.49 | . | . | . | 172 | 180 | 44 | . | . | . | . | 396 |
| 2.50-2.99 | . | . | . | 1 | 234 | 54 | . | . | 1 | . | 290 |
| 3.00-3.49 | . | . | . | . | 27 | 155 | 2 | . | . | . | 184 |
| 3.50-3.99 | . | . | . | . | . | 77 | 1 | . | . | . | 78 |
| 4.00-4.49 | . | . | . | . | . | 4 | 18 | . | . | . | 22 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | . | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 224 | 853 | 1719 | 1284 | 624 | 343 | 27 | 1 | 1 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.8 NO. OF CASES= 4758.

STATION S31 47.08N 89.00W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 984 | 1911 | 516 | 55 | 5 | . | . | . | . | . | 3471 |
| 0.50-0.99 | . | 1525 | 1843 | 190 | 36 | 9 | . | . | . | . | 3603 |
| 1.00-1.49 | . | . | 685 | 579 | 42 | 21 | 3 | 1 | . | . | 1331 |
| 1.50-1.99 | . | . | 89 | 369 | 206 | 18 | 5 | 2 | . | . | 689 |
| 2.00-2.49 | . | . | 3 | 134 | 122 | 71 | 3 | 1 | . | . | 334 |
| 2.50-2.99 | . | . | . | 3 | 167 | 69 | 7 | . | . | . | 246 |
| 3.00-3.49 | . | . | . | . | 11 | 128 | 8 | 2 | . | . | 149 |
| 3.50-3.99 | . | . | . | . | . | 57 | 21 | 3 | . | . | 81 |
| 4.00-4.49 | . | . | . | . | . | 4 | 26 | 5 | . | . | 35 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 9 | 1 | . | 16 |
| 5.00-5.49 | . | . | . | . | . | . | . | 9 | . | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 984 | 3436 | 3136 | 1330 | 589 | 377 | 79 | 33 | 2 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 8.7 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S31 (47.08N 89.00W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.7 | 1.1 | 1.1 | 1.1 | 0.8 | 0.6 | 0.6 | 0.5 | 0.7 | 1.1 | 1.4 | 1.3 | 0.9 |
| 1957 | 1.5 | 1.3 | 0.9 | 0.9 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 0.7 | 1.3 | 1.2 | 1.0 |
| 1958 | 0.8 | 1.4 | 0.5 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.8 | 1.0 | 1.4 | 1.1 | 0.9 |
| 1959 | 1.1 | 1.0 | 0.8 | 0.8 | 0.8 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 1.4 | 1.3 | 0.9 |
| 1960 | 1.2 | 1.2 | 0.9 | 1.0 | 0.8 | 0.5 | 0.5 | 0.6 | 0.7 | 1.0 | 1.4 | 1.3 | 0.9 |
| 1961 | 1.0 | 1.0 | 1.1 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.7 | 0.9 | 1.0 | 1.2 | 0.8 |
| 1962 | 1.5 | 0.9 | 0.7 | 0.8 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 0.7 | 1.1 | 0.7 |
| 1963 | 1.3 | 1.2 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 1.1 | 1.1 | 0.8 |
| 1964 | 1.2 | 1.0 | 1.2 | 0.9 | 0.8 | 0.6 | 0.5 | 0.7 | 0.8 | 1.0 | 1.1 | 0.9 | 0.9 |
| 1965 | 1.5 | 1.5 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 1.1 | 1.6 | 1.4 | 0.9 |
| 1966 | 1.6 | 1.5 | 1.6 | 1.0 | 1.1 | 0.6 | 0.6 | 0.6 | 0.9 | 1.5 | 1.5 | 1.5 | 1.2 |
| 1967 | 1.5 | 1.5 | 1.2 | 1.0 | 0.9 | 0.5 | 0.6 | 0.6 | 0.8 | 1.4 | 1.4 | 1.7 | 1.1 |
| 1968 | 1.2 | 2.3 | 1.5 | 1.0 | 0.7 | 0.6 | 0.7 | 0.7 | 0.7 | 1.1 | 1.7 | 1.6 | 1.1 |
| 1969 | 1.5 | 0.9 | 1.2 | 0.7 | 0.7 | 0.5 | 0.4 | 0.6 | 0.6 | 1.1 | 1.2 | 0.9 | 0.9 |
| 1970 | 1.1 | 1.4 | 0.9 | 0.9 | 0.8 | 0.5 | 0.5 | 0.5 | 0.8 | 0.8 | 1.2 | 1.0 | 0.9 |
| 1971 | 1.3 | 1.2 | 1.0 | 0.9 | 0.7 | 0.4 | 0.5 | 0.4 | 0.5 | 0.8 | 1.1 | 1.0 | 0.8 |
| 1972 | 1.5 | 1.0 | 1.0 | 0.6 | 0.4 | 0.5 | 0.4 | 0.4 | 0.7 | 1.0 | 0.8 | 1.0 | 0.8 |
| 1973 | 1.2 | 1.0 | 1.0 | 0.9 | 0.8 | 0.5 | 0.6 | 0.4 | 0.8 | 0.9 | 1.2 | 1.0 | 0.9 |
| 1974 | 1.0 | 0.8 | 1.0 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.8 | 0.9 | 1.1 | 1.0 | 0.8 |
| 1975 | 1.1 | 1.2 | 1.2 | 0.7 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 0.9 | 1.2 | 0.9 | 0.8 |
| 1976 | 1.2 | 1.2 | 1.3 | 0.8 | 0.6 | 0.5 | 0.3 | 0.5 | 0.6 | 0.5 | 0.9 | 1.1 | 0.8 |
| 1977 | 1.5 | 1.5 | 1.3 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 0.9 | 1.1 | 0.9 |
| 1978 | 1.3 | 1.1 | 0.9 | 0.9 | 0.5 | 0.5 | 0.4 | 0.5 | 0.8 | 0.8 | 1.1 | 1.2 | 0.8 |
| 1979 | 1.1 | 0.8 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 | 1.1 | 1.1 | 0.8 |
| 1980 | 1.1 | 0.9 | 1.0 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.8 | 1.2 | 1.0 | 1.3 | 0.9 |
| 1981 | 1.2 | 1.1 | 1.1 | 0.8 | 0.5 | 0.6 | 0.4 | 0.4 | 0.8 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1982 | 1.6 | 1.2 | 1.4 | 1.0 | 0.6 | 0.6 | 0.4 | 0.5 | 0.7 | 0.8 | 1.1 | 1.2 | 0.9 |
| 1983 | 1.0 | 0.8 | 1.1 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.7 | 0.8 | 1.2 | 1.4 | 0.8 |
| 1984 | 1.1 | 0.9 | 1.1 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.7 | 0.8 | 1.3 | 1.4 | 0.9 |
| 1985 | 1.5 | 1.2 | 1.2 | 0.8 | 0.6 | 0.7 | 0.4 | 0.5 | 0.5 | 0.7 | 0.9 | 1.4 | 0.9 |
| 1986 | 1.2 | 0.8 | 1.1 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.7 | 1.1 | 1.0 | 0.8 |
| 1987 | 1.0 | 1.0 | 1.0 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.9 | 1.1 | 0.9 | 0.7 |
| MEAN | 1.2 | 1.2 | 1.1 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 1.2 | 1.2 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S31 (47.08N 89.00W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.2 | 3.9 | 3.2 | 3.8 | 2.7 | 2.5 | 1.6 | 1.8 | 2.8 | 4.3 | 4.7 | 4.5 |
| 1957 | 3.7 | 3.5 | 3.7 | 3.2 | 2.8 | 2.5 | 2.3 | 2.2 | 3.3 | 2.8 | 4.1 | 5.3 |
| 1958 | 3.3 | 3.6 | 2.8 | 4.8 | 3.1 | 1.8 | 2.2 | 2.3 | 3.4 | 4.3 | 5.3 | 4.7 |
| 1959 | 3.4 | 3.9 | 5.6 | 3.2 | 4.1 | 1.8 | 2.5 | 1.8 | 3.3 | 3.5 | 5.2 | 5.5 |
| 1960 | 3.9 | 4.1 | 4.4 | 3.6 | 3.5 | 1.8 | 1.6 | 2.8 | 2.8 | 4.0 | 4.4 | 4.4 |
| 1961 | 3.6 | 3.8 | 4.9 | 3.2 | 2.7 | 2.8 | 2.8 | 2.0 | 3.8 | 2.9 | 4.1 | 4.3 |
| 1962 | 4.7 | 3.7 | 2.9 | 3.3 | 2.8 | 1.7 | 2.9 | 1.9 | 2.5 | 5.4 | 4.2 | 4.0 |
| 1963 | 4.2 | 4.4 | 3.5 | 3.9 | 1.8 | 1.4 | 1.8 | 1.7 | 2.1 | 2.7 | 3.5 | 3.5 |
| 1964 | 4.7 | 4.7 | 4.1 | 4.4 | 2.6 | 2.5 | 2.0 | 2.8 | 4.1 | 4.0 | 5.1 | 3.6 |
| 1965 | 4.3 | 5.9 | 3.7 | 2.9 | 2.4 | 2.0 | 1.9 | 1.8 | 3.1 | 4.6 | 6.2 | 4.5 |
| 1966 | 7.0 | 4.5 | 6.9 | 3.5 | 4.0 | 3.8 | 2.7 | 3.0 | 3.5 | 6.2 | 5.1 | 5.2 |
| 1967 | 6.2 | 4.6 | 3.9 | 4.7 | 3.4 | 2.4 | 4.0 | 2.4 | 3.9 | 5.2 | 4.7 | 5.5 |
| 1968 | 4.0 | 6.1 | 6.1 | 4.4 | 3.4 | 2.9 | 3.4 | 3.0 | 3.3 | 4.6 | 5.5 | 5.4 |
| 1969 | 4.7 | 4.0 | 5.6 | 3.6 | 2.2 | 2.2 | 2.6 | 2.9 | 2.7 | 3.5 | 4.0 | 4.1 |
| 1970 | 3.6 | 4.7 | 3.3 | 5.0 | 3.6 | 2.0 | 2.3 | 2.2 | 3.9 | 3.6 | 4.4 | 4.8 |
| 1971 | 4.0 | 5.3 | 5.4 | 2.9 | 2.0 | 1.2 | 1.8 | 1.7 | 2.0 | 4.4 | 5.4 | 4.7 |
| 1972 | 4.7 | 3.9 | 3.6 | 3.3 | 1.2 | 2.2 | 1.5 | 1.4 | 4.0 | 5.4 | 2.9 | 4.3 |
| 1973 | 3.5 | 3.3 | 3.4 | 3.9 | 3.3 | 1.5 | 2.9 | 1.7 | 4.0 | 3.6 | 3.4 | 3.9 |
| 1974 | 4.0 | 3.2 | 4.2 | 2.8 | 2.3 | 2.1 | 3.1 | 2.5 | 2.5 | 2.9 | 4.0 | 2.8 |
| 1975 | 3.9 | 6.3 | 5.8 | 2.3 | 1.8 | 2.2 | 2.1 | 2.3 | 2.6 | 4.6 | 6.6 | 4.0 |
| 1976 | 4.8 | 4.5 | 4.9 | 3.6 | 2.8 | 1.5 | 0.9 | 1.8 | 2.8 | 2.3 | 3.3 | 5.3 |
| 1977 | 5.3 | 5.1 | 5.3 | 2.2 | 2.1 | 1.6 | 3.4 | 2.4 | 3.5 | 4.3 | 4.6 | 4.2 |
| 1978 | 5.0 | 3.7 | 3.8 | 3.5 | 1.9 | 1.8 | 1.3 | 1.7 | 2.9 | 3.8 | 3.7 | 3.8 |
| 1979 | 3.6 | 2.7 | 3.6 | 3.3 | 2.4 | 1.8 | 1.9 | 2.1 | 2.1 | 3.3 | 3.0 | 3.2 |
| 1980 | 6.7 | 4.4 | 4.5 | 2.5 | 2.7 | 1.4 | 1.4 | 2.0 | 3.7 | 5.2 | 4.6 | 5.3 |
| 1981 | 3.9 | 3.5 | 4.4 | 3.3 | 1.6 | 3.3 | 1.0 | 1.2 | 5.3 | 3.6 | 5.4 | 3.4 |
| 1982 | 5.5 | 4.3 | 8.7 | 5.6 | 2.0 | 3.0 | 2.5 | 1.8 | 2.6 | 3.2 | 5.5 | 4.3 |
| 1983 | 3.3 | 4.5 | 3.8 | 3.1 | 2.5 | 2.8 | 2.1 | 1.7 | 3.2 | 3.6 | 5.6 | 4.7 |
| 1984 | 4.6 | 3.1 | 4.6 | 3.8 | 3.6 | 2.3 | 2.8 | 1.6 | 2.2 | 4.1 | 5.5 | 5.1 |
| 1985 | 5.2 | 3.4 | 4.0 | 3.8 | 2.8 | 4.2 | 1.1 | 1.9 | 3.2 | 3.3 | 3.1 | 4.7 |
| 1986 | 4.4 | 3.1 | 3.9 | 4.3 | 4.0 | 1.6 | 1.4 | 1.4 | 3.0 | 4.5 | 4.3 | 3.7 |
| 1987 | 3.4 | 4.6 | 3.4 | 2.5 | 2.5 | 1.7 | 1.2 | 2.9 | 2.3 | 3.8 | 4.1 | 3.4 |

32 YR. STATISTICS FOR WIS STATION S31

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.1 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.5 |
| LARGEST WAVE HS | (METERS) | 8.7 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 272.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 82031400 |

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 269 | 601 | 212 | 10 | . | 1 | . | . | . | . | 1093 |
| 0.50-0.99 | . | 372 | 1103 | 136 | 27 | 1 | . | . | . | . | 1639 |
| 1.00-1.49 | . | . | 412 | 279 | 45 | 23 | 1 | . | . | . | 759 |
| 1.50-1.99 | . | . | 29 | 352 | 43 | 20 | 1 | . | . | . | 445 |
| 2.00-2.49 | . | . | . | 162 | 86 | 19 | 2 | . | . | . | 269 |
| 2.50-2.99 | . | . | . | 2 | 160 | 10 | 2 | . | . | . | 174 |
| 3.00-3.49 | . | . | . | . | 32 | 43 | 1 | . | 1 | . | 77 |
| 3.50-3.99 | . | . | . | . | 1 | 39 | 3 | 4 | . | . | 47 |
| 4.00-4.49 | . | . | . | . | . | 4 | 4 | 3 | . | . | 11 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | 2 | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | 2 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 269 | 973 | 1756 | 940 | 394 | 160 | 16 | 7 | 6 | 1 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.4 NO. OF CASES= 4244.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 194 | 465 | 174 | 9 | . | 1 | . | . | . | . | 843 |
| 0.50-0.99 | . | 317 | 722 | 121 | 18 | . | . | . | . | . | 1178 |
| 1.00-1.49 | . | . | 210 | 199 | 49 | 14 | . | . | . | . | 472 |
| 1.50-1.99 | . | . | 12 | 143 | 40 | 32 | 2 | . | . | . | 229 |
| 2.00-2.49 | . | . | . | 40 | 33 | 21 | 4 | . | . | . | 98 |
| 2.50-2.99 | . | . | . | . | 48 | 16 | 3 | . | . | . | 67 |
| 3.00-3.49 | . | . | . | . | 2 | 25 | 16 | 2 | . | . | 45 |
| 3.50-3.99 | . | . | . | . | . | 14 | 6 | 2 | 1 | . | 23 |
| 4.00-4.49 | . | . | . | . | . | . | 8 | 5 | 2 | . | 15 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 3 | 1 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 3 | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 3 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 194 | 782 | 1118 | 512 | 190 | 123 | 41 | 20 | 15 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 2816.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 394 | 763 | 373 | 27 | 2 | . | . | . | . | . | 1559 |
| 0.50-0.99 | . | 434 | 983 | 218 | 21 | 3 | . | . | . | . | 1659 |
| 1.00-1.49 | . | . | 302 | 281 | 57 | 12 | 1 | . | . | . | 653 |
| 1.50-1.99 | . | . | 28 | 160 | 58 | 34 | 4 | . | . | . | 284 |
| 2.00-2.49 | . | . | . | 68 | 35 | 19 | 10 | 2 | . | . | 134 |
| 2.50-2.99 | . | . | . | 2 | 55 | 38 | 9 | 5 | . | . | 109 |
| 3.00-3.49 | . | . | . | . | 4 | 33 | 4 | 6 | . | . | 47 |
| 3.50-3.99 | . | . | . | . | . | 14 | 9 | 2 | . | . | 25 |
| 4.00-4.49 | . | . | . | . | . | . | 11 | 4 | 1 | . | 16 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 6 | 4 | . | 12 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 2 | 1 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 394 | 1197 | 1686 | 756 | 232 | 153 | 51 | 27 | 10 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 4231.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 715 | 1150 | 416 | 35 | 1 | . | . | . | . | . | 2317 |
| 0.50-0.99 | . | 1112 | 485 | 191 | 39 | 10 | . | . | . | . | 1837 |
| 1.00-1.49 | . | . | 206 | 77 | 42 | 50 | 5 | 1 | . | . | 381 |
| 1.50-1.99 | . | . | 36 | 38 | 22 | 52 | 21 | 8 | . | . | 177 |
| 2.00-2.49 | . | . | 1 | 16 | 7 | 7 | 8 | 5 | 3 | . | 47 |
| 2.50-2.99 | . | . | . | 6 | 9 | 3 | 3 | 5 | 5 | . | 31 |
| 3.00-3.49 | . | . | . | 1 | 2 | 7 | . | 8 | 1 | . | 19 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | 1 | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | 5 | 3 | 1 | . | 9 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 715 | 2262 | 1144 | 364 | 122 | 131 | 42 | 32 | 14 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 4527.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1227 | 2023 | 579 | 79 | 8 | 2 | . | . | . | . | 3918 |
| 0.50-0.99 | . | 2392 | 322 | 158 | 72 | 33 | 1 | . | . | . | 2978 |
| 1.00-1.49 | . | . | 466 | 29 | 58 | 77 | 7 | 3 | . | . | 640 |
| 1.50-1.99 | . | . | 117 | 3 | 12 | 51 | 21 | 12 | 2 | . | 218 |
| 2.00-2.49 | . | . | 19 | 2 | 2 | 5 | 18 | 10 | 4 | . | 60 |
| 2.50-2.99 | . | . | . | 6 | . | . | 3 | 4 | . | 1 | 14 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | 2 | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1227 | 4415 | 1503 | 278 | 152 | 168 | 50 | 29 | 6 | 3 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 7336.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 771 | 1110 | 310 | 42 | 2 | 1 | . | . | . | . | 2236 |
| 0.50-0.99 | . | 1407 | 216 | 73 | 39 | 6 | . | 1 | . | . | 1742 |
| 1.00-1.49 | . | . | 282 | 4 | 6 | 19 | 5 | 2 | . | . | 318 |
| 1.50-1.99 | . | . | 77 | 4 | . | 7 | 3 | 2 | . | . | 93 |
| 2.00-2.49 | . | . | 3 | 2 | . | . | 1 | 1 | . | . | 7 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 771 | 2517 | 888 | 126 | 47 | 33 | 9 | 6 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 4118.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 755 | 1006 | 283 | 17 | 4 | . | . | . | . | . | 2065 |
| 0.50-0.99 | . | 1082 | 189 | 35 | 8 | 6 | . | 1 | . | . | 1321 |
| 1.00-1.49 | . | . | 158 | 2 | 1 | 5 | 1 | 1 | . | . | 168 |
| 1.50-1.99 | . | . | 42 | 1 | . | 2 | . | . | . | . | 45 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 755 | 2088 | 672 | 56 | 13 | 13 | 1 | 2 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 3371.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 607 | 851 | 130 | 20 | 3 | . | . | . | . | . | 1611 |
| 0.50-0.99 | . | 902 | 156 | 10 | 14 | 1 | . | . | . | . | 1083 |
| 1.00-1.49 | . | . | 144 | . | 1 | 2 | 1 | . | . | . | 148 |
| 1.50-1.99 | . | . | 25 | 4 | . | . | 1 | . | . | . | 30 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | 1 | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 607 | 1753 | 455 | 35 | 18 | 3 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 2693.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 651 | 914 | 178 | 20 | 2 | . | . | . | . | . | 1765 |
| 0.50-0.99 | . | 799 | 82 | 10 | 7 | 1 | . | . | . | . | 899 |
| 1.00-1.49 | . | . | 141 | . | . | 1 | . | . | . | . | 142 |
| 1.50-1.99 | . | . | 14 | . | . | . | . | . | . | . | 14 |
| 2.00-2.49 | . | . | 1 | . | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 651 | 1713 | 416 | 30 | 9 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 2643.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 541 | 1104 | 127 | 13 | 2 | 1 | . | . | . | . | 1788 |
| 0.50-0.99 | . | 1009 | 168 | 12 | 5 | 2 | . | . | . | . | 1196 |
| 1.00-1.49 | . | . | 279 | 2 | . | 4 | . | . | . | . | 285 |
| 1.50-1.99 | . | . | 52 | 20 | . | . | . | . | . | . | 72 |
| 2.00-2.49 | . | . | . | 7 | . | . | . | . | . | . | 7 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 541 | 2113 | 626 | 54 | 7 | 7 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 3137.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 510 | 1037 | 350 | 12 | . | . | . | . | . | . | 1909 |
| 0.50-0.99 | . | 812 | 871 | 59 | 10 | 2 | . | . | . | . | 1754 |
| 1.00-1.49 | . | . | 532 | 47 | 12 | 3 | 1 | . | . | . | 595 |
| 1.50-1.99 | . | . | 85 | 142 | 7 | 3 | . | . | . | . | 237 |
| 2.00-2.49 | . | . | . | 95 | 2 | 2 | . | . | . | . | 99 |
| 2.50-2.99 | . | . | . | 10 | 4 | 1 | . | . | . | . | 15 |
| 3.00-3.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 510 | 1849 | 1838 | 365 | 35 | 11 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 4320.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 501 | 1307 | 628 | 52 | 1 | 1 | . | . | . | . | 2490 |
| 0.50-0.99 | . | 791 | 1797 | 263 | 16 | . | . | . | . | . | 2867 |
| 1.00-1.49 | . | . | 1020 | 381 | 43 | 2 | . | . | . | . | 1446 |
| 1.50-1.99 | . | . | 97 | 467 | 173 | 11 | . | . | . | . | 748 |
| 2.00-2.49 | . | . | . | 160 | 104 | 64 | 1 | . | . | . | 329 |
| 2.50-2.99 | . | . | . | 13 | 112 | 55 | . | . | . | . | 180 |
| 3.00-3.49 | . | . | . | . | 7 | 54 | 5 | 1 | . | . | 67 |
| 3.50-3.99 | . | . | . | . | 1 | 18 | 14 | 5 | . | . | 38 |
| 4.00-4.49 | . | . | . | . | . | 7 | 11 | . | . | . | 18 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 501 | 2098 | 3542 | 1336 | 457 | 212 | 32 | 7 | 1 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 7669.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 729 | 2403 | 612 | 27 | . | . | . | . | . | . | 3771 |
| 0.50-0.99 | . | 1033 | 4302 | 379 | 24 | . | . | . | . | . | 5738 |
| 1.00-1.49 | . | . | 1175 | 1316 | 96 | 1 | . | . | . | . | 2588 |
| 1.50-1.99 | . | . | 96 | 813 | 466 | 48 | . | . | . | . | 1423 |
| 2.00-2.49 | . | . | . | 300 | 234 | 210 | 3 | . | . | . | 747 |
| 2.50-2.99 | . | . | . | 8 | 350 | 174 | 24 | 2 | . | . | 558 |
| 3.00-3.49 | . | . | . | . | 28 | 269 | 54 | 1 | . | . | 352 |
| 3.50-3.99 | . | . | . | . | . | 112 | 93 | 13 | . | . | 218 |
| 4.00-4.49 | . | . | . | . | . | 14 | 87 | 19 | . | . | 120 |
| 4.50-4.99 | . | . | . | . | . | . | 17 | 54 | 1 | . | 72 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 48 | . | . | 49 |
| 5.50-5.99 | . | . | . | . | . | . | . | 12 | 9 | . | 21 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 3 | 3 |
| TOTAL | 729 | 3436 | 6185 | 2843 | 1198 | 828 | 279 | 149 | 11 | 3 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 8.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 14661.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 587 | 2417 | 472 | 18 | 2 | . | . | . | . | . | 3496 |
| 0.50-0.99 | . | 910 | 4320 | 243 | 14 | . | . | . | . | . | 5487 |
| 1.00-1.49 | . | . | 888 | 1613 | 72 | 6 | . | . | . | . | 2579 |
| 1.50-1.99 | . | . | 80 | 730 | 756 | 28 | . | . | . | . | 1594 |
| 2.00-2.49 | . | . | . | 249 | 299 | 328 | 1 | . | . | . | 877 |
| 2.50-2.99 | . | . | . | 4 | 450 | 252 | 24 | . | . | . | 730 |
| 3.00-3.49 | . | . | . | . | 16 | 430 | 42 | 3 | . | . | 491 |
| 3.50-3.99 | . | . | . | . | . | 197 | 103 | 3 | 1 | . | 304 |
| 4.00-4.49 | . | . | . | . | . | 10 | 119 | 18 | . | . | 147 |
| 4.50-4.99 | . | . | . | . | . | . | 31 | 50 | 1 | . | 82 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 29 | 1 | . | 31 |
| 5.50-5.99 | . | . | . | . | . | . | . | 9 | 8 | . | 17 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 7 | . | 7 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 587 | 3327 | 5760 | 2857 | 1609 | 1251 | 321 | 112 | 20 | 2 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.7 NO. OF CASES= 14835.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 390 | 1152 | 325 | 13 | . | . | . | . | . | . | 1880 |
| 0.50-0.99 | . | 579 | 2340 | 109 | 24 | 1 | . | . | . | . | 3053 |
| 1.00-1.49 | . | . | 591 | 928 | 21 | 7 | . | . | . | . | 1547 |
| 1.50-1.99 | . | . | 42 | 638 | 380 | 3 | . | . | . | . | 1063 |
| 2.00-2.49 | . | . | . | 202 | 213 | 103 | 1 | . | . | . | 519 |
| 2.50-2.99 | . | . | . | 4 | 289 | 127 | . | . | . | . | 420 |
| 3.00-3.49 | . | . | . | . | 8 | 312 | . | . | . | . | 320 |
| 3.50-3.99 | . | . | . | . | . | 112 | 9 | . | . | . | 121 |
| 4.00-4.49 | . | . | . | . | . | 9 | 43 | . | . | . | 52 |
| 4.50-4.99 | . | . | . | . | . | . | 9 | 5 | . | . | 14 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 5 | . | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 390 | 1731 | 3298 | 1894 | 935 | 674 | 63 | 12 | 1 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.7 NO. OF CASES= 8428.

STATION S32 47.23N 88.78W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

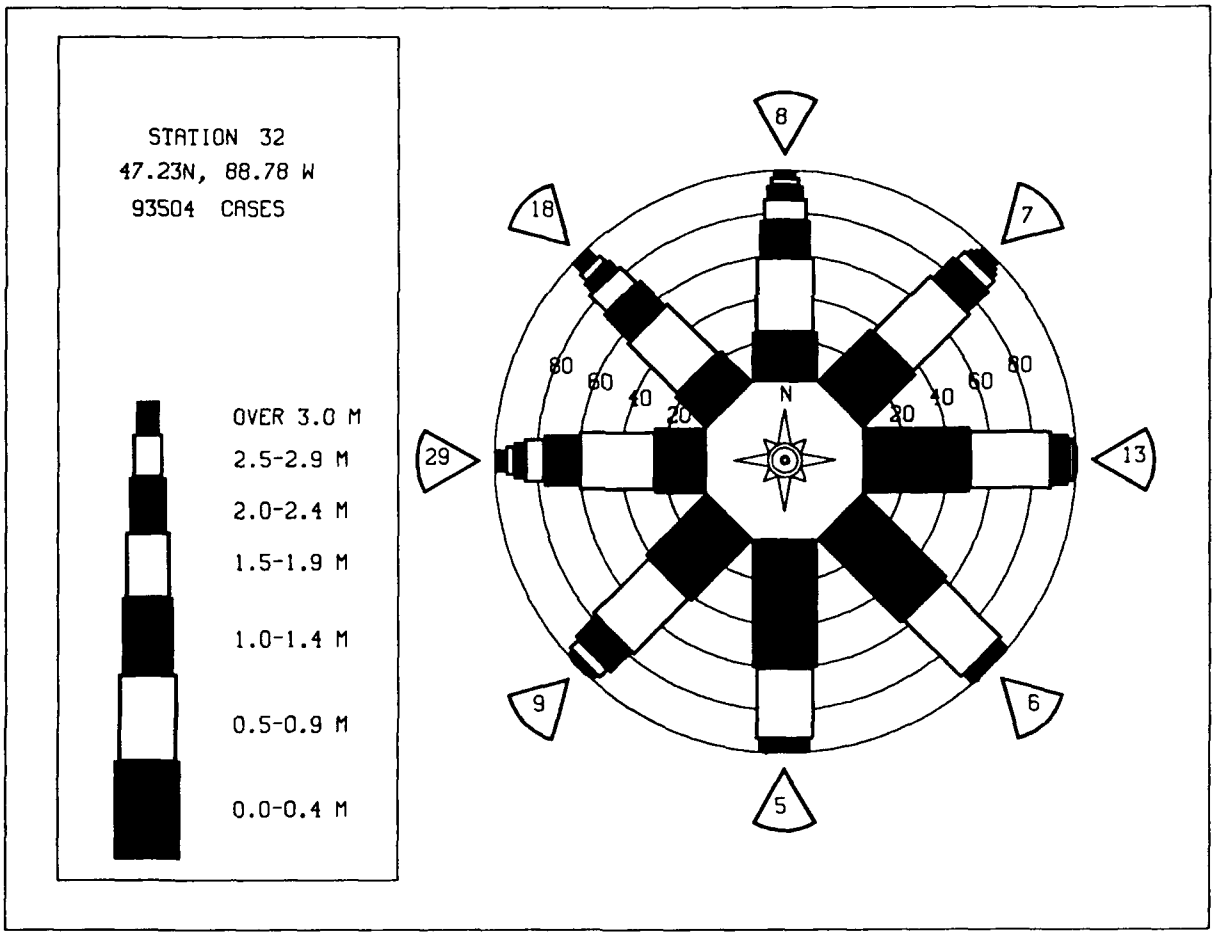
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 201 | 478 | 186 | 17 | 1 | . | . | . | . | . | 883 |
| 0.50-0.99 | . | 346 | 1056 | 104 | 29 | 1 | . | . | . | . | 1536 |
| 1.00-1.49 | . | . | 427 | 436 | 25 | 11 | . | . | . | . | 899 |
| 1.50-1.99 | . | . | 27 | 483 | 101 | 9 | . | . | . | . | 620 |
| 2.00-2.49 | . | . | . | 188 | 146 | 17 | 1 | . | . | . | 352 |
| 2.50-2.99 | . | . | . | 2 | 212 | 36 | . | . | . | . | 250 |
| 3.00-3.49 | . | . | . | . | 32 | 110 | 2 | . | . | . | 144 |
| 3.50-3.99 | . | . | . | . | . | 69 | 1 | . | . | . | 70 |
| 4.00-4.49 | . | . | . | . | . | 4 | 9 | . | . | . | 13 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | . | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 201 | 824 | 1696 | 1230 | 546 | 257 | 18 | 1 | 0 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.7 NO. OF CASES= 4475.

STATION S32 47.23N 88.78W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 904 | 1878 | 536 | 41 | 2 | . | . | . | . | . | 3361 |
| 0.50-0.99 | . | 1430 | 1912 | 213 | 37 | 6 | . | . | . | . | 3598 |
| 1.00-1.49 | . | . | 724 | 559 | 53 | 24 | 2 | . | . | . | 1362 |
| 1.50-1.99 | . | . | 86 | 400 | 206 | 30 | 5 | 2 | . | . | 729 |
| 2.00-2.49 | . | . | 2 | 149 | 116 | 79 | 5 | 2 | . | . | 353 |
| 2.50-2.99 | . | . | . | 6 | 169 | 71 | 7 | 1 | . | . | 254 |
| 3.00-3.49 | . | . | . | . | 13 | 128 | 12 | 2 | . | . | 155 |
| 3.50-3.99 | . | . | . | . | . | 58 | 24 | 3 | . | . | 85 |
| 4.00-4.49 | . | . | . | . | . | 5 | 30 | 5 | . | . | 40 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 11 | 1 | . | 18 |
| 5.00-5.49 | . | . | . | . | . | . | . | 9 | . | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 2 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 904 | 3308 | 3260 | 1368 | 596 | 401 | 91 | 37 | 4 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 8.6 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S32 (47.23N 88.78W)

| | MONTH | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| YEAR | | | | | | | | | | | | | MEAN |
| 1956 | 0.7 | 1.1 | 1.1 | 1.1 | 0.8 | 0.6 | 0.6 | 0.5 | 0.7 | 1.1 | 1.4 | 1.3 | 0.9 |
| 1957 | 1.5 | 1.3 | 0.9 | 0.9 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 0.7 | 1.3 | 1.2 | 1.0 |
| 1958 | 0.8 | 1.4 | 0.5 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.8 | 1.0 | 1.4 | 1.1 | 0.9 |
| 1959 | 1.1 | 1.0 | 0.8 | 0.8 | 0.8 | 0.5 | 0.5 | 0.5 | 0.8 | 0.8 | 1.4 | 1.3 | 0.9 |
| 1960 | 1.3 | 1.2 | 0.9 | 1.0 | 0.8 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.4 | 1.3 | 0.9 |
| 1961 | 1.0 | 1.0 | 1.2 | 0.9 | 0.8 | 0.7 | 0.5 | 0.5 | 0.8 | 0.9 | 1.0 | 1.2 | 0.9 |
| 1962 | 1.5 | 0.9 | 0.7 | 0.8 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 0.7 | 1.1 | 0.8 |
| 1963 | 1.3 | 1.2 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 1.1 | 1.2 | 0.8 |
| 1964 | 1.2 | 1.0 | 1.2 | 0.9 | 0.7 | 0.6 | 0.5 | 0.7 | 0.8 | 1.0 | 1.2 | 1.0 | 0.9 |
| 1965 | 1.5 | 1.5 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.7 | 1.2 | 1.7 | 1.5 | 1.0 |
| 1966 | 1.7 | 1.5 | 1.7 | 1.1 | 1.2 | 0.6 | 0.6 | 0.6 | 1.0 | 1.6 | 1.5 | 1.5 | 1.2 |
| 1967 | 1.5 | 1.5 | 1.3 | 1.0 | 0.9 | 0.6 | 0.7 | 0.7 | 0.8 | 1.5 | 1.5 | 1.8 | 1.2 |
| 1968 | 1.2 | 2.4 | 1.5 | 1.1 | 0.7 | 0.6 | 0.7 | 0.7 | 0.7 | 1.2 | 1.7 | 1.7 | 1.2 |
| 1969 | 1.5 | 0.9 | 1.2 | 0.8 | 0.7 | 0.5 | 0.4 | 0.6 | 0.7 | 1.1 | 1.2 | 0.9 | 0.9 |
| 1970 | 1.1 | 1.3 | 0.9 | 0.9 | 0.8 | 0.5 | 0.5 | 0.6 | 0.8 | 0.8 | 1.2 | 1.0 | 0.9 |
| 1971 | 1.4 | 1.2 | 1.1 | 0.9 | 0.7 | 0.4 | 0.6 | 0.5 | 0.6 | 0.9 | 1.1 | 1.0 | 0.9 |
| 1972 | 1.6 | 1.1 | 1.0 | 0.7 | 0.4 | 0.5 | 0.4 | 0.4 | 0.7 | 1.1 | 0.8 | 1.1 | 0.8 |
| 1973 | 1.2 | 1.1 | 1.0 | 0.9 | 0.8 | 0.6 | 0.6 | 0.4 | 0.8 | 0.9 | 1.2 | 1.0 | 0.9 |
| 1974 | 1.0 | 0.8 | 1.1 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.8 | 0.9 | 1.1 | 1.0 | 0.8 |
| 1975 | 1.1 | 1.2 | 1.2 | 0.7 | 0.4 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 1.2 | 1.0 | 0.8 |
| 1976 | 1.2 | 1.3 | 1.3 | 0.8 | 0.6 | 0.5 | 0.3 | 0.6 | 0.6 | 0.5 | 0.9 | 1.1 | 0.8 |
| 1977 | 1.5 | 1.5 | 1.3 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 0.9 | 1.1 | 0.9 |
| 1978 | 1.4 | 1.1 | 0.9 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.8 | 0.8 | 1.1 | 1.2 | 0.9 |
| 1979 | 1.1 | 0.8 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 | 1.1 | 1.1 | 0.8 |
| 1980 | 1.1 | 0.9 | 1.1 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.9 | 1.2 | 1.0 | 1.3 | 0.9 |
| 1981 | 1.2 | 1.1 | 1.1 | 0.8 | 0.5 | 0.6 | 0.4 | 0.4 | 0.8 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1982 | 1.7 | 1.3 | 1.4 | 1.0 | 0.6 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 1.1 | 1.3 | 1.0 |
| 1983 | 1.0 | 0.9 | 1.1 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.7 | 0.9 | 1.2 | 1.4 | 0.8 |
| 1984 | 1.1 | 0.9 | 1.1 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.7 | 0.8 | 1.3 | 1.4 | 0.9 |
| 1985 | 1.5 | 1.2 | 1.3 | 0.8 | 0.6 | 0.7 | 0.4 | 0.5 | 0.5 | 0.7 | 1.0 | 1.4 | 0.9 |
| 1986 | 1.2 | 0.8 | 1.1 | 1.0 | 0.6 | 0.6 | 0.4 | 0.4 | 0.7 | 0.8 | 1.2 | 1.0 | 0.8 |
| 1987 | 1.0 | 1.0 | 1.0 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.9 | 1.1 | 0.9 | 0.7 |
| MEAN | 1.3 | 1.2 | 1.1 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 1.2 | 1.2 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S32 (47.23N 88.78W)

| | MONTH | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| YEAR | | | | | | | | | | | | |
| 1956 | 3.0 | 3.9 | 3.2 | 4.1 | 2.6 | 2.6 | 1.6 | 1.8 | 2.8 | 4.3 | 4.7 | 4.5 |
| 1957 | 3.9 | 3.4 | 3.6 | 3.6 | 2.8 | 2.4 | 2.3 | 2.2 | 3.4 | 2.8 | 4.1 | 5.3 |
| 1958 | 3.4 | 3.7 | 2.8 | 4.7 | 3.1 | 1.9 | 2.2 | 2.2 | 3.5 | 4.1 | 5.7 | 4.8 |
| 1959 | 3.5 | 4.1 | 5.5 | 3.3 | 4.2 | 1.8 | 2.5 | 1.9 | 3.1 | 3.4 | 5.1 | 5.5 |
| 1960 | 4.1 | 4.0 | 4.0 | 3.8 | 3.5 | 1.8 | 1.6 | 2.9 | 2.8 | 4.0 | 4.6 | 4.3 |
| 1961 | 3.6 | 3.7 | 5.2 | 3.3 | 2.7 | 2.9 | 2.8 | 2.0 | 3.6 | 3.0 | 4.1 | 4.3 |
| 1962 | 4.7 | 3.7 | 2.9 | 3.3 | 2.8 | 1.7 | 3.0 | 1.9 | 2.4 | 5.5 | 4.1 | 4.0 |
| 1963 | 4.2 | 4.4 | 3.6 | 3.9 | 1.8 | 1.4 | 1.8 | 1.7 | 2.1 | 2.7 | 3.6 | 3.7 |
| 1964 | 5.0 | 4.8 | 4.1 | 4.4 | 2.6 | 2.7 | 2.0 | 2.8 | 4.2 | 4.0 | 5.4 | 3.8 |
| 1965 | 4.3 | 6.0 | 3.8 | 3.0 | 2.6 | 2.1 | 2.0 | 1.7 | 3.3 | 4.6 | 6.3 | 4.6 |
| 1966 | 7.3 | 4.9 | 6.7 | 3.9 | 3.9 | 4.0 | 2.8 | 3.1 | 3.6 | 6.4 | 5.3 | 5.3 |
| 1967 | 6.1 | 4.7 | 4.0 | 5.0 | 3.5 | 2.4 | 3.9 | 2.5 | 3.9 | 5.2 | 4.7 | 5.8 |
| 1968 | 4.2 | 6.4 | 6.5 | 4.4 | 3.4 | 3.1 | 3.6 | 3.4 | 3.5 | 4.8 | 5.9 | 5.6 |
| 1969 | 4.9 | 4.1 | 5.4 | 3.6 | 2.2 | 2.3 | 2.6 | 2.6 | 2.8 | 3.8 | 4.2 | 4.4 |
| 1970 | 3.7 | 4.7 | 3.2 | 5.0 | 3.6 | 2.1 | 2.4 | 2.4 | 4.0 | 3.7 | 4.5 | 4.7 |
| 1971 | 4.2 | 5.2 | 5.5 | 3.0 | 2.1 | 1.2 | 1.8 | 1.7 | 2.3 | 4.6 | 5.3 | 4.8 |
| 1972 | 4.7 | 4.0 | 3.6 | 3.4 | 1.4 | 2.2 | 1.5 | 1.4 | 4.0 | 5.4 | 3.3 | 4.9 |
| 1973 | 3.6 | 3.5 | 3.6 | 4.1 | 3.3 | 1.6 | 3.0 | 1.7 | 4.1 | 3.6 | 3.7 | 3.9 |
| 1974 | 3.9 | 3.1 | 4.3 | 2.8 | 2.4 | 2.1 | 3.1 | 2.6 | 2.5 | 3.0 | 4.0 | 3.0 |
| 1975 | 3.9 | 5.9 | 5.5 | 2.5 | 1.8 | 2.5 | 2.1 | 2.6 | 2.7 | 5.2 | 6.1 | 4.2 |
| 1976 | 4.9 | 4.5 | 5.3 | 3.7 | 2.9 | 1.8 | 0.9 | 1.8 | 2.8 | 2.2 | 3.4 | 5.3 |
| 1977 | 5.4 | 5.2 | 5.2 | 2.2 | 2.0 | 1.6 | 3.7 | 2.6 | 4.1 | 4.4 | 4.8 | 4.1 |
| 1978 | 4.8 | 3.7 | 3.8 | 3.6 | 2.1 | 1.9 | 1.6 | 1.8 | 2.8 | 4.0 | 3.7 | 4.0 |
| 1979 | 3.6 | 2.6 | 3.6 | 3.3 | 2.6 | 2.1 | 2.1 | 2.1 | 2.0 | 3.2 | 3.1 | 3.3 |
| 1980 | 6.7 | 4.2 | 4.4 | 2.5 | 2.8 | 1.4 | 1.6 | 2.2 | 3.9 | 5.1 | 4.5 | 5.3 |
| 1981 | 4.0 | 3.5 | 4.6 | 3.3 | 1.7 | 3.4 | 1.0 | 1.2 | 5.4 | 3.7 | 5.5 | 3.5 |
| 1982 | 5.6 | 4.4 | 8.6 | 5.5 | 2.2 | 3.1 | 2.7 | 2.1 | 2.8 | 3.1 | 5.5 | 4.5 |
| 1983 | 3.3 | 4.5 | 3.8 | 3.1 | 2.4 | 2.8 | 2.4 | 1.7 | 3.2 | 3.6 | 5.6 | 5.0 |
| 1984 | 4.6 | 3.1 | 4.8 | 3.7 | 3.5 | 2.5 | 2.8 | 1.7 | 2.3 | 4.2 | 5.5 | 5.6 |
| 1985 | 5.2 | 3.7 | 4.1 | 3.9 | 2.8 | 4.2 | 1.2 | 2.0 | 3.2 | 3.4 | 3.2 | 4.9 |
| 1986 | 4.6 | 3.1 | 4.0 | 4.4 | 4.1 | 1.8 | 1.5 | 1.4 | 3.0 | 4.6 | 4.4 | 3.9 |
| 1987 | 3.5 | 4.5 | 3.4 | 2.6 | 2.5 | 1.7 | 1.2 | 3.0 | 2.3 | 3.5 | 4.1 | 3.7 |

32 YR. STATISTICS FOR WIS STATION S32

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.1 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.5 |
| LARGEST WAVE HS | (METERS) | 8.6 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 269.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 82031400 |

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 228 | 547 | 202 | 6 | . | . | . | . | . | . | 983 |
| 0.50-0.99 | . | 387 | 1089 | 165 | 13 | 2 | . | . | . | . | 1656 |
| 1.00-1.49 | . | . | 421 | 260 | 75 | 7 | . | . | . | . | 763 |
| 1.50-1.99 | . | . | 29 | 336 | 43 | 41 | . | . | . | . | 449 |
| 2.00-2.49 | . | . | . | 161 | 79 | 34 | 1 | . | . | . | 275 |
| 2.50-2.99 | . | . | . | 7 | 145 | 10 | 3 | . | . | . | 165 |
| 3.00-3.49 | . | . | . | . | 51 | 53 | 2 | . | 1 | . | 107 |
| 3.50-3.99 | . | . | . | . | . | 40 | 5 | 5 | . | . | 50 |
| 4.00-4.49 | . | . | . | . | . | 4 | 3 | 1 | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 3 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 1 | 1 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 228 | 934 | 1741 | 935 | 406 | 191 | 16 | 10 | 4 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.5 NO. OF CASES= 4191.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 171 | 416 | 164 | 3 | 1 | 1 | . | . | . | . | 756 |
| 0.50-0.99 | . | 324 | 702 | 127 | 9 | . | . | . | . | . | 1162 |
| 1.00-1.49 | . | . | 197 | 208 | 50 | 10 | . | . | . | . | 465 |
| 1.50-1.99 | . | . | 18 | 120 | 58 | 33 | . | . | . | . | 229 |
| 2.00-2.49 | . | . | . | 47 | 33 | 32 | 6 | . | . | . | 118 |
| 2.50-2.99 | . | . | . | . | 54 | 24 | 3 | . | . | . | 81 |
| 3.00-3.49 | . | . | . | . | 3 | 22 | 13 | . | . | . | 38 |
| 3.50-3.99 | . | . | . | . | . | 11 | 10 | 5 | . | . | 26 |
| 4.00-4.49 | . | . | . | . | . | 1 | 5 | 7 | 1 | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 4 | 1 | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 8 | 2 | . | 10 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 5 | . | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 171 | 740 | 1081 | 505 | 208 | 134 | 40 | 25 | 12 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.4 NO. OF CASES= 2741.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 322 | 727 | 347 | 12 | . | . | . | . | . | . | 1408 |
| 0.50-0.99 | . | 413 | 973 | 253 | 13 | 1 | . | . | . | . | 1653 |
| 1.00-1.49 | . | . | 280 | 311 | 59 | 10 | . | . | . | . | 660 |
| 1.50-1.99 | . | . | 21 | 155 | 71 | 42 | 1 | . | . | . | 290 |
| 2.00-2.49 | . | . | . | 56 | 38 | 31 | 9 | . | . | . | 134 |
| 2.50-2.99 | . | . | . | . | 48 | 40 | 8 | 5 | . | . | 101 |
| 3.00-3.49 | . | . | . | . | 4 | 35 | 7 | 6 | . | . | 52 |
| 3.50-3.99 | . | . | . | . | . | 20 | 12 | 2 | . | . | 34 |
| 4.00-4.49 | . | . | . | . | . | . | 5 | 6 | . | . | 11 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | 3 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 2 | 5 | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 322 | 1140 | 1621 | 787 | 233 | 179 | 44 | 23 | 10 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.3 NO. OF CASES= 4092.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 621 | 1051 | 515 | 17 | 1 | . | . | . | . | . | 2205 |
| 0.50-0.99 | . | 932 | 576 | 304 | 33 | 4 | . | . | . | . | 1849 |
| 1.00-1.49 | . | . | 149 | 127 | 75 | 26 | 2 | . | . | . | 379 |
| 1.50-1.99 | . | . | 21 | 44 | 45 | 74 | 9 | 1 | . | . | 194 |
| 2.00-2.49 | . | . | 1 | 17 | 10 | 37 | 18 | 9 | . | . | 92 |
| 2.50-2.99 | . | . | . | . | 10 | 8 | 9 | 7 | 3 | . | 37 |
| 3.00-3.49 | . | . | . | . | 1 | 5 | 4 | 11 | 3 | . | 24 |
| 3.50-3.99 | . | . | . | . | . | 3 | 1 | 2 | 1 | 1 | 8 |
| 4.00-4.49 | . | . | . | . | . | . | 5 | 3 | 2 | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 621 | 1983 | 1262 | 509 | 175 | 157 | 48 | 36 | 12 | 1 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 4509.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1104 | 1864 | 782 | 58 | 8 | 3 | . | . | . | . | 3819 |
| 0.50-0.99 | . | 2169 | 412 | 337 | 110 | 19 | . | . | . | . | 3047 |
| 1.00-1.49 | . | . | 345 | 84 | 115 | 85 | 5 | . | . | . | 634 |
| 1.50-1.99 | . | . | 59 | 2 | 48 | 89 | 25 | 11 | . | . | 234 |
| 2.00-2.49 | . | . | 9 | 1 | 2 | 27 | 35 | 25 | 4 | . | 103 |
| 2.50-2.99 | . | . | . | . | . | . | 4 | 12 | 8 | . | 24 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1104 | 4033 | 1607 | 482 | 283 | 223 | 69 | 48 | 17 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 7372.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 728 | 1100 | 371 | 33 | 4 | 1 | . | . | . | . | 2237 |
| 0.50-0.99 | . | 1375 | 253 | 111 | 28 | 10 | . | 1 | . | . | 1778 |
| 1.00-1.49 | . | . | 251 | 16 | 16 | 19 | 6 | . | . | . | 308 |
| 1.50-1.99 | . | . | 66 | 6 | 3 | 19 | 8 | 6 | 1 | . | 109 |
| 2.00-2.49 | . | . | 6 | 1 | . | 2 | 1 | 1 | . | 1 | 12 |
| 2.50-2.99 | . | . | . | 2 | . | . | 1 | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 728 | 2475 | 947 | 169 | 51 | 51 | 16 | 8 | 1 | 1 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 4166.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 690 | 978 | 297 | 17 | 3 | . | . | . | . | . | 1985 |
| 0.50-0.99 | . | 1058 | 202 | 28 | 11 | 2 | . | 1 | . | . | 1302 |
| 1.00-1.49 | . | . | 164 | 2 | 2 | 4 | 1 | . | . | . | 173 |
| 1.50-1.99 | . | . | 38 | 2 | . | 3 | . | . | . | . | 43 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 690 | 2036 | 701 | 49 | 16 | 9 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.1 NO. OF CASES= 3282.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 536 | 788 | 140 | 7 | 3 | . | . | . | . | . | 1474 |
| 0.50-0.99 | . | 816 | 151 | 9 | 10 | 1 | . | . | . | . | 987 |
| 1.00-1.49 | . | . | 127 | . | 3 | 3 | . | . | . | . | 133 |
| 1.50-1.99 | . | . | 24 | 4 | . | . | 1 | . | . | . | 29 |
| 2.00-2.49 | . | . | . | 2 | . | . | . | 1 | . | . | 3 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 536 | 1604 | 442 | 22 | 16 | 4 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 2461.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 590 | 849 | 182 | 23 | 1 | . | . | . | . | . | 1645 |
| 0.50-0.99 | . | 714 | 90 | 21 | 3 | 2 | . | . | . | . | 830 |
| 1.00-1.49 | . | . | 136 | . | 3 | 1 | . | . | . | . | 140 |
| 1.50-1.99 | . | . | 18 | . | . | . | . | . | . | . | 18 |
| 2.00-2.49 | . | . | 1 | . | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 590 | 1563 | 427 | 44 | 7 | 3 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 2468.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 514 | 1058 | 172 | 19 | . | 1 | . | . | . | . | 1764 |
| 0.50-0.99 | . | 1033 | 220 | 24 | 9 | . | . | . | . | . | 1306 |
| 1.00-1.49 | . | . | 269 | 7 | 2 | 2 | . | . | . | . | 280 |
| 1.50-1.99 | . | . | 50 | 23 | 1 | 2 | . | . | . | . | 76 |
| 2.00-2.49 | . | . | . | 12 | . | . | . | . | . | . | 12 |
| 2.50-2.99 | . | . | . | 2 | 1 | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 514 | 2111 | 711 | 87 | 13 | 5 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 3224.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 458 | 1063 | 473 | 18 | 1 | 2 | . | . | . | . | 2015 |
| 0.50-0.99 | . | 868 | 1003 | 127 | 12 | . | . | . | . | . | 2010 |
| 1.00-1.49 | . | . | 487 | 122 | 21 | 5 | . | . | . | . | 635 |
| 1.50-1.99 | . | . | 68 | 195 | 24 | 2 | . | . | . | . | 289 |
| 2.00-2.49 | . | . | . | 85 | 12 | 2 | . | . | . | . | 99 |
| 2.50-2.99 | . | . | . | 5 | 50 | 4 | . | . | . | . | 59 |
| 3.00-3.49 | . | . | . | . | 5 | 1 | . | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 458 | 1931 | 2031 | 552 | 125 | 16 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 4791.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 479 | 1418 | 793 | 45 | . | . | . | . | . | . | 2735 |
| 0.50-0.99 | . | 787 | 2171 | 408 | 16 | . | . | . | . | . | 3382 |
| 1.00-1.49 | . | . | 864 | 465 | 71 | 5 | . | . | . | . | 1405 |
| 1.50-1.99 | . | . | 77 | 467 | 178 | 20 | . | . | . | . | 742 |
| 2.00-2.49 | . | . | . | 191 | 98 | 73 | . | . | . | . | 362 |
| 2.50-2.99 | . | . | . | 6 | 161 | 57 | 1 | 1 | . | . | 226 |
| 3.00-3.49 | . | . | . | . | 16 | 70 | 10 | . | . | . | 96 |
| 3.50-3.99 | . | . | . | . | 1 | 27 | 20 | 3 | . | . | 51 |
| 4.00-4.49 | . | . | . | . | . | 7 | 11 | 8 | . | . | 26 |
| 4.50-4.99 | . | . | . | . | . | 2 | . | 2 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 479 | 2205 | 3905 | 1582 | 541 | 261 | 42 | 15 | 1 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 8457.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 620 | 2547 | 635 | 5 | . | . | . | . | . | . | 3807 |
| 0.50-0.99 | . | 1059 | 4913 | 499 | 14 | . | . | . | . | . | 6485 |
| 1.00-1.49 | . | . | 1149 | 1630 | 137 | 3 | . | . | . | . | 2919 |
| 1.50-1.99 | . | . | 95 | 852 | 582 | 75 | . | . | . | . | 1604 |
| 2.00-2.49 | . | . | . | 321 | 231 | 325 | 5 | . | . | . | 882 |
| 2.50-2.99 | . | . | . | 6 | 395 | 201 | 68 | 4 | . | . | 674 |
| 3.00-3.49 | . | . | . | . | 29 | 284 | 69 | 19 | . | . | 401 |
| 3.50-3.99 | . | . | . | . | . | 139 | 111 | 16 | 1 | . | 267 |
| 4.00-4.49 | . | . | . | . | . | 12 | 99 | 53 | 1 | . | 165 |
| 4.50-4.99 | . | . | . | . | . | . | 18 | 71 | 4 | . | 93 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 39 | 8 | . | 49 |
| 5.50-5.99 | . | . | . | . | . | . | . | 8 | 2 | . | 36 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 1 | . | 9 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 3 | 3 |
| TOTAL | 620 | 3606 | 6792 | 3313 | 1388 | 1039 | 372 | 211 | 52 | 3 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 16286.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 518 | 2173 | 450 | 10 | 1 | . | . | . | . | . | 3152 |
| 0.50-0.99 | . | 859 | 4028 | 255 | 10 | . | . | . | . | . | 5152 |
| 1.00-1.49 | . | . | 990 | 1442 | 70 | 6 | . | . | . | . | 2508 |
| 1.50-1.99 | . | . | 79 | 828 | 568 | 37 | . | . | . | . | 1512 |
| 2.00-2.49 | . | . | . | 339 | 401 | 251 | 1 | . | . | . | 992 |
| 2.50-2.99 | . | . | . | 4 | 498 | 270 | 23 | 1 | . | . | 796 |
| 3.00-3.49 | . | . | . | . | 23 | 340 | 40 | 5 | . | . | 408 |
| 3.50-3.99 | . | . | . | . | . | 163 | 73 | 13 | 1 | . | 250 |
| 4.00-4.49 | . | . | . | . | . | 10 | 87 | 29 | . | . | 126 |
| 4.50-4.99 | . | . | . | . | . | 2 | 24 | 36 | 2 | . | 64 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 33 | 7 | . | 41 |
| 5.50-5.99 | . | . | . | . | . | . | . | 6 | 9 | . | 15 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 7 | . | 8 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| TOTAL | 518 | 3032 | 5547 | 2878 | 1571 | 1079 | 249 | 124 | 30 | 2 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.7 NO. OF CASES= 14074.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 322 | 1044 | 313 | 7 | . | . | . | . | . | . | 1686 |
| 0.50-0.99 | . | 572 | 2014 | 129 | 19 | . | . | . | . | . | 2734 |
| 1.00-1.49 | . | . | 773 | 486 | 24 | 9 | . | . | . | . | 1292 |
| 1.50-1.99 | . | . | 60 | 675 | 141 | 11 | . | . | . | . | 887 |
| 2.00-2.49 | . | . | . | 313 | 199 | 20 | . | . | . | . | 532 |
| 2.50-2.99 | . | . | . | 3 | 255 | 68 | . | . | . | . | 326 |
| 3.00-3.49 | . | . | . | . | 49 | 69 | . | . | . | . | 118 |
| 3.50-3.99 | . | . | . | . | 1 | 33 | 2 | . | . | . | 36 |
| 4.00-4.49 | . | . | . | . | . | 5 | 8 | 1 | . | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 1 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 322 | 1616 | 3160 | 1613 | 688 | 215 | 12 | 3 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.5 NO. OF CASES= 7147.

STATION S33 47.38N 88.57W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

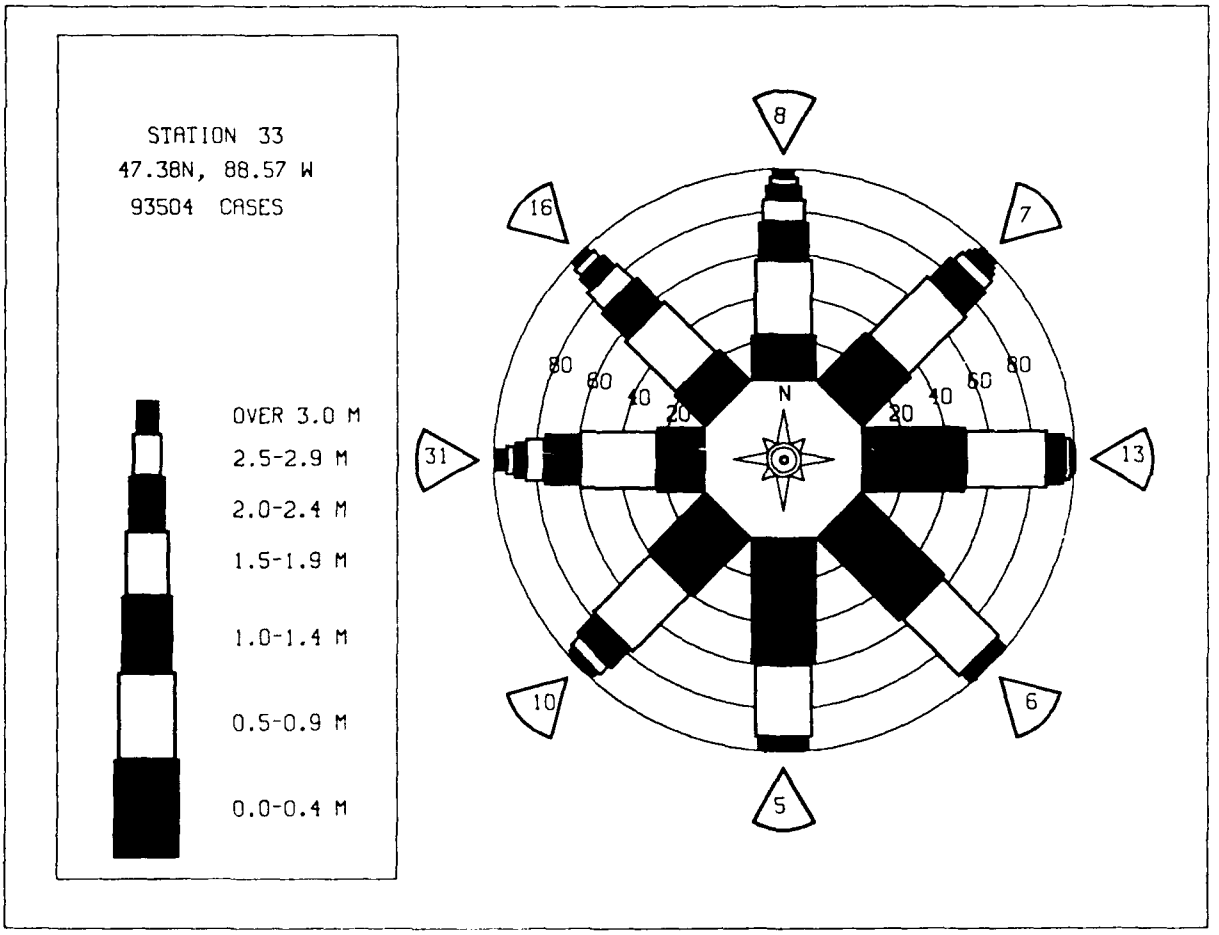
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 177 | 433 | 179 | 5 | 1 | . | . | . | . | . | 795 |
| 0.50-0.99 | . | 324 | 999 | 136 | 13 | . | . | . | . | . | 1472 |
| 1.00-1.49 | . | . | 546 | 287 | 40 | 9 | . | . | . | . | 882 |
| 1.50-1.99 | . | . | 36 | 505 | 56 | 9 | . | . | . | . | 606 |
| 2.00-2.49 | . | . | . | 250 | 112 | 6 | 1 | . | . | . | 369 |
| 2.50-2.99 | . | . | . | 11 | 227 | 13 | . | . | . | . | 251 |
| 3.00-3.49 | . | . | . | . | 63 | 49 | 1 | . | . | . | 113 |
| 3.50-3.99 | . | . | . | . | 1 | 26 | 1 | . | . | . | 28 |
| 4.00-4.49 | . | . | . | . | . | 6 | . | . | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 177 | 757 | 1760 | 1194 | 513 | 118 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 4243.

STATION S33 47.38N 88.57W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 808 | 1806 | 602 | 29 | 2 | . | . | . | . | . | 3247 |
| 0.50-0.99 | . | 1371 | 1980 | 294 | 33 | 4 | . | . | . | . | 3682 |
| 1.00-1.49 | . | . | 715 | 545 | 77 | 21 | 1 | . | . | . | 1359 |
| 1.50-1.99 | . | . | 76 | 422 | 182 | 46 | 4 | 1 | . | . | 731 |
| 2.00-2.49 | . | . | 1 | 180 | 121 | 84 | 7 | 3 | . | . | 396 |
| 2.50-2.99 | . | . | . | 4 | 184 | 70 | 12 | 3 | 1 | . | 274 |
| 3.00-3.49 | . | . | . | . | 24 | 93 | 14 | 4 | . | . | 135 |
| 3.50-3.99 | . | . | . | . | . | 46 | 23 | 4 | . | . | 73 |
| 4.00-4.49 | . | . | . | . | . | 4 | 22 | 11 | . | . | 37 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 12 | 1 | . | 18 |
| 5.00-5.49 | . | . | . | . | . | . | . | 8 | 2 | . | 10 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 4 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 808 | 3177 | 3374 | 1474 | 623 | 368 | 88 | 47 | 10 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 4.2 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S33 (47.38N 88.57W)

| | MONTH | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| YEAR | | | | | | | | | | | | | MEAN |
| 1956 | 0.7 | 1.2 | 1.1 | 1.1 | 0.8 | 0.6 | 0.6 | 0.5 | 0.7 | 1.1 | 1.4 | 1.3 | 0.9 |
| 1957 | 1.5 | 1.3 | 0.9 | 0.9 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 0.7 | 1.3 | 1.2 | 1.0 |
| 1958 | 0.8 | 1.3 | 0.5 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.9 | 1.0 | 1.5 | 1.1 | 0.9 |
| 1959 | 1.1 | 1.0 | 0.8 | 0.8 | 0.8 | 0.5 | 0.5 | 0.5 | 0.8 | 0.9 | 1.4 | 1.3 | 0.9 |
| 1960 | 1.3 | 1.1 | 0.9 | 1.0 | 0.8 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.4 | 1.3 | 0.9 |
| 1961 | 1.0 | 1.0 | 1.1 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.8 | 0.9 | 1.0 | 1.2 | 0.9 |
| 1962 | 1.5 | 0.9 | 0.7 | 0.8 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 0.8 | 1.1 | 0.8 |
| 1963 | 1.3 | 1.2 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 1.1 | 1.2 | 0.8 |
| 1964 | 1.2 | 1.0 | 1.2 | 0.9 | 0.7 | 0.6 | 0.5 | 0.7 | 0.8 | 1.0 | 1.2 | 1.0 | 0.9 |
| 1965 | 1.6 | 1.6 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.7 | 1.2 | 1.7 | 1.5 | 1.0 |
| 1966 | 1.7 | 1.6 | 1.7 | 1.1 | 1.2 | 0.6 | 0.6 | 0.6 | 1.0 | 1.6 | 1.5 | 1.6 | 1.3 |
| 1967 | 1.6 | 1.6 | 1.4 | 1.1 | 1.0 | 0.6 | 0.7 | 0.7 | 0.8 | 1.6 | 1.5 | 1.9 | 1.2 |
| 1968 | 1.3 | 2.4 | 1.6 | 1.1 | 0.8 | 0.6 | 0.8 | 0.8 | 0.8 | 1.2 | 1.8 | 1.7 | 1.2 |
| 1969 | 1.5 | 0.9 | 1.3 | 0.8 | 0.7 | 0.6 | 0.4 | 0.6 | 0.7 | 1.1 | 1.2 | 0.9 | 0.9 |
| 1970 | 1.1 | 1.3 | 0.9 | 0.9 | 0.8 | 0.5 | 0.5 | 0.5 | 0.8 | 0.9 | 1.2 | 1.0 | 0.9 |
| 1971 | 1.4 | 1.3 | 1.1 | 0.9 | 0.7 | 0.4 | 0.6 | 0.5 | 0.6 | 1.0 | 1.2 | 1.1 | 0.9 |
| 1972 | 1.6 | 1.1 | 1.1 | 0.7 | 0.4 | 0.5 | 0.4 | 0.4 | 0.8 | 1.1 | 0.9 | 1.1 | 0.8 |
| 1973 | 1.2 | 1.1 | 1.0 | 0.9 | 0.8 | 0.6 | 0.6 | 0.4 | 0.8 | 0.9 | 1.2 | 1.0 | 0.9 |
| 1974 | 1.0 | 0.8 | 1.1 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.8 | 0.9 | 1.2 | 1.0 | 0.8 |
| 1975 | 1.1 | 1.2 | 1.2 | 0.7 | 0.4 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 1.2 | 1.0 | 0.8 |
| 1976 | 1.2 | 1.3 | 1.3 | 0.8 | 0.6 | 0.5 | 0.3 | 0.6 | 0.6 | 0.5 | 0.9 | 1.1 | 0.8 |
| 1977 | 1.5 | 1.5 | 1.3 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.9 | 0.9 | 1.1 | 0.9 |
| 1978 | 1.3 | 1.1 | 0.9 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.8 | 0.8 | 1.1 | 1.2 | 0.9 |
| 1979 | 1.1 | 0.8 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 | 1.1 | 1.1 | 0.8 |
| 1980 | 1.1 | 0.9 | 1.1 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.9 | 1.2 | 1.0 | 1.3 | 0.9 |
| 1981 | 1.2 | 1.1 | 1.1 | 0.8 | 0.5 | 0.6 | 0.4 | 0.4 | 0.9 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1982 | 1.6 | 1.3 | 1.4 | 1.0 | 0.6 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 1.1 | 1.3 | 1.0 |
| 1983 | 1.0 | 0.9 | 1.2 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.7 | 0.9 | 1.3 | 1.4 | 0.8 |
| 1984 | 1.1 | 0.9 | 1.1 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.7 | 0.8 | 1.3 | 1.4 | 0.9 |
| 1985 | 1.5 | 1.2 | 1.3 | 0.8 | 0.6 | 0.7 | 0.4 | 0.5 | 0.5 | 0.8 | 1.0 | 1.4 | 0.9 |
| 1986 | 1.2 | 0.8 | 1.1 | 1.0 | 0.6 | 0.6 | 0.4 | 0.4 | 0.7 | 0.8 | 1.2 | 1.1 | 0.8 |
| 1987 | 1.0 | 1.0 | 1.0 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.9 | 1.1 | 1.0 | 0.7 |
| MEAN | 1.3 | 1.2 | 1.1 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 1.0 | 1.2 | 1.2 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S33 (47.38N 88.57W)

| | MONTH | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| YEAR | | | | | | | | | | | | |
| 1956 | 3.1 | 3.9 | 3.3 | 4.1 | 2.7 | 2.1 | 1.6 | 1.8 | 2.8 | 4.3 | 4.5 | 4.5 |
| 1957 | 4.0 | 3.6 | 3.9 | 3.5 | 2.8 | 2.6 | 1.9 | 2.2 | 3.0 | 2.9 | 4.2 | 5.3 |
| 1958 | 3.1 | 3.8 | 2.8 | 5.0 | 3.1 | 1.8 | 2.3 | 2.1 | 3.5 | 4.3 | 6.0 | 4.9 |
| 1959 | 3.5 | 4.2 | 5.2 | 3.5 | 4.3 | 1.8 | 2.5 | 1.8 | 3.2 | 3.3 | 5.2 | 5.8 |
| 1960 | 4.3 | 3.8 | 3.7 | 3.8 | 3.4 | 1.8 | 1.6 | 2.9 | 2.6 | 3.7 | 4.6 | 4.4 |
| 1961 | 3.3 | 3.9 | 5.3 | 3.3 | 2.4 | 2.9 | 2.8 | 2.1 | 3.7 | 3.0 | 4.2 | 4.5 |
| 1962 | 4.5 | 3.7 | 3.0 | 3.2 | 2.7 | 1.6 | 2.9 | 1.9 | 2.5 | 5.5 | 4.2 | 4.2 |
| 1963 | 4.2 | 3.8 | 3.6 | 3.3 | 1.8 | 1.4 | 1.8 | 1.7 | 2.1 | 2.7 | 3.4 | 3.9 |
| 1964 | 5.0 | 4.9 | 4.1 | 4.7 | 2.7 | 2.7 | 2.0 | 2.8 | 4.1 | 4.0 | 5.4 | 3.8 |
| 1965 | 4.3 | 6.4 | 3.8 | 3.1 | 2.8 | 2.2 | 2.0 | 1.7 | 3.4 | 4.5 | 6.2 | 4.9 |
| 1966 | 7.8 | 5.0 | 6.3 | 4.3 | 4.0 | 4.0 | 2.5 | 3.0 | 3.3 | 6.9 | 4.9 | 5.6 |
| 1967 | 5.9 | 4.7 | 4.2 | 5.4 | 3.5 | 2.6 | 3.6 | 2.5 | 3.9 | 5.5 | 4.9 | 6.4 |
| 1968 | 4.1 | 5.9 | 6.7 | 4.7 | 3.5 | 2.5 | 4.0 | 3.5 | 3.8 | 5.3 | 6.1 | 5.8 |
| 1969 | 5.0 | 4.3 | 5.1 | 3.6 | 2.2 | 2.3 | 2.3 | 2.6 | 2.3 | 4.1 | 4.3 | 4.4 |
| 1970 | 3.7 | 4.6 | 3.2 | 5.3 | 3.7 | 1.8 | 2.3 | 2.2 | 3.8 | 3.8 | 4.1 | 4.8 |
| 1971 | 4.3 | 5.5 | 5.7 | 3.0 | 2.3 | 1.3 | 1.9 | 1.8 | 2.4 | 4.9 | 5.5 | 4.9 |
| 1972 | 4.4 | 4.0 | 3.5 | 3.7 | 1.3 | 1.9 | 1.5 | 1.3 | 4.1 | 5.5 | 3.4 | 5.0 |
| 1973 | 3.6 | 3.5 | 3.7 | 4.0 | 3.3 | 1.5 | 3.0 | 1.5 | 4.3 | 3.6 | 3.5 | 3.9 |
| 1974 | 3.9 | 2.9 | 4.2 | 2.8 | 2.4 | 1.9 | 3.1 | 2.6 | 2.5 | 3.0 | 4.0 | 3.0 |
| 1975 | 4.2 | 5.0 | 5.2 | 2.7 | 2.0 | 2.6 | 2.3 | 2.6 | 2.5 | 5.5 | 5.8 | 4.5 |
| 1976 | 5.3 | 4.6 | 5.3 | 3.7 | 2.4 | 1.8 | 0.9 | 2.0 | 2.8 | 2.1 | 3.2 | 5.7 |
| 1977 | 5.4 | 5.3 | 5.3 | 2.0 | 2.1 | 1.6 | 3.9 | 2.7 | 4.6 | 4.4 | 5.0 | 4.2 |
| 1978 | 4.2 | 3.7 | 3.9 | 3.6 | 2.2 | 1.9 | 1.5 | 2.0 | 3.0 | 4.1 | 3.7 | 4.0 |
| 1979 | 3.7 | 2.6 | 3.6 | 3.3 | 2.5 | 2.1 | 2.3 | 2.3 | 2.2 | 3.2 | 2.9 | 3.4 |
| 1980 | 6.8 | 4.1 | 4.6 | 2.3 | 2.8 | 1.4 | 1.7 | 2.2 | 3.9 | 5.3 | 4.9 | 5.5 |
| 1981 | 4.3 | 3.4 | 4.6 | 3.2 | 1.6 | 3.4 | 1.0 | 1.2 | 5.6 | 3.2 | 5.5 | 3.5 |
| 1982 | 5.7 | 4.4 | 8.9 | 5.8 | 2.3 | 3.1 | 2.8 | 1.9 | 2.7 | 3.3 | 6.0 | 4.5 |
| 1983 | 3.3 | 4.5 | 3.8 | 3.1 | 2.3 | 2.8 | 2.7 | 1.7 | 3.2 | 3.7 | 5.7 | 4.6 |
| 1984 | 5.3 | 3.1 | 5.2 | 3.3 | 3.0 | 2.5 | 2.8 | 1.6 | 2.0 | 4.4 | 5.9 | 5.8 |
| 1985 | 5.5 | 3.8 | 4.3 | 3.9 | 2.8 | 4.3 | 1.2 | 2.0 | 3.3 | 3.5 | 3.1 | 4.9 |
| 1986 | 4.5 | 2.9 | 3.9 | 4.3 | 3.3 | 1.8 | 1.5 | 1.4 | 3.0 | 4.6 | 4.8 | 3.9 |
| 1987 | 3.6 | 4.5 | 3.5 | 2.6 | 2.5 | 1.7 | 1.2 | 3.0 | 1.9 | 3.3 | 4.1 | 3.7 |

32 YR. STATISTICS FOR WIS STATION S33

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.2 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.5 |
| LARGEST WAVE HS | (METERS) | 8.9 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 266.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 82031400 |

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 152 | 455 | 177 | 11 | . | 1 | . | . | . | . | 796 |
| 0.50-0.99 | . | 280 | 1152 | 149 | 12 | 3 | . | . | . | . | 1596 |
| 1.00-1.49 | . | . | 375 | 331 | 73 | 2 | . | . | . | . | 781 |
| 1.50-1.99 | . | . | 31 | 320 | 86 | 33 | . | . | . | . | 470 |
| 2.00-2.49 | . | . | . | 139 | 77 | 69 | 1 | . | . | . | 286 |
| 2.50-2.99 | . | . | . | 6 | 155 | 32 | 3 | . | . | . | 196 |
| 3.00-3.49 | . | . | . | . | 50 | 49 | 7 | . | . | . | 106 |
| 3.50-3.99 | . | . | . | . | 3 | 40 | 10 | . | . | . | 53 |
| 4.00-4.49 | . | . | . | . | . | 10 | 3 | 2 | . | . | 15 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 4 | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 152 | 735 | 1735 | 956 | 456 | 239 | 26 | 6 | 2 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.7 NO. OF CASES= 4041.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 121 | 341 | 111 | 6 | . | . | . | . | . | . | 579 |
| 0.50-0.99 | . | 274 | 817 | 110 | 5 | . | . | . | . | . | 1206 |
| 1.00-1.49 | . | . | 225 | 276 | 36 | 2 | . | . | . | . | 539 |
| 1.50-1.99 | . | . | 11 | 122 | 94 | 18 | . | . | . | . | 245 |
| 2.00-2.49 | . | . | . | 44 | 54 | 49 | . | . | . | . | 147 |
| 2.50-2.99 | . | . | . | . | 50 | 49 | 6 | . | . | . | 105 |
| 3.00-3.49 | . | . | . | . | 6 | 34 | 3 | 2 | . | . | 45 |
| 3.50-3.99 | . | . | . | . | . | 17 | 10 | 4 | . | . | 31 |
| 4.00-4.49 | . | . | . | . | . | 2 | 13 | 3 | . | . | 18 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 10 | . | . | 12 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 3 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 3 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 121 | 615 | 1164 | 558 | 245 | 171 | 35 | 24 | 3 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.6 NO. OF CASES= 2759.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 196 | 628 | 193 | 17 | . | . | . | . | . | . | 1034 |
| 0.50-0.99 | . | 312 | 1222 | 162 | 14 | . | . | . | . | . | 1710 |
| 1.00-1.49 | . | . | 275 | 459 | 33 | 3 | . | . | . | . | 770 |
| 1.50-1.99 | . | . | 13 | 171 | 142 | 12 | . | . | . | . | 338 |
| 2.00-2.49 | . | . | . | 49 | 48 | 50 | . | . | . | . | 147 |
| 2.50-2.99 | . | . | . | . | 57 | 42 | 2 | . | . | . | 101 |
| 3.00-3.49 | . | . | . | . | 2 | 60 | 14 | 2 | . | . | 78 |
| 3.50-3.99 | . | . | . | . | . | 21 | 20 | 4 | . | . | 45 |
| 4.00-4.49 | . | . | . | . | . | . | 6 | 8 | . | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 7 | . | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 6 | 2 | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 196 | 940 | 1703 | 858 | 296 | 188 | 44 | 29 | 3 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.5 NO. OF CASES= 3996.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 308 | 788 | 162 | 14 | . | . | . | . | . | . | 1272 |
| 0.50-0.99 | . | 439 | 1438 | 121 | 8 | 2 | . | . | . | . | 2008 |
| 1.00-1.49 | . | 1 | 370 | 397 | 26 | . | . | . | . | . | 794 |
| 1.50-1.99 | . | . | 23 | 191 | 78 | 11 | . | . | . | . | 303 |
| 2.00-2.49 | . | . | . | 57 | 43 | 34 | 2 | . | . | . | 136 |
| 2.50-2.99 | . | . | . | . | 72 | 28 | 5 | . | . | . | 105 |
| 3.00-3.49 | . | . | . | . | 4 | 57 | 4 | 5 | . | . | 70 |
| 3.50-3.99 | . | . | . | . | . | 39 | 14 | 3 | . | . | 56 |
| 4.00-4.49 | . | . | . | . | . | 3 | 14 | 7 | 1 | . | 25 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 21 | 1 | . | 26 |
| 5.00-5.49 | . | . | . | . | . | . | . | 7 | . | . | 7 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 2 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 308 | 1228 | 1993 | 780 | 231 | 174 | 43 | 46 | 7 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 4516.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 565 | 1453 | 320 | 26 | 5 | . | . | . | . | . | 2369 |
| 0.50-0.99 | . | 805 | 2274 | 129 | 24 | . | . | . | . | . | 3232 |
| 1.00-1.49 | . | . | 777 | 625 | 40 | 9 | 1 | . | . | . | 1452 |
| 1.50-1.99 | . | . | 32 | 387 | 119 | 14 | . | . | . | . | 552 |
| 2.00-2.49 | . | . | . | 114 | 80 | 35 | 1 | . | . | . | 230 |
| 2.50-2.99 | . | . | . | . | 140 | 43 | 2 | . | . | . | 185 |
| 3.00-3.49 | . | . | . | . | 5 | 101 | 5 | . | . | . | 111 |
| 3.50-3.99 | . | . | . | . | . | 57 | 14 | . | . | . | 71 |
| 4.00-4.49 | . | . | . | . | . | 4 | 47 | 8 | . | . | 59 |
| 4.50-4.99 | . | . | . | . | . | . | 11 | 22 | . | . | 33 |
| 5.00-5.49 | . | . | . | . | . | . | . | 13 | . | . | 13 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | 6 | . | 11 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| TOTAL | 565 | 2258 | 3403 | 1281 | 413 | 263 | 81 | 48 | 15 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 7805.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 444 | 1034 | 236 | 34 | 2 | . | . | . | . | . | 1750 |
| 0.50-0.99 | . | 783 | 1020 | 119 | 29 | 6 | 1 | . | . | . | 1958 |
| 1.00-1.49 | . | . | 311 | 159 | 34 | 19 | 2 | . | . | . | 525 |
| 1.50-1.99 | . | . | 47 | 89 | 41 | 20 | 1 | . | . | . | 198 |
| 2.00-2.49 | . | . | 1 | 42 | 16 | 17 | 7 | . | . | . | 83 |
| 2.50-2.99 | . | . | . | 1 | 22 | 9 | 3 | . | . | . | 35 |
| 3.00-3.49 | . | . | . | . | 3 | 17 | 3 | . | . | . | 23 |
| 3.50-3.99 | . | . | . | . | . | 6 | 3 | 2 | . | . | 11 |
| 4.00-4.49 | . | . | . | . | . | 1 | 4 | 3 | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 3 | 1 | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 444 | 1817 | 1615 | 444 | 147 | 95 | 27 | 10 | 3 | 2 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 4318.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 482 | 1089 | 279 | 78 | 18 | 8 | . | . | . | . | 1954 |
| 0.50-0.99 | . | 1055 | 453 | 141 | 55 | 33 | 4 | . | . | . | 1741 |
| 1.00-1.49 | . | . | 179 | 49 | 44 | 25 | 1 | . | . | . | 298 |
| 1.50-1.99 | . | . | 48 | 8 | 12 | 14 | 7 | 2 | . | . | 91 |
| 2.00-2.49 | . | . | . | 3 | 3 | 6 | 4 | . | . | . | 16 |
| 2.50-2.99 | . | . | . | . | . | . | 4 | 4 | . | . | 8 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 482 | 2144 | 959 | 279 | 132 | 86 | 20 | 6 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.6 NO. OF CASES= 3852.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 464 | 920 | 222 | 55 | 17 | 4 | . | . | . | . | 1682 |
| 0.50-0.99 | . | 819 | 254 | 69 | 31 | 23 | 7 | . | . | . | 1203 |
| 1.00-1.49 | . | . | 117 | 16 | 18 | 13 | 3 | . | . | . | 167 |
| 1.50-1.99 | . | . | 19 | 1 | 3 | 6 | 6 | 1 | . | . | 36 |
| 2.00-2.49 | . | . | . | 1 | . | . | 2 | . | . | . | 3 |
| 2.50-2.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 464 | 1739 | 612 | 142 | 69 | 46 | 19 | 2 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 2900.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 412 | 865 | 274 | 64 | 8 | 4 | . | . | . | . | 1627 |
| 0.50-0.99 | . | 706 | 219 | 81 | 22 | 28 | . | . | . | . | 1056 |
| 1.00-1.49 | . | . | 113 | 12 | 22 | 14 | 7 | . | . | . | 168 |
| 1.50-1.99 | . | . | 16 | . | 1 | 3 | 4 | . | . | . | 24 |
| 2.00-2.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 412 | 1571 | 622 | 157 | 53 | 50 | 14 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 2701.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 309 | 770 | 306 | 32 | 3 | 1 | . | . | . | . | 1421 |
| 0.50-0.99 | . | 802 | 378 | 73 | 29 | 18 | . | . | . | . | 1300 |
| 1.00-1.49 | . | . | 222 | 36 | 11 | 10 | 1 | . | . | . | 280 |
| 1.50-1.99 | . | . | 52 | 18 | 2 | 2 | 1 | . | . | . | 75 |
| 2.00-2.49 | . | . | 2 | 11 | . | 2 | . | . | . | . | 15 |
| 2.50-2.99 | . | . | . | 1 | 4 | . | . | 1 | . | . | 6 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 309 | 1572 | 960 | 171 | 49 | 33 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 2904.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 279 | 874 | 530 | 55 | 5 | 3 | . | . | . | . | 1746 |
| 0.50-0.99 | . | 735 | 1132 | 234 | 32 | 5 | . | . | . | . | 2138 |
| 1.00-1.49 | . | . | 416 | 210 | 41 | 9 | . | . | . | . | 676 |
| 1.50-1.99 | . | . | 63 | 182 | 34 | 9 | 1 | . | . | . | 289 |
| 2.00-2.49 | . | . | . | 80 | 32 | 7 | . | . | . | . | 119 |
| 2.50-2.99 | . | . | . | 5 | 50 | 2 | . | . | . | . | 57 |
| 3.00-3.49 | . | . | . | . | 8 | 9 | 1 | . | . | . | 18 |
| 3.50-3.99 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 279 | 1609 | 2141 | 766 | 202 | 48 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 4730.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 302 | 1449 | 821 | 44 | 5 | . | . | . | . | . | 2621 |
| 0.50-0.99 | . | 756 | 2821 | 620 | 23 | 3 | 1 | . | . | . | 4224 |
| 1.00-1.49 | . | . | 731 | 672 | 114 | 4 | 1 | . | . | . | 1522 |
| 1.50-1.99 | . | . | 65 | 432 | 199 | 48 | . | . | . | . | 744 |
| 2.00-2.49 | . | . | . | 165 | 99 | 86 | 3 | . | . | . | 353 |
| 2.50-2.99 | . | . | . | 8 | 157 | 69 | 8 | 1 | . | . | 243 |
| 3.00-3.49 | . | . | . | . | 22 | 81 | 5 | 1 | . | . | 109 |
| 3.50-3.99 | . | . | . | . | . | 34 | 33 | 3 | . | . | 70 |
| 4.00-4.49 | . | . | . | . | . | 9 | 16 | 9 | 1 | . | 35 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 10 | . | . | 13 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | 1 | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 302 | 2205 | 4438 | 1941 | 619 | 334 | 70 | 29 | 3 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 9310.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 434 | 2313 | 688 | 12 | . | . | . | . | . | . | 3447 |
| 0.50-0.99 | . | 967 | 5294 | 618 | 18 | 7 | . | . | . | . | 6904 |
| 1.00-1.49 | . | . | 1076 | 1835 | 237 | 3 | . | . | . | . | 3151 |
| 1.50-1.99 | . | . | 109 | 830 | 630 | 110 | . | . | . | . | 1679 |
| 2.00-2.49 | . | . | . | 332 | 265 | 383 | 12 | . | . | . | 992 |
| 2.50-2.99 | . | . | . | 4 | 389 | 260 | 64 | 3 | . | . | 720 |
| 3.00-3.49 | . | . | . | . | 18 | 281 | 89 | 10 | 2 | . | 400 |
| 3.50-3.99 | . | . | . | . | . | 152 | 136 | 26 | 2 | . | 316 |
| 4.00-4.49 | . | . | . | . | . | 13 | 110 | 50 | 1 | . | 174 |
| 4.50-4.99 | . | . | . | . | . | . | 24 | 70 | 5 | 1 | 100 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 62 | 7 | . | 70 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | 20 | . | 25 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 8 | . | 8 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 5 | 5 |
| TOTAL | 434 | 3280 | 7167 | 3631 | 1557 | 1209 | 436 | 226 | 49 | 6 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 8.8 MEAN TP(SEC)= 4.8 NO. OF CASES= 16848.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 364 | 1682 | 371 | 13 | 2 | . | . | . | . | . | 2432 |
| 0.50-0.99 | . | 804 | 3383 | 280 | 29 | 2 | . | . | . | . | 4498 |
| 1.00-1.49 | . | . | 1004 | 1059 | 78 | 10 | . | . | . | . | 2151 |
| 1.50-1.99 | . | . | 82 | 885 | 361 | 31 | . | . | . | . | 1359 |
| 2.00-2.49 | . | . | . | 371 | 350 | 161 | . | . | . | . | 882 |
| 2.50-2.99 | . | . | . | 4 | 416 | 146 | 14 | . | . | . | 580 |
| 3.00-3.49 | . | . | . | . | 55 | 183 | 33 | 3 | . | . | 274 |
| 3.50-3.99 | . | . | . | . | . | 87 | 55 | 7 | . | . | 149 |
| 4.00-4.49 | . | . | . | . | . | 13 | 68 | 24 | . | . | 105 |
| 4.50-4.99 | . | . | . | . | . | 1 | 13 | 29 | . | . | 43 |
| 5.00-5.49 | . | . | . | . | . | . | 5 | 21 | 8 | . | 34 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 10 | . | 14 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 7 | 1 | 9 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| TOTAL | 364 | 2486 | 4840 | 2612 | 1291 | 634 | 188 | 89 | 29 | 2 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 11741.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 228 | 903 | 287 | 11 | 1 | . | . | . | . | . | 1430 |
| 0.50-0.99 | . | 474 | 1942 | 179 | 16 | 2 | . | . | . | . | 2613 |
| 1.00-1.49 | . | 1 | 772 | 543 | 44 | 2 | . | . | . | . | 1362 |
| 1.50-1.99 | . | . | 63 | 752 | 49 | 13 | . | . | . | . | 877 |
| 2.00-2.49 | . | . | 1 | 365 | 194 | 7 | . | . | . | . | 567 |
| 2.50-2.99 | . | . | . | 3 | 250 | 7 | . | . | . | . | 260 |
| 3.00-3.49 | . | . | . | . | 47 | 34 | 2 | . | . | . | 83 |
| 3.50-3.99 | . | . | . | . | . | 19 | 1 | . | . | . | 20 |
| 4.00-4.49 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 228 | 1378 | 3065 | 1853 | 601 | 88 | 5 | 0 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.5 NO. OF CASES= 6761.

STATION S34 47.53N 88.35W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

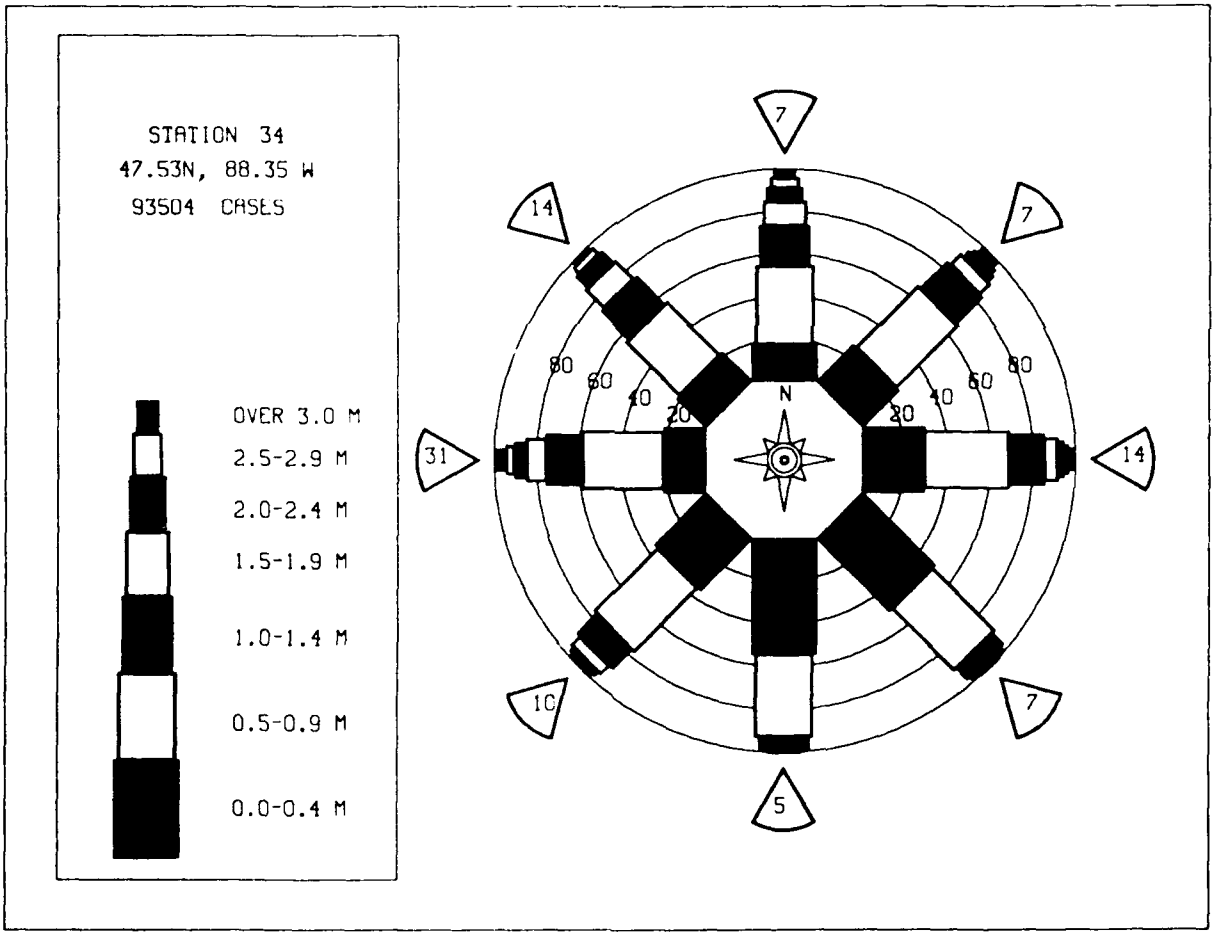
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 104 | 385 | 143 | 11 | 1 | . | . | . | . | . | 644 |
| 0.50-0.99 | . | 290 | 1218 | 113 | 5 | 1 | . | . | . | . | 1627 |
| 1.00-1.49 | . | 1 | 555 | 301 | 59 | 7 | 1 | . | . | . | 924 |
| 1.50-1.99 | . | . | 47 | 540 | 47 | 22 | . | . | . | . | 656 |
| 2.00-2.49 | . | . | . | 254 | 111 | 17 | . | . | . | . | 382 |
| 2.50-2.99 | . | . | . | 5 | 229 | 8 | 1 | . | . | . | 243 |
| 3.00-3.49 | . | . | . | . | 53 | 43 | 3 | . | . | . | 99 |
| 3.50-3.99 | . | . | . | . | 2 | 22 | 1 | . | . | . | 25 |
| 4.00-4.49 | . | . | . | . | . | 8 | 1 | . | . | . | 9 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 104 | 676 | 1963 | 1224 | 507 | 128 | 8 | 0 | 0 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 4322.

STATION S34 47.53N 88.35W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 517 | 1595 | 512 | 49 | 6 | 2 | . | . | . | . | 2681 |
| 0.50-0.99 | . | 1030 | 2502 | 320 | 36 | 13 | 1 | . | . | . | 3902 |
| 1.00-1.49 | . | . | 752 | 698 | 91 | 13 | 1 | . | . | . | 1555 |
| 1.50-1.99 | . | . | 72 | 493 | 190 | 37 | 2 | . | . | . | 794 |
| 2.00-2.49 | . | . | . | 203 | 137 | 92 | 3 | . | . | . | 435 |
| 2.50-2.99 | . | . | . | 3 | 199 | 70 | 11 | 1 | . | . | 284 |
| 3.00-3.49 | . | . | . | . | 27 | 95 | 17 | 2 | . | . | 141 |
| 3.50-3.99 | . | . | . | . | . | 50 | 30 | 5 | . | . | 85 |
| 4.00-4.49 | . | . | . | . | . | 7 | 28 | 11 | . | . | 46 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 18 | . | . | 24 |
| 5.00-5.49 | . | . | . | . | . | . | . | 11 | 2 | . | 13 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 4 | . | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 517 | 2625 | 3838 | 1766 | 686 | 379 | 99 | 50 | 9 | 0 | |

MEAN HS(M)= 1.0 LARGEST HS(M)= 8.8 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S34 (47.53N 88.35W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.8 | 1.2 | 1.3 | 1.2 | 0.9 | 0.7 | 0.7 | 0.6 | 0.7 | 1.2 | 1.4 | 1.4 | 1.0 |
| 1957 | 1.5 | 1.3 | 1.0 | 1.0 | 1.0 | 0.7 | 0.6 | 0.6 | 0.8 | 0.8 | 1.3 | 1.2 | 1.0 |
| 1958 | 0.8 | 1.3 | 0.6 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.9 | 1.0 | 1.6 | 1.1 | 0.9 |
| 1959 | 1.1 | 1.1 | 0.9 | 0.9 | 0.9 | 0.6 | 0.5 | 0.5 | 0.8 | 0.9 | 1.4 | 1.6 | 0.9 |
| 1960 | 1.2 | 1.1 | 1.0 | 1.1 | 0.9 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.5 | 1.2 | 0.9 |
| 1961 | 1.0 | 1.1 | 1.2 | 0.9 | 0.8 | 0.7 | 0.4 | 0.4 | 0.8 | 0.9 | 1.0 | 1.2 | 0.9 |
| 1962 | 1.5 | 1.0 | 0.9 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.8 | 0.8 | 1.1 | 0.8 |
| 1963 | 1.2 | 1.2 | 1.1 | 0.8 | 0.7 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 1.1 | 1.3 | 0.9 |
| 1964 | 1.3 | 1.1 | 1.3 | 1.1 | 0.8 | 0.6 | 0.6 | 0.8 | 0.9 | 1.0 | 1.2 | 1.1 | 1.0 |
| 1965 | 1.6 | 1.6 | 1.1 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 1.2 | 1.8 | 1.6 | 1.1 |
| 1966 | 1.7 | 1.7 | 2.0 | 1.3 | 1.3 | 0.7 | 0.7 | 0.7 | 1.1 | 1.7 | 1.6 | 1.6 | 1.3 |
| 1967 | 1.7 | 1.6 | 1.5 | 1.2 | 1.1 | 0.8 | 0.7 | 0.8 | 0.9 | 1.7 | 1.5 | 2.1 | 1.3 |
| 1968 | 1.4 | 2.4 | 1.7 | 1.3 | 0.9 | 0.7 | 0.8 | 0.8 | 0.8 | 1.3 | 1.9 | 1.8 | 1.3 |
| 1969 | 1.6 | 1.0 | 1.3 | 0.9 | 0.7 | 0.6 | 0.4 | 0.7 | 0.8 | 1.2 | 1.3 | 1.0 | 1.0 |
| 1970 | 1.1 | 1.3 | 1.1 | 1.1 | 0.9 | 0.5 | 0.6 | 0.6 | 0.9 | 1.0 | 1.3 | 1.1 | 0.9 |
| 1971 | 1.4 | 1.4 | 1.2 | 1.0 | 0.8 | 0.5 | 0.6 | 0.5 | 0.7 | 1.1 | 1.3 | 1.2 | 1.0 |
| 1972 | 1.6 | 1.2 | 1.3 | 0.8 | 0.5 | 0.5 | 0.4 | 0.5 | 0.8 | 1.1 | 1.0 | 1.2 | 0.9 |
| 1973 | 1.3 | 1.1 | 1.2 | 1.0 | 0.9 | 0.6 | 0.6 | 0.4 | 0.8 | 1.0 | 1.3 | 1.1 | 0.9 |
| 1974 | 1.1 | 0.8 | 1.2 | 0.9 | 0.8 | 0.7 | 0.6 | 0.7 | 0.8 | 0.9 | 1.2 | 1.1 | 0.9 |
| 1975 | 1.2 | 1.2 | 1.3 | 0.8 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 1.0 | 1.3 | 1.0 | 0.9 |
| 1976 | 1.3 | 1.3 | 1.4 | 0.9 | 0.7 | 0.6 | 0.4 | 0.6 | 0.7 | 0.6 | 1.0 | 1.1 | 0.9 |
| 1977 | 1.5 | 1.6 | 1.6 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.8 | 0.9 | 1.0 | 1.4 | 1.0 |
| 1978 | 1.3 | 1.0 | 1.0 | 1.1 | 0.6 | 0.5 | 0.5 | 0.6 | 1.0 | 0.8 | 1.2 | 1.3 | 0.9 |
| 1979 | 1.2 | 0.9 | 1.2 | 0.9 | 0.7 | 0.6 | 0.5 | 0.6 | 0.7 | 0.8 | 1.1 | 1.2 | 0.8 |
| 1980 | 1.2 | 0.9 | 1.1 | 0.8 | 0.7 | 0.6 | 0.4 | 0.6 | 0.9 | 1.2 | 1.0 | 1.3 | 0.9 |
| 1981 | 1.1 | 1.1 | 1.1 | 0.9 | 0.6 | 0.6 | 0.4 | 0.5 | 0.9 | 1.0 | 1.1 | 0.9 | 0.8 |
| 1982 | 1.7 | 1.3 | 1.6 | 1.0 | 0.8 | 0.6 | 0.5 | 0.5 | 0.8 | 1.0 | 1.2 | 1.3 | 1.0 |
| 1983 | 1.1 | 0.9 | 1.5 | 0.9 | 0.8 | 0.5 | 0.5 | 0.4 | 0.8 | 0.9 | 1.5 | 1.5 | 0.9 |
| 1984 | 1.1 | 1.1 | 1.2 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.7 | 1.0 | 1.3 | 1.5 | 0.9 |
| 1985 | 1.4 | 1.2 | 1.6 | 0.9 | 0.7 | 0.7 | 0.4 | 0.5 | 0.6 | 0.8 | 1.1 | 1.4 | 0.9 |
| 1986 | 1.2 | 0.9 | 1.3 | 1.2 | 0.6 | 0.6 | 0.5 | 0.5 | 0.8 | 0.8 | 1.2 | 1.1 | 0.9 |
| 1987 | 1.0 | 1.1 | 1.3 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 1.0 | 1.2 | 1.0 | 0.8 |
| MEAN | 1.3 | 1.2 | 1.2 | 1.0 | 0.8 | 0.6 | 0.5 | 0.6 | 0.8 | 1.0 | 1.3 | 1.3 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S34 (47.53N 88.35W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.6 | 4.3 | 7.2 | 4.1 | 3.0 | 1.9 | 1.5 | 1.9 | 2.8 | 4.6 | 4.3 | 5.2 |
| 1957 | 3.9 | 3.6 | 3.9 | 4.9 | 3.2 | 2.5 | 2.1 | 2.2 | 2.9 | 2.8 | 4.2 | 5.3 |
| 1958 | 3.1 | 3.8 | 2.7 | 5.0 | 3.0 | 1.8 | 2.3 | 2.0 | 3.3 | 4.2 | 6.2 | 4.9 |
| 1959 | 3.3 | 4.5 | 4.8 | 3.4 | 4.6 | 1.7 | 2.6 | 1.8 | 3.2 | 3.1 | 5.2 | 5.9 |
| 1960 | 4.3 | 3.5 | 3.7 | 3.7 | 3.2 | 1.8 | 1.6 | 2.9 | 2.5 | 4.1 | 4.5 | 4.3 |
| 1961 | 3.1 | 3.8 | 5.4 | 3.2 | 2.2 | 2.8 | 2.8 | 2.0 | 3.5 | 3.0 | 4.4 | 4.3 |
| 1962 | 4.4 | 3.6 | 4.2 | 3.2 | 2.4 | 1.5 | 2.7 | 1.9 | 2.3 | 5.7 | 4.2 | 4.2 |
| 1963 | 4.2 | 3.8 | 3.6 | 3.1 | 1.8 | 1.8 | 1.7 | 1.6 | 2.3 | 2.3 | 3.2 | 5.3 |
| 1964 | 5.3 | 4.7 | 4.0 | 4.8 | 2.7 | 2.4 | 1.7 | 2.8 | 4.0 | 4.2 | 5.4 | 3.8 |
| 1965 | 4.3 | 6.3 | 4.6 | 3.1 | 3.0 | 2.2 | 2.0 | 1.8 | 3.5 | 4.7 | 7.0 | 5.1 |
| 1966 | 7.9 | 5.3 | 6.7 | 4.8 | 4.1 | 4.0 | 2.4 | 2.9 | 3.3 | 7.1 | 4.3 | 5.7 |
| 1967 | 5.9 | 5.0 | 4.6 | 5.5 | 4.0 | 2.7 | 3.5 | 2.6 | 3.9 | 5.4 | 5.0 | 6.7 |
| 1968 | 4.2 | 6.1 | 6.8 | 4.7 | 3.7 | 2.5 | 4.2 | 3.5 | 3.8 | 5.4 | 6.2 | 6.0 |
| 1969 | 5.3 | 4.4 | 4.8 | 3.5 | 2.1 | 2.2 | 2.1 | 2.7 | 2.0 | 4.1 | 4.3 | 4.4 |
| 1970 | 3.8 | 4.1 | 4.5 | 5.4 | 3.8 | 1.8 | 2.3 | 2.2 | 3.6 | 3.8 | 4.4 | 4.7 |
| 1971 | 4.4 | 5.6 | 5.5 | 3.0 | 3.8 | 1.8 | 1.8 | 1.8 | 2.5 | 4.9 | 5.3 | 4.8 |
| 1972 | 4.5 | 4.7 | 3.8 | 3.7 | 1.4 | 1.8 | 1.5 | 1.4 | 4.1 | 5.7 | 3.6 | 5.0 |
| 1973 | 3.6 | 3.3 | 4.0 | 3.7 | 3.3 | 1.7 | 2.9 | 1.4 | 4.3 | 3.2 | 3.6 | 3.9 |
| 1974 | 3.7 | 3.0 | 4.2 | 3.7 | 2.6 | 2.1 | 3.0 | 2.3 | 2.3 | 2.8 | 4.0 | 4.4 |
| 1975 | 4.9 | 5.6 | 5.0 | 2.6 | 1.7 | 3.3 | 2.3 | 2.6 | 2.4 | 6.0 | 5.4 | 4.7 |
| 1976 | 5.2 | 4.5 | 5.2 | 3.8 | 2.3 | 1.9 | 1.0 | 2.1 | 2.8 | 2.5 | 3.1 | 5.6 |
| 1977 | 5.4 | 7.0 | 5.1 | 2.6 | 2.0 | 1.6 | 3.7 | 2.7 | 4.8 | 4.1 | 5.3 | 5.8 |
| 1978 | 4.2 | 3.5 | 4.2 | 3.6 | 2.4 | 1.7 | 1.7 | 2.1 | 3.5 | 4.0 | 3.7 | 4.0 |
| 1979 | 3.9 | 4.3 | 3.6 | 4.9 | 2.5 | 1.8 | 2.5 | 2.1 | 2.4 | 3.6 | 3.2 | 3.3 |
| 1980 | 6.5 | 3.7 | 4.6 | 2.6 | 2.3 | 2.2 | 1.5 | 2.2 | 4.0 | 5.3 | 4.9 | 5.3 |
| 1981 | 4.0 | 3.4 | 4.6 | 3.7 | 1.6 | 3.4 | 1.1 | 1.3 | 5.6 | 3.6 | 5.4 | 3.6 |
| 1982 | 5.6 | 4.7 | 8.8 | 5.4 | 2.8 | 3.1 | 2.6 | 1.8 | 2.7 | 3.7 | 5.7 | 4.5 |
| 1983 | 3.5 | 4.7 | 4.3 | 3.1 | 2.2 | 2.7 | 2.9 | 1.7 | 2.9 | 3.4 | 5.5 | 4.4 |
| 1984 | 5.0 | 3.2 | 5.3 | 2.9 | 2.7 | 2.4 | 2.7 | 1.6 | 1.8 | 4.6 | 5.8 | 5.4 |
| 1985 | 5.2 | 4.2 | 7.8 | 4.1 | 2.8 | 4.4 | 1.2 | 2.0 | 3.3 | 3.2 | 3.1 | 5.1 |
| 1986 | 4.5 | 3.8 | 4.5 | 4.1 | 3.2 | 1.5 | 1.5 | 1.2 | 2.8 | 4.4 | 4.8 | 4.0 |
| 1987 | 3.7 | 5.3 | 5.3 | 2.6 | 2.6 | 1.5 | 1.7 | 3.1 | 1.9 | 3.4 | 4.1 | 3.7 |

32 YR. STATISTICS FOR WIS STATION S34

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.0 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.4 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 8.8 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 264.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 82031400 |

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 140 | 454 | 174 | 14 | . | . | . | . | . | . | 782 |
| 0.50-0.99 | . | 262 | 1178 | 144 | 14 | 4 | . | . | . | . | 1602 |
| 1.00-1.49 | . | . | 343 | 463 | 56 | 1 | . | . | . | . | 863 |
| 1.50-1.99 | . | . | 27 | 247 | 170 | 24 | . | . | . | . | 468 |
| 2.00-2.49 | . | . | . | 98 | 95 | 86 | . | . | . | . | 279 |
| 2.50-2.99 | . | . | . | 1 | 125 | 59 | 1 | . | . | . | 186 |
| 3.00-3.49 | . | . | . | . | 6 | 125 | . | . | . | . | 131 |
| 3.50-3.99 | . | . | . | . | . | 86 | 19 | . | . | . | 105 |
| 4.00-4.49 | . | . | . | . | . | 7 | 45 | 1 | . | . | 53 |
| 4.50-4.99 | . | . | . | . | . | . | 13 | 9 | . | . | 22 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 3 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 140 | 716 | 1722 | 967 | 466 | 392 | 79 | 14 | 2 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.9 NO. OF CASES= 4219.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 120 | 342 | 120 | 10 | . | . | . | . | . | . | 592 |
| 0.50-0.99 | . | 242 | 891 | 104 | 3 | . | . | . | . | . | 1240 |
| 1.00-1.49 | . | . | 217 | 322 | 42 | 3 | . | . | . | . | 584 |
| 1.50-1.99 | . | . | 7 | 124 | 120 | 11 | . | . | . | . | 262 |
| 2.00-2.49 | . | . | . | 36 | 57 | 55 | . | . | . | . | 148 |
| 2.50-2.99 | . | . | . | 1 | 55 | 40 | 3 | . | . | . | 99 |
| 3.00-3.49 | . | . | . | . | 5 | 43 | 4 | 2 | . | . | 54 |
| 3.50-3.99 | . | . | . | . | . | 23 | 12 | 2 | . | . | 37 |
| 4.00-4.49 | . | . | . | . | . | 3 | 16 | 2 | . | . | 21 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 10 | . | . | 16 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 120 | 584 | 1235 | 597 | 282 | 178 | 41 | 19 | 2 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.7 NO. OF CASES= 2876.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 176 | 579 | 206 | 10 | . | . | . | . | . | . | 971 |
| 0.50-0.99 | . | 308 | 1309 | 147 | 10 | . | . | . | . | . | 1774 |
| 1.00-1.49 | . | . | 294 | 472 | 31 | 2 | . | . | . | . | 799 |
| 1.50-1.99 | . | . | 12 | 183 | 144 | 11 | . | . | . | . | 350 |
| 2.00-2.49 | . | . | . | 53 | 60 | 52 | . | . | . | . | 165 |
| 2.50-2.99 | . | . | . | 1 | 51 | 36 | 6 | . | . | . | 94 |
| 3.00-3.49 | . | . | . | . | 2 | 58 | 17 | 1 | . | . | 78 |
| 3.50-3.99 | . | . | . | . | . | 18 | 26 | 2 | . | . | 46 |
| 4.00-4.49 | . | . | . | . | . | . | 7 | 8 | . | . | 15 |
| 4.50-4.99 | . | . | . | . | . | . | . | 6 | . | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 8 | 1 | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 176 | 887 | 1821 | 866 | 298 | 177 | 56 | 26 | 2 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.5 NO. OF CASES= 4043.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 263 | 749 | 186 | 7 | . | . | . | . | . | . | 1205 |
| 0.50-0.99 | . | 391 | 1489 | 119 | 4 | 2 | . | . | . | . | 2005 |
| 1.00-1.49 | . | . | 342 | 373 | 21 | 2 | . | . | . | . | 738 |
| 1.50-1.99 | . | . | 21 | 175 | 83 | 6 | . | . | . | . | 285 |
| 2.00-2.49 | . | . | . | 45 | 38 | 26 | . | . | . | . | 109 |
| 2.50-2.99 | . | . | . | 1 | 77 | 20 | 6 | . | . | . | 104 |
| 3.00-3.49 | . | . | . | . | 3 | 60 | 6 | 2 | . | . | 71 |
| 3.50-3.99 | . | . | . | . | . | 29 | 14 | 3 | . | . | 46 |
| 4.00-4.49 | . | . | . | . | . | . | 21 | 3 | . | . | 24 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 14 | . | . | 21 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 263 | 1140 | 2038 | 720 | 226 | 145 | 54 | 27 | 3 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 4331.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 570 | 1382 | 317 | 25 | | | | | | | 2294 |
| 0.50-0.99 | . | 752 | 2233 | 121 | 25 | 1 | . | . | . | . | 3132 |
| 1.00-1.49 | . | . | 659 | 561 | 50 | 8 | . | . | . | . | 1278 |
| 1.50-1.99 | . | . | 31 | 376 | 97 | 16 | . | . | . | . | 520 |
| 2.00-2.49 | . | . | . | 98 | 84 | 31 | . | . | . | . | 213 |
| 2.50-2.99 | . | . | . | . | 117 | 32 | . | . | . | . | 149 |
| 3.00-3.49 | . | . | . | . | 6 | 91 | 4 | 2 | . | . | 103 |
| 3.50-3.99 | . | . | . | . | . | 45 | 12 | 1 | . | . | 58 |
| 4.00-4.49 | . | . | . | . | . | 3 | 39 | 7 | . | . | 49 |
| 4.50-4.99 | . | . | . | . | . | . | 11 | 13 | . | . | 24 |
| 5.00-5.49 | . | . | . | . | . | . | . | 14 | 2 | . | 16 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 3 | . | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 570 | 2134 | 3240 | 1181 | 379 | 227 | 66 | 41 | 11 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 7357.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 459 | 972 | 300 | 25 | 1 | | | | | | 1757 |
| 0.50-0.99 | . | 709 | 1045 | 147 | 24 | 5 | . | . | . | . | 1930 |
| 1.00-1.49 | . | . | 250 | 199 | 45 | 18 | 1 | . | . | . | 513 |
| 1.50-1.99 | . | . | 24 | 117 | 34 | 21 | 2 | . | . | . | 198 |
| 2.00-2.49 | . | . | 3 | 18 | 27 | 14 | 7 | 1 | . | . | 70 |
| 2.50-2.99 | . | . | . | 2 | 21 | 16 | . | . | . | . | 39 |
| 3.00-3.49 | . | . | . | . | 4 | 13 | 2 | . | . | . | 19 |
| 3.50-3.99 | . | . | . | . | . | 9 | 5 | 1 | . | . | 15 |
| 4.00-4.49 | . | . | . | . | . | . | 9 | 1 | . | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 459 | 1681 | 1622 | 508 | 156 | 96 | 27 | 6 | 2 | 2 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 4278.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 483 | 1107 | 379 | 135 | 41 | 8 | | | | | 2153 |
| 0.50-0.99 | . | 1118 | 502 | 221 | 114 | 42 | 3 | . | . | . | 2000 |
| 1.00-1.49 | . | . | 168 | 91 | 52 | 55 | 4 | 1 | . | . | 371 |
| 1.50-1.99 | . | . | 54 | 13 | 29 | 21 | 4 | 1 | . | . | 122 |
| 2.00-2.49 | . | . | 1 | 2 | 3 | 20 | 6 | 2 | . | . | 34 |
| 2.50-2.99 | . | . | . | . | . | 1 | 4 | 3 | . | . | 8 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 483 | 2225 | 1104 | 462 | 239 | 147 | 21 | 8 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 4399.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 517 | 1015 | 329 | 111 | 49 | 6 | | | | | 2027 |
| 0.50-0.99 | . | 981 | 269 | 113 | 66 | 57 | 9 | 1 | . | . | 1496 |
| 1.00-1.49 | . | . | 124 | 28 | 26 | 36 | 5 | 1 | . | . | 220 |
| 1.50-1.99 | . | . | 19 | 2 | 7 | 4 | 3 | 1 | . | . | 36 |
| 2.00-2.49 | . | . | . | 2 | . | 2 | 6 | | . | . | 10 |
| 2.50-2.99 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 517 | 1996 | 741 | 256 | 148 | 105 | 24 | 5 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 3556.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 443 | 890 | 356 | 62 | 12 | 2 | . | . | . | . | 1765 |
| 0.50-0.99 | . | 770 | 244 | 94 | 45 | 35 | 1 | . | . | . | 1189 |
| 1.00-1.49 | . | . | 154 | 10 | 16 | 23 | 5 | . | . | . | 208 |
| 1.50-1.99 | . | . | 27 | . | 3 | 6 | 5 | . | . | . | 41 |
| 2.00-2.49 | . | . | 1 | 1 | . | . | 2 | . | . | . | 4 |
| 2.50-2.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 443 | 1660 | 782 | 167 | 76 | 67 | 13 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 3008.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 318 | 662 | 300 | 44 | 4 | . | . | . | . | . | 1328 |
| 0.50-0.99 | . | 741 | 253 | 84 | 33 | 12 | . | . | . | . | 1123 |
| 1.00-1.49 | . | . | 166 | 12 | 8 | 12 | . | . | . | . | 198 |
| 1.50-1.99 | . | . | 36 | 1 | . | 2 | 1 | . | . | . | 40 |
| 2.00-2.49 | . | . | . | 1 | . | 1 | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 318 | 1403 | 755 | 142 | 45 | 27 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 2525.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 303 | 775 | 485 | 50 | 2 | . | . | . | . | . | 1615 |
| 0.50-0.99 | . | 903 | 627 | 196 | 37 | 6 | . | . | . | . | 1769 |
| 1.00-1.49 | . | . | 228 | 104 | 29 | 17 | . | . | . | . | 378 |
| 1.50-1.99 | . | . | 65 | 49 | 29 | 8 | 2 | . | . | . | 153 |
| 2.00-2.49 | . | . | 3 | 8 | 18 | 11 | . | . | . | . | 40 |
| 2.50-2.99 | . | . | . | 1 | . | 3 | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 303 | 1678 | 1408 | 408 | 115 | 45 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 3713.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 294 | 1228 | 928 | 65 | 2 | . | . | . | . | . | 2517 |
| 0.50-0.99 | . | 872 | 2025 | 582 | 48 | 7 | . | . | . | . | 3534 |
| 1.00-1.49 | . | . | 578 | 651 | 147 | 20 | 1 | . | . | . | 1397 |
| 1.50-1.99 | . | . | 53 | 349 | 177 | 58 | . | . | . | . | 637 |
| 2.00-2.49 | . | . | 1 | 65 | 147 | 65 | 6 | . | . | . | 284 |
| 2.50-2.99 | . | . | . | 2 | 65 | 78 | 16 | . | . | . | 161 |
| 3.00-3.49 | . | . | . | . | 5 | 44 | 12 | 5 | . | . | 66 |
| 3.50-3.99 | . | . | . | . | . | 13 | 14 | 6 | 2 | . | 35 |
| 4.00-4.49 | . | . | . | . | . | . | 4 | 8 | . | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 294 | 2100 | 3585 | 1714 | 591 | 285 | 53 | 21 | 3 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 8100.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 403 | 2357 | 872 | 19 | 2 | . | . | . | . | . | 3653 |
| 0.50-0.99 | . | 974 | 5523 | 893 | 13 | 3 | . | . | . | . | 7405 |
| 1.00-1.49 | . | . | 1158 | 1804 | 355 | 6 | . | . | . | . | 3323 |
| 1.50-1.99 | . | . | 93 | 838 | 616 | 164 | . | . | . | . | 1711 |
| 2.00-2.49 | . | . | . | 302 | 273 | 391 | 36 | . | . | . | 1002 |
| 2.50-2.99 | . | . | . | 7 | 364 | 208 | 101 | 14 | 1 | . | 695 |
| 3.00-3.49 | . | . | . | . | 22 | 249 | 85 | 26 | 2 | . | 384 |
| 3.50-3.99 | . | . | . | . | . | 118 | 118 | 29 | 5 | . | 270 |
| 4.00-4.49 | . | . | . | . | . | 7 | 94 | 63 | 7 | . | 171 |
| 4.50-4.99 | . | . | . | . | . | . | 18 | 72 | 9 | . | 99 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 42 | 11 | 1 | 55 |
| 5.50-5.99 | . | . | . | . | . | . | . | 6 | 23 | . | 29 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 13 | . | 13 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 7.00+ | | | | | | | | | | 4 | 4 |
| TOTAL | 403 | 3331 | 7646 | 3863 | 1645 | 1146 | 453 | 252 | 74 | 6 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 17618.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 297 | 1722 | 458 | 17 | 1 | . | . | . | . | . | 2495 |
| 0.50-0.99 | . | 733 | 3490 | 332 | 20 | . | . | . | . | . | 4575 |
| 1.00-1.49 | . | . | 904 | 1171 | 121 | 4 | . | . | . | . | 2200 |
| 1.50-1.99 | . | . | 73 | 810 | 414 | 41 | . | . | . | . | 1338 |
| 2.00-2.49 | . | . | . | 299 | 322 | 178 | 10 | . | . | . | 809 |
| 2.50-2.99 | . | . | . | 9 | 371 | 149 | 25 | 2 | . | . | 556 |
| 3.00-3.49 | . | . | . | . | 47 | 185 | 32 | 12 | . | . | 276 |
| 3.50-3.99 | . | . | . | . | . | 102 | 66 | 13 | . | . | 181 |
| 4.00-4.49 | . | . | . | . | . | 11 | 57 | 22 | 2 | . | 92 |
| 4.50-4.99 | . | . | . | . | . | . | 10 | 42 | 3 | . | 55 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 19 | 7 | . | 28 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 14 | 1 | 17 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 8 | 1 | 9 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 7.00+ | | | | | | | | | 1 | 1 | 2 |
| TOTAL | 297 | 2455 | 4925 | 2638 | 1296 | 670 | 202 | 112 | 35 | 5 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 11837.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 220 | 876 | 326 | 9 | 1 | . | . | . | . | . | 1432 |
| 0.50-0.99 | . | 427 | 2081 | 162 | 11 | 1 | . | . | . | . | 2682 |
| 1.00-1.49 | . | 1 | 750 | 640 | 44 | 3 | . | . | . | . | 1438 |
| 1.50-1.99 | . | . | 48 | 772 | 128 | 14 | . | . | . | . | 962 |
| 2.00-2.49 | . | . | . | 362 | 290 | 19 | . | . | . | . | 671 |
| 2.50-2.99 | . | . | . | 4 | 337 | 25 | . | . | . | . | 366 |
| 3.00-3.49 | . | . | . | . | 43 | 57 | 1 | . | . | . | 101 |
| 3.50-3.99 | . | . | . | . | . | 25 | 2 | . | . | . | 27 |
| 4.00-4.49 | . | . | . | . | . | 4 | 1 | . | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 220 | 1304 | 3205 | 1949 | 854 | 148 | 7 | 0 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.6 NO. OF CASES= 7202.

STATION S35 47.53N 88.13W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

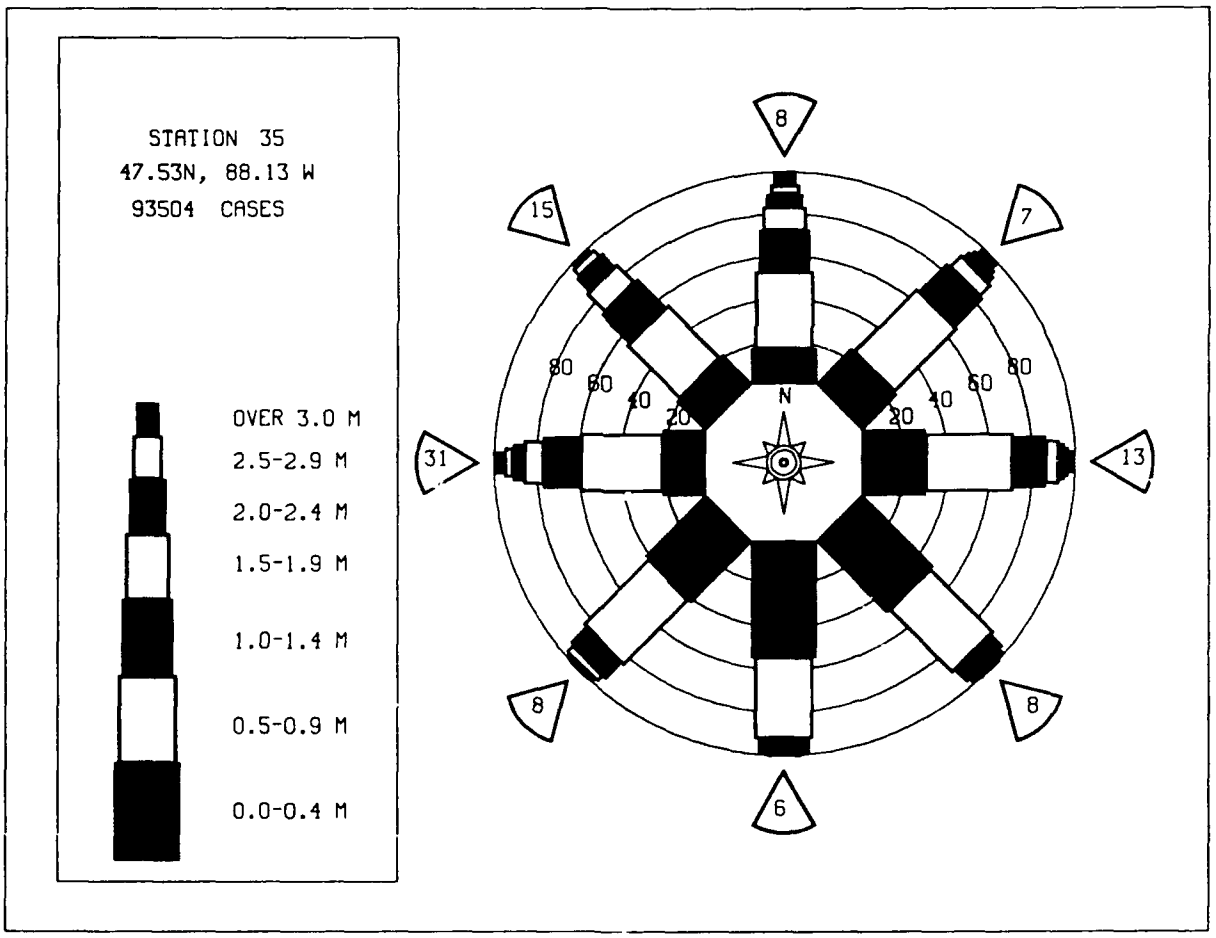
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 99 | 393 | 162 | 13 | . | . | . | . | . | . | 667 |
| 0.50-0.99 | . | 289 | 1253 | 130 | 8 | 1 | . | . | . | . | 1681 |
| 1.00-1.49 | . | . | 452 | 460 | 50 | 4 | . | . | . | . | 966 |
| 1.50-1.99 | . | . | 35 | 441 | 139 | 16 | . | . | . | . | 631 |
| 2.00-2.49 | . | . | . | 185 | 136 | 31 | . | . | . | . | 352 |
| 2.50-2.99 | . | . | . | 3 | 203 | 48 | 1 | . | . | . | 255 |
| 3.00-3.49 | . | . | . | . | 33 | 80 | 3 | . | . | . | 116 |
| 3.50-3.99 | . | . | . | . | . | 43 | 7 | . | . | . | 50 |
| 4.00-4.49 | . | . | . | . | . | 4 | 13 | . | . | . | 17 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 99 | 682 | 1902 | 1232 | 569 | 227 | 24 | 3 | 0 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.8 NO. OF CASES= 4442.

STATION S35 47.53N 88.13W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 511 | 1551 | 590 | 62 | 11 | 1 | . | . | . | . | 2726 |
| 0.50-0.99 | . | 1047 | 2442 | 359 | 48 | 18 | 1 | . | . | . | 3915 |
| 1.00-1.49 | . | . | 679 | 737 | 110 | 21 | 1 | . | . | . | 1548 |
| 1.50-1.99 | . | . | 63 | 450 | 219 | 43 | 1 | . | . | . | 776 |
| 2.00-2.49 | . | . | . | 158 | 155 | 98 | 7 | . | . | . | 418 |
| 2.50-2.99 | . | . | . | 3 | 179 | 72 | 16 | 2 | . | . | 272 |
| 3.00-3.49 | . | . | . | . | 17 | 101 | 16 | 5 | . | . | 139 |
| 3.50-3.99 | . | . | . | . | . | 51 | 30 | 5 | . | . | 86 |
| 4.00-4.49 | . | . | . | . | . | 4 | 31 | 11 | . | . | 46 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 17 | 1 | . | 25 |
| 5.00-5.49 | . | . | . | . | . | . | . | 10 | 2 | . | 12 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 4 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 511 | 2598 | 3774 | 1769 | 739 | 409 | 110 | 51 | 9 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S35 (47.53N 88.13W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.8 | 1.2 | 1.2 | 1.2 | 0.9 | 0.7 | 0.7 | 0.5 | 0.7 | 1.2 | 1.4 | 1.4 | 1.0 |
| 1957 | 1.4 | 1.3 | 1.0 | 1.0 | 1.0 | 0.7 | 0.6 | 0.6 | 0.8 | 0.8 | 1.3 | 1.3 | 1.0 |
| 1958 | 0.9 | 1.4 | 0.6 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.9 | 1.0 | 1.6 | 1.1 | 0.9 |
| 1959 | 1.1 | 1.1 | 0.9 | 0.9 | 0.9 | 0.6 | 0.5 | 0.5 | 0.8 | 0.9 | 1.4 | 1.6 | 0.9 |
| 1960 | 1.2 | 1.2 | 1.0 | 1.1 | 0.9 | 0.5 | 0.5 | 0.6 | 0.7 | 1.0 | 1.5 | 1.2 | 0.9 |
| 1961 | 1.0 | 1.1 | 1.2 | 0.9 | 0.8 | 0.7 | 0.4 | 0.4 | 0.7 | 0.9 | 1.0 | 1.2 | 0.9 |
| 1962 | 1.5 | 1.0 | 0.9 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.8 | 0.8 | 1.2 | 0.8 |
| 1963 | 1.2 | 1.2 | 1.1 | 0.8 | 0.7 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 1.2 | 1.3 | 0.9 |
| 1964 | 1.3 | 1.1 | 1.3 | 1.1 | 0.8 | 0.6 | 0.6 | 0.8 | 0.9 | 1.0 | 1.2 | 1.1 | 1.0 |
| 1965 | 1.6 | 1.6 | 1.1 | 0.8 | 0.6 | 0.6 | 0.6 | 0.5 | 0.7 | 1.2 | 1.8 | 1.5 | 1.1 |
| 1966 | 1.7 | 1.6 | 1.9 | 1.2 | 1.2 | 0.7 | 0.7 | 0.7 | 1.0 | 1.6 | 1.6 | 1.6 | 1.3 |
| 1967 | 1.6 | 1.6 | 1.4 | 1.1 | 1.1 | 0.7 | 0.7 | 0.7 | 0.9 | 1.7 | 1.5 | 2.0 | 1.3 |
| 1968 | 1.4 | 2.4 | 1.7 | 1.3 | 0.9 | 0.7 | 0.8 | 0.8 | 0.8 | 1.3 | 1.9 | 1.7 | 1.3 |
| 1969 | 1.6 | 1.0 | 1.3 | 0.9 | 0.7 | 0.6 | 0.4 | 0.6 | 0.8 | 1.2 | 1.3 | 1.0 | 1.0 |
| 1970 | 1.1 | 1.3 | 1.1 | 1.1 | 0.9 | 0.5 | 0.6 | 0.6 | 0.9 | 1.0 | 1.3 | 1.1 | 1.0 |
| 1971 | 1.4 | 1.4 | 1.2 | 1.0 | 0.8 | 0.4 | 0.6 | 0.5 | 0.7 | 1.1 | 1.3 | 1.1 | 1.0 |
| 1972 | 1.6 | 1.2 | 1.2 | 0.8 | 0.5 | 0.5 | 0.4 | 0.5 | 0.9 | 1.1 | 1.0 | 1.1 | 0.9 |
| 1973 | 1.3 | 1.2 | 1.2 | 1.0 | 0.9 | 0.6 | 0.6 | 0.4 | 0.8 | 0.9 | 1.3 | 1.1 | 0.9 |
| 1974 | 1.1 | 0.8 | 1.2 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.8 | 0.9 | 1.2 | 1.1 | 0.9 |
| 1975 | 1.2 | 1.1 | 1.2 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 1.0 | 1.4 | 1.0 | 0.9 |
| 1976 | 1.3 | 1.3 | 1.4 | 0.9 | 0.7 | 0.5 | 0.4 | 0.6 | 0.7 | 0.6 | 1.0 | 1.1 | 0.9 |
| 1977 | 1.5 | 1.6 | 1.5 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.8 | 0.9 | 1.0 | 1.4 | 1.0 |
| 1978 | 1.3 | 1.0 | 0.9 | 1.0 | 0.6 | 0.5 | 0.5 | 0.6 | 0.9 | 0.8 | 1.2 | 1.3 | 0.9 |
| 1979 | 1.1 | 0.9 | 1.2 | 0.8 | 0.7 | 0.6 | 0.4 | 0.5 | 0.7 | 0.9 | 1.1 | 1.1 | 0.8 |
| 1980 | 1.2 | 0.9 | 1.1 | 0.8 | 0.7 | 0.6 | 0.4 | 0.6 | 0.9 | 1.2 | 0.9 | 1.3 | 0.9 |
| 1981 | 1.1 | 1.1 | 1.1 | 0.8 | 0.5 | 0.6 | 0.4 | 0.4 | 0.9 | 0.9 | 1.1 | 0.9 | 0.8 |
| 1982 | 1.7 | 1.3 | 1.5 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 1.0 | 1.2 | 1.3 | 1.0 |
| 1983 | 1.1 | 0.9 | 1.5 | 0.9 | 0.7 | 0.5 | 0.5 | 0.4 | 0.8 | 0.9 | 1.5 | 1.4 | 0.9 |
| 1984 | 1.1 | 1.1 | 1.3 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.7 | 0.9 | 1.3 | 1.5 | 0.9 |
| 1985 | 1.4 | 1.2 | 1.6 | 0.9 | 0.7 | 0.7 | 0.4 | 0.5 | 0.6 | 0.8 | 1.1 | 1.4 | 0.9 |
| 1986 | 1.2 | 0.9 | 1.2 | 1.1 | 0.6 | 0.6 | 0.5 | 0.4 | 0.8 | 0.8 | 1.2 | 1.1 | 0.9 |
| 1987 | 1.1 | 1.1 | 1.3 | 0.7 | 0.6 | 0.5 | 0.4 | 0.6 | 0.6 | 1.0 | 1.2 | 1.0 | 0.8 |
| MEAN | 1.3 | 1.2 | 1.2 | 0.9 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 1.0 | 1.3 | 1.3 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S35 (47.53N 88.13W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.0 | 4.3 | 6.7 | 4.2 | 2.9 | 2.1 | 1.5 | 1.6 | 2.9 | 4.8 | 4.3 | 5.0 |
| 1957 | 4.0 | 3.6 | 3.8 | 4.6 | 3.0 | 2.5 | 2.5 | 2.2 | 3.1 | 2.8 | 5.0 | 5.3 |
| 1958 | 3.7 | 3.8 | 2.8 | 5.0 | 3.0 | 1.8 | 2.2 | 2.3 | 3.2 | 4.4 | 6.0 | 4.9 |
| 1959 | 3.2 | 4.5 | 4.6 | 3.3 | 4.6 | 1.7 | 2.6 | 1.8 | 3.1 | 3.4 | 5.2 | 6.1 |
| 1960 | 4.2 | 3.6 | 4.3 | 3.5 | 3.1 | 1.8 | 1.6 | 2.8 | 2.5 | 4.0 | 4.4 | 4.5 |
| 1961 | 3.1 | 4.0 | 5.2 | 3.1 | 2.2 | 2.7 | 2.8 | 2.0 | 3.4 | 3.0 | 4.4 | 4.2 |
| 1962 | 4.5 | 3.8 | 3.9 | 3.2 | 2.4 | 1.5 | 2.7 | 2.1 | 2.3 | 5.5 | 4.2 | 4.2 |
| 1963 | 4.2 | 3.6 | 4.0 | 3.1 | 1.8 | 1.8 | 1.6 | 1.8 | 2.3 | 2.3 | 3.4 | 5.1 |
| 1964 | 5.4 | 4.7 | 3.9 | 4.6 | 2.7 | 2.3 | 1.7 | 2.7 | 4.1 | 4.0 | 5.4 | 3.5 |
| 1965 | 4.3 | 6.4 | 4.6 | 3.0 | 2.8 | 2.2 | 1.9 | 1.9 | 3.3 | 4.4 | 6.6 | 4.8 |
| 1966 | 7.7 | 5.3 | 6.2 | 4.5 | 3.8 | 3.9 | 2.3 | 2.7 | 3.5 | 6.9 | 5.0 | 5.8 |
| 1967 | 5.5 | 4.6 | 4.5 | 5.2 | 3.7 | 2.3 | 3.9 | 2.9 | 3.6 | 5.3 | 4.8 | 6.7 |
| 1968 | 4.7 | 6.3 | 6.8 | 4.6 | 3.5 | 2.5 | 3.9 | 3.5 | 3.5 | 5.1 | 6.0 | 6.1 |
| 1969 | 5.0 | 4.4 | 4.9 | 3.5 | 2.2 | 2.2 | 2.1 | 2.6 | 2.6 | 4.0 | 4.1 | 4.1 |
| 1970 | 4.0 | 4.2 | 4.4 | 4.9 | 3.6 | 1.9 | 2.7 | 2.0 | 3.7 | 3.9 | 4.3 | 4.9 |
| 1971 | 4.4 | 5.7 | 5.2 | 3.4 | 3.7 | 1.8 | 1.8 | 1.7 | 2.4 | 4.7 | 5.6 | 4.9 |
| 1972 | 4.3 | 4.7 | 4.1 | 3.3 | 1.3 | 1.8 | 1.4 | 1.4 | 4.1 | 5.4 | 3.6 | 4.8 |
| 1973 | 3.5 | 3.2 | 3.8 | 3.7 | 3.3 | 1.7 | 2.4 | 1.4 | 4.3 | 3.1 | 3.6 | 3.9 |
| 1974 | 3.8 | 3.5 | 4.2 | 3.5 | 2.1 | 1.7 | 2.8 | 2.2 | 2.3 | 2.8 | 3.8 | 4.3 |
| 1975 | 4.6 | 5.7 | 4.4 | 2.3 | 1.5 | 3.1 | 2.1 | 2.4 | 2.2 | 5.9 | 5.6 | 4.7 |
| 1976 | 5.4 | 4.5 | 5.1 | 3.6 | 2.4 | 1.6 | 1.0 | 1.8 | 2.8 | 2.4 | 3.1 | 5.5 |
| 1977 | 5.3 | 6.5 | 5.3 | 2.6 | 2.0 | 1.6 | 3.5 | 2.7 | 4.6 | 4.1 | 5.1 | 5.6 |
| 1978 | 4.2 | 3.5 | 4.1 | 3.5 | 2.7 | 1.8 | 1.5 | 2.0 | 3.3 | 3.9 | 3.8 | 4.1 |
| 1979 | 3.4 | 4.1 | 4.0 | 4.7 | 2.4 | 1.8 | 2.3 | 1.9 | 2.1 | 4.0 | 2.9 | 3.2 |
| 1980 | 6.5 | 3.7 | 4.7 | 2.5 | 2.1 | 2.0 | 1.4 | 2.1 | 3.7 | 5.4 | 4.5 | 5.2 |
| 1981 | 4.0 | 3.3 | 4.7 | 3.5 | 1.6 | 3.5 | 1.1 | 1.3 | 5.7 | 4.1 | 5.7 | 3.6 |
| 1982 | 5.8 | 4.1 | 8.9 | 5.6 | 2.6 | 2.9 | 2.1 | 1.7 | 2.6 | 4.0 | 5.5 | 4.7 |
| 1983 | 4.1 | 4.7 | 4.1 | 3.1 | 1.8 | 2.7 | 2.4 | 1.6 | 2.8 | 3.4 | 5.6 | 4.1 |
| 1984 | 5.0 | 3.7 | 5.1 | 3.3 | 2.8 | 2.2 | 2.7 | 1.6 | 1.9 | 4.4 | 6.1 | 5.1 |
| 1985 | 5.4 | 3.7 | 7.5 | 4.1 | 2.7 | 4.5 | 1.1 | 1.8 | 3.3 | 3.1 | 2.9 | 5.1 |
| 1986 | 4.3 | 3.8 | 4.2 | 3.9 | 3.2 | 1.5 | 1.4 | 1.2 | 2.8 | 4.7 | 4.6 | 4.0 |
| 1987 | 3.3 | 5.2 | 5.1 | 2.5 | 2.5 | 1.5 | 1.7 | 2.8 | 1.9 | 3.7 | 4.1 | 3.6 |

32 YR. STATISTICS FOR WIS STATION S35

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 4.4 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.4 |
| LARGEST WAVE HS . . . . . | (METERS) | 8.9 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 266.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 82031400 |

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 119 | 472 | 168 | 13 | | | | | | | 772 |
| 0.50-0.99 | . | 249 | 1285 | 159 | 11 | 1 | | | | | 1705 |
| 1.00-1.49 | . | . | 311 | 506 | 54 | 2 | | | | | 873 |
| 1.50-1.99 | . | . | 25 | 262 | 183 | 18 | | | | | 488 |
| 2.00-2.49 | . | . | . | 85 | 93 | 106 | | | | | 284 |
| 2.50-2.99 | . | . | . | 4 | 121 | 56 | 2 | | | | 183 |
| 3.00-3.49 | . | . | . | . | 12 | 137 | 5 | | | | 154 |
| 3.50-3.99 | . | . | . | . | . | 79 | 22 | | | | 101 |
| 4.00-4.49 | . | . | . | . | . | 6 | 62 | 2 | | | 70 |
| 4.50-4.99 | . | . | . | . | . | . | 16 | 7 | | | 23 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 7 | | | 10 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | | 0 |
| TOTAL | 119 | 721 | 1789 | 1029 | 474 | 405 | 110 | 16 | 3 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.9 NO. OF CASES= 4379.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 98 | 359 | 121 | 7 | | | | | | | 585 |
| 0.50-0.99 | . | 219 | 1104 | 114 | 6 | | | | | | 1443 |
| 1.00-1.49 | . | . | 202 | 376 | 55 | 2 | | | | | 635 |
| 1.50-1.99 | . | . | 8 | 136 | 126 | 9 | | | | | 279 |
| 2.00-2.49 | . | . | . | 32 | 59 | 53 | | | | | 144 |
| 2.50-2.99 | . | . | . | 3 | 39 | 39 | 3 | | | | 84 |
| 3.00-3.49 | . | . | . | . | 4 | 45 | 5 | 1 | | | 55 |
| 3.50-3.99 | . | . | . | . | . | 26 | 19 | 1 | | | 46 |
| 4.00-4.49 | . | . | . | . | . | 2 | 20 | 3 | | | 25 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 10 | | | 14 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | | | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | | | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | | | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | | 0 |
| TOTAL | 98 | 578 | 1435 | 668 | 289 | 176 | 51 | 18 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.7 NO. OF CASES= 3112.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 156 | 579 | 196 | 8 | | | | | | | 939 |
| 0.50-0.99 | . | 273 | 1384 | 131 | 5 | | | | | | 1793 |
| 1.00-1.49 | . | 1 | 293 | 507 | 27 | 1 | | | | | 829 |
| 1.50-1.99 | . | . | 13 | 186 | 139 | 6 | | | | | 344 |
| 2.00-2.49 | . | . | . | 48 | 68 | 55 | | | | | 171 |
| 2.50-2.99 | . | . | . | 1 | 55 | 32 | 4 | | | | 92 |
| 3.00-3.49 | . | . | . | . | 4 | 58 | 8 | | | | 70 |
| 3.50-3.99 | . | . | . | . | . | 23 | 21 | 2 | | | 46 |
| 4.00-4.49 | . | . | . | . | . | 1 | 14 | 4 | | | 19 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 6 | | | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | | | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | | | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | | | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | | 0 |
| TOTAL | 156 | 853 | 1886 | 881 | 298 | 176 | 50 | 17 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 4051.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 217 | 730 | 207 | 4 | | | | | | | 1158 |
| 0.50-0.99 | . | 361 | 1543 | 114 | 6 | | | | | | 2024 |
| 1.00-1.49 | . | . | 312 | 350 | 29 | 1 | | | | | 692 |
| 1.50-1.99 | . | . | 13 | 156 | 90 | 9 | | | | | 268 |
| 2.00-2.49 | . | . | . | 41 | 34 | 20 | | | | | 95 |
| 2.50-2.99 | . | . | . | . | 67 | 22 | 5 | | | | 94 |
| 3.00-3.49 | . | . | . | . | 2 | 53 | 6 | | | | 61 |
| 3.50-3.99 | . | . | . | . | . | 24 | 13 | 2 | | | 39 |
| 4.00-4.49 | . | . | . | . | . | . | 13 | 7 | | | 20 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 4 | | | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | | | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | | | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | | | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | | 0 |
| TOTAL | 217 | 1091 | 2075 | 665 | 228 | 129 | 40 | 18 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.3 NO. OF CASES= 4187.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 441 | 1296 | 288 | 11 | . | . | . | . | . | . | 2036 |
| 0.50-0.99 | . | 654 | 2099 | 129 | 21 | . | . | . | . | . | 2903 |
| 1.00-1.49 | . | . | 547 | 452 | 43 | 5 | . | . | . | . | 1047 |
| 1.50-1.99 | . | . | 13 | 340 | 89 | 7 | . | . | . | . | 449 |
| 2.00-2.49 | . | . | . | 79 | 72 | 28 | 1 | . | . | . | 180 |
| 2.50-2.99 | . | . | . | 2 | 88 | 28 | . | . | . | . | 118 |
| 3.00-3.49 | . | . | . | . | 6 | 71 | 3 | 3 | . | . | 83 |
| 3.50-3.99 | . | . | . | . | . | 40 | 14 | 1 | . | . | 55 |
| 4.00-4.49 | . | . | . | . | . | 5 | 36 | 5 | . | . | 46 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 9 | 1 | . | 15 |
| 5.00-5.49 | . | . | . | . | . | . | . | 8 | 1 | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | 1 | . | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 441 | 1950 | 2947 | 1013 | 319 | 184 | 59 | 31 | 9 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.2 NO. OF CASES= 6519.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 430 | 958 | 317 | 11 | . | . | . | . | . | . | 1716 |
| 0.50-0.99 | . | 579 | 1097 | 122 | 13 | 2 | . | . | . | . | 1813 |
| 1.00-1.49 | . | . | 239 | 271 | 51 | 17 | . | . | . | . | 578 |
| 1.50-1.99 | . | . | 13 | 114 | 48 | 24 | 2 | . | . | . | 201 |
| 2.00-2.49 | . | . | . | 37 | 33 | 18 | 3 | . | . | . | 91 |
| 2.50-2.99 | . | . | . | . | 27 | 20 | 7 | . | . | . | 54 |
| 3.00-3.49 | . | . | . | . | . | 18 | 7 | . | . | . | 25 |
| 3.50-3.99 | . | . | . | . | . | 11 | 3 | 2 | . | . | 16 |
| 4.00-4.49 | . | . | . | . | . | 1 | 7 | . | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 430 | 1537 | 1666 | 555 | 172 | 111 | 29 | 5 | 2 | 2 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 4230.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 401 | 1043 | 633 | 191 | 21 | 1 | . | . | . | . | 2290 |
| 0.50-0.99 | . | 933 | 757 | 380 | 217 | 85 | 2 | . | . | . | 2374 |
| 1.00-1.49 | . | . | 173 | 194 | 115 | 88 | 7 | . | . | . | 577 |
| 1.50-1.99 | . | . | 32 | 47 | 41 | 34 | 9 | 1 | . | . | 164 |
| 2.00-2.49 | . | . | 2 | 3 | 17 | 27 | 7 | 2 | . | . | 58 |
| 2.50-2.99 | . | . | . | . | . | 4 | 8 | 2 | . | . | 14 |
| 3.00-3.49 | . | . | . | . | . | . | 4 | 4 | . | . | 8 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 401 | 1976 | 1597 | 815 | 411 | 239 | 37 | 9 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 5140.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 562 | 1032 | 599 | 287 | 75 | 6 | . | . | . | . | 2561 |
| 0.50-0.99 | . | 1152 | 304 | 214 | 217 | 109 | 3 | . | . | . | 1999 |
| 1.00-1.49 | . | . | 173 | 48 | 50 | 50 | 6 | 1 | . | . | 328 |
| 1.50-1.99 | . | . | 40 | 6 | 12 | 13 | 5 | 2 | . | . | 78 |
| 2.00-2.49 | . | . | 1 | 1 | 3 | 8 | 6 | . | . | . | 19 |
| 2.50-2.99 | . | . | . | . | . | 2 | 4 | . | . | . | 6 |
| 3.00-3.49 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 562 | 2184 | 1117 | 556 | 357 | 188 | 25 | 6 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 4683.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 459 | 863 | 402 | 60 | 13 | 1 | . | . | . | . | 1798 |
| 0.50-0.99 | . | 802 | 264 | 117 | 59 | 22 | 2 | . | . | . | 1266 |
| 1.00-1.49 | . | . | 189 | 12 | 25 | 32 | 3 | . | . | . | 261 |
| 1.50-1.99 | . | . | 32 | . | 7 | 6 | 6 | . | . | . | 51 |
| 2.00-2.49 | . | . | 2 | 2 | . | 4 | 1 | 1 | . | . | 10 |
| 2.50-2.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 459 | 1665 | 889 | 191 | 104 | 65 | 13 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 3176.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 271 | 606 | 287 | 31 | . | . | . | . | . | . | 1195 |
| 0.50-0.99 | . | 722 | 302 | 95 | 36 | 8 | . | . | . | . | 1163 |
| 1.00-1.49 | . | . | 182 | 6 | 18 | 16 | . | . | . | . | 222 |
| 1.50-1.99 | . | . | 52 | 3 | 1 | 4 | . | . | . | . | 60 |
| 2.00-2.49 | . | . | . | 2 | . | 2 | 1 | . | . | . | 5 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 271 | 1328 | 823 | 137 | 55 | 30 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 2480.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 276 | 687 | 407 | 42 | 1 | . | . | . | . | . | 1413 |
| 0.50-0.99 | . | 885 | 451 | 192 | 31 | 2 | . | . | . | . | 1561 |
| 1.00-1.49 | . | . | 193 | 45 | 37 | 16 | . | . | . | . | 291 |
| 1.50-1.99 | . | . | 71 | 7 | 18 | 7 | 3 | . | . | . | 106 |
| 2.00-2.49 | . | . | 2 | 4 | 2 | 10 | . | . | . | . | 18 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 276 | 1572 | 1124 | 292 | 89 | 35 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 3180.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 279 | 1040 | 842 | 56 | . | . | . | . | . | . | 2217 |
| 0.50-0.99 | . | 927 | 1503 | 552 | 59 | 5 | . | . | . | . | 3046 |
| 1.00-1.49 | . | . | 396 | 440 | 159 | 34 | 1 | . | . | . | 1030 |
| 1.50-1.99 | . | . | 79 | 172 | 185 | 47 | 2 | . | . | . | 485 |
| 2.00-2.49 | . | . | 3 | 42 | 72 | 81 | 12 | . | . | . | 210 |
| 2.50-2.99 | . | . | . | 2 | 31 | 33 | 11 | 2 | . | . | 79 |
| 3.00-3.49 | . | . | . | 1 | 4 | 13 | 5 | 6 | . | . | 29 |
| 3.50-3.99 | . | . | . | . | . | 10 | 6 | 1 | 1 | . | 18 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | 3 | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 279 | 1967 | 2823 | 1265 | 510 | 223 | 40 | 13 | 1 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.3 NO. OF CASES= 6673.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 324 | 2191 | 1053 | 17 | . | . | . | . | . | . | 3585 |
| 0.50-0.99 | . | 936 | 5545 | 1131 | 17 | 2 | . | . | . | . | 7631 |
| 1.00-1.49 | . | . | 1137 | 1779 | 428 | 14 | . | . | . | . | 3358 |
| 1.50-1.99 | . | . | 111 | 788 | 542 | 237 | 1 | . | . | . | 1679 |
| 2.00-2.49 | . | . | 1 | 265 | 282 | 379 | 45 | 2 | . | . | 974 |
| 2.50-2.99 | . | . | . | 7 | 305 | 223 | 114 | 20 | 1 | . | 670 |
| 3.00-3.49 | . | . | . | . | 16 | 241 | 77 | 44 | 4 | . | 382 |
| 3.50-3.99 | . | . | . | . | 1 | 79 | 105 | 53 | 5 | . | 243 |
| 4.00-4.49 | . | . | . | . | . | 3 | 68 | 65 | 11 | . | 147 |
| 4.50-4.99 | . | . | . | . | . | . | 18 | 51 | 11 | . | 80 |
| 5.00-5.49 | . | . | . | . | . | . | . | 32 | 19 | 2 | 53 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 23 | . | 26 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 13 | . | 13 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | 2 | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 3 | 3 |
| TOTAL | 324 | 3127 | 7847 | 3987 | 1591 | 1178 | 428 | 270 | 89 | 7 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 9.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 17644.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 267 | 1685 | 513 | 9 | . | . | . | . | . | . | 2474 |
| 0.50-0.99 | . | 635 | 3545 | 398 | 19 | . | . | . | . | . | 4597 |
| 1.00-1.49 | . | . | 828 | 1357 | 158 | 3 | . | . | . | . | 2346 |
| 1.50-1.99 | . | . | 68 | 720 | 472 | 68 | . | . | . | . | 1328 |
| 2.00-2.49 | . | . | . | 236 | 296 | 219 | 11 | . | . | . | 762 |
| 2.50-2.99 | . | . | . | 2 | 339 | 144 | 36 | 6 | . | . | 527 |
| 3.00-3.49 | . | . | . | . | 22 | 207 | 38 | 17 | 1 | . | 285 |
| 3.50-3.99 | . | . | . | . | . | 89 | 66 | 21 | 4 | . | 180 |
| 4.00-4.49 | . | . | . | . | . | 7 | 50 | 37 | 2 | . | 96 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 32 | 10 | . | 47 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 18 | 12 | . | 32 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 16 | 1 | 21 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 4 | 1 | 5 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 3 | 3 |
| TOTAL | 267 | 2320 | 4954 | 2722 | 1306 | 737 | 208 | 135 | 51 | 5 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.8 NO. OF CASES= 11897.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 165 | 885 | 325 | 5 | . | . | . | . | . | . | 1380 |
| 0.50-0.99 | . | 437 | 2127 | 189 | 14 | 1 | . | . | . | . | 2768 |
| 1.00-1.49 | . | . | 537 | 915 | 47 | 3 | . | . | . | . | 1502 |
| 1.50-1.99 | . | . | 42 | 702 | 242 | 8 | . | . | . | . | 994 |
| 2.00-2.49 | . | . | . | 189 | 332 | 35 | 1 | . | . | . | 557 |
| 2.50-2.99 | . | . | . | 2 | 419 | 51 | . | . | . | . | 472 |
| 3.00-3.49 | . | . | . | . | 11 | 194 | 2 | . | . | . | 207 |
| 3.50-3.99 | . | . | . | . | . | 56 | 3 | . | . | . | 59 |
| 4.00-4.49 | . | . | . | . | . | 6 | 3 | . | . | . | 9 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | . | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 165 | 1322 | 3031 | 2002 | 1065 | 354 | 14 | 2 | 0 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.8 NO OF CASES= 7451.

STATION S36 47.53N 87.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

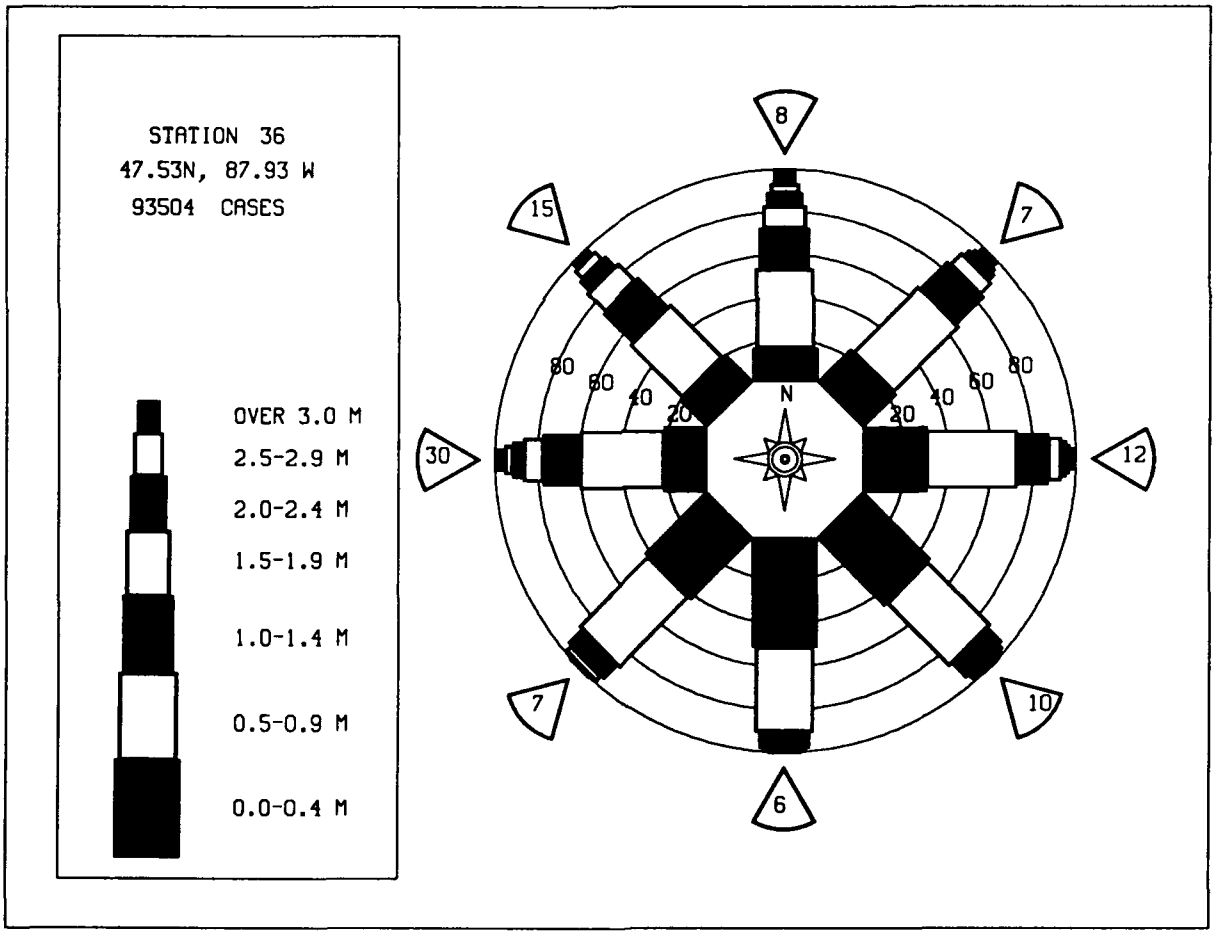
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 114 | 383 | 186 | 10 | . | . | . | . | . | . | 693 |
| 0.50-0.99 | . | 272 | 1317 | 145 | 10 | . | . | . | . | . | 1744 |
| 1.00-1.49 | . | . | 387 | 563 | 55 | 2 | . | . | . | . | 1007 |
| 1.50-1.99 | . | . | 27 | 421 | 168 | 19 | . | . | . | . | 635 |
| 2.00-2.49 | . | . | . | 139 | 183 | 54 | . | . | . | . | 376 |
| 2.50-2.99 | . | . | . | 3 | 207 | 57 | 3 | . | . | . | 270 |
| 3.00-3.49 | . | . | . | . | 19 | 150 | 4 | . | . | . | 173 |
| 3.50-3.99 | . | . | . | . | . | 62 | 13 | . | . | . | 75 |
| 4.00-4.49 | . | . | . | . | . | 7 | 23 | 1 | . | . | 31 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 5 | . | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 114 | 655 | 1917 | 1281 | 642 | 351 | 44 | 9 | 0 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.9 NO. OF CASES= 4702.

STATION S36 47.53N 87.93W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 458 | 1481 | 655 | 77 | 11 | . | . | . | . | . | 2682 |
| 0.50-0.99 | . | 1004 | 2463 | 419 | 74 | 23 | . | . | . | . | 3983 |
| 1.00-1.49 | . | . | 610 | 783 | 135 | 28 | 1 | . | . | . | 1557 |
| 1.50-1.99 | . | . | 64 | 406 | 237 | 52 | 2 | . | . | . | 761 |
| 2.00-2.49 | . | . | 1 | 120 | 155 | 110 | 9 | . | . | . | 395 |
| 2.50-2.99 | . | . | . | 2 | 170 | 71 | 20 | 3 | . | . | 266 |
| 3.00-3.49 | . | . | . | . | 10 | 119 | 16 | 7 | . | . | 152 |
| 3.50-3.99 | . | . | . | . | . | 50 | 29 | 8 | 1 | . | 88 |
| 4.00-4.49 | . | . | . | . | . | 4 | 30 | 12 | 1 | . | 47 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 13 | 2 | . | 21 |
| 5.00-5.49 | . | . | . | . | . | . | . | 8 | 3 | . | 11 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 4 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 458 | 2485 | 3793 | 1807 | 792 | 457 | 113 | 52 | 13 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 9.2 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S36 (47.53N 87.93W)

| | MONTH | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| YEAR | | | | | | | | | | | | | MEAN |
| 1956 | 0.8 | 1.2 | 1.2 | 1.2 | 0.8 | 0.7 | 0.6 | 0.5 | 0.7 | 1.1 | 1.4 | 1.4 | 1.0 |
| 1957 | 1.4 | 1.3 | 1.0 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 0.8 | 1.3 | 1.3 | 1.0 |
| 1958 | 0.9 | 1.4 | 0.6 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 1.0 | 1.6 | 1.1 | 0.9 |
| 1959 | 1.1 | 1.1 | 0.9 | 0.9 | 0.9 | 0.6 | 0.5 | 0.5 | 0.8 | 0.9 | 1.4 | 1.6 | 0.9 |
| 1960 | 1.2 | 1.2 | 0.9 | 1.1 | 0.8 | 0.5 | 0.5 | 0.6 | 0.7 | 1.0 | 1.5 | 1.2 | 0.9 |
| 1961 | 1.0 | 1.1 | 1.2 | 0.9 | 0.8 | 0.6 | 0.4 | 0.4 | 0.7 | 0.9 | 1.0 | 1.2 | 0.8 |
| 1962 | 1.5 | 1.0 | 0.8 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.8 | 0.8 | 1.2 | 0.8 |
| 1963 | 1.2 | 1.3 | 1.1 | 0.8 | 0.7 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 1.2 | 1.3 | 0.9 |
| 1964 | 1.3 | 1.1 | 1.3 | 1.1 | 0.8 | 0.6 | 0.6 | 0.8 | 0.9 | 1.0 | 1.2 | 1.1 | 1.0 |
| 1965 | 1.6 | 1.6 | 1.1 | 0.8 | 0.6 | 0.6 | 0.6 | 0.5 | 0.7 | 1.2 | 1.8 | 1.5 | 1.1 |
| 1966 | 1.7 | 1.6 | 1.9 | 1.2 | 1.2 | 0.6 | 0.7 | 0.6 | 1.0 | 1.6 | 1.7 | 1.6 | 1.3 |
| 1967 | 1.6 | 1.6 | 1.4 | 1.1 | 1.1 | 0.7 | 0.7 | 0.7 | 0.9 | 1.7 | 1.5 | 1.9 | 1.2 |
| 1968 | 1.3 | 2.4 | 1.6 | 1.2 | 0.9 | 0.7 | 0.7 | 0.8 | 0.8 | 1.3 | 1.8 | 1.7 | 1.3 |
| 1969 | 1.7 | 1.0 | 1.4 | 0.9 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 1.2 | 1.3 | 1.1 | 1.0 |
| 1970 | 1.1 | 1.4 | 1.1 | 1.1 | 0.9 | 0.5 | 0.6 | 0.6 | 0.9 | 1.1 | 1.4 | 1.1 | 1.0 |
| 1971 | 1.4 | 1.4 | 1.2 | 1.0 | 0.8 | 0.4 | 0.6 | 0.5 | 0.7 | 1.1 | 1.3 | 1.1 | 1.0 |
| 1972 | 1.5 | 1.2 | 1.2 | 0.8 | 0.5 | 0.5 | 0.4 | 0.5 | 0.9 | 1.2 | 1.0 | 1.2 | 0.9 |
| 1973 | 1.3 | 1.2 | 1.2 | 1.0 | 0.8 | 0.6 | 0.6 | 0.4 | 0.8 | 0.9 | 1.3 | 1.1 | 0.9 |
| 1974 | 1.0 | 0.8 | 1.2 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.8 | 0.9 | 1.2 | 1.1 | 0.9 |
| 1975 | 1.1 | 1.1 | 1.2 | 0.7 | 0.4 | 0.5 | 0.5 | 0.6 | 0.7 | 1.0 | 1.4 | 1.0 | 0.9 |
| 1976 | 1.4 | 1.3 | 1.4 | 0.9 | 0.7 | 0.6 | 0.4 | 0.6 | 0.7 | 0.6 | 1.0 | 1.1 | 0.9 |
| 1977 | 1.5 | 1.6 | 1.5 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.8 | 0.9 | 1.0 | 1.4 | 0.9 |
| 1978 | 1.3 | 1.0 | 0.9 | 1.0 | 0.6 | 0.5 | 0.5 | 0.6 | 0.9 | 0.8 | 1.2 | 1.3 | 0.9 |
| 1979 | 1.1 | 0.9 | 1.2 | 0.8 | 0.7 | 0.6 | 0.4 | 0.5 | 0.7 | 0.9 | 1.2 | 1.2 | 0.8 |
| 1980 | 1.2 | 0.9 | 1.1 | 0.8 | 0.6 | 0.6 | 0.4 | 0.6 | 0.9 | 1.2 | 0.9 | 1.3 | 0.9 |
| 1981 | 1.1 | 1.1 | 1.1 | 0.8 | 0.6 | 0.6 | 0.4 | 0.4 | 0.9 | 1.0 | 1.1 | 0.9 | 0.8 |
| 1982 | 1.7 | 1.3 | 1.5 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 1.0 | 1.2 | 1.3 | 1.0 |
| 1983 | 1.1 | 0.9 | 1.5 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.7 | 0.9 | 1.5 | 1.4 | 0.9 |
| 1984 | 1.1 | 1.1 | 1.3 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.8 | 0.9 | 1.3 | 1.4 | 0.9 |
| 1985 | 1.5 | 1.2 | 1.5 | 0.9 | 0.6 | 0.7 | 0.4 | 0.5 | 0.6 | 0.8 | 1.1 | 1.4 | 0.9 |
| 1986 | 1.3 | 0.9 | 1.2 | 1.1 | 0.6 | 0.6 | 0.4 | 0.5 | 0.8 | 0.8 | 1.2 | 1.1 | 0.9 |
| 1987 | 1.1 | 1.1 | 1.3 | 0.7 | 0.6 | 0.5 | 0.4 | 0.6 | 0.6 | 1.0 | 1.2 | 1.0 | 0.8 |
| MEAN | 1.3 | 1.2 | 1.2 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 1.0 | 1.3 | 1.3 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S36 (47.53N 87.93W)

| | MONTH | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| YEAR | | | | | | | | | | | | |
| 1956 | 3.0 | 4.1 | 6.5 | 4.0 | 2.9 | 2.3 | 1.5 | 1.5 | 3.0 | 4.8 | 4.1 | 4.7 |
| 1957 | 4.0 | 3.7 | 3.8 | 4.2 | 2.8 | 2.5 | 2.7 | 2.2 | 3.0 | 2.8 | 4.8 | 5.1 |
| 1958 | 3.7 | 3.8 | 2.8 | 5.0 | 3.0 | 1.8 | 2.1 | 2.3 | 3.4 | 4.3 | 5.7 | 4.9 |
| 1959 | 3.2 | 4.5 | 4.3 | 3.2 | 4.3 | 1.7 | 2.0 | 1.8 | 3.1 | 3.2 | 5.3 | 6.3 |
| 1960 | 4.0 | 3.5 | 4.4 | 3.5 | 3.2 | 1.8 | 1.7 | 2.7 | 2.6 | 3.9 | 4.4 | 4.1 |
| 1961 | 3.4 | 4.0 | 5.1 | 3.0 | 2.2 | 2.7 | 2.8 | 1.9 | 3.6 | 3.2 | 4.3 | 4.5 |
| 1962 | 4.3 | 3.8 | 3.7 | 3.3 | 2.2 | 1.6 | 2.7 | 2.1 | 2.6 | 5.5 | 4.3 | 4.0 |
| 1963 | 4.2 | 3.7 | 4.3 | 3.5 | 1.8 | 1.6 | 1.6 | 1.6 | 2.3 | 2.4 | 3.7 | 5.0 |
| 1964 | 5.4 | 4.8 | 3.8 | 4.4 | 2.6 | 1.9 | 1.6 | 2.7 | 4.1 | 3.9 | 5.2 | 3.4 |
| 1965 | 4.4 | 6.3 | 4.4 | 2.9 | 2.6 | 2.2 | 1.9 | 2.2 | 3.1 | 4.5 | 6.2 | 4.5 |
| 1966 | 7.4 | 5.4 | 5.9 | 4.2 | 4.0 | 3.7 | 2.2 | 2.9 | 3.3 | 6.6 | 5.4 | 5.5 |
| 1967 | 5.2 | 4.4 | 4.2 | 5.0 | 3.6 | 2.2 | 3.3 | 2.8 | 3.7 | 5.1 | 4.7 | 6.3 |
| 1968 | 4.6 | 6.3 | 6.5 | 4.7 | 3.3 | 2.7 | 3.6 | 3.3 | 3.4 | 4.9 | 5.7 | 6.0 |
| 1969 | 4.6 | 4.6 | 4.8 | 3.7 | 2.0 | 2.0 | 2.3 | 2.6 | 2.6 | 3.9 | 4.1 | 4.0 |
| 1970 | 4.2 | 4.6 | 4.1 | 5.0 | 3.4 | 2.0 | 2.8 | 2.0 | 3.8 | 3.7 | 4.4 | 5.2 |
| 1971 | 4.5 | 5.8 | 4.7 | 3.0 | 3.5 | 1.7 | 1.8 | 1.6 | 2.4 | 4.7 | 5.7 | 4.8 |
| 1972 | 4.4 | 4.3 | 4.1 | 3.3 | 1.3 | 1.8 | 1.3 | 1.4 | 3.9 | 5.0 | 3.7 | 4.7 |
| 1973 | 3.5 | 3.3 | 3.9 | 3.5 | 3.1 | 1.3 | 2.3 | 1.3 | 3.9 | 3.0 | 3.6 | 3.8 |
| 1974 | 3.7 | 3.6 | 4.0 | 3.2 | 1.8 | 1.7 | 2.6 | 2.0 | 2.3 | 2.7 | 3.8 | 4.1 |
| 1975 | 4.3 | 5.6 | 4.0 | 2.0 | 1.2 | 3.0 | 2.1 | 2.1 | 2.4 | 5.6 | 5.3 | 4.6 |
| 1976 | 5.5 | 4.5 | 4.7 | 3.5 | 2.7 | 1.5 | 1.0 | 1.8 | 2.7 | 2.7 | 3.2 | 5.3 |
| 1977 | 5.3 | 6.1 | 5.5 | 2.5 | 1.9 | 1.6 | 3.2 | 2.3 | 4.4 | 4.1 | 4.8 | 5.4 |
| 1978 | 4.2 | 3.5 | 4.0 | 3.3 | 2.8 | 1.6 | 1.5 | 1.9 | 2.9 | 3.7 | 3.8 | 3.8 |
| 1979 | 3.4 | 3.8 | 4.2 | 4.2 | 2.1 | 1.7 | 2.0 | 1.8 | 2.0 | 4.4 | 2.9 | 3.0 |
| 1980 | 6.5 | 3.7 | 4.7 | 2.6 | 1.9 | 1.8 | 1.3 | 2.0 | 3.6 | 5.6 | 4.6 | 5.1 |
| 1981 | 4.0 | 3.3 | 4.6 | 3.3 | 1.7 | 3.3 | 1.1 | 1.2 | 5.8 | 3.9 | 5.7 | 3.5 |
| 1982 | 6.0 | 4.2 | 9.2 | 5.9 | 2.5 | 2.8 | 2.0 | 1.6 | 2.7 | 4.2 | 5.6 | 4.9 |
| 1983 | 4.3 | 4.8 | 4.1 | 3.1 | 1.7 | 2.5 | 2.1 | 1.7 | 2.8 | 3.4 | 5.8 | 4.0 |
| 1984 | 5.0 | 3.9 | 5.3 | 3.7 | 3.0 | 2.1 | 2.6 | 1.6 | 2.0 | 4.2 | 6.2 | 5.0 |
| 1985 | 5.4 | 3.6 | 7.0 | 4.0 | 2.7 | 4.1 | 1.1 | 1.9 | 3.2 | 3.1 | 2.8 | 5.3 |
| 1986 | 4.3 | 3.5 | 4.0 | 3.8 | 3.4 | 1.4 | 1.3 | 1.1 | 3.0 | 4.5 | 4.4 | 4.1 |
| 1987 | 3.3 | 5.2 | 4.6 | 2.7 | 2.2 | 1.5 | 1.7 | 2.7 | 2.1 | 4.3 | 4.2 | 3.8 |

32 YR. STATISTICS FOR WIS STATION S36

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.5 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.5 |
| LARGEST WAVE HS | (METERS) | 9.2 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 268.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 82031400 |

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 98 | 478 | 188 | 6 | . | . | . | . | . | . | 770 |
| 0.50-0.99 | . | 220 | 1440 | 142 | 5 | . | . | . | . | . | 1807 |
| 1.00-1.49 | . | . | 343 | 558 | 42 | 3 | . | . | . | . | 946 |
| 1.50-1.99 | . | . | 32 | 263 | 208 | 20 | . | . | . | . | 523 |
| 2.00-2.49 | . | . | . | 94 | 84 | 91 | . | . | . | . | 269 |
| 2.50-2.99 | . | . | . | . | 140 | 67 | 2 | . | . | . | 209 |
| 3.00-3.49 | . | . | . | . | 7 | 152 | 3 | 1 | . | . | 163 |
| 3.50-3.99 | . | . | . | . | . | 82 | 19 | . | . | . | 101 |
| 4.00-4.49 | . | . | . | . | . | 9 | 68 | 1 | . | . | 78 |
| 4.50-4.99 | . | . | . | . | . | . | 18 | 4 | . | . | 22 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 7 | . | . | 10 |
| 5.50-5.99 | . | . | . | . | . | . | . | 6 | 1 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 98 | 698 | 2003 | 1063 | 486 | 424 | 113 | 19 | 1 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.9 NO. OF CASES= 4598.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 93 | 356 | 136 | 1 | . | . | . | . | . | . | 586 |
| 0.50-0.99 | . | 216 | 1267 | 112 | 2 | . | . | . | . | . | 1597 |
| 1.00-1.49 | . | . | 243 | 430 | 40 | 2 | . | . | . | . | 715 |
| 1.50-1.99 | . | . | 9 | 151 | 131 | 11 | . | . | . | . | 302 |
| 2.00-2.49 | . | . | . | 40 | 65 | 47 | 1 | . | . | . | 153 |
| 2.50-2.99 | . | . | . | . | 54 | 40 | 2 | . | . | . | 96 |
| 3.00-3.49 | . | . | . | . | 1 | 62 | 6 | . | . | . | 69 |
| 3.50-3.99 | . | . | . | . | . | 34 | 22 | . | . | . | 56 |
| 4.00-4.49 | . | . | . | . | . | 3 | 21 | . | . | . | 24 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 3 | . | . | 10 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 93 | 572 | 1655 | 734 | 293 | 199 | 59 | 7 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.7 NO. OF CASES= 3389.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 112 | 578 | 202 | 1 | . | . | . | . | . | . | 893 |
| 0.50-0.99 | . | 284 | 1470 | 99 | 7 | . | . | . | . | . | 1860 |
| 1.00-1.49 | . | . | 295 | 533 | 33 | 1 | . | . | . | . | 862 |
| 1.50-1.99 | . | . | 9 | 191 | 130 | 8 | . | . | . | . | 338 |
| 2.00-2.49 | . | . | . | 39 | 58 | 38 | . | . | . | . | 135 |
| 2.50-2.99 | . | . | . | . | 69 | 31 | 1 | . | . | . | 101 |
| 3.00-3.49 | . | . | . | . | 3 | 59 | 6 | . | . | . | 68 |
| 3.50-3.99 | . | . | . | . | . | 27 | 24 | . | . | . | 51 |
| 4.00-4.49 | . | . | . | . | . | . | 12 | . | . | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 7 | . | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 112 | 862 | 1976 | 863 | 300 | 164 | 45 | 10 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 4063.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 188 | 753 | 182 | 1 | . | . | . | . | . | . | 1124 |
| 0.50-0.99 | . | 353 | 1603 | 90 | 3 | . | . | . | . | . | 2049 |
| 1.00-1.49 | . | . | 288 | 339 | 22 | 1 | . | . | . | . | 650 |
| 1.50-1.99 | . | . | 7 | 154 | 91 | 2 | . | . | . | . | 254 |
| 2.00-2.49 | . | . | . | 37 | 34 | 19 | 2 | . | . | . | 92 |
| 2.50-2.99 | . | . | . | . | 54 | 36 | 2 | . | . | . | 92 |
| 3.00-3.49 | . | . | . | . | 2 | 40 | 5 | . | . | . | 47 |
| 3.50-3.99 | . | . | . | . | . | 22 | 5 | . | . | . | 27 |
| 4.00-4.49 | . | . | . | . | . | 1 | 12 | 2 | . | . | 15 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 3 | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 188 | 1106 | 2080 | 621 | 206 | 121 | 28 | 5 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 4084.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 335 | 1171 | 249 | 2 | . | . | . | . | . | . | 1757 |
| 0.50-0.99 | . | 545 | 1873 | 139 | 6 | . | . | . | . | . | 2563 |
| 1.00-1.49 | . | . | 422 | 394 | 48 | 5 | . | . | . | . | 869 |
| 1.50-1.99 | . | . | 16 | 248 | 71 | 7 | . | . | . | . | 342 |
| 2.00-2.49 | . | . | . | 63 | 62 | 23 | . | . | . | . | 148 |
| 2.50-2.99 | . | . | . | 2 | 75 | 24 | 1 | . | . | . | 102 |
| 3.00-3.49 | . | . | . | . | 1 | 63 | 2 | 2 | . | . | 68 |
| 3.50-3.99 | . | . | . | . | . | 40 | 9 | 1 | . | . | 50 |
| 4.00-4.49 | . | . | . | . | . | 2 | 26 | 2 | . | . | 30 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 8 | 1 | . | 17 |
| 5.00-5.49 | . | . | . | . | . | . | . | 8 | . | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 335 | 1716 | 2560 | 848 | 263 | 164 | 46 | 23 | 4 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 5584.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 299 | 855 | 228 | 5 | . | . | . | . | . | . | 1387 |
| 0.50-0.99 | . | 386 | 1219 | 110 | 4 | . | . | . | . | . | 1719 |
| 1.00-1.49 | . | . | 291 | 303 | 65 | 4 | . | . | . | . | 663 |
| 1.50-1.99 | . | . | 5 | 150 | 64 | 35 | 1 | . | . | . | 255 |
| 2.00-2.49 | . | . | . | 42 | 33 | 22 | 2 | . | . | . | 99 |
| 2.50-2.99 | . | . | . | . | 37 | 11 | 1 | . | . | . | 49 |
| 3.00-3.49 | . | . | . | . | 1 | 29 | 3 | . | . | . | 33 |
| 3.50-3.99 | . | . | . | . | . | 17 | 14 | 3 | . | . | 34 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | 2 | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 299 | 1241 | 1743 | 610 | 204 | 118 | 23 | 8 | 4 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.1 NO. OF CASES= 3986.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 305 | 878 | 752 | 57 | . | . | . | . | . | . | 1992 |
| 0.50-0.99 | . | 483 | 1244 | 541 | 105 | 9 | . | . | . | . | 2382 |
| 1.00-1.49 | . | . | 294 | 236 | 180 | 91 | . | . | . | . | 801 |
| 1.50-1.99 | . | . | 18 | 113 | 73 | 58 | 3 | . | . | . | 265 |
| 2.00-2.49 | . | . | . | 37 | 19 | 21 | 6 | . | . | . | 83 |
| 2.50-2.99 | . | . | . | 3 | 25 | 18 | 6 | 2 | . | . | 54 |
| 3.00-3.49 | . | . | . | . | 3 | 20 | 5 | . | . | . | 28 |
| 3.50-3.99 | . | . | . | . | . | 8 | 16 | 1 | . | . | 25 |
| 4.00-4.49 | . | . | . | . | . | . | 9 | 2 | . | . | 11 |
| 4.50-4.99 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 305 | 1361 | 2308 | 987 | 405 | 225 | 45 | 8 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 5292.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 418 | 999 | 1336 | 340 | 28 | . | . | . | . | . | 3121 |
| 0.50-0.99 | . | 1098 | 627 | 897 | 597 | 82 | . | . | . | . | 3301 |
| 1.00-1.49 | . | . | 239 | 121 | 236 | 216 | 8 | 1 | . | . | 821 |
| 1.50-1.99 | . | . | 37 | 64 | 37 | 125 | 18 | 1 | . | . | 282 |
| 2.00-2.49 | . | . | 1 | 19 | 13 | 13 | 14 | 6 | . | . | 66 |
| 2.50-2.99 | . | . | . | . | 8 | 8 | 2 | . | . | . | 18 |
| 3.00-3.49 | . | . | . | . | 1 | 7 | . | . | . | . | 8 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 418 | 2097 | 2240 | 1441 | 920 | 452 | 44 | 8 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.5 NO. OF CASES= 7139.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 362 | 793 | 418 | 39 | 2 | . | . | . | . | . | 1614 |
| 0.50-0.99 | . | 779 | 340 | 189 | 133 | 24 | . | . | . | . | 1465 |
| 1.00-1.49 | . | . | 183 | 20 | 34 | 51 | . | . | . | . | 288 |
| 1.50-1.99 | . | . | 55 | . | 3 | 28 | 8 | 1 | . | . | 95 |
| 2.00-2.49 | . | . | 3 | . | 1 | 1 | 9 | 1 | . | . | 15 |
| 2.50-2.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 362 | 1572 | 999 | 248 | 173 | 104 | 18 | 2 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 3261.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 240 | 607 | 313 | 17 | . | . | . | . | . | . | 1177 |
| 0.50-0.99 | . | 674 | 312 | 129 | 37 | 8 | . | . | . | . | 1160 |
| 1.00-1.49 | . | . | 128 | 18 | 28 | 24 | 1 | . | . | . | 199 |
| 1.50-1.99 | . | . | 62 | 1 | 3 | 13 | . | . | . | . | 79 |
| 2.00-2.49 | . | . | 1 | 5 | . | 3 | 2 | . | . | . | 11 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 240 | 1281 | 816 | 171 | 68 | 48 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 2464.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 202 | 657 | 325 | 27 | 1 | . | . | . | . | . | 1212 |
| 0.50-0.99 | . | 733 | 449 | 199 | 32 | 2 | . | . | . | . | 1415 |
| 1.00-1.49 | . | . | 190 | 36 | 51 | 18 | . | . | . | . | 295 |
| 1.50-1.99 | . | . | 86 | 6 | 8 | 14 | . | . | . | . | 114 |
| 2.00-2.49 | . | . | 2 | 8 | . | 5 | 2 | . | . | . | 17 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 202 | 1390 | 1052 | 276 | 92 | 39 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 2863.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 228 | 865 | 625 | 31 | . | . | . | . | . | . | 1749 |
| 0.50-0.99 | . | 843 | 1088 | 428 | 50 | . | . | . | . | . | 2409 |
| 1.00-1.49 | . | . | 337 | 273 | 144 | 35 | . | . | . | . | 789 |
| 1.50-1.99 | . | . | 100 | 118 | 112 | 50 | 2 | . | . | . | 382 |
| 2.00-2.49 | . | . | 3 | 25 | 31 | 53 | 8 | 1 | . | . | 121 |
| 2.50-2.99 | . | . | . | 3 | 14 | 19 | 5 | 4 | . | . | 45 |
| 3.00-3.49 | . | . | . | . | 1 | 12 | 4 | 3 | . | . | 20 |
| 3.50-3.99 | . | . | . | . | . | 4 | 5 | . | . | . | 9 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 228 | 1708 | 2153 | 878 | 352 | 173 | 25 | 10 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 5182.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 265 | 1972 | 1106 | 16 | . | . | . | . | . | . | 3359 |
| 0.50-0.99 | . | 812 | 5335 | 1321 | 22 | . | . | . | . | . | 7490 |
| 1.00-1.49 | . | . | 1098 | 1782 | 506 | 26 | 1 | . | . | . | 3413 |
| 1.50-1.99 | . | . | 104 | 706 | 549 | 291 | 3 | . | . | . | 1653 |
| 2.00-2.49 | . | . | . | 232 | 288 | 404 | 57 | 1 | . | . | 982 |
| 2.50-2.99 | . | . | . | 9 | 257 | 210 | 106 | 34 | 1 | . | 617 |
| 3.00-3.49 | . | . | . | . | 20 | 189 | 75 | 59 | 8 | . | 351 |
| 3.50-3.99 | . | . | . | . | . | 67 | 91 | 55 | 7 | . | 220 |
| 4.00-4.49 | . | . | . | . | . | 6 | 42 | 54 | 14 | . | 116 |
| 4.50-4.99 | . | . | . | . | . | . | 13 | 37 | 19 | . | 69 |
| 5.00-5.49 | . | . | . | . | . | . | . | 24 | 22 | 2 | 48 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 22 | . | 22 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 12 | 1 | 13 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 4 | 4 |
| TOTAL | 265 | 2784 | 7643 | 4066 | 1642 | 1193 | 388 | 264 | 105 | 7 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 9.3 MEAN TP(SEC)= 4.9 NO. OF CASES= 17191.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 211 | 1642 | 496 | 1 | . | . | . | . | . | . | 2350 |
| 0.50-0.99 | . | 622 | 3621 | 435 | 8 | . | . | . | . | . | 4686 |
| 1.00-1.49 | . | . | 748 | 1455 | 199 | 3 | . | . | . | . | 2405 |
| 1.50-1.99 | . | . | 40 | 714 | 514 | 86 | . | . | . | . | 1354 |
| 2.00-2.49 | . | . | . | 224 | 313 | 228 | 12 | . | . | . | 777 |
| 2.50-2.99 | . | . | . | 2 | 265 | 155 | 45 | 9 | . | . | 476 |
| 3.00-3.49 | . | . | . | . | 24 | 231 | 47 | 19 | . | . | 321 |
| 3.50-3.99 | . | . | . | . | . | 78 | 62 | 29 | 7 | . | 176 |
| 4.00-4.49 | . | . | . | . | . | 11 | 48 | 33 | 7 | . | 99 |
| 4.50-4.99 | . | . | . | . | . | 1 | 4 | 32 | 17 | 1 | 55 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 11 | 9 | 2 | 23 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 13 | 1 | 14 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 6 | 2 | 8 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 211 | 2264 | 4905 | 2831 | 1323 | 793 | 219 | 133 | 60 | 9 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.9 NO. OF CASES= 11939.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 140 | 883 | 287 | 1 | . | . | . | . | . | . | 1311 |
| 0.50-0.99 | . | 413 | 2146 | 198 | 6 | . | . | . | . | . | 2763 |
| 1.00-1.49 | . | . | 522 | 988 | 55 | 2 | . | . | . | . | 1567 |
| 1.50-1.99 | . | . | 43 | 626 | 294 | 6 | . | . | . | . | 969 |
| 2.00-2.49 | . | . | . | 192 | 310 | 54 | . | . | . | . | 556 |
| 2.50-2.99 | . | . | . | 1 | 374 | 79 | 1 | . | . | . | 455 |
| 3.00-3.49 | . | . | . | . | 65 | 208 | 1 | . | . | . | 274 |
| 3.50-3.99 | . | . | . | . | . | 69 | 8 | . | . | . | 77 |
| 4.00-4.49 | . | . | . | . | . | 14 | 7 | . | . | . | 21 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 1 | . | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 140 | 1296 | 2998 | 2006 | 1104 | 432 | 24 | 4 | 0 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.8 NO. OF CASES= 7497.

STATION S37 47.53N 87.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

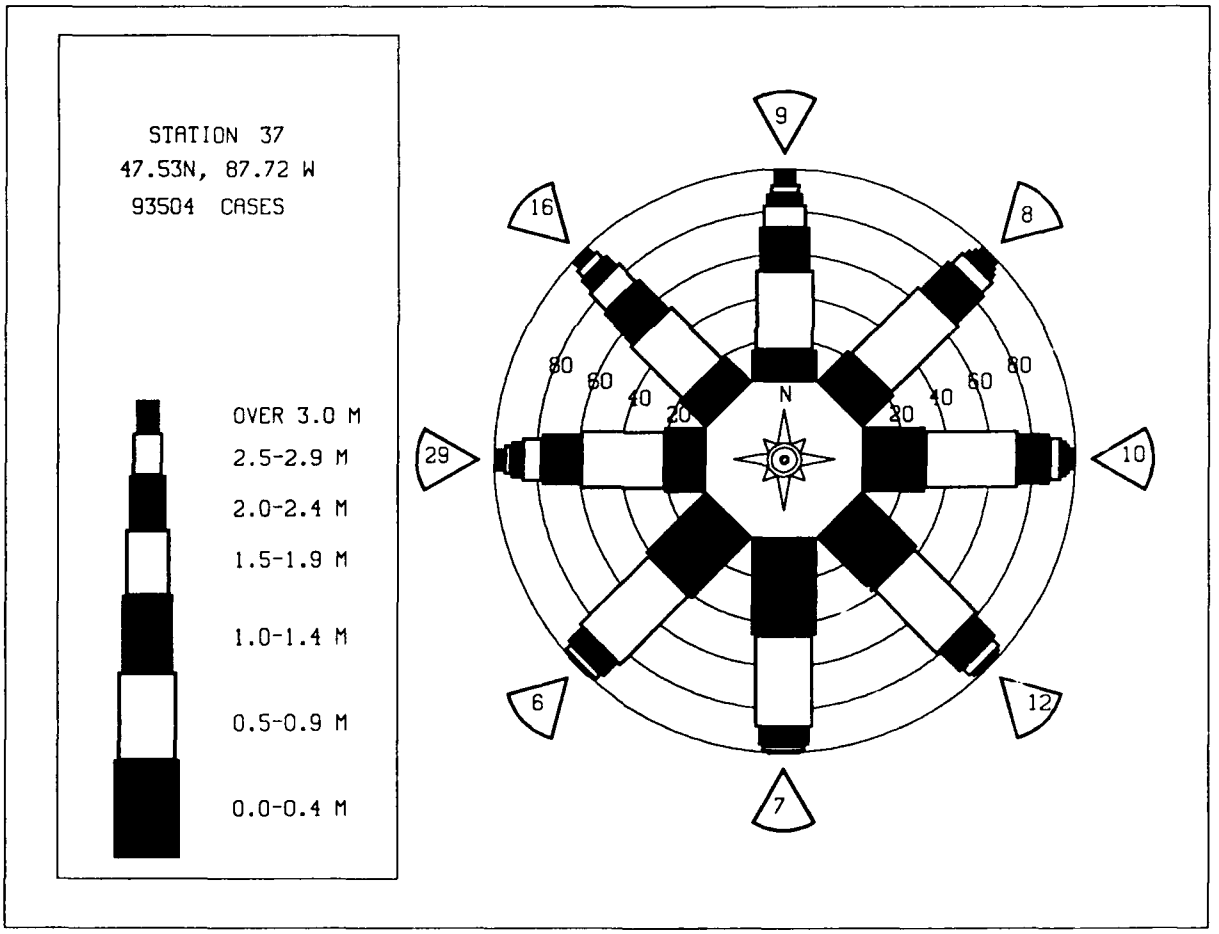
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 116 | 436 | 189 | 5 | . | . | . | . | . | . | 746 |
| 0.50-0.99 | . | 257 | 1441 | 128 | 9 | . | . | . | . | . | 1835 |
| 1.00-1.49 | . | . | 391 | 635 | 59 | 1 | . | . | . | . | 1086 |
| 1.50-1.99 | . | . | 29 | 417 | 202 | 22 | . | . | . | . | 670 |
| 2.00-2.49 | . | . | . | 133 | 165 | 59 | . | . | . | . | 357 |
| 2.50-2.99 | . | . | . | 1 | 197 | 69 | 2 | . | . | . | 269 |
| 3.00-3.49 | . | . | . | . | 8 | 172 | 6 | 1 | . | . | 187 |
| 3.50-3.99 | . | . | . | . | . | 88 | 16 | . | . | . | 104 |
| 4.00-4.49 | . | . | . | . | . | 9 | 29 | . | . | . | 38 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 3 | . | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 116 | 693 | 2050 | 1319 | 640 | 420 | 57 | 7 | 0 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.9 NO. OF CASES= 4972.

STATION S37 47.53N 87.72W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 361 | 1392 | 704 | 55 | 3 | . | . | . | . | . | 2515 |
| 0.50-0.99 | . | 872 | 2548 | 516 | 103 | 12 | . | . | . | . | 4051 |
| 1.00-1.49 | . | . | 602 | 812 | 175 | 48 | 1 | . | . | . | 1638 |
| 1.50-1.99 | . | . | 65 | 392 | 249 | 78 | 3 | . | . | . | 787 |
| 2.00-2.49 | . | . | 1 | 119 | 148 | 108 | 11 | . | . | . | 387 |
| 2.50-2.99 | . | . | . | 2 | 157 | 77 | 18 | 5 | . | . | 259 |
| 3.00-3.49 | . | . | . | . | 14 | 125 | 16 | 8 | . | . | 163 |
| 3.50-3.99 | . | . | . | . | . | 54 | 29 | 9 | 1 | . | 93 |
| 4.00-4.49 | . | . | . | . | . | 5 | 28 | 9 | 2 | . | 44 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 10 | 3 | . | 19 |
| 5.00-5.49 | . | . | . | . | . | . | . | 6 | 3 | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | . |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | . |
| TOTAL | 361 | 2264 | 3920 | 1896 | 849 | 507 | 112 | 48 | 14 | 0 | |

MEAN HS(M)= 1.0 LARGEST HS(M)= 9.3 MEAN TP(SEC)= 4.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S37 (47.53N 87.72W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MONTH | | | | | | | |
| 1956 | 0.8 | 1.2 | 1.2 | 1.1 | 0.8 | 0.6 | 0.6 | 0.5 | 0.7 | 1.2 | 1.4 | 1.3 | 1.0 |
| 1957 | 1.4 | 1.3 | 1.0 | 0.9 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 0.8 | 1.3 | 1.3 | 1.0 |
| 1958 | 0.9 | 1.4 | 0.6 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 1.0 | 1.7 | 1.1 | 0.9 |
| 1959 | 1.0 | 1.1 | 0.9 | 0.9 | 0.9 | 0.6 | 0.5 | 0.5 | 0.8 | 0.9 | 1.4 | 1.6 | 0.9 |
| 1960 | 1.2 | 1.2 | 0.9 | 1.0 | 0.8 | 0.5 | 0.5 | 0.6 | 0.7 | 1.0 | 1.5 | 1.2 | 0.9 |
| 1961 | 1.0 | 1.1 | 1.2 | 0.9 | 0.8 | 0.6 | 0.4 | 0.4 | 0.7 | 0.9 | 1.0 | 1.2 | 0.8 |
| 1962 | 1.5 | 1.0 | 0.8 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.8 | 0.9 | 1.2 | 0.8 |
| 1963 | 1.2 | 1.3 | 1.2 | 0.8 | 0.7 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 1.2 | 1.3 | 0.9 |
| 1964 | 1.3 | 1.2 | 1.3 | 1.1 | 0.8 | 0.6 | 0.6 | 0.8 | 0.9 | 1.0 | 1.2 | 1.1 | 1.0 |
| 1965 | 1.6 | 1.6 | 1.2 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.8 | 1.3 | 1.7 | 1.5 | 1.1 |
| 1966 | 1.7 | 1.7 | 1.9 | 1.2 | 1.2 | 0.6 | 0.7 | 0.6 | 1.0 | 1.6 | 1.7 | 1.6 | 1.3 |
| 1967 | 1.6 | 1.7 | 1.4 | 1.1 | 1.1 | 0.7 | 0.7 | 0.7 | 1.0 | 1.7 | 1.5 | 1.9 | 1.3 |
| 1968 | 1.4 | 2.4 | 1.7 | 1.2 | 0.9 | 0.7 | 0.7 | 0.8 | 0.8 | 1.4 | 1.8 | 1.7 | 1.3 |
| 1969 | 1.7 | 1.1 | 1.4 | 0.9 | 0.8 | 0.6 | 0.5 | 0.7 | 0.8 | 1.3 | 1.3 | 1.1 | 1.0 |
| 1970 | 1.2 | 1.4 | 1.1 | 1.2 | 0.9 | 0.6 | 0.6 | 0.6 | 1.0 | 1.3 | 1.4 | 1.2 | 1.0 |
| 1971 | 1.4 | 1.4 | 1.2 | 1.0 | 0.8 | 0.5 | 0.6 | 0.5 | 0.7 | 1.2 | 1.4 | 1.2 | 1.0 |
| 1972 | 1.5 | 1.2 | 1.2 | 0.8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.9 | 1.2 | 1.1 | 1.2 | 0.9 |
| 1973 | 1.3 | 1.2 | 1.3 | 1.0 | 0.9 | 0.6 | 0.6 | 0.5 | 0.9 | 1.0 | 1.4 | 1.1 | 1.0 |
| 1974 | 1.0 | 0.9 | 1.2 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.8 | 0.9 | 1.2 | 1.1 | 0.9 |
| 1975 | 1.1 | 1.0 | 1.1 | 0.6 | 0.5 | 0.6 | 0.5 | 0.6 | 0.8 | 1.1 | 1.4 | 1.1 | 0.9 |
| 1976 | 1.4 | 1.4 | 1.5 | 1.0 | 0.7 | 0.6 | 0.4 | 0.6 | 0.7 | 0.7 | 1.0 | 1.1 | 0.9 |
| 1977 | 1.5 | 1.6 | 1.4 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.8 | 0.9 | 1.0 | 1.3 | 0.9 |
| 1978 | 1.3 | 1.0 | 0.9 | 1.0 | 0.6 | 0.5 | 0.5 | 0.6 | 0.9 | 0.8 | 1.2 | 1.3 | 0.9 |
| 1979 | 1.2 | 0.9 | 1.2 | 0.8 | 0.7 | 0.6 | 0.4 | 0.6 | 0.7 | 0.9 | 1.2 | 1.2 | 0.9 |
| 1980 | 1.2 | 0.9 | 1.1 | 0.8 | 0.6 | 0.6 | 0.4 | 0.6 | 0.9 | 1.3 | 0.9 | 1.3 | 0.9 |
| 1981 | 1.1 | 1.1 | 1.1 | 0.8 | 0.6 | 0.6 | 0.4 | 0.4 | 0.9 | 1.0 | 1.1 | 0.9 | 0.8 |
| 1982 | 1.7 | 1.3 | 1.6 | 1.1 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 1.0 | 1.2 | 1.3 | 1.0 |
| 1983 | 1.2 | 1.0 | 1.5 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.8 | 0.9 | 1.5 | 1.4 | 0.9 |
| 1984 | 1.1 | 1.1 | 1.3 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.8 | 1.0 | 1.4 | 1.5 | 0.9 |
| 1985 | 1.5 | 1.2 | 1.5 | 0.9 | 0.6 | 0.7 | 0.4 | 0.5 | 0.7 | 0.9 | 1.1 | 1.4 | 1.0 |
| 1986 | 1.3 | 0.9 | 1.2 | 1.1 | 0.6 | 0.6 | 0.4 | 0.5 | 0.8 | 0.9 | 1.2 | 1.2 | 0.9 |
| 1987 | 1.1 | 1.1 | 1.3 | 0.7 | 0.6 | 0.4 | 0.5 | 0.6 | 0.6 | 1.0 | 1.2 | 1.1 | 0.8 |
| MEAN | 1.3 | 1.2 | 1.2 | 0.9 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 1.0 | 1.3 | 1.3 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S37 (47.53N 87.72W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MONTH | | | | | | |
| 1956 | 3.2 | 3.9 | 6.1 | 3.9 | 2.7 | 1.7 | 1.4 | 1.5 | 3.0 | 4.8 | 3.8 | 4.5 |
| 1957 | 3.6 | 3.8 | 3.7 | 3.9 | 2.8 | 2.5 | 2.8 | 1.8 | 3.1 | 3.0 | 4.6 | 5.1 |
| 1958 | 3.4 | 3.9 | 2.7 | 5.1 | 3.0 | 1.8 | 2.0 | 1.7 | 3.3 | 4.4 | 5.3 | 4.8 |
| 1959 | 3.1 | 4.7 | 4.1 | 3.1 | 4.3 | 1.7 | 1.9 | 1.8 | 3.0 | 3.3 | 5.4 | 6.4 |
| 1960 | 3.8 | 3.6 | 4.0 | 3.6 | 3.1 | 1.7 | 1.7 | 2.7 | 2.6 | 3.9 | 4.7 | 4.0 |
| 1961 | 3.5 | 3.7 | 4.9 | 2.8 | 2.3 | 2.3 | 2.4 | 1.9 | 3.4 | 3.4 | 3.9 | 4.4 |
| 1962 | 4.0 | 3.7 | 3.5 | 3.2 | 2.2 | 1.8 | 2.5 | 2.0 | 2.5 | 5.2 | 4.2 | 4.1 |
| 1963 | 4.0 | 3.8 | 4.3 | 3.4 | 1.9 | 1.7 | 1.7 | 1.6 | 2.6 | 2.5 | 3.9 | 4.7 |
| 1964 | 5.1 | 4.8 | 3.8 | 4.4 | 2.5 | 2.1 | 1.5 | 2.6 | 4.1 | 3.8 | 5.0 | 3.3 |
| 1965 | 4.3 | 6.1 | 4.2 | 2.8 | 2.5 | 2.2 | 1.9 | 2.2 | 3.0 | 4.4 | 5.9 | 4.5 |
| 1966 | 7.0 | 5.0 | 5.7 | 3.9 | 3.8 | 3.7 | 2.1 | 2.8 | 3.3 | 6.4 | 5.7 | 5.3 |
| 1967 | 4.9 | 4.4 | 4.0 | 4.8 | 3.6 | 2.1 | 3.4 | 2.7 | 3.8 | 5.0 | 4.3 | 5.9 |
| 1968 | 4.5 | 6.3 | 6.5 | 4.5 | 3.0 | 2.5 | 3.6 | 3.0 | 3.2 | 4.7 | 5.4 | 5.8 |
| 1969 | 4.4 | 4.7 | 5.1 | 3.6 | 2.0 | 2.0 | 2.3 | 2.3 | 2.6 | 3.7 | 3.9 | 4.0 |
| 1970 | 4.3 | 4.6 | 4.0 | 4.8 | 3.3 | 1.7 | 2.8 | 1.9 | 3.6 | 4.9 | 4.5 | 5.3 |
| 1971 | 4.4 | 5.7 | 4.3 | 2.9 | 3.4 | 1.7 | 1.6 | 1.5 | 2.3 | 4.7 | 5.7 | 4.6 |
| 1972 | 4.5 | 4.2 | 4.4 | 3.0 | 1.4 | 1.6 | 1.3 | 1.5 | 4.1 | 4.8 | 4.1 | 4.6 |
| 1973 | 3.6 | 3.5 | 4.0 | 3.7 | 3.1 | 1.2 | 2.2 | 1.3 | 3.8 | 3.4 | 3.7 | 3.8 |
| 1974 | 3.6 | 3.7 | 3.9 | 3.0 | 1.8 | 1.6 | 2.5 | 1.9 | 2.2 | 2.8 | 3.8 | 4.0 |
| 1975 | 3.9 | 5.1 | 3.8 | 1.8 | 1.2 | 2.8 | 2.0 | 2.1 | 2.4 | 5.3 | 5.2 | 4.5 |
| 1976 | 5.7 | 4.4 | 4.6 | 3.4 | 2.8 | 2.0 | 1.2 | 2.0 | 2.6 | 2.8 | 3.7 | 5.1 |
| 1977 | 5.4 | 5.6 | 5.7 | 2.6 | 2.0 | 1.6 | 3.1 | 2.1 | 4.1 | 3.9 | 4.7 | 5.1 |
| 1978 | 4.3 | 3.4 | 4.0 | 3.3 | 2.8 | 1.5 | 1.3 | 1.9 | 2.8 | 3.7 | 3.8 | 4.1 |
| 1979 | 3.5 | 3.7 | 4.4 | 4.1 | 1.9 | 1.6 | 2.0 | 1.8 | 2.0 | 4.7 | 3.1 | 2.9 |
| 1980 | 6.4 | 3.4 | 4.9 | 2.7 | 1.8 | 1.4 | 1.3 | 1.9 | 3.6 | 5.7 | 4.7 | 5.0 |
| 1981 | 3.8 | 3.2 | 4.5 | 3.2 | 1.8 | 3.2 | 1.0 | 1.2 | 5.4 | 4.2 | 5.9 | 3.5 |
| 1982 | 6.0 | 4.1 | 9.3 | 6.1 | 1.8 | 2.6 | 1.9 | 1.5 | 2.7 | 4.5 | 5.7 | 4.9 |
| 1983 | 4.4 | 5.0 | 4.4 | 2.9 | 1.8 | 2.3 | 2.2 | 1.5 | 2.8 | 3.3 | 5.6 | 4.1 |
| 1984 | 5.0 | 4.1 | 5.2 | 3.5 | 3.0 | 2.0 | 2.3 | 1.4 | 2.1 | 4.1 | 6.3 | 5.1 |
| 1985 | 5.4 | 3.7 | 6.6 | 3.8 | 2.4 | 4.1 | 1.1 | 1.7 | 3.3 | 3.2 | 2.7 | 5.2 |
| 1986 | 4.3 | 3.1 | 4.2 | 3.7 | 3.3 | 1.4 | 1.2 | 1.2 | 3.1 | 4.3 | 4.3 | 4.1 |
| 1987 | 3.3 | 5.5 | 4.3 | 2.8 | 2.2 | 1.5 | 1.7 | 2.4 | 2.3 | 4.4 | 4.1 | 3.8 |

32 YR. STATISTICS FOR WIS STATION S37

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.0 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 9.3 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 270.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 82031400 |

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X10(0) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 84 | 513 | 143 | . | . | . | . | . | . | . | 740 |
| 0.50-0.99 | . | 229 | 1581 | 124 | 3 | . | . | . | . | . | 1937 |
| 1.00-1.49 | . | . | 364 | 626 | 44 | . | . | . | . | . | 1034 |
| 1.50-1.99 | . | . | 38 | 284 | 209 | 12 | . | . | . | . | 543 |
| 2.00-2.49 | . | . | . | 121 | 111 | 90 | . | . | . | . | 322 |
| 2.50-2.99 | . | . | . | 2 | 160 | 58 | 2 | . | . | . | 222 |
| 3.00-3.49 | . | . | . | . | 8 | 164 | 5 | . | . | . | 177 |
| 3.50-3.99 | . | . | . | . | . | 103 | 20 | . | . | . | 123 |
| 4.00-4.49 | . | . | . | . | . | 5 | 70 | 1 | 1 | . | 77 |
| 4.50-4.99 | . | . | . | . | . | . | 19 | 8 | . | . | 27 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 9 | . | . | 10 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | . | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 84 | 742 | 2126 | 1157 | 535 | 432 | 117 | 23 | 1 | 0 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.9 NO. OF CASES= 4894.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 84 | 389 | 127 | 2 | . | . | . | . | . | . | 602 |
| 0.50-0.99 | . | 204 | 1413 | 101 | 2 | . | . | . | . | . | 1720 |
| 1.00-1.49 | . | . | 278 | 468 | 26 | . | . | . | . | . | 772 |
| 1.50-1.99 | . | . | 18 | 185 | 139 | 8 | . | . | . | . | 350 |
| 2.00-2.49 | . | . | . | 42 | 66 | 48 | . | . | . | . | 156 |
| 2.50-2.99 | . | . | . | 2 | 73 | 25 | 1 | . | . | . | 101 |
| 3.00-3.49 | . | . | . | . | 3 | 65 | 4 | . | . | . | 72 |
| 3.50-3.99 | . | . | . | . | . | 57 | 19 | . | . | . | 76 |
| 4.00-4.49 | . | . | . | . | . | 2 | 25 | . | . | . | 27 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 4 | . | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 84 | 593 | 1836 | 800 | 309 | 205 | 54 | 8 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.7 NO. OF CASES= 3647.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 99 | 622 | 141 | . | . | . | . | . | . | . | 862 |
| 0.50-0.99 | . | 284 | 1622 | 94 | 3 | . | . | . | . | . | 2003 |
| 1.00-1.49 | . | . | 317 | 509 | 33 | . | . | . | . | . | 859 |
| 1.50-1.99 | . | . | 7 | 206 | 105 | 7 | . | . | . | . | 325 |
| 2.00-2.49 | . | . | . | 34 | 62 | 32 | . | . | . | . | 128 |
| 2.50-2.99 | . | . | . | . | 68 | 36 | 1 | . | . | . | 105 |
| 3.00-3.49 | . | . | . | . | 1 | 56 | 4 | . | . | . | 61 |
| 3.50-3.99 | . | . | . | . | . | 31 | 25 | . | . | . | 56 |
| 4.00-4.49 | . | . | . | . | . | . | 12 | . | . | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 6 | . | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 99 | 906 | 2087 | 843 | 272 | 162 | 45 | 8 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 4144.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 132 | 751 | 128 | 1 | . | . | . | . | . | . | 1012 |
| 0.50-0.99 | . | 341 | 1608 | 64 | 1 | . | . | . | . | . | 2014 |
| 1.00-1.49 | . | . | 265 | 309 | 24 | 2 | . | . | . | . | 600 |
| 1.50-1.99 | . | . | 7 | 137 | 80 | 9 | . | . | . | . | 233 |
| 2.00-2.49 | . | . | . | 41 | 32 | 24 | . | . | . | . | 97 |
| 2.50-2.99 | . | . | . | . | 52 | 24 | 1 | . | . | . | 77 |
| 3.00-3.49 | . | . | . | . | 1 | 35 | 6 | . | . | . | 42 |
| 3.50-3.99 | . | . | . | . | . | 14 | 12 | . | . | . | 26 |
| 4.00-4.49 | . | . | . | . | . | . | 10 | . | . | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 3 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 132 | 1092 | 2008 | 552 | 190 | 108 | 30 | 3 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 3859.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 223 | 913 | 154 | . | . | . | . | . | . | . | 1290 |
| 0.50-0.99 | . | 420 | 1591 | 70 | . | . | . | . | . | . | 2081 |
| 1.00-1.49 | . | . | 315 | 334 | 39 | 1 | . | . | . | . | 689 |
| 1.50-1.99 | . | . | 8 | 176 | 68 | 8 | . | . | . | . | 260 |
| 2.00-2.49 | . | . | . | 40 | 45 | 14 | . | . | . | . | 99 |
| 2.50-2.99 | . | . | . | 2 | 63 | 11 | 4 | . | . | . | 80 |
| 3.00-3.49 | . | . | . | . | 3 | 47 | 3 | . | . | . | 53 |
| 3.50-3.99 | . | . | . | . | . | 24 | 8 | 2 | . | . | 34 |
| 4.00-4.49 | . | . | . | . | . | 3 | 19 | 1 | . | . | 23 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 4 | 1 | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 223 | 1333 | 2068 | 622 | 218 | 108 | 38 | 11 | 2 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 4335.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 161 | 674 | 104 | . | . | . | . | . | . | . | 939 |
| 0.50-0.99 | . | 295 | 1057 | 74 | 2 | . | . | . | . | . | 1428 |
| 1.00-1.49 | . | . | 265 | 273 | 36 | 1 | . | . | . | . | 575 |
| 1.50-1.99 | . | . | 5 | 132 | 82 | 14 | . | . | . | . | 233 |
| 2.00-2.49 | . | . | . | 32 | 44 | 27 | 1 | . | . | . | 104 |
| 2.50-2.99 | . | . | . | 1 | 34 | 11 | 2 | . | . | . | 48 |
| 3.00-3.49 | . | . | . | . | 2 | 34 | 3 | 2 | . | . | 41 |
| 3.50-3.99 | . | . | . | . | . | 23 | 4 | . | . | . | 27 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | 1 | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | 1 | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 2 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 161 | 969 | 1431 | 512 | 200 | 110 | 14 | 7 | 3 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 3198.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 194 | 795 | 249 | . | . | . | . | . | . | . | 1238 |
| 0.50-0.99 | . | 327 | 1620 | 198 | 11 | . | . | . | . | . | 2156 |
| 1.00-1.49 | . | . | 257 | 410 | 67 | 2 | . | . | . | . | 736 |
| 1.50-1.99 | . | . | 7 | 116 | 128 | 20 | . | . | . | . | 271 |
| 2.00-2.49 | . | . | . | 31 | 44 | 49 | . | . | . | . | 124 |
| 2.50-2.99 | . | . | . | . | 38 | 24 | 2 | . | . | . | 64 |
| 3.00-3.49 | . | . | . | . | 1 | 37 | 1 | . | . | . | 39 |
| 3.50-3.99 | . | . | . | . | . | 18 | 8 | . | . | . | 26 |
| 4.00-4.49 | . | . | . | . | . | . | 8 | . | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 194 | 1122 | 2133 | 755 | 289 | 150 | 20 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 4371.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 172 | 1346 | 472 | 1 | . | . | . | . | . | . | 1991 |
| 0.50-0.99 | . | 531 | 3274 | 448 | 8 | . | . | . | . | . | 4261 |
| 1.00-1.49 | . | . | 445 | 1027 | 226 | 3 | . | . | . | . | 1701 |
| 1.50-1.99 | . | . | 20 | 301 | 377 | 47 | . | . | . | . | 745 |
| 2.00-2.49 | . | . | . | 73 | 141 | 104 | 2 | . | . | . | 320 |
| 2.50-2.99 | . | . | . | 3 | 118 | 54 | 4 | . | . | . | 179 |
| 3.00-3.49 | . | . | . | . | 7 | 77 | 1 | . | . | . | 85 |
| 3.50-3.99 | . | . | . | . | . | 36 | 4 | . | . | . | 40 |
| 4.00-4.49 | . | . | . | . | . | 6 | 10 | . | . | . | 16 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 1 | . | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 172 | 1877 | 4211 | 1853 | 877 | 327 | 29 | 2 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.5 NO. OF CASES= 8754.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 172 | 1120 | 305 | | | | | | | | 1597 |
| 0.50-0.99 | | 557 | 2147 | 212 | 3 | | | | | | 2919 |
| 1.00-1.49 | | | 662 | 934 | 109 | 1 | | | | | 1706 |
| 1.50-1.99 | | | 60 | 440 | 270 | 31 | | | | | 801 |
| 2.00-2.49 | | | | 114 | 152 | 47 | 1 | | | | 314 |
| 2.50-2.99 | | | | 6 | 186 | 66 | 1 | | | | 259 |
| 3.00-3.49 | | | | | 8 | 140 | 2 | | | | 150 |
| 3.50-3.99 | | | | | | 48 | 3 | | | | 51 |
| 4.00-4.49 | | | | | | 2 | 22 | | | | 24 |
| 4.50-4.99 | | | | | | | 3 | | | | 3 |
| 5.00-5.49 | | | | | | | | 2 | | | 2 |
| 5.50-5.99 | | | | | | | | | | | 0 |
| 6.00-6.49 | | | | | | | | | | | 0 |
| 6.50-6.99 | | | | | | | | | | | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 172 | 1677 | 3174 | 1706 | 728 | 335 | 32 | 2 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.6 NO. OF CASES= 7328.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 114 | 619 | 145 | | | | | | | | 878 |
| 0.50-0.99 | | 493 | 927 | 90 | 1 | | | | | | 1511 |
| 1.00-1.49 | | | 260 | 284 | 17 | 1 | | | | | 562 |
| 1.50-1.99 | | | 20 | 195 | 55 | 5 | | | | | 275 |
| 2.00-2.49 | | | | 33 | 111 | 7 | | | | | 151 |
| 2.50-2.99 | | | | | 26 | 23 | 1 | | | | 50 |
| 3.00-3.49 | | | | | | 18 | | | | | 18 |
| 3.50-3.99 | | | | | | 3 | 1 | | | | 4 |
| 4.00-4.49 | | | | | | | 1 | | | | 1 |
| 4.50-4.99 | | | | | | | | | | | 0 |
| 5.00-5.49 | | | | | | | | | | | 0 |
| 5.50-5.99 | | | | | | | | | | | 0 |
| 6.00-6.49 | | | | | | | | | | | 0 |
| 6.50-6.99 | | | | | | | | | | | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 114 | 1112 | 1352 | 602 | 210 | 57 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 3234.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 129 | 666 | 172 | 3 | | | | | | | 970 |
| 0.50-0.99 | | 474 | 743 | 112 | 1 | | | | | | 1330 |
| 1.00-1.49 | | | 211 | 177 | 27 | 2 | | | | | 417 |
| 1.50-1.99 | | | 35 | 101 | 41 | 9 | | | | | 186 |
| 2.00-2.49 | | | 1 | 27 | 82 | 9 | 2 | | | | 121 |
| 2.50-2.99 | | | | 1 | 11 | 10 | 2 | | | | 24 |
| 3.00-3.49 | | | | | | 9 | | | | | 9 |
| 3.50-3.99 | | | | | 2 | 1 | | | | | 3 |
| 4.00-4.49 | | | | | | | | | | | 0 |
| 4.50-4.99 | | | | | | | | | | | 0 |
| 5.00-5.49 | | | | | | | | | | | 0 |
| 5.50-5.99 | | | | | | | | | | | 0 |
| 6.00-6.49 | | | | | | | | | | | 0 |
| 6.50-6.99 | | | | | | | | | | | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 129 | 1140 | 1162 | 421 | 164 | 40 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 2872.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 131 | 752 | 279 | 8 | | | | | | | 1170 |
| 0.50-0.99 | | 537 | 1180 | 210 | 18 | | | | | | 1945 |
| 1.00-1.49 | | | 345 | 344 | 96 | 14 | | | | | 799 |
| 1.50-1.99 | | | 32 | 183 | 93 | 39 | 2 | | | | 349 |
| 2.00-2.49 | | | | 53 | 75 | 36 | 8 | | | | 172 |
| 2.50-2.99 | | | | 5 | 41 | 28 | 5 | | | | 79 |
| 3.00-3.49 | | | | | 3 | 21 | 4 | 9 | 1 | | 38 |
| 3.50-3.99 | | | | | | 4 | 6 | 5 | | | 15 |
| 4.00-4.49 | | | | | | | 1 | | 1 | | 2 |
| 4.50-4.99 | | | | | | | 2 | | | | 2 |
| 5.00-5.49 | | | | | | | | | | | 0 |
| 5.50-5.99 | | | | | | | | | | | 0 |
| 6.00-6.49 | | | | | | | | | | | 0 |
| 6.50-6.99 | | | | | | | | | | | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 131 | 1289 | 1836 | 803 | 326 | 142 | 28 | 14 | 2 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.4 NO. OF CASES= 4289.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 179 | 1555 | 852 | 12 | . | . | . | . | . | . | 2598 |
| 0.50-0.99 | . | 648 | 4635 | 1207 | 14 | . | . | . | . | . | 6504 |
| 1.00-1.49 | . | . | 872 | 1591 | 487 | 25 | 1 | . | . | . | 2976 |
| 1.50-1.99 | . | . | 67 | 556 | 471 | 295 | 3 | . | . | . | 1392 |
| 2.00-2.49 | . | . | 1 | 201 | 248 | 378 | 60 | 4 | . | . | 892 |
| 2.50-2.99 | . | . | . | 6 | 203 | 174 | 114 | 34 | . | . | 531 |
| 3.00-3.49 | . | . | . | . | 20 | 155 | 85 | 58 | 10 | . | 328 |
| 3.50-3.99 | . | . | . | . | . | 65 | 67 | 45 | 9 | 1 | 187 |
| 4.00-4.49 | . | . | . | . | . | 7 | 42 | 38 | 11 | 2 | 100 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 36 | 24 | 1 | 68 |
| 5.00-5.49 | . | . | . | . | . | . | . | 14 | 19 | 4 | 37 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 17 | 1 | 18 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 9 | 1 | 11 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 4 | 4 |
| TOTAL | 179 | 2203 | 6427 | 3573 | 1443 | 1099 | 379 | 230 | 100 | 15 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 8.8 MEAN TP(SEC)= 5.0 NO. OF CASES= 14653.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 164 | 1460 | 398 | 3 | . | . | . | . | . | . | 2025 |
| 0.50-0.99 | . | 515 | 3491 | 444 | 2 | . | . | . | . | . | 4452 |
| 1.00-1.49 | . | . | 710 | 1546 | 206 | 1 | . | . | . | . | 2463 |
| 1.50-1.99 | . | . | 38 | 601 | 575 | 125 | 1 | . | . | . | 1340 |
| 2.00-2.49 | . | . | . | 193 | 291 | 243 | 16 | 1 | . | . | 744 |
| 2.50-2.99 | . | . | . | 3 | 204 | 161 | 52 | 21 | 1 | . | 442 |
| 3.00-3.49 | . | . | . | . | 8 | 219 | 47 | 14 | 1 | . | 289 |
| 3.50-3.99 | . | . | . | . | . | 90 | 58 | 28 | 14 | . | 190 |
| 4.00-4.49 | . | . | . | . | . | 2 | 38 | 28 | 13 | 1 | 82 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 31 | 13 | . | 51 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 6 | 12 | 4 | 24 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 11 | . | 11 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 5 | 3 | 8 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 164 | 1975 | 4637 | 2790 | 1286 | 841 | 221 | 129 | 70 | 10 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.9 NO. OF CASES= 11358.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 103 | 819 | 210 | . | . | . | . | . | . | . | 1132 |
| 0.50-0.99 | . | 364 | 2243 | 187 | . | . | . | . | . | . | 2794 |
| 1.00-1.49 | . | . | 483 | 1073 | 60 | 1 | . | . | . | . | 1617 |
| 1.50-1.99 | . | . | 37 | 473 | 466 | 10 | . | . | . | . | 986 |
| 2.00-2.49 | . | . | . | 127 | 224 | 124 | 1 | . | . | . | 476 |
| 2.50-2.99 | . | . | . | 2 | 212 | 152 | 4 | . | . | . | 370 |
| 3.00-3.49 | . | . | . | . | 4 | 236 | 11 | 1 | . | . | 252 |
| 3.50-3.99 | . | . | . | . | . | 137 | 60 | 2 | . | . | 199 |
| 4.00-4.49 | . | . | . | . | . | 1 | 47 | 4 | . | . | 52 |
| 4.50-4.99 | . | . | . | . | . | 1 | 9 | 8 | 2 | . | 20 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | 1 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | 1 | . | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 103 | 1183 | 2973 | 1862 | 966 | 662 | 132 | 23 | 4 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 5.0 NO. OF CASES= 7410.

STATION S38 47.53N 87.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

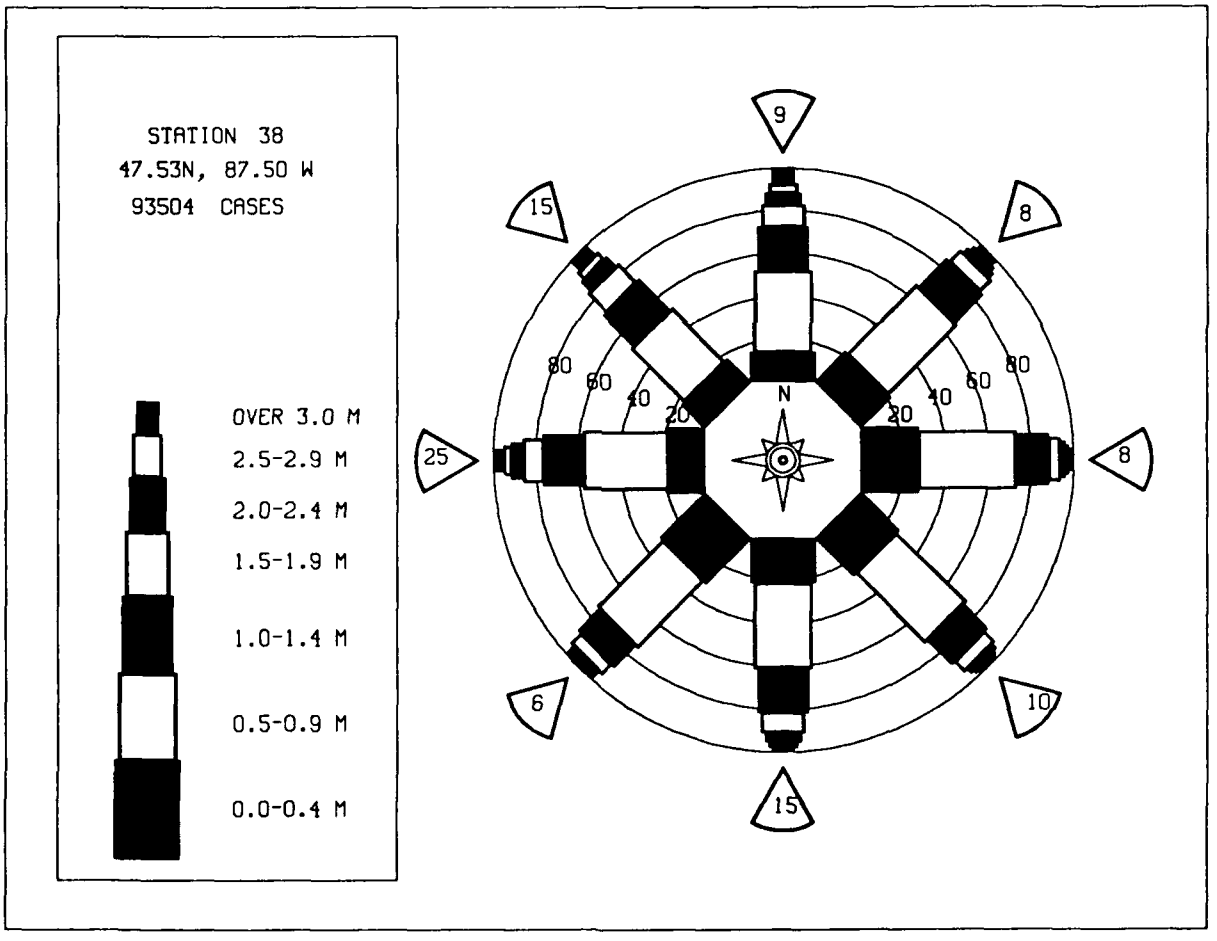
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 79 | 475 | 151 | 3 | . | . | . | . | . | . | 708 |
| 0.50-0.99 | . | 240 | 1521 | 109 | 2 | . | . | . | . | . | 1872 |
| 1.00-1.49 | . | . | 422 | 676 | 51 | . | . | . | . | . | 1149 |
| 1.50-1.99 | . | . | 38 | 382 | 249 | 17 | . | . | . | . | 686 |
| 2.00-2.49 | . | . | . | 131 | 157 | 67 | . | . | . | . | 355 |
| 2.50-2.99 | . | . | . | 3 | 186 | 86 | . | . | . | . | 275 |
| 3.00-3.49 | . | . | . | . | 12 | 225 | 6 | . | . | . | 243 |
| 3.50-3.99 | . | . | . | . | . | 108 | 23 | . | . | . | 131 |
| 4.00-4.49 | . | . | . | . | . | 5 | 63 | . | . | . | 68 |
| 4.50-4.99 | . | . | . | . | . | . | 9 | 4 | . | . | 13 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 79 | 715 | 2132 | 1304 | 657 | 508 | 101 | 7 | 0 | 0 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 5.0 NO. OF CASES= 5158.

STATION S38 47.53N 87.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 222 | 1347 | 403 | 3 | . | . | . | . | . | . | 1975 |
| 0.50-0.99 | . | 646 | 3066 | 375 | 7 | . | . | . | . | . | 4094 |
| 1.00-1.49 | . | . | 647 | 1058 | 155 | 5 | . | . | . | . | 1865 |
| 1.50-1.99 | . | . | 44 | 447 | 341 | 66 | . | . | . | . | 898 |
| 2.00-2.49 | . | . | . | 130 | 189 | 130 | 9 | . | . | . | 458 |
| 2.50-2.99 | . | . | . | 3 | 168 | 95 | 19 | 5 | . | . | 290 |
| 3.00-3.49 | . | . | . | . | 8 | 154 | 18 | 8 | 1 | . | 189 |
| 3.50-3.99 | . | . | . | . | . | 76 | 32 | 8 | 2 | . | 118 |
| 4.00-4.49 | . | . | . | . | . | 3 | 37 | 7 | 2 | . | 49 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 10 | 4 | . | 22 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 3 | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 222 | 1993 | 4160 | 2016 | 868 | 529 | 123 | 44 | 16 | 0 | |

MEAN HS(M)= 1.0 LARGEST HS(M)= 8.8 MEAN TP(SEC)= 4.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S38 (47.53N 87.50W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.8 | 1.2 | 1.1 | 1.1 | 0.8 | 0.6 | 0.6 | 0.5 | 0.7 | 1.2 | 1.4 | 1.3 | 0.9 |
| 1957 | 1.5 | 1.4 | 1.1 | 1.0 | 0.9 | 0.7 | 0.6 | 0.7 | 0.9 | 0.9 | 1.4 | 1.5 | 1.1 |
| 1958 | 1.0 | 1.5 | 0.6 | 1.0 | 0.9 | 0.8 | 0.6 | 0.6 | 0.9 | 1.1 | 1.7 | 1.2 | 1.0 |
| 1959 | 1.0 | 1.1 | 0.9 | 0.8 | 0.9 | 0.6 | 0.5 | 0.6 | 0.8 | 0.9 | 1.4 | 1.5 | 0.9 |
| 1960 | 1.3 | 1.2 | 0.9 | 1.0 | 0.8 | 0.5 | 0.5 | 0.6 | 0.7 | 1.0 | 1.5 | 1.2 | 1.0 |
| 1961 | 1.0 | 1.1 | 1.3 | 0.9 | 0.8 | 0.6 | 0.4 | 0.5 | 0.9 | 1.0 | 1.1 | 1.2 | 0.9 |
| 1962 | 1.5 | 1.1 | 0.8 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.4 | 0.9 |
| 1963 | 1.3 | 1.4 | 1.3 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.9 | 1.3 | 1.3 | 1.0 |
| 1964 | 1.4 | 1.3 | 1.4 | 1.2 | 0.9 | 0.7 | 0.6 | 0.8 | 1.0 | 1.2 | 1.2 | 1.2 | 1.1 |
| 1965 | 1.8 | 1.8 | 1.2 | 0.9 | 0.8 | 0.8 | 0.7 | 0.6 | 0.9 | 1.4 | 1.8 | 1.7 | 1.2 |
| 1966 | 1.7 | 1.8 | 2.0 | 1.2 | 1.3 | 0.7 | 0.7 | 0.7 | 1.0 | 1.7 | 1.9 | 1.8 | 1.4 |
| 1967 | 1.8 | 1.8 | 1.6 | 1.2 | 1.1 | 0.8 | 0.7 | 0.8 | 1.1 | 1.9 | 1.6 | 2.1 | 1.4 |
| 1968 | 1.6 | 2.5 | 1.8 | 1.3 | 1.0 | 0.8 | 0.8 | 0.8 | 0.9 | 1.7 | 1.9 | 1.8 | 1.4 |
| 1969 | 2.0 | 1.2 | 1.5 | 1.0 | 0.9 | 0.7 | 0.6 | 0.8 | 1.0 | 1.4 | 1.5 | 1.3 | 1.1 |
| 1970 | 1.4 | 1.6 | 1.2 | 1.3 | 1.0 | 0.7 | 0.6 | 0.7 | 1.2 | 1.6 | 1.7 | 1.4 | 1.2 |
| 1971 | 1.4 | 1.4 | 1.2 | 1.0 | 0.8 | 0.5 | 0.6 | 0.6 | 0.8 | 1.3 | 1.5 | 1.2 | 1.0 |
| 1972 | 1.6 | 1.2 | 1.3 | 0.8 | 0.5 | 0.5 | 0.5 | 0.6 | 1.0 | 1.3 | 1.2 | 1.3 | 1.0 |
| 1973 | 1.3 | 1.3 | 1.4 | 1.0 | 0.9 | 0.6 | 0.6 | 0.6 | 1.0 | 1.1 | 1.5 | 1.2 | 1.0 |
| 1974 | 1.1 | 0.9 | 1.3 | 0.9 | 0.8 | 0.7 | 0.6 | 0.7 | 0.9 | 1.1 | 1.3 | 1.2 | 1.0 |
| 1975 | 1.2 | 1.0 | 1.2 | 0.6 | 0.5 | 0.7 | 0.6 | 0.7 | 0.9 | 1.4 | 1.6 | 1.2 | 1.0 |
| 1976 | 1.6 | 1.5 | 1.7 | 1.1 | 0.8 | 0.7 | 0.5 | 0.6 | 0.8 | 0.8 | 1.1 | 1.2 | 1.0 |
| 1977 | 1.5 | 1.7 | 1.4 | 0.7 | 0.5 | 0.6 | 0.6 | 0.6 | 0.8 | 1.0 | 1.2 | 1.4 | 1.0 |
| 1978 | 1.4 | 1.1 | 1.0 | 1.0 | 0.7 | 0.6 | 0.5 | 0.7 | 0.9 | 1.0 | 1.3 | 1.3 | 1.0 |
| 1979 | 1.2 | 1.0 | 1.3 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.9 | 1.0 | 1.4 | 1.4 | 1.0 |
| 1980 | 1.3 | 0.9 | 1.2 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 1.0 | 1.4 | 1.0 | 1.4 | 1.0 |
| 1981 | 1.1 | 1.2 | 1.1 | 0.9 | 0.6 | 0.6 | 0.4 | 0.4 | 0.9 | 1.2 | 1.2 | 1.0 | 0.9 |
| 1982 | 1.9 | 1.3 | 1.7 | 1.1 | 0.7 | 0.6 | 0.5 | 0.5 | 0.9 | 1.2 | 1.4 | 1.5 | 1.1 |
| 1983 | 1.4 | 1.1 | 1.6 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.8 | 1.1 | 1.6 | 1.5 | 1.0 |
| 1984 | 1.2 | 1.2 | 1.4 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.9 | 1.1 | 1.6 | 1.6 | 1.0 |
| 1985 | 1.6 | 1.3 | 1.6 | 0.9 | 0.6 | 0.7 | 0.5 | 0.6 | 0.8 | 1.0 | 1.2 | 1.5 | 1.0 |
| 1986 | 1.4 | 0.9 | 1.3 | 1.1 | 0.6 | 0.6 | 0.5 | 0.5 | 0.9 | 0.9 | 1.3 | 1.3 | 0.9 |
| 1987 | 1.2 | 1.2 | 1.4 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 1.1 | 1.3 | 1.2 | 0.9 |
| MEAN | 1.4 | 1.3 | 1.3 | 1.0 | 0.8 | 0.6 | 0.6 | 0.6 | 0.9 | 1.2 | 1.4 | 1.4 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S38 (47.53N 87.50W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.0 | 4.0 | 5.7 | 3.8 | 2.6 | 1.7 | 1.4 | 1.5 | 2.7 | 4.8 | 3.8 | 4.2 |
| 1957 | 3.8 | 3.8 | 3.7 | 3.6 | 2.9 | 2.4 | 2.8 | 1.9 | 3.7 | 2.9 | 4.3 | 5.0 |
| 1958 | 3.7 | 3.9 | 2.8 | 5.1 | 3.0 | 1.8 | 1.9 | 1.6 | 3.2 | 4.1 | 5.2 | 4.7 |
| 1959 | 3.0 | 4.8 | 3.8 | 3.1 | 4.3 | 1.7 | 1.9 | 1.8 | 2.8 | 3.5 | 5.4 | 6.4 |
| 1960 | 3.7 | 3.6 | 3.7 | 3.5 | 3.0 | 1.5 | 1.7 | 2.5 | 2.6 | 3.8 | 4.8 | 3.9 |
| 1961 | 4.1 | 3.7 | 4.8 | 2.7 | 2.6 | 2.2 | 2.3 | 1.9 | 3.2 | 3.4 | 3.9 | 4.3 |
| 1962 | 4.4 | 3.6 | 3.2 | 3.6 | 2.1 | 1.8 | 2.3 | 2.1 | 2.5 | 5.0 | 4.0 | 4.3 |
| 1963 | 4.0 | 4.5 | 4.4 | 4.0 | 1.8 | 1.6 | 1.7 | 1.8 | 2.8 | 2.5 | 4.3 | 4.4 |
| 1964 | 4.7 | 5.0 | 4.2 | 4.4 | 2.8 | 2.1 | 1.4 | 2.6 | 3.9 | 3.7 | 4.9 | 3.1 |
| 1965 | 4.3 | 5.9 | 4.4 | 2.8 | 2.2 | 2.2 | 1.8 | 2.2 | 2.8 | 4.5 | 5.6 | 4.9 |
| 1966 | 7.0 | 4.8 | 5.5 | 3.7 | 3.6 | 3.7 | 2.1 | 2.8 | 3.4 | 6.1 | 5.9 | 5.1 |
| 1967 | 4.6 | 4.6 | 4.3 | 4.5 | 3.5 | 2.1 | 3.2 | 2.7 | 4.0 | 4.9 | 4.4 | 5.7 |
| 1968 | 4.4 | 6.5 | 6.1 | 4.4 | 2.9 | 2.5 | 3.5 | 2.9 | 3.0 | 4.5 | 5.2 | 5.6 |
| 1969 | 4.3 | 4.7 | 5.2 | 3.5 | 2.6 | 2.1 | 2.4 | 3.1 | 3.2 | 3.8 | 4.1 | 4.3 |
| 1970 | 4.3 | 4.8 | 3.6 | 4.4 | 3.3 | 1.7 | 2.8 | 1.9 | 3.9 | 5.0 | 5.0 | 5.3 |
| 1971 | 4.3 | 5.7 | 4.3 | 3.1 | 3.3 | 1.7 | 1.6 | 1.4 | 2.7 | 4.5 | 5.7 | 4.7 |
| 1972 | 4.5 | 4.1 | 4.4 | 3.1 | 1.4 | 1.6 | 1.3 | 1.4 | 4.1 | 5.7 | 4.1 | 4.7 |
| 1973 | 3.7 | 3.6 | 4.4 | 3.6 | 3.0 | 1.2 | 2.1 | 1.3 | 3.8 | 3.8 | 3.8 | 3.8 |
| 1974 | 3.5 | 4.1 | 3.7 | 3.1 | 2.5 | 1.6 | 2.3 | 1.9 | 2.2 | 3.0 | 3.8 | 3.8 |
| 1975 | 4.4 | 4.7 | 3.6 | 1.9 | 1.9 | 2.7 | 2.0 | 3.0 | 2.9 | 5.3 | 5.2 | 4.3 |
| 1976 | 6.1 | 4.4 | 4.6 | 3.4 | 3.2 | 2.8 | 1.4 | 2.1 | 2.7 | 3.0 | 4.0 | 4.8 |
| 1977 | 5.6 | 5.0 | 5.7 | 3.0 | 2.0 | 1.6 | 2.9 | 2.0 | 3.9 | 3.6 | 4.6 | 4.8 |
| 1978 | 4.6 | 3.5 | 4.1 | 3.3 | 3.2 | 1.7 | 1.4 | 2.0 | 2.7 | 3.7 | 3.7 | 3.8 |
| 1979 | 3.6 | 3.4 | 4.4 | 3.8 | 2.8 | 2.0 | 2.0 | 2.5 | 2.4 | 4.5 | 3.8 | 3.2 |
| 1980 | 6.5 | 3.1 | 5.0 | 3.0 | 1.8 | 1.3 | 1.4 | 1.9 | 3.2 | 5.8 | 4.7 | 4.8 |
| 1981 | 3.5 | 3.2 | 4.5 | 3.3 | 2.1 | 3.0 | 1.3 | 1.2 | 5.2 | 4.1 | 5.6 | 3.4 |
| 1982 | 6.3 | 3.9 | 8.8 | 6.2 | 1.8 | 2.5 | 1.9 | 1.4 | 2.8 | 4.8 | 5.5 | 4.7 |
| 1983 | 4.5 | 5.0 | 4.6 | 2.7 | 1.8 | 2.2 | 2.2 | 1.6 | 2.7 | 3.7 | 5.3 | 5.6 |
| 1984 | 4.9 | 4.1 | 5.3 | 4.1 | 3.2 | 2.1 | 2.2 | 1.4 | 2.9 | 4.0 | 6.4 | 4.8 |
| 1985 | 5.4 | 3.7 | 6.1 | 3.8 | 2.3 | 4.0 | 1.2 | 1.6 | 3.4 | 3.3 | 2.9 | 5.3 |
| 1986 | 4.3 | 2.8 | 4.4 | 3.6 | 3.4 | 1.5 | 1.3 | 1.4 | 3.3 | 4.4 | 4.3 | 4.0 |
| 1987 | 3.4 | 5.5 | 4.0 | 2.8 | 2.2 | 1.5 | 1.7 | 2.4 | 2.7 | 4.5 | 4.2 | 3.9 |

32 YR. STATISTICS FOR WIS STATION S38

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 1.0 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 4.7 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.4 |
| LARGEST WAVE HS . . . . . | (METERS) | 8.8 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 271.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 82031400 |

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 154 | 678 | 302 | 6 | . | . | . | . | . | . | 1140 |
| 0.50-0.99 | . | 310 | 1772 | 235 | 2 | . | . | . | . | . | 2319 |
| 1.00-1.49 | . | . | 451 | 653 | 111 | 3 | . | . | . | . | 1218 |
| 1.50-1.99 | . | . | 54 | 328 | 207 | 25 | . | . | . | . | 614 |
| 2.00-2.49 | . | . | . | 161 | 134 | 103 | . | . | . | . | 398 |
| 2.50-2.99 | . | . | . | 8 | 237 | 70 | 3 | . | . | . | 318 |
| 3.00-3.49 | . | . | . | . | 9 | 196 | 8 | . | . | . | 213 |
| 3.50-3.99 | . | . | . | . | . | 128 | 27 | . | . | . | 155 |
| 4.00-4.49 | . | . | . | . | . | 10 | 86 | 2 | . | . | 98 |
| 4.50-4.99 | . | . | . | . | . | . | 42 | 23 | . | . | 65 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 19 | . | . | 20 |
| 5.50-5.99 | . | . | . | . | . | . | . | 10 | . | . | 10 |
| 6.00-6.49 | . | . | . | . | . | . | . | 3 | 1 | . | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 0 | 0 |
| TOTAL | 154 | 988 | 2579 | 1391 | 700 | 535 | 167 | 57 | 2 | 0 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.9 NO. OF CASES= 6161.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 136 | 520 | 248 | 4 | . | . | . | . | . | . | 908 |
| 0.50-0.99 | . | 244 | 1522 | 133 | 3 | . | . | . | . | . | 1902 |
| 1.00-1.49 | . | . | 290 | 499 | 49 | . | . | . | . | . | 838 |
| 1.50-1.99 | . | . | 23 | 183 | 152 | 8 | . | . | . | . | 366 |
| 2.00-2.49 | . | . | . | 59 | 77 | 41 | . | . | . | . | 177 |
| 2.50-2.99 | . | . | . | . | 87 | 32 | 2 | . | . | . | 121 |
| 3.00-3.49 | . | . | . | . | 3 | 69 | 3 | . | . | . | 75 |
| 3.50-3.99 | . | . | . | . | . | 52 | 34 | . | . | . | 86 |
| 4.00-4.49 | . | . | . | . | . | 1 | 34 | 2 | . | . | 37 |
| 4.50-4.99 | . | . | . | . | . | . | 11 | 4 | . | . | 15 |
| 5.00-5.49 | . | . | . | . | . | . | . | 7 | . | . | 7 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 136 | 764 | 2083 | 878 | 371 | 203 | 84 | 14 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 4253.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 152 | 741 | 234 | 6 | . | . | . | . | . | . | 1133 |
| 0.50-0.99 | . | 293 | 1663 | 128 | 2 | . | . | . | . | . | 2086 |
| 1.00-1.49 | . | . | 304 | 512 | 32 | 1 | . | . | . | . | 849 |
| 1.50-1.99 | . | . | 4 | 228 | 112 | 5 | . | . | . | . | 349 |
| 2.00-2.49 | . | . | . | 52 | 70 | 31 | . | . | . | . | 153 |
| 2.50-2.99 | . | . | . | . | 74 | 34 | 1 | . | . | . | 109 |
| 3.00-3.49 | . | . | . | . | 2 | 75 | 5 | . | . | . | 82 |
| 3.50-3.99 | . | . | . | . | . | 34 | 28 | . | . | . | 62 |
| 4.00-4.49 | . | . | . | . | . | 1 | 13 | . | . | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 4 | . | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | . | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 152 | 1034 | 2205 | 926 | 292 | 181 | 49 | 10 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.5 NO. OF CASES= 4545.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 192 | 857 | 227 | 2 | . | . | . | . | . | . | 1278 |
| 0.50-0.99 | . | 347 | 1579 | 84 | . | . | . | . | . | . | 2010 |
| 1.00-1.49 | . | . | 305 | 312 | 21 | . | . | . | . | . | 638 |
| 1.50-1.99 | . | . | 4 | 148 | 77 | 7 | . | . | . | . | 236 |
| 2.00-2.49 | . | . | . | 40 | 40 | 27 | . | . | . | . | 107 |
| 2.50-2.99 | . | . | . | . | 48 | 18 | 1 | . | . | . | 67 |
| 3.00-3.49 | . | . | . | . | 2 | 44 | 2 | . | . | . | 48 |
| 3.50-3.99 | . | . | . | . | . | 17 | 3 | . | . | . | 20 |
| 4.00-4.49 | . | . | . | . | . | 5 | 3 | . | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 1 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 192 | 1204 | 2115 | 586 | 188 | 118 | 11 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 4139.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 272 | 925 | 223 | 2 | . | . | . | . | . | . | 1422 |
| 0.50-0.99 | . | 403 | 1494 | 74 | . | . | . | . | . | . | 1971 |
| 1.00-1.49 | . | . | 322 | 317 | 28 | 1 | . | . | . | . | 668 |
| 1.50-1.99 | . | . | 4 | 186 | 56 | 4 | . | . | . | . | 250 |
| 2.00-2.49 | . | . | . | 53 | 44 | 13 | . | . | . | . | 110 |
| 2.50-2.99 | . | . | . | . | 66 | 10 | 4 | 1 | . | . | 81 |
| 3.00-3.49 | . | . | . | . | 3 | 53 | 1 | . | . | . | 57 |
| 3.50-3.99 | . | . | . | . | . | 29 | 2 | 2 | . | . | 33 |
| 4.00-4.49 | . | . | . | . | . | 8 | 5 | . | . | . | 13 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 272 | 1328 | 2043 | 632 | 197 | 118 | 16 | 4 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 4323.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 212 | 654 | 161 | 3 | . | . | . | . | . | . | 1030 |
| 0.50-0.99 | . | 299 | 1100 | 65 | 1 | . | . | . | . | . | 1465 |
| 1.00-1.49 | . | . | 260 | 283 | 38 | 2 | . | . | . | . | 583 |
| 1.50-1.99 | . | . | 5 | 140 | 88 | 9 | . | . | . | . | 242 |
| 2.00-2.49 | . | . | . | 38 | 52 | 21 | 1 | . | . | . | 112 |
| 2.50-2.99 | . | . | . | 1 | 36 | 10 | 2 | . | . | . | 49 |
| 3.00-3.49 | . | . | . | . | 3 | 28 | 2 | 1 | . | . | 34 |
| 3.50-3.99 | . | . | . | . | . | 24 | 8 | . | . | . | 32 |
| 4.00-4.49 | . | . | . | . | . | . | 3 | 1 | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | 1 | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 1 | 2 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 212 | 953 | 1526 | 530 | 218 | 94 | 18 | 5 | 5 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.2 NO. OF CASES= 3342.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 224 | 881 | 317 | 8 | . | . | . | . | . | . | 1430 |
| 0.50-0.99 | . | 376 | 1578 | 196 | 4 | . | . | . | . | . | 2154 |
| 1.00-1.49 | . | . | 250 | 394 | 51 | 4 | . | . | . | . | 699 |
| 1.50-1.99 | . | . | 8 | 141 | 137 | 13 | . | . | . | . | 299 |
| 2.00-2.49 | . | . | . | 25 | 45 | 43 | . | . | . | . | 113 |
| 2.50-2.99 | . | . | . | 1 | 32 | 25 | . | . | . | . | 58 |
| 3.00-3.49 | . | . | . | . | . | 31 | 1 | . | . | . | 32 |
| 3.50-3.99 | . | . | . | . | . | 19 | 5 | . | . | . | 24 |
| 4.00-4.49 | . | . | . | . | . | . | 6 | . | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 224 | 1257 | 2153 | 765 | 269 | 135 | 12 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 4514.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 210 | 1560 | 609 | 10 | . | . | . | . | . | . | 2389 |
| 0.50-0.99 | . | 567 | 3377 | 500 | 3 | . | . | . | . | . | 4447 |
| 1.00-1.49 | . | . | 522 | 929 | 177 | 3 | . | . | . | . | 1631 |
| 1.50-1.99 | . | . | 24 | 385 | 314 | 26 | . | . | . | . | 749 |
| 2.00-2.49 | . | . | . | 103 | 174 | 48 | . | . | . | . | 325 |
| 2.50-2.99 | . | . | . | 1 | 159 | 33 | . | . | . | . | 193 |
| 3.00-3.49 | . | . | . | . | 6 | 77 | . | . | . | . | 83 |
| 3.50-3.99 | . | . | . | . | . | 41 | 4 | . | . | . | 45 |
| 4.00-4.49 | . | . | . | . | . | 4 | 9 | . | . | . | 13 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 210 | 2127 | 4532 | 1928 | 833 | 232 | 14 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.4 NO. OF CASES= 9246.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 240 | 1381 | 491 | 12 | . | . | . | . | . | . | 2124 |
| 0.50-0.99 | . | 597 | 2340 | 177 | 5 | . | . | . | . | . | 3119 |
| 1.00-1.49 | . | . | 795 | 713 | 83 | . | . | . | . | . | 1591 |
| 1.50-1.99 | . | . | 69 | 607 | 180 | 14 | . | . | . | . | 870 |
| 2.00-2.49 | . | . | . | 161 | 154 | 25 | . | . | . | . | 340 |
| 2.50-2.99 | . | . | . | 4 | 294 | 26 | 1 | . | . | . | 325 |
| 3.00-3.49 | . | . | . | . | 9 | 127 | . | . | . | . | 136 |
| 3.50-3.99 | . | . | . | . | . | 44 | . | . | . | . | 44 |
| 4.00-4.49 | . | . | . | . | . | 17 | 6 | . | 1 | . | 24 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | . | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 240 | 1978 | 3695 | 1674 | 725 | 253 | 11 | 0 | 1 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 8033.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 177 | 774 | 300 | 8 | . | . | . | . | . | . | 1259 |
| 0.50-0.99 | . | 467 | 1329 | 109 | 3 | . | . | . | . | . | 1908 |
| 1.00-1.49 | . | . | 597 | 205 | 17 | 1 | . | . | . | . | 820 |
| 1.50-1.99 | . | . | 55 | 372 | 23 | 7 | . | . | . | . | 457 |
| 2.00-2.49 | . | . | . | 198 | 65 | 2 | . | . | . | . | 265 |
| 2.50-2.99 | . | . | . | 5 | 117 | 1 | . | . | . | . | 123 |
| 3.00-3.49 | . | . | . | . | 18 | 28 | . | . | . | . | 46 |
| 3.50-3.99 | . | . | . | . | . | 12 | . | . | . | . | 12 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 177 | 1241 | 2281 | 897 | 243 | 51 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 4583.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 235 | 776 | 362 | 17 | 1 | . | . | . | . | . | 1391 |
| 0.50-0.99 | . | 500 | 1268 | 159 | 6 | . | . | . | . | . | 1933 |
| 1.00-1.49 | . | 1 | 541 | 221 | 29 | . | . | . | . | . | 792 |
| 1.50-1.99 | . | . | 39 | 321 | 19 | 4 | . | . | . | . | 383 |
| 2.00-2.49 | . | . | . | 168 | 44 | . | 1 | . | . | . | 213 |
| 2.50-2.99 | . | . | . | 2 | 93 | 1 | . | . | . | . | 96 |
| 3.00-3.49 | . | . | . | . | 17 | 7 | . | . | . | . | 24 |
| 3.50-3.99 | . | . | . | . | . | 8 | . | . | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 235 | 1277 | 2210 | 888 | 209 | 22 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 4539.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 214 | 806 | 402 | 14 | . | . | . | . | . | . | 1436 |
| 0.50-0.99 | . | 672 | 763 | 177 | 7 | 1 | . | . | . | . | 1620 |
| 1.00-1.49 | . | . | 223 | 252 | 32 | 3 | 1 | . | . | 1 | 512 |
| 1.50-1.99 | . | . | 57 | 130 | 41 | 6 | 1 | 1 | . | . | 236 |
| 2.00-2.49 | . | . | 6 | 47 | 18 | 4 | . | . | 1 | . | 76 |
| 2.50-2.99 | . | . | . | 2 | 22 | 3 | . | . | . | . | 27 |
| 3.00-3.49 | . | . | . | . | 5 | 6 | . | . | . | 1 | 12 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 214 | 1478 | 1451 | 622 | 125 | 25 | 4 | 1 | 1 | 2 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 3679.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 352 | 1071 | 816 | 34 | 1 | . | . | . | . | . | 2274 |
| 0.50-0.99 | . | 1037 | 859 | 425 | 65 | 13 | 1 | . | 1 | . | 2401 |
| 1.00-1.49 | . | . | 175 | 239 | 155 | 71 | 19 | 2 | 1 | . | 662 |
| 1.50-1.99 | . | . | 85 | 23 | 50 | 33 | 16 | 18 | 7 | . | 232 |
| 2.00-2.49 | . | . | 9 | . | 8 | 9 | 3 | 12 | 9 | 2 | 52 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 352 | 2108 | 1944 | 721 | 279 | 126 | 40 | 32 | 19 | 3 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 5271.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 430 | 1259 | 1522 | 145 | 21 | 3 | . | . | . | . | 3380 |
| 0.50-0.99 | . | 1207 | 1388 | 993 | 259 | 72 | 7 | . | . | . | 3926 |
| 1.00-1.49 | . | . | 211 | 481 | 489 | 291 | 93 | 33 | . | . | 1598 |
| 1.50-1.99 | . | . | 55 | 93 | 190 | 187 | 59 | 67 | 12 | . | 663 |
| 2.00-2.49 | . | . | 7 | 29 | 22 | 66 | 39 | 52 | 26 | 2 | 243 |
| 2.50-2.99 | . | . | . | 5 | 14 | 19 | 12 | 14 | 20 | 3 | 87 |
| 3.00-3.49 | . | . | . | . | 2 | 13 | 2 | 4 | 6 | 2 | 29 |
| 3.50-3.99 | . | . | . | . | . | 2 | 3 | 1 | 1 | 1 | 8 |
| 4.00-4.49 | . | . | . | . | . | . | 4 | 4 | 2 | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 430 | 2466 | 3183 | 1746 | 997 | 653 | 219 | 176 | 69 | 8 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 9324.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 262 | 1014 | 1190 | 66 | 5 | . | . | . | . | . | 2537 |
| 0.50-0.99 | . | 672 | 2460 | 902 | 79 | 11 | . | . | . | . | 4124 |
| 1.00-1.49 | . | . | 704 | 1010 | 397 | 65 | 4 | . | . | . | 2180 |
| 1.50-1.99 | . | . | 87 | 587 | 385 | 161 | 7 | 3 | 1 | . | 1231 |
| 2.00-2.49 | . | . | 1 | 202 | 182 | 147 | 14 | 9 | 2 | . | 557 |
| 2.50-2.99 | . | . | . | 27 | 229 | 137 | 19 | 12 | 4 | . | 428 |
| 3.00-3.49 | . | . | . | . | 22 | 322 | 7 | 6 | 1 | . | 358 |
| 3.50-3.99 | . | . | . | . | 1 | 85 | 32 | 7 | 1 | . | 126 |
| 4.00-4.49 | . | . | . | . | . | 5 | 21 | 2 | 1 | . | 29 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 9 | . | . | 14 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 262 | 1686 | 4442 | 2794 | 1300 | 933 | 109 | 49 | 11 | 1 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.9 NO. OF CASES= 10856.

STATION S39 47.35N 87.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

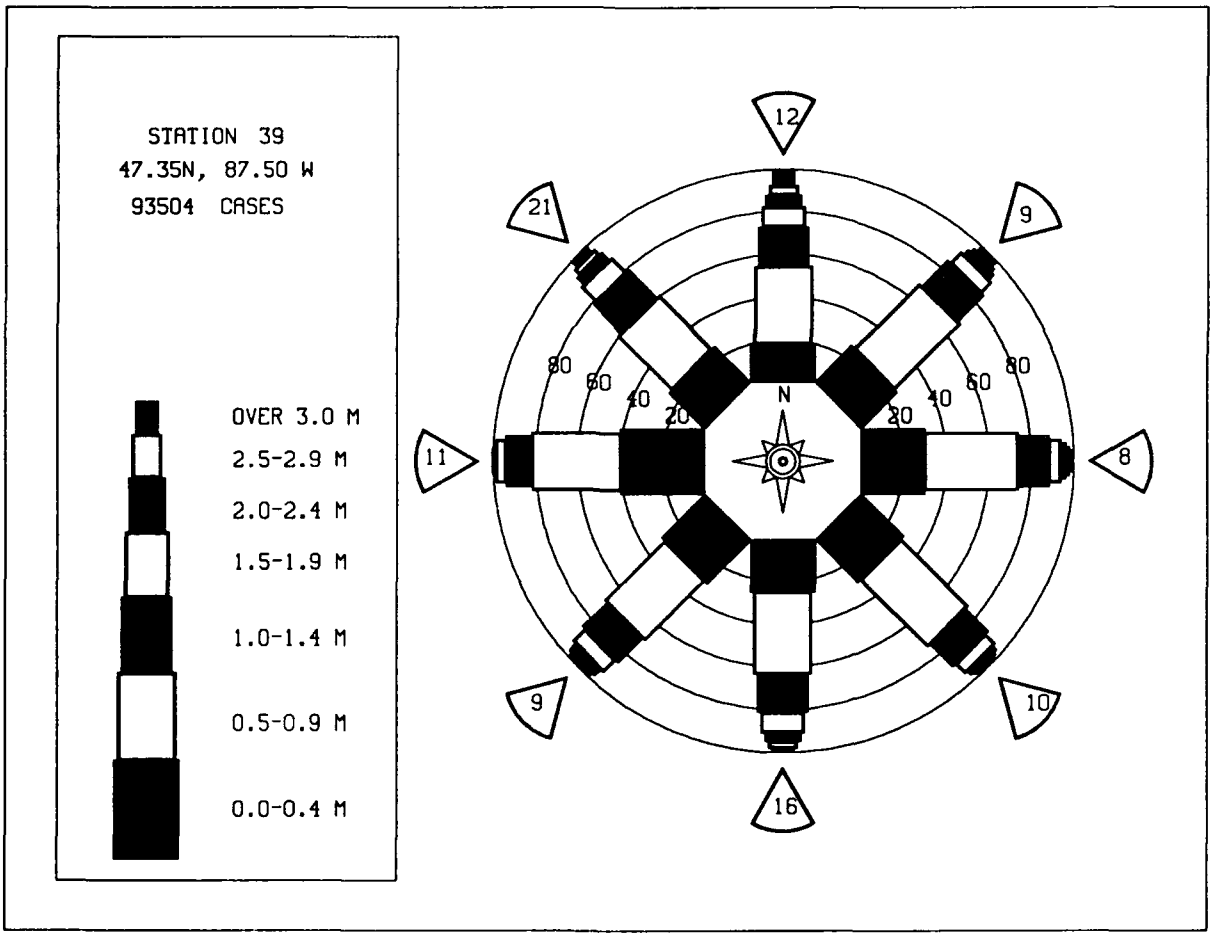
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 160 | 721 | 368 | 6 | . | . | . | . | . | . | 1255 |
| 0.50-0.99 | . | 346 | 1751 | 330 | 4 | . | . | . | . | . | 2431 |
| 1.00-1.49 | . | . | 502 | 710 | 124 | 2 | . | . | . | . | 1338 |
| 1.50-1.99 | . | . | 39 | 453 | 279 | 42 | . | . | . | . | 813 |
| 2.00-2.49 | . | . | . | 188 | 164 | 91 | 1 | . | . | . | 444 |
| 2.50-2.99 | . | . | . | 8 | 259 | 86 | 7 | . | . | . | 362 |
| 3.00-3.49 | . | . | . | . | 14 | 240 | 8 | 1 | . | . | 263 |
| 3.50-3.99 | . | . | . | . | . | 108 | 29 | . | . | . | 137 |
| 4.00-4.49 | . | . | . | . | . | 18 | 59 | 2 | . | . | 79 |
| 4.50-4.99 | . | . | . | . | . | . | 9 | 7 | . | . | 16 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 160 | 1067 | 2660 | 1695 | 844 | 589 | 113 | 13 | 2 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.9 NO. OF CASES= 6696.

STATION S39 47.35N 87.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 363 | 1462 | 778 | 34 | 2 | . | . | . | . | . | 2639 |
| 0.50-0.99 | . | 834 | 2625 | 469 | 44 | 9 | . | . | . | . | 3981 |
| 1.00-1.49 | . | . | 646 | 773 | 183 | 45 | 11 | 3 | . | . | 1661 |
| 1.50-1.99 | . | . | 62 | 433 | 231 | 55 | 8 | 8 | 2 | . | 799 |
| 2.00-2.49 | . | . | 2 | 153 | 130 | 67 | 6 | 7 | 3 | . | 368 |
| 2.50-2.99 | . | . | . | 6 | 177 | 51 | 5 | 2 | 2 | . | 243 |
| 3.00-3.49 | . | . | . | . | 11 | 132 | 4 | 1 | . | . | 148 |
| 3.50-3.99 | . | . | . | . | . | 61 | 17 | 1 | . | . | 79 |
| 4.00-4.49 | . | . | . | . | . | 7 | 25 | 1 | . | . | 33 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 5 | . | . | 13 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 363 | 2296 | 4113 | 1868 | 778 | 427 | 84 | 32 | 7 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S39 (47.35N 87.50W)

| | MONTH | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| YEAR | | | | | | | | | | | | | MEAN |
| 1956 | 0.7 | 0.9 | 1.0 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.7 | 1.1 | 1.3 | 1.2 | 0.8 |
| 1957 | 1.3 | 1.2 | 0.9 | 0.9 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 0.8 | 1.2 | 1.3 | 0.9 |
| 1958 | 0.9 | 1.5 | 0.6 | 0.8 | 0.8 | 0.7 | 0.5 | 0.5 | 0.8 | 0.9 | 1.5 | 1.0 | 0.9 |
| 1959 | 0.9 | 0.9 | 0.8 | 0.7 | 0.8 | 0.5 | 0.4 | 0.5 | 0.7 | 0.9 | 1.1 | 1.3 | 0.8 |
| 1960 | 1.2 | 1.2 | 0.9 | 0.9 | 0.9 | 0.5 | 0.4 | 0.6 | 0.6 | 0.9 | 1.3 | 1.0 | 0.9 |
| 1961 | 0.8 | 0.9 | 1.2 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.8 | 0.9 | 1.0 | 1.0 | 0.8 |
| 1962 | 1.2 | 1.0 | 0.8 | 0.8 | 0.7 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 1.0 | 1.3 | 0.8 |
| 1963 | 1.1 | 1.2 | 1.2 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.8 | 1.2 | 1.3 | 0.9 |
| 1964 | 1.3 | 1.2 | 1.4 | 1.1 | 0.8 | 0.6 | 0.5 | 0.7 | 0.9 | 1.0 | 1.0 | 1.0 | 1.0 |
| 1965 | 1.6 | 1.5 | 1.2 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.8 | 1.4 | 1.5 | 1.6 | 1.1 |
| 1966 | 1.4 | 1.7 | 2.0 | 1.1 | 1.1 | 0.6 | 0.6 | 0.6 | 0.9 | 1.4 | 1.9 | 1.6 | 1.2 |
| 1967 | 1.7 | 1.7 | 1.4 | 1.1 | 1.0 | 0.7 | 0.6 | 0.7 | 1.0 | 1.6 | 1.4 | 1.6 | 1.2 |
| 1968 | 1.5 | 2.1 | 1.6 | 1.2 | 1.0 | 0.7 | 0.7 | 0.7 | 0.8 | 1.5 | 1.8 | 1.7 | 1.3 |
| 1969 | 1.7 | 1.1 | 1.5 | 1.1 | 0.8 | 0.7 | 0.5 | 0.7 | 0.9 | 1.3 | 1.3 | 1.3 | 1.1 |
| 1970 | 1.4 | 1.6 | 1.2 | 1.2 | 1.0 | 0.7 | 0.6 | 0.6 | 1.1 | 1.6 | 1.6 | 1.4 | 1.2 |
| 1971 | 1.1 | 1.1 | 1.1 | 0.9 | 0.7 | 0.5 | 0.5 | 0.5 | 0.7 | 1.2 | 1.3 | 0.9 | 0.9 |
| 1972 | 1.2 | 1.0 | 1.2 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.9 | 1.2 | 1.1 | 1.3 | 0.9 |
| 1973 | 1.2 | 1.2 | 1.4 | 1.0 | 0.9 | 0.5 | 0.6 | 0.5 | 0.8 | 1.0 | 1.3 | 1.2 | 1.0 |
| 1974 | 1.0 | 0.9 | 1.1 | 0.9 | 0.7 | 0.6 | 0.5 | 0.6 | 0.7 | 1.0 | 1.1 | 1.1 | 0.9 |
| 1975 | 1.2 | 0.8 | 1.1 | 0.6 | 0.5 | 0.6 | 0.5 | 0.6 | 0.8 | 1.2 | 1.5 | 1.2 | 0.9 |
| 1976 | 1.5 | 1.4 | 1.7 | 1.1 | 0.8 | 0.7 | 0.5 | 0.6 | 0.7 | 0.7 | 0.9 | 1.1 | 1.0 |
| 1977 | 1.1 | 1.4 | 1.2 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 1.1 | 1.2 | 0.9 |
| 1978 | 1.3 | 0.9 | 0.8 | 0.9 | 0.7 | 0.5 | 0.5 | 0.6 | 0.8 | 0.9 | 1.1 | 1.1 | 0.9 |
| 1979 | 1.1 | 1.0 | 1.3 | 0.7 | 0.6 | 0.6 | 0.4 | 0.6 | 0.8 | 1.0 | 1.2 | 1.2 | 0.9 |
| 1980 | 1.1 | 0.8 | 1.0 | 0.8 | 0.6 | 0.5 | 0.4 | 0.6 | 0.9 | 1.2 | 0.9 | 1.2 | 0.8 |
| 1981 | 0.9 | 1.1 | 1.0 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.8 | 1.1 | 1.1 | 0.9 | 0.8 |
| 1982 | 1.6 | 1.1 | 1.4 | 1.0 | 0.6 | 0.5 | 0.5 | 0.4 | 0.9 | 1.1 | 1.2 | 1.3 | 1.0 |
| 1983 | 1.4 | 1.1 | 1.6 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.7 | 0.9 | 1.5 | 1.3 | 0.9 |
| 1984 | 1.1 | 1.2 | 1.4 | 1.0 | 0.6 | 0.6 | 0.4 | 0.4 | 0.8 | 1.0 | 1.4 | 1.4 | 0.9 |
| 1985 | 1.3 | 1.2 | 1.4 | 0.8 | 0.6 | 0.6 | 0.4 | 0.5 | 0.7 | 0.8 | 1.0 | 1.2 | 0.9 |
| 1986 | 1.3 | 0.8 | 1.2 | 1.0 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 1.1 | 1.1 | 0.8 |
| 1987 | 1.1 | 1.0 | 1.3 | 0.7 | 0.6 | 0.4 | 0.5 | 0.5 | 0.6 | 1.0 | 1.2 | 1.0 | 0.8 |
| MEAN | 1.2 | 1.2 | 1.2 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 1.1 | 1.2 | 1.2 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S39 (47.35N 87.50W)

| | MONTH | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| YEAR | | | | | | | | | | | | |
| 1956 | 3.1 | 3.8 | 6.0 | 3.8 | 2.4 | 1.6 | 1.2 | 1.3 | 2.8 | 3.7 | 3.7 | 4.4 |
| 1957 | 3.4 | 3.4 | 3.2 | 3.5 | 2.6 | 2.3 | 2.1 | 1.7 | 3.4 | 3.0 | 4.6 | 4.3 |
| 1958 | 3.3 | 3.4 | 3.1 | 3.7 | 2.0 | 1.9 | 1.4 | 1.7 | 2.7 | 2.2 | 3.9 | 3.1 |
| 1959 | 2.8 | 2.7 | 3.9 | 2.3 | 2.6 | 1.3 | 1.4 | 1.3 | 2.7 | 3.1 | 3.3 | 4.4 |
| 1960 | 3.3 | 3.9 | 4.0 | 2.4 | 3.3 | 1.2 | 1.5 | 1.7 | 2.5 | 3.7 | 4.5 | 3.0 |
| 1961 | 3.9 | 3.1 | 3.7 | 2.5 | 2.7 | 1.5 | 1.5 | 1.9 | 3.4 | 3.5 | 3.5 | 3.5 |
| 1962 | 3.8 | 3.7 | 3.1 | 3.3 | 2.1 | 1.2 | 1.6 | 2.3 | 2.0 | 2.5 | 3.0 | 3.7 |
| 1963 | 2.8 | 4.1 | 4.6 | 3.6 | 1.9 | 1.6 | 1.7 | 1.8 | 2.8 | 2.5 | 4.0 | 4.5 |
| 1964 | 3.9 | 3.7 | 4.0 | 4.3 | 2.3 | 2.2 | 1.2 | 2.5 | 2.8 | 3.7 | 2.6 | 3.1 |
| 1965 | 4.5 | 5.1 | 4.6 | 3.1 | 1.8 | 2.1 | 2.1 | 2.4 | 2.4 | 4.4 | 5.3 | 5.3 |
| 1966 | 4.3 | 4.5 | 5.6 | 3.8 | 3.6 | 1.9 | 2.2 | 2.0 | 3.2 | 4.7 | 6.7 | 4.4 |
| 1967 | 5.1 | 4.4 | 4.3 | 3.8 | 3.5 | 2.5 | 3.4 | 2.7 | 3.4 | 4.2 | 3.9 | 4.7 |
| 1968 | 4.6 | 5.8 | 5.8 | 4.7 | 2.7 | 2.3 | 3.1 | 2.8 | 2.5 | 4.2 | 5.0 | 5.9 |
| 1969 | 4.3 | 5.2 | 5.7 | 3.8 | 2.8 | 2.7 | 1.9 | 3.1 | 3.2 | 3.6 | 3.7 | 4.7 |
| 1970 | 4.7 | 4.8 | 3.7 | 4.0 | 2.9 | 1.8 | 2.8 | 1.9 | 4.2 | 4.4 | 4.9 | 4.8 |
| 1971 | 3.4 | 4.0 | 4.2 | 3.0 | 3.1 | 1.7 | 1.6 | 1.2 | 2.4 | 4.3 | 4.5 | 3.6 |
| 1972 | 4.7 | 3.9 | 4.4 | 2.8 | 1.3 | 1.5 | 1.3 | 1.7 | 3.5 | 5.2 | 3.5 | 4.8 |
| 1973 | 4.0 | 3.8 | 4.6 | 2.6 | 3.3 | 1.2 | 1.8 | 1.4 | 2.7 | 3.4 | 3.7 | 3.9 |
| 1974 | 3.3 | 4.3 | 3.1 | 3.1 | 2.7 | 1.7 | 1.3 | 1.9 | 1.8 | 3.0 | 3.4 | 3.9 |
| 1975 | 4.7 | 2.4 | 3.8 | 1.4 | 2.1 | 1.7 | 2.3 | 2.9 | 2.8 | 4.0 | 5.3 | 3.9 |
| 1976 | 4.4 | 4.6 | 5.1 | 3.6 | 3.0 | 3.0 | 1.3 | 1.9 | 2.9 | 2.7 | 3.4 | 4.2 |
| 1977 | 3.5 | 4.5 | 3.8 | 3.1 | 1.5 | 1.4 | 2.3 | 1.6 | 4.0 | 2.9 | 3.8 | 4.5 |
| 1978 | 5.0 | 3.7 | 3.2 | 3.0 | 3.4 | 2.0 | 1.7 | 2.2 | 2.5 | 3.6 | 3.5 | 3.9 |
| 1979 | 3.3 | 3.5 | 4.7 | 3.7 | 2.7 | 1.9 | 1.2 | 2.2 | 2.7 | 4.9 | 3.4 | 3.4 |
| 1980 | 4.8 | 3.4 | 3.4 | 3.2 | 1.6 | 1.4 | 1.3 | 2.1 | 3.5 | 3.5 | 3.0 | 3.6 |
| 1981 | 2.8 | 3.0 | 3.2 | 2.6 | 2.5 | 3.1 | 1.6 | 1.3 | 3.7 | 4.0 | 4.1 | 3.0 |
| 1982 | 5.7 | 2.6 | 4.9 | 4.2 | 1.8 | 1.5 | 2.0 | 1.2 | 3.1 | 5.1 | 4.3 | 3.5 |
| 1983 | 4.8 | 5.3 | 4.9 | 2.1 | 2.4 | 1.9 | 2.6 | 1.6 | 2.0 | 3.2 | 4.5 | 4.4 |
| 1984 | 3.9 | 4.5 | 5.5 | 3.8 | 3.2 | 2.5 | 1.4 | 1.3 | 2.7 | 3.2 | 4.3 | 4.7 |
| 1985 | 4.5 | 3.8 | 5.2 | 3.8 | 2.1 | 2.5 | 1.1 | 1.8 | 2.6 | 3.2 | 2.8 | 5.6 |
| 1986 | 4.3 | 2.7 | 4.5 | 3.0 | 3.6 | 1.5 | 0.9 | 1.3 | 2.7 | 3.5 | 3.9 | 2.9 |
| 1987 | 3.3 | 6.0 | 4.0 | 3.2 | 2.0 | 1.0 | 1.7 | 1.6 | 2.6 | 4.7 | 3.9 | 4.2 |

32 YR. STATISTICS FOR WIS STATION S39

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.5 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 6.7 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 7.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66112809 |

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 485 | 875 | 664 | 87 | 4 | . | . | . | . | . | 2115 |
| 0.50-0.99 | . | 930 | 516 | 511 | 147 | 25 | 1 | . | . | . | 2130 |
| 1.00-1.49 | . | . | 316 | 182 | 217 | 149 | 13 | 1 | . | . | 878 |
| 1.50-1.99 | . | . | 136 | 20 | 86 | 212 | 83 | 11 | . | . | 548 |
| 2.00-2.49 | . | . | 20 | 8 | 7 | 39 | 67 | 55 | 3 | . | 199 |
| 2.50-2.99 | . | . | . | 6 | . | 3 | 6 | 29 | 6 | . | 50 |
| 3.00-3.49 | . | . | . | 2 | . | . | 1 | 1 | 3 | . | 7 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 485 | 1805 | 1652 | 816 | 461 | 428 | 171 | 97 | 15 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 5562.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 357 | 632 | 427 | 32 | 3 | . | . | . | . | . | 1451 |
| 0.50-0.99 | . | 493 | 650 | 313 | 53 | 3 | . | . | . | . | 1512 |
| 1.00-1.49 | . | . | 121 | 171 | 111 | 24 | 2 | . | . | . | 429 |
| 1.50-1.99 | . | . | 12 | 55 | 55 | 64 | 6 | . | . | . | 192 |
| 2.00-2.49 | . | . | . | 17 | 12 | 25 | 14 | 6 | . | . | 74 |
| 2.50-2.99 | . | . | . | 1 | 20 | 12 | 8 | 3 | . | . | 44 |
| 3.00-3.49 | . | . | . | . | 4 | 13 | 4 | . | . | . | 21 |
| 3.50-3.99 | . | . | . | . | . | 5 | 4 | 3 | . | . | 12 |
| 4.00-4.49 | . | . | . | . | . | 1 | 5 | 2 | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 3 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 357 | 1125 | 1210 | 589 | 258 | 147 | 44 | 19 | 2 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 3522.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 407 | 820 | 424 | 23 | 2 | 1 | . | . | . | . | 1677 |
| 0.50-0.99 | . | 472 | 1146 | 268 | 22 | 1 | . | . | . | . | 1909 |
| 1.00-1.49 | . | . | 296 | 322 | 70 | 3 | . | . | . | . | 691 |
| 1.50-1.99 | . | . | 21 | 171 | 126 | 20 | 1 | . | . | . | 339 |
| 2.00-2.49 | . | . | . | 47 | 45 | 45 | 4 | . | . | . | 141 |
| 2.50-2.99 | . | . | . | 3 | 48 | 22 | 8 | . | . | . | 81 |
| 3.00-3.49 | . | . | . | . | 2 | 50 | 6 | 2 | . | . | 60 |
| 3.50-3.99 | . | . | . | . | . | 17 | 16 | 3 | . | . | 36 |
| 4.00-4.49 | . | . | . | . | . | . | 5 | 5 | . | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 3 | 1 | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 407 | 1292 | 1887 | 834 | 315 | 159 | 43 | 15 | 3 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 4646.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 363 | 734 | 314 | 18 | 1 | . | . | . | . | . | 1430 |
| 0.50-0.99 | . | 417 | 1297 | 150 | 5 | . | . | . | . | . | 1869 |
| 1.00-1.49 | . | . | 295 | 280 | 22 | 1 | . | . | . | . | 598 |
| 1.50-1.99 | . | . | 11 | 145 | 89 | 11 | . | . | . | . | 256 |
| 2.00-2.49 | . | . | . | 37 | 43 | 25 | 1 | . | . | . | 106 |
| 2.50-2.99 | . | . | . | . | 59 | 28 | 7 | 2 | . | . | 96 |
| 3.00-3.49 | . | . | . | . | 2 | 45 | 7 | 2 | . | . | 56 |
| 3.50-3.99 | . | . | . | . | . | 24 | 10 | 3 | . | . | 37 |
| 4.00-4.49 | . | . | . | . | . | 1 | 12 | 4 | . | . | 17 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 7 | . | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 6 | . | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 363 | 1151 | 1917 | 630 | 221 | 135 | 38 | 24 | 1 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 4205.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 518 | 1083 | 309 | 12 | . | . | . | . | . | . | 1922 |
| 0.50-0.99 | . | 519 | 1555 | 98 | 2 | . | . | . | . | . | 2174 |
| 1.00-1.49 | . | . | 441 | 332 | 29 | 1 | . | . | . | . | 803 |
| 1.50-1.99 | . | . | 9 | 231 | 72 | 5 | . | . | . | . | 317 |
| 2.00-2.49 | . | . | . | 64 | 44 | 9 | . | . | . | . | 117 |
| 2.50-2.99 | . | . | . | 1 | 73 | 21 | 4 | 1 | . | . | 100 |
| 3.00-3.49 | . | . | . | . | 2 | 53 | 3 | 3 | . | . | 61 |
| 3.50-3.99 | . | . | . | . | . | 23 | 16 | 2 | 1 | . | 42 |
| 4.00-4.49 | . | . | . | . | . | 2 | 20 | 8 | . | . | 30 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 9 | 2 | . | 15 |
| 5.00-5.49 | . | . | . | . | . | . | . | 7 | 1 | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 3 | . | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 0 | 0 |
| TOTAL | 518 | 1602 | 2314 | 738 | 222 | 114 | 47 | 33 | 10 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 5249.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 401 | 689 | 207 | 10 | . | . | . | . | . | . | 1307 |
| 0.50-0.99 | . | 343 | 1219 | 74 | 4 | 1 | . | . | . | . | 1641 |
| 1.00-1.49 | . | . | 337 | 317 | 35 | 1 | . | . | . | . | 690 |
| 1.50-1.99 | . | . | 10 | 209 | 93 | 13 | . | . | . | . | 325 |
| 2.00-2.49 | . | . | . | 50 | 49 | 18 | . | . | . | . | 117 |
| 2.50-2.99 | . | . | . | 2 | 39 | 19 | 3 | . | . | . | 63 |
| 3.00-3.49 | . | . | . | . | 1 | 28 | . | 3 | . | . | 32 |
| 3.50-3.99 | . | . | . | . | . | 35 | 12 | 2 | . | . | 49 |
| 4.00-4.49 | . | . | . | . | . | . | 13 | 1 | . | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 1 | 1 | 7 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 401 | 1032 | 1773 | 662 | 221 | 115 | 29 | 14 | 6 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 3991.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 351 | 868 | 464 | 19 | . | . | . | . | . | . | 1702 |
| 0.50-0.99 | . | 449 | 1581 | 244 | 16 | . | . | . | . | . | 2290 |
| 1.00-1.49 | . | . | 293 | 439 | 65 | 2 | . | . | . | . | 799 |
| 1.50-1.99 | . | . | 12 | 181 | 120 | 17 | . | . | . | . | 330 |
| 2.00-2.49 | . | . | . | 42 | 54 | 37 | . | . | . | . | 133 |
| 2.50-2.99 | . | . | . | . | 32 | 16 | 1 | . | . | . | 49 |
| 3.00-3.49 | . | . | . | . | . | 47 | . | . | . | . | 47 |
| 3.50-3.99 | . | . | . | . | . | 14 | 1 | 1 | . | . | 16 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 351 | 1317 | 2350 | 925 | 287 | 133 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 5027.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 423 | 1190 | 1008 | 91 | . | . | . | . | . | . | 2712 |
| 0.50-0.99 | . | 773 | 2402 | 897 | 53 | . | . | . | . | . | 4125 |
| 1.00-1.49 | . | . | 875 | 517 | 250 | 9 | . | . | . | . | 1651 |
| 1.50-1.99 | . | . | 132 | 469 | 136 | 20 | 1 | . | . | . | 758 |
| 2.00-2.49 | . | . | . | 272 | 37 | 17 | . | . | . | . | 326 |
| 2.50-2.99 | . | . | . | 40 | 60 | 8 | . | . | . | . | 108 |
| 3.00-3.49 | . | . | . | . | 14 | 16 | . | 1 | . | . | 31 |
| 3.50-3.99 | . | . | . | . | 2 | 11 | 3 | . | . | . | 16 |
| 4.00-4.49 | . | . | . | . | . | 1 | 3 | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 423 | 1963 | 4417 | 2286 | 552 | 82 | 7 | 1 | 1 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 9113.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 520 | 1072 | 249 | 21 | . | . | . | . | . | . | 1862 |
| 0.50-0.99 | . | 778 | 1544 | 112 | 14 | 2 | . | . | . | . | 2450 |
| 1.00-1.49 | . | . | 973 | 83 | 36 | 2 | . | . | . | . | 1094 |
| 1.50-1.99 | . | . | 148 | 434 | 3 | 7 | . | . | . | . | 592 |
| 2.00-2.49 | . | . | . | 412 | 5 | 5 | . | . | . | . | 422 |
| 2.50-2.99 | . | . | . | 37 | 78 | 1 | . | . | . | . | 116 |
| 3.00-3.49 | . | . | . | . | 35 | 4 | . | . | . | . | 39 |
| 3.50-3.99 | . | . | . | . | 1 | 7 | . | . | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 520 | 1850 | 2914 | 1099 | 172 | 29 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 6166.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 425 | 821 | 163 | 11 | . | . | . | . | . | . | 1420 |
| 0.50-0.99 | . | 590 | 1078 | 67 | 5 | . | . | . | . | . | 1740 |
| 1.00-1.49 | . | . | 716 | 39 | 14 | 6 | . | . | . | . | 775 |
| 1.50-1.99 | . | . | 85 | 297 | 6 | 5 | . | . | . | . | 393 |
| 2.00-2.49 | . | . | . | 188 | 4 | 2 | . | . | . | . | 194 |
| 2.50-2.99 | . | . | . | 19 | 52 | . | . | . | . | . | 71 |
| 3.00-3.49 | . | . | . | . | 17 | . | . | . | . | . | 17 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 425 | 1411 | 2042 | 621 | 98 | 15 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 4321.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 476 | 858 | 186 | 33 | 2 | . | . | . | . | . | 1555 |
| 0.50-0.99 | . | 590 | 1363 | 70 | 7 | . | . | . | . | . | 2030 |
| 1.00-1.49 | . | . | 920 | 78 | 18 | 4 | . | . | . | . | 1020 |
| 1.50-1.99 | . | . | 83 | 382 | 2 | 3 | 1 | . | . | . | 471 |
| 2.00-2.49 | . | . | . | 180 | 18 | . | . | . | . | . | 198 |
| 2.50-2.99 | . | . | . | 28 | 16 | . | . | . | . | . | 44 |
| 3.00-3.49 | . | . | . | . | 9 | 2 | . | . | . | . | 11 |
| 3.50-3.99 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 476 | 1448 | 2552 | 771 | 74 | 10 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 4995.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 598 | 1007 | 162 | 29 | 7 | 1 | . | . | . | . | 1804 |
| 0.50-0.99 | . | 1351 | 1750 | 67 | 8 | . | . | . | . | . | 3176 |
| 1.00-1.49 | . | . | 1393 | 71 | 17 | 3 | . | . | . | . | 1484 |
| 1.50-1.99 | . | . | 291 | 388 | 6 | 3 | . | . | . | . | 688 |
| 2.00-2.49 | . | . | . | 237 | 11 | . | . | . | . | . | 248 |
| 2.50-2.99 | . | . | . | 14 | 22 | . | . | . | . | . | 36 |
| 3.00-3.49 | . | . | . | . | 9 | 1 | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 598 | 2358 | 3596 | 806 | 80 | 12 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 6978.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 990 | 1249 | 306 | 49 | 7 | . | . | . | . | . | 2601 |
| 0.50-0.99 | . | 2064 | 1726 | 87 | 12 | 1 | . | . | . | . | 3890 |
| 1.00-1.49 | . | . | 1412 | 20 | 34 | 1 | . | . | . | . | 1467 |
| 1.50-1.99 | . | . | 406 | 361 | 8 | 5 | . | . | . | . | 780 |
| 2.00-2.49 | . | . | . | 170 | 1 | . | . | . | . | . | 171 |
| 2.50-2.99 | . | . | . | 13 | 1 | . | . | 1 | . | . | 15 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 990 | 3313 | 3850 | 700 | 64 | 7 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 8353.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 890 | 1533 | 428 | 71 | 9 | 4 | . | . | . | . | 2935 |
| 0.50-0.99 | . | 2500 | 1387 | 152 | 28 | 5 | . | . | . | . | 4072 |
| 1.00-1.49 | . | . | 1146 | 29 | 35 | 5 | 1 | . | . | . | 1216 |
| 1.50-1.99 | . | . | 466 | 236 | 5 | 3 | . | 1 | . | . | 711 |
| 2.00-2.49 | . | . | . | 93 | . | . | . | . | . | . | 93 |
| 2.50-2.99 | . | . | . | 8 | 3 | . | . | . | . | . | 11 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 890 | 4033 | 3427 | 589 | 81 | 17 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 8462.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 737 | 1205 | 546 | 94 | 7 | . | . | . | . | . | 2589 |
| 0.50-0.99 | . | 2291 | 963 | 148 | 58 | 36 | 1 | . | . | . | 3497 |
| 1.00-1.49 | . | . | 934 | 26 | 31 | 18 | 4 | 2 | . | . | 1015 |
| 1.50-1.99 | . | . | 429 | 45 | 8 | 9 | 3 | 2 | . | . | 496 |
| 2.00-2.49 | . | . | . | 36 | . | . | . | . | . | . | 36 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 737 | 3496 | 2872 | 352 | 104 | 63 | 8 | 4 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 7151.

STATION S40 47.38N 87.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

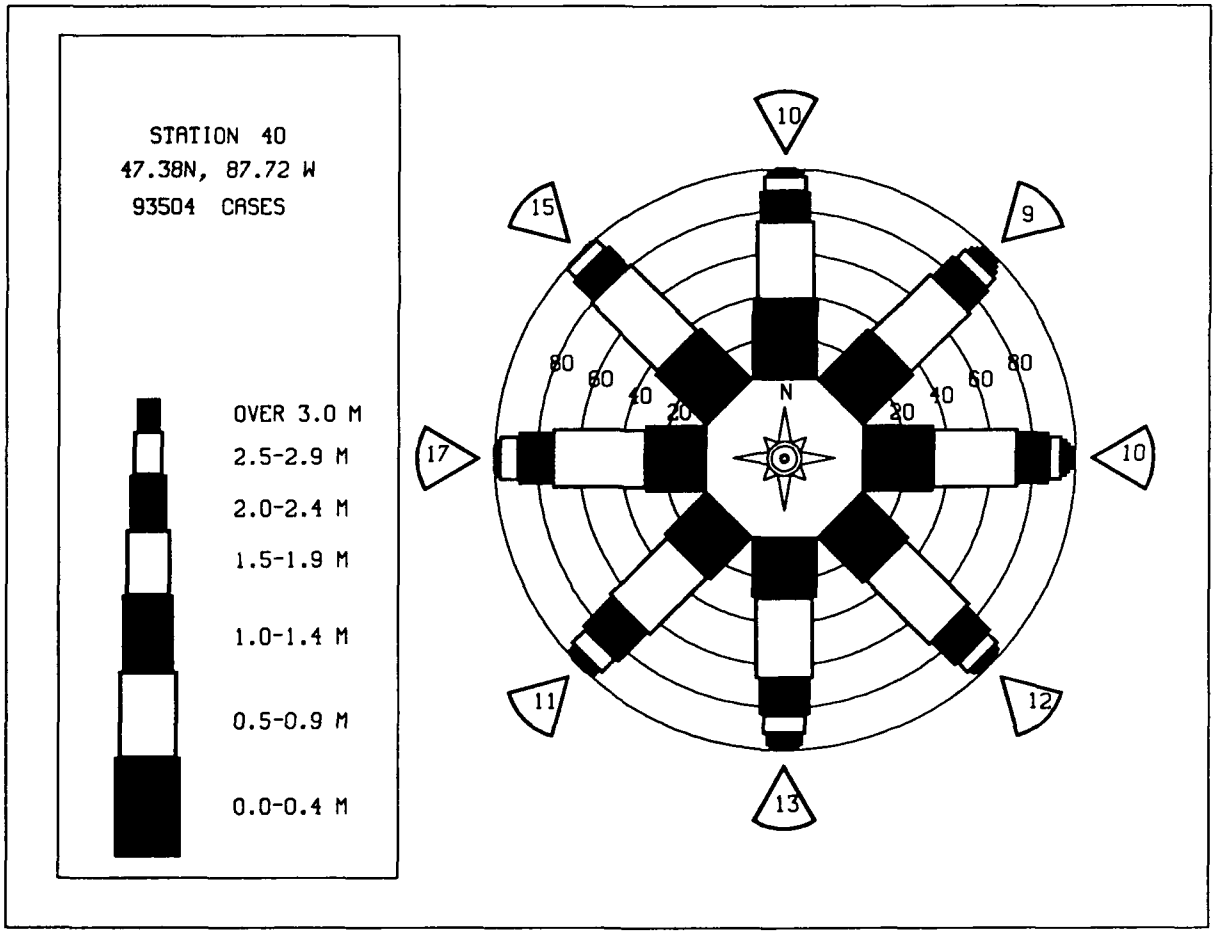
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 534 | 986 | 548 | 97 | 8 | 4 | . | . | . | . | 2177 |
| 0.50-0.99 | . | 1518 | 581 | 315 | 115 | 53 | 1 | . | . | . | 2583 |
| 1.00-1.49 | . | . | 563 | 52 | 90 | 113 | 27 | 1 | . | . | 846 |
| 1.50-1.99 | . | . | 334 | 25 | 22 | 45 | 47 | 18 | . | . | 491 |
| 2.00-2.49 | . | . | 8 | 18 | . | 2 | 5 | 11 | 1 | . | 45 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | 2 | 1 | . | 7 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 534 | 2504 | 2034 | 511 | 235 | 217 | 80 | 32 | 2 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 5763.

STATION S40 47.38N 87.72W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 848 | 1562 | 641 | 70 | 5 | 1 | . | . | . | . | 3127 |
| 0.50-0.99 | . | 1608 | 2076 | 358 | 55 | 12 | . | . | . | . | 4109 |
| 1.00-1.49 | . | . | 1104 | 296 | 108 | 34 | 4 | . | . | . | 1546 |
| 1.50-1.99 | . | . | 259 | 365 | 84 | 44 | 14 | 3 | . | . | 769 |
| 2.00-2.49 | . | . | 2 | 187 | 33 | 22 | 9 | 7 | . | . | 260 |
| 2.50-2.99 | . | . | . | 18 | 50 | 13 | 3 | 3 | . | . | 87 |
| 3.00-3.49 | . | . | . | . | 9 | 26 | 2 | 1 | . | . | 38 |
| 3.50-3.99 | . | . | . | . | . | 14 | 6 | 1 | . | . | 21 |
| 4.00-4.49 | . | . | . | . | . | . | 6 | 2 | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 848 | 3170 | 4082 | 1294 | 344 | 166 | 45 | 21 | 0 | 0 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S40 (47.38N 87.72W)

| | MONTH | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| YEAR | | | | | | | | | | | | | MEAN |
| 1956 | 0.7 | 0.9 | 1.0 | 0.9 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 1.0 | 1.1 | 1.1 | 0.8 |
| 1957 | 1.0 | 1.0 | 0.9 | 0.8 | 0.8 | 0.6 | 0.5 | 0.6 | 0.7 | 0.6 | 0.9 | 1.1 | 0.8 |
| 1958 | 0.8 | 1.0 | 0.5 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.7 | 0.8 | 1.3 | 0.8 | 0.7 |
| 1959 | 0.7 | 0.8 | 0.7 | 0.6 | 0.8 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 | 1.0 | 1.3 | 0.7 |
| 1960 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.4 | 0.4 | 0.6 | 0.6 | 0.8 | 1.0 | 0.8 | 0.7 |
| 1961 | 0.7 | 0.9 | 1.1 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 0.9 | 0.9 | 0.7 |
| 1962 | 1.0 | 0.9 | 0.8 | 0.7 | 0.7 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.8 | 0.7 |
| 1963 | 0.9 | 0.9 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.9 | 1.0 | 0.7 |
| 1964 | 1.1 | 0.9 | 1.1 | 1.0 | 0.7 | 0.5 | 0.5 | 0.7 | 0.7 | 0.9 | 0.9 | 1.0 | 0.8 |
| 1965 | 1.3 | 1.3 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 1.1 | 1.2 | 1.4 | 0.9 |
| 1966 | 1.1 | 1.2 | 1.5 | 0.9 | 0.9 | 0.6 | 0.6 | 0.5 | 0.7 | 1.1 | 1.3 | 1.2 | 1.0 |
| 1967 | 1.4 | 1.3 | 1.1 | 0.9 | 0.8 | 0.6 | 0.5 | 0.7 | 0.8 | 1.1 | 1.0 | 1.4 | 1.0 |
| 1968 | 1.2 | 1.3 | 1.2 | 1.0 | 0.8 | 0.6 | 0.6 | 0.6 | 0.7 | 1.2 | 1.3 | 1.3 | 1.0 |
| 1969 | 1.4 | 0.9 | 1.1 | 0.9 | 0.8 | 0.6 | 0.5 | 0.7 | 0.8 | 1.1 | 1.0 | 1.1 | 0.9 |
| 1970 | 1.1 | 1.3 | 0.9 | 1.2 | 0.9 | 0.6 | 0.6 | 0.6 | 1.0 | 1.4 | 1.3 | 1.3 | 1.0 |
| 1971 | 0.9 | 1.0 | 0.9 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.6 | 1.0 | 0.9 | 0.8 | 0.7 |
| 1972 | 1.0 | 0.8 | 1.0 | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.8 | 1.0 | 1.0 | 1.1 | 0.8 |
| 1973 | 1.0 | 1.0 | 1.1 | 0.9 | 0.7 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 1.0 | 1.0 | 0.8 |
| 1974 | 0.9 | 0.7 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.8 | 0.9 | 1.0 | 0.8 |
| 1975 | 1.1 | 0.8 | 1.1 | 0.6 | 0.4 | 0.6 | 0.5 | 0.6 | 0.7 | 1.1 | 1.3 | 1.1 | 0.8 |
| 1976 | 1.2 | 1.2 | 1.4 | 0.9 | 0.6 | 0.7 | 0.4 | 0.5 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 |
| 1977 | 0.9 | 1.1 | 1.2 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 1.1 | 0.8 |
| 1978 | 1.0 | 0.8 | 0.8 | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.8 | 0.7 | 1.0 | 1.0 | 0.8 |
| 1979 | 0.9 | 0.8 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 | 0.9 | 1.0 | 0.7 |
| 1980 | 0.9 | 0.7 | 0.9 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.7 | 0.9 | 0.7 | 1.0 | 0.7 |
| 1981 | 0.8 | 0.9 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.7 | 0.9 | 0.8 | 0.8 | 0.7 |
| 1982 | 1.2 | 1.0 | 1.2 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.7 | 0.9 | 0.9 | 1.0 | 0.8 |
| 1983 | 1.0 | 0.9 | 1.3 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 1.3 | 1.1 | 0.8 |
| 1984 | 0.9 | 0.9 | 1.0 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 1.1 | 1.1 | 0.8 |
| 1985 | 1.0 | 0.9 | 1.3 | 0.7 | 0.5 | 0.5 | 0.3 | 0.5 | 0.6 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1986 | 1.0 | 0.7 | 1.0 | 0.9 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 0.9 | 0.9 | 0.7 |
| 1987 | 0.8 | 0.9 | 1.1 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.8 | 0.9 | 0.9 | 0.7 |
| MEAN | 1.0 | 1.0 | 1.0 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 1.0 | 1.0 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S40 (47.38N 87.72W)

| | MONTH | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| YEAR | | | | | | | | | | | | |
| 1956 | 3.5 | 4.3 | 6.3 | 3.5 | 2.7 | 1.5 | 1.5 | 1.5 | 1.8 | 2.7 | 4.0 | 5.2 |
| 1957 | 2.3 | 2.6 | 3.2 | 4.2 | 2.8 | 1.9 | 1.5 | 1.4 | 1.8 | 2.8 | 2.8 | 3.9 |
| 1958 | 2.9 | 4.1 | 1.8 | 4.9 | 2.2 | 1.7 | 1.7 | 1.3 | 2.0 | 1.9 | 4.3 | 2.7 |
| 1959 | 1.9 | 2.6 | 4.5 | 2.0 | 2.2 | 1.3 | 1.2 | 1.4 | 2.0 | 1.9 | 3.2 | 5.6 |
| 1960 | 2.7 | 4.0 | 2.7 | 2.7 | 3.2 | 1.5 | 1.3 | 1.8 | 1.7 | 2.0 | 4.2 | 2.2 |
| 1961 | 1.8 | 3.2 | 2.8 | 2.5 | 2.6 | 1.5 | 1.6 | 1.4 | 2.1 | 2.2 | 3.6 | 2.1 |
| 1962 | 2.9 | 3.7 | 4.0 | 2.2 | 2.7 | 1.1 | 1.9 | 1.2 | 1.4 | 2.5 | 2.2 | 2.0 |
| 1963 | 3.2 | 3.1 | 2.8 | 3.1 | 1.7 | 1.6 | 1.1 | 1.7 | 2.6 | 1.9 | 2.9 | 4.6 |
| 1964 | 4.4 | 2.1 | 3.9 | 3.3 | 2.0 | 1.7 | 1.1 | 2.0 | 2.4 | 2.4 | 2.9 | 3.3 |
| 1965 | 3.5 | 5.1 | 4.6 | 2.6 | 1.8 | 2.0 | 1.9 | 2.1 | 2.0 | 2.9 | 6.3 | 3.7 |
| 1966 | 3.4 | 3.7 | 6.1 | 4.5 | 2.4 | 1.9 | 2.0 | 1.4 | 1.7 | 3.6 | 3.7 | 3.7 |
| 1967 | 5.4 | 4.3 | 3.4 | 2.8 | 2.8 | 2.1 | 1.6 | 3.2 | 2.4 | 3.5 | 3.1 | 4.0 |
| 1968 | 3.4 | 2.9 | 3.7 | 2.9 | 2.0 | 1.9 | 2.8 | 2.0 | 2.2 | 3.7 | 4.2 | 4.8 |
| 1969 | 4.2 | 3.1 | 5.1 | 3.7 | 2.3 | 2.4 | 1.4 | 2.7 | 2.8 | 3.0 | 3.0 | 3.4 |
| 1970 | 2.5 | 2.6 | 3.8 | 4.6 | 2.2 | 1.8 | 1.8 | 1.5 | 3.9 | 3.8 | 4.6 | 5.2 |
| 1971 | 2.5 | 3.6 | 4.4 | 2.7 | 3.3 | 1.5 | 1.4 | 1.2 | 1.9 | 4.0 | 3.9 | 3.6 |
| 1972 | 2.5 | 3.9 | 4.1 | 2.8 | 1.1 | 0.9 | 1.5 | 1.2 | 3.3 | 3.5 | 3.8 | 3.4 |
| 1973 | 3.3 | 3.3 | 3.4 | 2.6 | 3.1 | 1.6 | 1.6 | 1.3 | 2.5 | 2.1 | 2.9 | 3.9 |
| 1974 | 2.4 | 2.1 | 3.7 | 3.2 | 2.1 | 1.5 | 1.7 | 1.8 | 1.7 | 2.5 | 2.9 | 4.3 |
| 1975 | 4.6 | 2.3 | 4.6 | 2.0 | 2.0 | 1.9 | 2.2 | 2.7 | 2.2 | 3.1 | 5.8 | 3.7 |
| 1976 | 3.4 | 3.2 | 5.7 | 3.3 | 2.0 | 2.5 | 1.3 | 1.6 | 2.4 | 2.0 | 2.0 | 2.4 |
| 1977 | 2.4 | 5.9 | 4.1 | 2.5 | 1.6 | 1.4 | 2.1 | 1.5 | 4.4 | 3.0 | 3.7 | 5.6 |
| 1978 | 4.1 | 2.5 | 2.3 | 2.3 | 1.8 | 1.6 | 1.3 | 1.7 | 2.8 | 2.5 | 2.6 | 3.5 |
| 1979 | 2.5 | 3.7 | 3.3 | 3.8 | 2.2 | 1.8 | 1.2 | 1.4 | 2.0 | 3.8 | 3.1 | 2.4 |
| 1980 | 4.4 | 3.0 | 3.5 | 2.8 | 1.5 | 1.7 | 1.3 | 1.8 | 2.9 | 2.8 | 2.4 | 2.5 |
| 1981 | 1.8 | 2.1 | 2.9 | 2.5 | 1.7 | 2.7 | 1.3 | 1.2 | 3.2 | 3.8 | 2.4 | 2.3 |
| 1982 | 4.5 | 2.7 | 4.1 | 2.8 | 1.8 | 1.8 | 1.6 | 1.3 | 3.0 | 2.9 | 3.4 | 2.5 |
| 1983 | 3.8 | 5.2 | 3.4 | 2.2 | 2.4 | 1.8 | 2.3 | 1.6 | 1.7 | 1.9 | 4.8 | 3.8 |
| 1984 | 2.6 | 3.5 | 2.7 | 2.4 | 1.8 | 2.1 | 1.6 | 1.1 | 2.1 | 3.7 | 2.9 | 4.1 |
| 1985 | 2.8 | 3.3 | 6.7 | 4.0 | 2.1 | 2.3 | 1.0 | 1.7 | 2.2 | 2.1 | 2.0 | 5.1 |
| 1986 | 3.4 | 2.9 | 3.6 | 3.0 | 1.9 | 1.4 | 1.0 | 1.1 | 1.8 | 2.2 | 3.6 | 2.3 |
| 1987 | 2.0 | 4.4 | 4.3 | 2.6 | 1.8 | 1.4 | 1.6 | 1.5 | 1.9 | 2.0 | 2.1 | 2.9 |

32 YR. STATISTICS FOR WIS STATION S40

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.0 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 157.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.2 |
| LARGEST WAVE HS | (METERS) | 6.7 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 86.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 85030418 |

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 660 | 1013 | 583 | 120 | 18 | 3 | . | . | . | . | 2397 |
| 0.50-0.99 | . | 1206 | 331 | 348 | 181 | 80 | 6 | 1 | . | . | 2153 |
| 1.00-1.49 | . | . | 526 | 58 | 111 | 105 | 43 | 4 | . | . | 847 |
| 1.50-1.99 | . | . | 224 | 5 | 27 | 37 | 39 | 26 | 1 | . | 359 |
| 2.00-2.49 | . | . | 42 | 20 | 1 | 10 | 9 | 4 | 3 | . | 89 |
| 2.50-2.99 | . | . | . | 5 | . | . | 2 | 6 | . | . | 13 |
| 3.00-3.49 | . | . | . | 3 | . | . | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 660 | 2219 | 1706 | 559 | 338 | 235 | 99 | 41 | 4 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 5497.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 433 | 658 | 371 | 60 | 7 | . | . | . | . | . | 1529 |
| 0.50-0.99 | . | 623 | 346 | 240 | 75 | 17 | 1 | . | . | . | 1302 |
| 1.00-1.49 | . | . | 87 | 115 | 80 | 55 | 8 | 1 | . | . | 346 |
| 1.50-1.99 | . | . | 21 | 19 | 24 | 48 | 16 | 6 | . | . | 134 |
| 2.00-2.49 | . | . | 2 | 3 | 8 | 33 | 13 | 6 | . | . | 65 |
| 2.50-2.99 | . | . | . | . | . | 8 | 9 | 4 | . | . | 21 |
| 3.00-3.49 | . | . | . | . | . | 2 | 2 | 5 | 2 | . | 11 |
| 3.50-3.99 | . | . | . | . | . | . | . | 3 | 2 | . | 5 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 433 | 1281 | 827 | 437 | 194 | 163 | 49 | 25 | 6 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 3207.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 597 | 883 | 452 | 50 | 2 | . | . | . | . | . | 1984 |
| 0.50-0.99 | . | 730 | 788 | 334 | 47 | 2 | . | . | . | . | 1901 |
| 1.00-1.49 | . | . | 167 | 352 | 145 | 22 | 4 | . | . | . | 690 |
| 1.50-1.99 | . | . | 17 | 91 | 118 | 44 | 9 | 1 | . | . | 280 |
| 2.00-2.49 | . | . | . | 12 | 48 | 63 | 9 | 2 | . | . | 134 |
| 2.50-2.99 | . | . | . | . | 1 | 56 | 18 | 5 | . | . | 80 |
| 3.00-3.49 | . | . | . | . | . | 12 | 16 | 7 | . | . | 35 |
| 3.50-3.99 | . | . | . | . | . | 1 | 7 | 3 | 1 | . | 12 |
| 4.00-4.49 | . | . | . | . | . | . | . | 6 | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 597 | 1613 | 1424 | 839 | 361 | 200 | 63 | 25 | 4 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 4808.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 493 | 777 | 325 | 10 | 3 | 1 | . | . | . | . | 1609 |
| 0.50-0.99 | . | 552 | 930 | 177 | 7 | 2 | . | . | . | . | 1668 |
| 1.00-1.49 | . | . | 229 | 211 | 33 | 1 | . | . | . | . | 474 |
| 1.50-1.99 | . | . | 10 | 103 | 50 | 14 | . | . | . | . | 177 |
| 2.00-2.49 | . | . | . | 25 | 31 | 21 | 2 | . | . | . | 79 |
| 2.50-2.99 | . | . | . | 2 | 26 | 27 | 5 | 3 | . | . | 63 |
| 3.00-3.49 | . | . | . | . | . | 22 | 5 | . | . | . | 27 |
| 3.50-3.99 | . | . | . | . | . | 8 | 6 | 1 | . | . | 15 |
| 4.00-4.49 | . | . | . | . | . | 1 | 6 | . | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 493 | 1329 | 1494 | 528 | 150 | 97 | 24 | 9 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 3871.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 637 | 1224 | 372 | 21 | 1 | . | . | . | . | . | 2255 |
| 0.50-0.99 | . | 712 | 1751 | 137 | 9 | . | . | . | . | . | 2609 |
| 1.00-1.49 | . | . | 594 | 390 | 39 | . | . | . | . | . | 1023 |
| 1.50-1.99 | . | . | 23 | 345 | 79 | 7 | . | . | . | . | 454 |
| 2.00-2.49 | . | . | . | 84 | 68 | 11 | 1 | . | . | . | 164 |
| 2.50-2.99 | . | . | . | 2 | 94 | 29 | 3 | 1 | . | . | 129 |
| 3.00-3.49 | . | . | . | . | 6 | 57 | 6 | 5 | . | . | 74 |
| 3.50-3.99 | . | . | . | . | . | 40 | 14 | 3 | 1 | . | 58 |
| 4.00-4.49 | . | . | . | . | . | 2 | 22 | 9 | . | . | 33 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 11 | 1 | . | 20 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 8 | 2 | . | 11 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 8 | . | 11 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 637 | 1936 | 2740 | 979 | 296 | 146 | 55 | 40 | 18 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.1 NO. OF CASES= 6420.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 472 | 736 | 248 | 12 | . | . | . | . | . | . | 1468 |
| 0.50-0.99 | . | 412 | 1263 | 94 | 2 | . | . | . | . | . | 1771 |
| 1.00-1.49 | . | . | 387 | 374 | 54 | 4 | . | . | . | . | 819 |
| 1.50-1.99 | . | . | 23 | 241 | 99 | 14 | . | . | . | . | 377 |
| 2.00-2.49 | . | . | . | 65 | 58 | 28 | 1 | . | . | . | 152 |
| 2.50-2.99 | . | . | . | . | 66 | 18 | 3 | 1 | . | . | 88 |
| 3.00-3.49 | . | . | . | . | 2 | 38 | 1 | 5 | . | . | 46 |
| 3.50-3.99 | . | . | . | . | . | 23 | 6 | 3 | . | . | 32 |
| 4.00-4.49 | . | . | . | . | . | 4 | 18 | 2 | . | . | 24 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 4 | . | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 1 | 1 | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 472 | 1148 | 1921 | 786 | 281 | 129 | 34 | 18 | 7 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 4499.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 445 | 860 | 634 | 38 | 2 | . | . | . | . | . | 1979 |
| 0.50-0.99 | . | 498 | 1515 | 456 | 36 | 1 | . | . | . | . | 2506 |
| 1.00-1.49 | . | . | 316 | 393 | 128 | 5 | . | . | . | . | 842 |
| 1.50-1.99 | . | . | 20 | 182 | 99 | 23 | . | . | . | . | 324 |
| 2.00-2.49 | . | . | . | 51 | 48 | 25 | . | . | . | . | 124 |
| 2.50-2.99 | . | . | . | . | 42 | 13 | 1 | . | . | . | 56 |
| 3.00-3.49 | . | . | . | . | 2 | 36 | 1 | . | . | . | 39 |
| 3.50-3.99 | . | . | . | . | . | 13 | 4 | 1 | . | . | 18 |
| 4.00-4.49 | . | . | . | . | . | . | 3 | . | 1 | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 445 | 1358 | 2485 | 1120 | 357 | 116 | 9 | 1 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 5522.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 571 | 1153 | 1007 | 216 | 2 | . | . | . | . | . | 2949 |
| 0.50-0.99 | . | 946 | 1744 | 853 | 102 | 1 | . | . | . | . | 3646 |
| 1.00-1.49 | . | . | 1068 | 234 | 146 | 19 | . | . | . | . | 1467 |
| 1.50-1.99 | . | . | 116 | 405 | 36 | 21 | . | . | . | . | 578 |
| 2.00-2.49 | . | . | . | 216 | 10 | 12 | . | . | . | . | 238 |
| 2.50-2.99 | . | . | . | 11 | 48 | 6 | . | 1 | . | . | 66 |
| 3.00-3.49 | . | . | . | . | 9 | 6 | 1 | 1 | . | . | 17 |
| 3.50-3.99 | . | . | . | . | 2 | 7 | . | 1 | . | . | 10 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 571 | 2099 | 3935 | 1935 | 355 | 72 | 3 | 3 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 8401.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 675 | 1133 | 236 | 34 | 1 | . | . | . | . | . | 2079 |
| 0.50-0.99 | . | 930 | 1355 | 108 | 19 | . | . | . | . | . | 2412 |
| 1.00-1.49 | . | . | 950 | 71 | 20 | 5 | . | . | . | . | 1046 |
| 1.50-1.99 | . | . | 98 | 377 | 3 | 4 | . | . | . | . | 482 |
| 2.00-2.49 | . | . | . | 310 | 6 | 3 | . | . | . | . | 319 |
| 2.50-2.99 | . | . | . | 17 | 80 | . | . | . | . | . | 97 |
| 3.00-3.49 | . | . | . | . | 22 | 3 | . | . | . | . | 25 |
| 3.50-3.99 | . | . | . | . | 1 | 2 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 675 | 2063 | 2639 | 917 | 152 | 17 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 6051.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 557 | 865 | 171 | 23 | 1 | . | . | . | . | . | 1617 |
| 0.50-0.99 | . | 687 | 898 | 72 | 11 | 1 | . | . | . | . | 1669 |
| 1.00-1.49 | . | . | 599 | 91 | 11 | 6 | . | . | . | . | 707 |
| 1.50-1.99 | . | . | 74 | 268 | 4 | 5 | . | . | . | . | 351 |
| 2.00-2.49 | . | . | . | 149 | 22 | 1 | . | . | . | . | 172 |
| 2.50-2.99 | . | . | . | 5 | 52 | . | . | . | . | . | 57 |
| 3.00-3.49 | . | . | . | . | 9 | 9 | . | . | . | . | 18 |
| 3.50-3.99 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 557 | 1552 | 1742 | 608 | 110 | 25 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 4307.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 662 | 989 | 201 | 32 | 4 | . | . | . | . | . | 1888 |
| 0.50-0.99 | . | 1020 | 1009 | 71 | 13 | . | . | . | . | . | 2113 |
| 1.00-1.49 | . | . | 786 | 132 | 20 | 3 | . | . | . | . | 941 |
| 1.50-1.99 | . | . | 77 | 362 | 3 | 6 | . | . | . | . | 448 |
| 2.00-2.49 | . | . | . | 145 | 51 | 1 | . | . | . | . | 197 |
| 2.50-2.99 | . | . | . | 1 | 89 | . | . | . | . | . | 90 |
| 3.00-3.49 | . | . | . | . | 8 | 20 | . | . | . | . | 28 |
| 3.50-3.99 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 662 | 2009 | 2073 | 743 | 188 | 34 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 5347.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 836 | 1577 | 193 | 32 | 4 | . | . | . | . | . | 2642 |
| 0.50-0.99 | . | 2010 | 355 | 70 | 12 | . | . | . | . | . | 2447 |
| 1.00-1.49 | . | . | 813 | 25 | 14 | 4 | . | . | . | . | 856 |
| 1.50-1.99 | . | . | 163 | 89 | 4 | 1 | . | . | . | . | 257 |
| 2.00-2.49 | . | . | 4 | 32 | 8 | . | . | . | . | . | 44 |
| 2.50-2.99 | . | . | . | 6 | 16 | . | . | . | . | . | 22 |
| 3.00-3.49 | . | . | . | . | 3 | 2 | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | 1 | 1 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 836 | 3587 | 1528 | 254 | 62 | 8 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0 6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 5877.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1552 | 2034 | 464 | 87 | 8 | . | . | . | . | . | 4145 |
| 0.50-0.99 | . | 2839 | 293 | 130 | 26 | 1 | . | . | . | . | 3289 |
| 1.00-1.49 | . | . | 1026 | 24 | 44 | 7 | . | . | . | . | 1101 |
| 1.50-1.99 | . | . | 180 | . | 6 | 5 | . | 1 | . | . | 192 |
| 2.00-2.49 | . | . | 1 | 1 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | 1 | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1552 | 4873 | 1964 | 243 | 84 | 13 | 0 | 2 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.2 NO. OF CASES= 8172.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1306 | 1781 | 465 | 89 | 21 | 3 | . | . | . | . | 3665 |
| 0.50-0.99 | . | 2558 | 721 | 136 | 26 | 10 | 1 | . | . | . | 3452 |
| 1.00-1.49 | . | . | 893 | 22 | 43 | 4 | . | . | . | . | 962 |
| 1.50-1.99 | . | . | 270 | 23 | 9 | 3 | . | . | . | . | 305 |
| 2.00-2.49 | . | . | 2 | 13 | . | 1 | . | . | . | . | 16 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1306 | 4339 | 2351 | 285 | 99 | 21 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 7867.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1022 | 1388 | 573 | 90 | 13 | 1 | . | . | . | . | 3087 |
| 0.50-0.99 | . | 2547 | 1223 | 121 | 39 | 17 | 1 | 1 | . | . | 3949 |
| 1.00-1.49 | . | . | 912 | 23 | 27 | 7 | 2 | . | . | . | 971 |
| 1.50-1.99 | . | . | 427 | 40 | 7 | 5 | . | 1 | . | . | 480 |
| 2.00-2.49 | . | . | . | 32 | . | . | . | . | . | . | 32 |
| 2.50-2.99 | . | . | . | 3 | . | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1022 | 3935 | 3135 | 309 | 86 | 30 | 3 | 2 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 7978.

STATION S41 47.23N 87.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

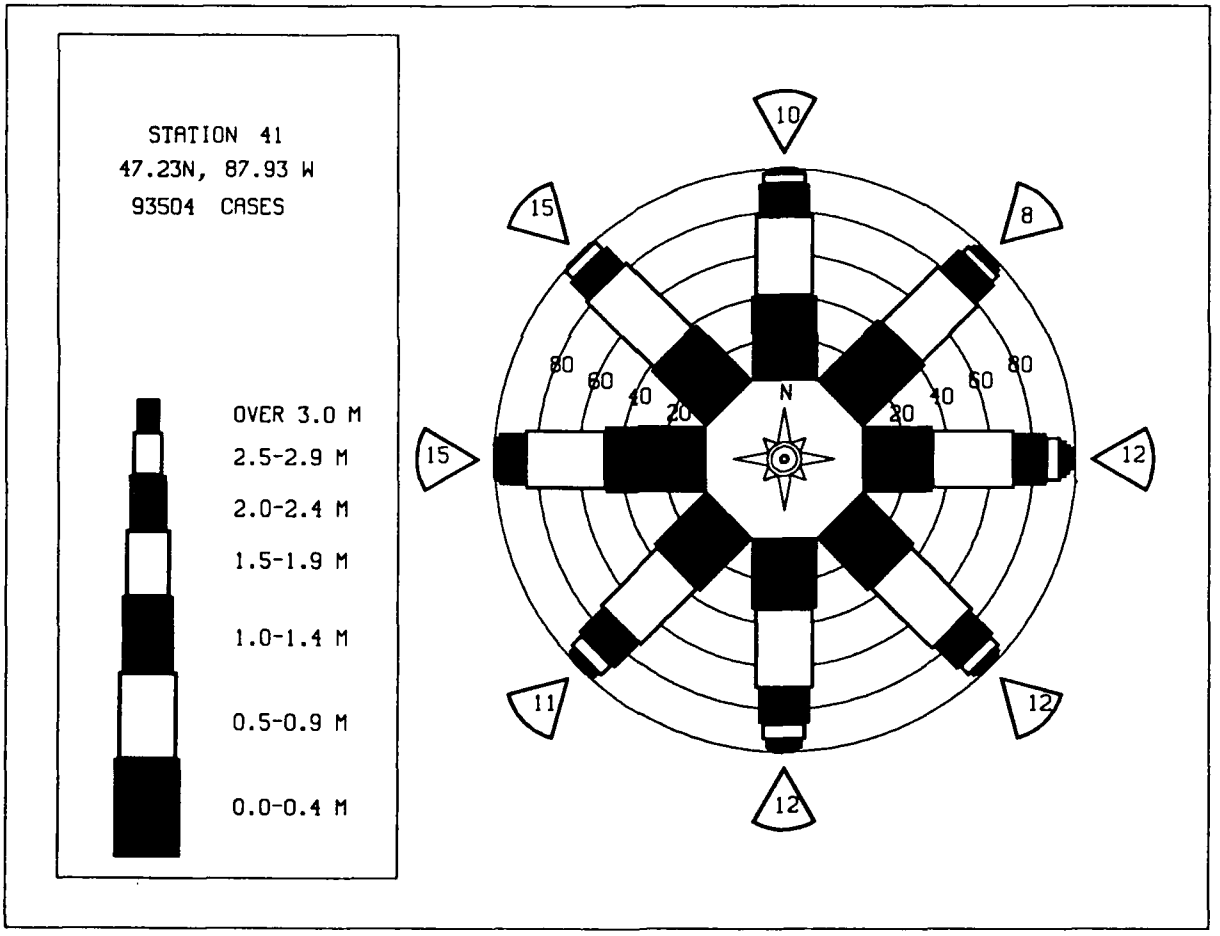
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 618 | 963 | 447 | 134 | 13 | . | . | . | . | . | 2175 |
| 0.50-0.99 | . | 1740 | 487 | 179 | 82 | 82 | 11 | 2 | . | . | 2583 |
| 1.00-1.49 | . | . | 781 | 29 | 32 | 42 | 13 | 3 | . | . | 900 |
| 1.50-1.99 | . | . | 326 | 25 | 9 | 12 | 2 | 1 | 1 | . | 376 |
| 2.00-2.49 | . | . | 4 | 19 | . | 2 | . | 1 | 1 | . | 27 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 618 | 2703 | 2045 | 387 | 136 | 138 | 26 | 7 | 2 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 5680.

STATION S41 47.23N 87.93W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1154 | 1804 | 674 | 105 | 10 | . | . | . | . | . | 3747 |
| 0.50-0.99 | . | 2001 | 1501 | 353 | 69 | 21 | 2 | . | . | . | 3947 |
| 1.00-1.49 | . | . | 1014 | 255 | 95 | 29 | 7 | . | . | . | 1400 |
| 1.50-1.99 | . | . | 207 | 258 | 58 | 25 | 6 | 3 | . | . | 557 |
| 2.00-2.49 | . | . | 5 | 118 | 36 | 21 | 3 | 1 | . | . | 184 |
| 2.50-2.99 | . | . | . | 5 | 51 | 16 | 4 | 2 | . | . | 78 |
| 3.00-3.49 | . | . | . | . | 6 | 21 | 3 | 2 | . | . | 32 |
| 3.50-3.99 | . | . | . | . | . | 10 | 3 | 1 | . | . | 14 |
| 4.00-4.49 | . | . | . | . | . | . | 5 | 1 | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1154 | 3805 | 3401 | 1094 | 325 | 143 | 34 | 13 | 0 | 0 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S41 (47.23N 87.93W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.7 | 0.8 | 1.0 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.9 | 1.0 | 1.0 | 0.8 |
| 1957 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 0.9 | 0.7 |
| 1958 | 0.7 | 0.9 | 0.5 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.7 | 0.7 | 1.1 | 0.7 | 0.7 |
| 1959 | 0.7 | 0.7 | 0.6 | 0.6 | 0.7 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 1.2 | 0.7 |
| 1960 | 0.8 | 0.9 | 0.7 | 0.8 | 0.7 | 0.4 | 0.3 | 0.5 | 0.6 | 0.7 | 0.9 | 0.7 | 0.7 |
| 1961 | 0.6 | 0.8 | 1.1 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.7 | 0.8 | 0.7 |
| 1962 | 0.9 | 0.9 | 0.8 | 0.6 | 0.7 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.7 | 0.6 |
| 1963 | 0.8 | 0.8 | 0.9 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 | 0.6 |
| 1964 | 1.0 | 0.7 | 1.0 | 1.0 | 0.7 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 0.8 | 0.9 | 0.7 |
| 1965 | 1.2 | 1.1 | 0.9 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.7 | 1.0 | 1.1 | 1.3 | 0.8 |
| 1966 | 1.0 | 1.1 | 1.4 | 0.8 | 0.8 | 0.5 | 0.5 | 0.5 | 0.6 | 1.0 | 1.2 | 1.1 | 0.9 |
| 1967 | 1.2 | 1.1 | 1.0 | 0.8 | 0.7 | 0.6 | 0.4 | 0.6 | 0.7 | 1.0 | 0.9 | 1.3 | 0.9 |
| 1968 | 1.1 | 1.1 | 1.1 | 0.9 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 1.1 | 1.1 | 1.2 | 0.9 |
| 1969 | 1.3 | 0.8 | 1.0 | 0.8 | 0.7 | 0.6 | 0.4 | 0.6 | 0.7 | 1.0 | 0.9 | 1.0 | 0.8 |
| 1970 | 1.0 | 1.1 | 0.9 | 1.0 | 0.8 | 0.5 | 0.5 | 0.5 | 0.9 | 1.3 | 1.2 | 1.2 | 0.9 |
| 1971 | 0.8 | 0.9 | 0.8 | 0.6 | 0.5 | 0.3 | 0.4 | 0.4 | 0.6 | 0.9 | 0.9 | 0.7 | 0.7 |
| 1972 | 0.8 | 0.8 | 0.9 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.8 | 0.9 | 0.9 | 1.0 | 0.7 |
| 1973 | 0.9 | 1.0 | 1.0 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.7 | 0.9 | 0.9 | 0.8 |
| 1974 | 0.9 | 0.7 | 0.9 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 1.0 | 0.7 |
| 1975 | 1.1 | 0.7 | 1.1 | 0.6 | 0.4 | 0.5 | 0.4 | 0.5 | 0.6 | 1.0 | 1.1 | 1.0 | 0.8 |
| 1976 | 1.1 | 1.0 | 1.3 | 0.8 | 0.6 | 0.6 | 0.3 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 |
| 1977 | 0.8 | 1.1 | 1.2 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.7 | 0.7 | 0.9 | 1.0 | 0.7 |
| 1978 | 0.9 | 0.7 | 0.7 | 0.8 | 0.5 | 0.5 | 0.4 | 0.5 | 0.8 | 0.6 | 0.9 | 0.9 | 0.7 |
| 1979 | 0.8 | 0.7 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.6 | 0.8 | 0.9 | 0.7 |
| 1980 | 0.9 | 0.6 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.7 | 0.8 | 0.7 | 0.9 | 0.7 |
| 1981 | 0.7 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.8 | 0.7 | 0.7 | 0.6 |
| 1982 | 1.1 | 1.0 | 1.1 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 0.9 | 0.9 | 0.8 |
| 1983 | 0.9 | 0.8 | 1.2 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 1.1 | 1.0 | 0.7 |
| 1984 | 0.8 | 0.8 | 0.9 | 0.8 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 0.9 | 1.0 | 0.7 |
| 1985 | 0.8 | 0.9 | 1.2 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.5 | 0.8 | 0.8 | 0.7 |
| 1986 | 0.9 | 0.7 | 0.9 | 0.9 | 0.5 | 0.4 | 0.4 | 0.3 | 0.6 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1987 | 0.7 | 0.8 | 1.1 | 0.6 | 0.5 | 0.3 | 0.4 | 0.4 | 0.5 | 0.7 | 0.8 | 0.7 | 0.6 |
| MEAN | 0.9 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 | 0.9 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S41 (47.23N 87.93W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.6 | 4.4 | 6.8 | 3.7 | 3.0 | 1.5 | 1.2 | 1.5 | 1.9 | 2.8 | 3.7 | 5.3 |
| 1957 | 2.2 | 2.5 | 3.4 | 4.5 | 2.9 | 1.4 | 1.3 | 1.5 | 1.6 | 2.3 | 2.3 | 3.9 |
| 1958 | 2.7 | 4.1 | 2.2 | 4.9 | 2.2 | 1.8 | 1.7 | 1.2 | 1.9 | 1.8 | 4.4 | 2.4 |
| 1959 | 1.7 | 2.6 | 3.5 | 2.0 | 1.9 | 1.2 | 1.2 | 1.4 | 2.0 | 1.8 | 2.8 | 6.1 |
| 1960 | 2.5 | 3.1 | 2.8 | 2.8 | 2.3 | 1.1 | 0.9 | 1.7 | 1.8 | 2.4 | 4.5 | 2.2 |
| 1961 | 1.6 | 3.2 | 3.0 | 2.8 | 2.7 | 1.5 | 1.6 | 1.5 | 1.9 | 2.1 | 3.6 | 2.2 |
| 1962 | 2.9 | 4.3 | 4.3 | 2.2 | 2.9 | 1.2 | 1.4 | 1.1 | 1.2 | 1.8 | 2.0 | 1.9 |
| 1963 | 2.8 | 2.8 | 2.9 | 2.0 | 1.7 | 1.6 | 1.0 | 1.6 | 2.0 | 1.7 | 2.3 | 5.0 |
| 1964 | 5.1 | 1.8 | 3.1 | 3.3 | 2.0 | 1.4 | 1.0 | 2.2 | 1.8 | 2.1 | 2.8 | 3.0 |
| 1965 | 3.2 | 3.8 | 3.9 | 2.2 | 1.6 | 1.7 | 1.9 | 1.6 | 2.2 | 3.2 | 6.7 | 3.6 |
| 1966 | 3.2 | 3.7 | 5.8 | 4.5 | 2.5 | 1.5 | 2.1 | 1.3 | 1.6 | 3.7 | 3.4 | 3.5 |
| 1967 | 5.4 | 3.2 | 3.4 | 2.5 | 2.5 | 2.2 | 1.5 | 2.4 | 2.4 | 3.2 | 2.9 | 3.7 |
| 1968 | 3.3 | 2.4 | 3.4 | 2.7 | 2.0 | 1.6 | 3.2 | 2.2 | 2.1 | 3.9 | 3.6 | 3.7 |
| 1969 | 3.9 | 2.5 | 3.4 | 2.9 | 2.1 | 2.6 | 1.4 | 2.6 | 2.3 | 3.0 | 2.8 | 3.4 |
| 1970 | 2.6 | 2.6 | 3.8 | 4.3 | 2.0 | 1.9 | 1.4 | 1.5 | 4.1 | 4.1 | 3.8 | 4.4 |
| 1971 | 2.3 | 3.6 | 3.3 | 2.0 | 3.4 | 1.5 | 1.2 | 1.0 | 1.9 | 4.3 | 3.7 | 3.7 |
| 1972 | 2.9 | 4.1 | 3.0 | 2.8 | 1.2 | 0.9 | 1.3 | 1.2 | 3.3 | 2.9 | 3.7 | 3.5 |
| 1973 | 3.4 | 3.5 | 3.7 | 2.0 | 2.6 | 1.7 | 1.4 | 1.1 | 1.7 | 2.2 | 3.0 | 3.1 |
| 1974 | 2.5 | 1.7 | 4.0 | 3.5 | 1.8 | 1.7 | 1.4 | 1.9 | 1.6 | 2.6 | 2.8 | 4.3 |
| 1975 | 5.0 | 2.4 | 5.3 | 2.4 | 1.9 | 1.5 | 2.0 | 2.6 | 2.2 | 3.3 | 4.8 | 3.6 |
| 1976 | 3.4 | 3.7 | 5.1 | 2.5 | 2.0 | 2.4 | 1.2 | 1.9 | 2.6 | 2.0 | 1.5 | 2.5 |
| 1977 | 2.0 | 6.5 | 4.6 | 2.1 | 1.7 | 1.4 | 2.4 | 1.4 | 4.7 | 3.2 | 3.4 | 5.8 |
| 1978 | 2.8 | 2.0 | 2.5 | 2.7 | 1.7 | 1.3 | 1.4 | 1.5 | 2.9 | 2.5 | 2.4 | 3.8 |
| 1979 | 2.7 | 4.0 | 3.1 | 4.6 | 2.4 | 1.7 | 1.2 | 1.4 | 2.0 | 2.7 | 2.7 | 2.2 |
| 1980 | 3.7 | 2.7 | 4.0 | 2.2 | 1.7 | 2.0 | 1.4 | 1.9 | 3.3 | 2.5 | 2.6 | 2.5 |
| 1981 | 1.9 | 2.3 | 3.2 | 3.0 | 1.4 | 2.4 | 1.2 | 1.3 | 3.2 | 2.7 | 2.1 | 2.3 |
| 1982 | 4.5 | 2.5 | 3.5 | 3.0 | 2.3 | 1.6 | 1.3 | 1.3 | 2.4 | 3.3 | 3.2 | 2.3 |
| 1983 | 2.9 | 4.2 | 3.6 | 2.5 | 1.8 | 1.4 | 2.6 | 1.7 | 1.5 | 1.8 | 4.9 | 4.0 |
| 1984 | 3.0 | 2.6 | 2.9 | 2.6 | 1.4 | 2.3 | 1.3 | 1.1 | 1.8 | 3.9 | 2.4 | 4.9 |
| 1985 | 3.0 | 3.6 | 7.1 | 3.2 | 2.4 | 2.3 | 0.9 | 1.5 | 2.0 | 2.2 | 2.4 | 3.5 |
| 1986 | 3.2 | 3.0 | 4.0 | 3.3 | 2.1 | 1.2 | 1.2 | 1.1 | 2.3 | 2.5 | 3.2 | 2.5 |
| 1987 | 1.9 | 4.6 | 4.7 | 2.2 | 1.7 | 1.0 | 1.5 | 1.2 | 1.8 | 1.9 | 2.3 | 2.2 |

32 YR. STATISTICS FOR WIS STATION S41

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 3.8 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 157.5 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.3 |
| LARGEST WAVE HS . . . . . | (METERS) | 7.1 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 88.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 85030418 |

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 563 | 993 | 559 | 128 | 20 | 4 | . | . | . | . | 2267 |
| 0.50-0.99 | . | 1135 | 348 | 347 | 190 | 73 | 13 | . | . | . | 2106 |
| 1.00-1.49 | . | . | 501 | 65 | 135 | 139 | 51 | 10 | . | . | 901 |
| 1.50-1.99 | . | . | 255 | 7 | 23 | 65 | 55 | 33 | 1 | . | 439 |
| 2.00-2.49 | . | . | 44 | 27 | 4 | 14 | 13 | 12 | 6 | . | 120 |
| 2.50-2.99 | . | . | . | 12 | . | 1 | 5 | 9 | 2 | . | 29 |
| 3.00-3.49 | . | . | . | 6 | . | . | . | 1 | 2 | . | 9 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 563 | 2128 | 1707 | 592 | 372 | 296 | 137 | 65 | 11 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 5508.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 387 | 705 | 308 | 45 | 3 | . | . | . | . | . | 1448 |
| 0.50-0.99 | . | 541 | 413 | 216 | 68 | 10 | 1 | . | . | . | 1249 |
| 1.00-1.49 | . | . | 161 | 72 | 68 | 35 | 4 | 1 | . | . | 341 |
| 1.50-1.99 | . | . | 35 | 31 | 44 | 48 | 18 | 5 | 1 | . | 182 |
| 2.00-2.49 | . | . | 1 | 16 | 19 | 16 | 11 | 6 | . | . | 69 |
| 2.50-2.99 | . | . | . | 5 | 1 | 18 | 10 | 4 | . | . | 38 |
| 3.00-3.49 | . | . | . | 1 | 1 | 1 | 6 | 3 | . | . | 12 |
| 3.50-3.99 | . | . | . | . | 1 | . | 2 | 3 | 3 | . | 9 |
| 4.00-4.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 387 | 1246 | 918 | 386 | 205 | 128 | 52 | 24 | 8 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 3149.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 590 | 886 | 468 | 77 | 3 | . | 1 | . | . | . | 2024 |
| 0.50-0.99 | . | 608 | 988 | 342 | 52 | 6 | 1 | . | . | . | 1997 |
| 1.00-1.49 | . | . | 401 | 196 | 139 | 29 | 4 | . | . | . | 769 |
| 1.50-1.99 | . | . | 41 | 124 | 120 | 60 | 7 | 3 | . | . | 355 |
| 2.00-2.49 | . | . | . | 40 | 62 | 50 | 13 | 1 | . | . | 166 |
| 2.50-2.99 | . | . | . | 5 | 10 | 57 | 24 | 2 | . | . | 98 |
| 3.00-3.49 | . | . | . | . | 1 | 20 | 24 | 2 | . | . | 47 |
| 3.50-3.99 | . | . | . | . | . | 1 | 13 | 4 | . | . | 18 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | 7 | 1 | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | . | 3 | 3 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 590 | 1494 | 1898 | 784 | 387 | 223 | 88 | 22 | 6 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 5151.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 510 | 840 | 331 | 31 | 2 | . | . | . | . | . | 1714 |
| 0.50-0.99 | . | 494 | 1090 | 201 | 20 | 3 | . | . | . | . | 1808 |
| 1.00-1.49 | . | . | 367 | 204 | 44 | 4 | . | . | . | . | 619 |
| 1.50-1.99 | . | . | 28 | 149 | 77 | 16 | . | . | . | . | 270 |
| 2.00-2.49 | . | . | . | 50 | 48 | 24 | 7 | 1 | . | . | 130 |
| 2.50-2.99 | . | . | . | . | 40 | 24 | 5 | 3 | . | . | 72 |
| 3.00-3.49 | . | . | . | . | 3 | 38 | 8 | 6 | . | . | 55 |
| 3.50-3.99 | . | . | . | . | . | 14 | 7 | 2 | . | . | 23 |
| 4.00-4.49 | . | . | . | . | . | 1 | 9 | 1 | . | . | 11 |
| 4.50-4.99 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 510 | 1334 | 1816 | 635 | 234 | 124 | 36 | 18 | 6 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 4421.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 660 | 1280 | 434 | 32 | 1 | . | . | . | . | . | 2407 |
| 0.50-0.99 | . | 839 | 1974 | 208 | 22 | . | . | . | . | . | 3043 |
| 1.00-1.49 | . | . | 770 | 514 | 55 | 7 | . | . | . | . | 1346 |
| 1.50-1.99 | . | . | 41 | 470 | 91 | 12 | . | . | . | . | 614 |
| 2.00-2.49 | . | . | . | 146 | 103 | 19 | 2 | . | . | . | 270 |
| 2.50-2.99 | . | . | . | 2 | 145 | 19 | 1 | 1 | . | . | 168 |
| 3.00-3.49 | . | . | . | . | 12 | 83 | 4 | 3 | 1 | . | 103 |
| 3.50-3.99 | . | . | . | . | . | 48 | 13 | . | . | . | 61 |
| 4.00-4.49 | . | . | . | . | . | 7 | 32 | 6 | . | . | 45 |
| 4.50-4.99 | . | . | . | . | . | . | 14 | 12 | 1 | 1 | 28 |
| 5.00-5.49 | . | . | . | . | . | . | . | 9 | . | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 2 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 8 | . | 9 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| TOTAL | 660 | 2119 | 3219 | 1372 | 429 | 195 | 66 | 34 | 16 | 2 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 4.2 NO. OF CASES= 7602.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 435 | 781 | 304 | 26 | 2 | . | . | . | . | . | 1548 |
| 0.50-0.99 | . | 435 | 1040 | 133 | 9 | 2 | . | . | . | . | 1619 |
| 1.00-1.49 | . | . | 423 | 212 | 40 | 11 | . | . | . | . | 686 |
| 1.50-1.99 | . | . | 42 | 168 | 38 | 22 | 1 | . | . | . | 271 |
| 2.00-2.49 | . | . | . | 70 | 26 | 14 | 1 | 2 | . | . | 113 |
| 2.50-2.99 | . | . | . | 5 | 43 | 18 | 2 | 1 | . | . | 69 |
| 3.00-3.49 | . | . | . | . | 5 | 18 | 2 | 5 | . | . | 30 |
| 3.50-3.99 | . | . | . | . | . | 6 | 1 | 1 | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | 3 | 9 | 1 | . | . | 13 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 5 | . | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 435 | 1216 | 1809 | 614 | 163 | 94 | 18 | 18 | 5 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 4106.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 545 | 1012 | 641 | 317 | 12 | . | . | . | . | . | 2527 |
| 0.50-0.99 | . | 971 | 933 | 445 | 117 | 11 | . | . | . | . | 2477 |
| 1.00-1.49 | . | . | 585 | 97 | 56 | 25 | . | . | . | . | 763 |
| 1.50-1.99 | . | . | 67 | 137 | 19 | 20 | 1 | . | . | . | 244 |
| 2.00-2.49 | . | . | . | 50 | 20 | 13 | . | . | . | . | 83 |
| 2.50-2.99 | . | . | . | 4 | 4 | 23 | . | . | . | . | 31 |
| 3.00-3.49 | . | . | . | . | 1 | 5 | 1 | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 545 | 1983 | 2226 | 1050 | 229 | 97 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 5747.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 911 | 1317 | 456 | 231 | 5 | . | . | . | . | . | 2920 |
| 0.50-0.99 | . | 1894 | 478 | 194 | 54 | 4 | . | . | . | . | 2624 |
| 1.00-1.49 | . | . | 506 | 32 | 41 | 16 | . | . | . | . | 595 |
| 1.50-1.99 | . | . | 124 | 45 | 13 | 5 | . | . | . | . | 187 |
| 2.00-2.49 | . | . | 7 | 10 | 5 | 7 | . | 1 | . | . | 30 |
| 2.50-2.99 | . | . | . | 3 | 1 | 3 | . | . | . | . | 7 |
| 3.00-3.49 | . | . | . | . | . | 2 | 2 | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 911 | 3211 | 1571 | 515 | 119 | 37 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 5963.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 888 | 1170 | 408 | 86 | 7 | . | . | . | . | . | 2559 |
| 0.50-0.99 | . | 1083 | 403 | 140 | 50 | 7 | . | . | . | . | 1683 |
| 1.00-1.49 | . | . | 422 | 19 | 44 | 23 | 1 | . | . | . | 509 |
| 1.50-1.99 | . | . | 125 | 3 | 7 | 13 | 1 | . | . | . | 149 |
| 2.00-2.49 | . | . | 13 | 6 | . | 5 | . | . | . | . | 24 |
| 2.50-2.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 888 | 2253 | 1371 | 254 | 108 | 48 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 4615.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 598 | 744 | 240 | 57 | 3 | 1 | . | . | . | . | 1643 |
| 0.50-0.99 | . | 762 | 659 | 67 | 37 | 4 | 1 | . | . | . | 1530 |
| 1.00-1.49 | . | . | 657 | 12 | 31 | 11 | . | . | . | . | 711 |
| 1.50-1.99 | . | . | 100 | 104 | 1 | 6 | . | . | . | . | 211 |
| 2.00-2.49 | . | . | 3 | 84 | . | . | 1 | . | . | . | 88 |
| 2.50-2.99 | . | . | . | 10 | 14 | . | . | 1 | . | . | 25 |
| 3.00-3.49 | . | . | . | . | 3 | . | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 598 | 1506 | 1659 | 334 | 89 | 22 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 3949.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 666 | 706 | 268 | 54 | 7 | . | . | . | . | . | 1701 |
| 0.50-0.99 | . | 907 | 745 | 70 | 25 | 2 | . | . | . | . | 1749 |
| 1.00-1.49 | . | . | 867 | 8 | 12 | 7 | . | . | . | . | 894 |
| 1.50-1.99 | . | . | 60 | 222 | . | 2 | . | . | . | . | 284 |
| 2.00-2.49 | . | . | . | 130 | . | 1 | . | . | . | . | 131 |
| 2.50-2.99 | . | . | . | 12 | 13 | . | . | . | . | . | 25 |
| 3.00-3.49 | . | . | . | . | 5 | 1 | . | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 666 | 1613 | 1940 | 496 | 62 | 13 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 4490.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 899 | 1248 | 252 | 69 | 12 | 1 | . | . | . | . | 2481 |
| 0.50-0.99 | . | 1914 | 413 | 81 | 21 | 2 | . | . | . | . | 2431 |
| 1.00-1.49 | . | . | 768 | 19 | 11 | 8 | 1 | . | . | . | 807 |
| 1.50-1.99 | . | . | 98 | 88 | 1 | 5 | . | . | . | . | 192 |
| 2.00-2.49 | . | . | 5 | 28 | . | . | . | . | 1 | . | 34 |
| 2.50-2.99 | . | . | . | 8 | 3 | . | . | . | . | . | 11 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 899 | 3162 | 1536 | 293 | 48 | 17 | 1 | 0 | 1 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 5580.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1784 | 2400 | 561 | 124 | 31 | 8 | . | . | . | . | 4908 |
| 0.50-0.99 | . | 3646 | 278 | 130 | 40 | 7 | 1 | . | . | . | 4102 |
| 1.00-1.49 | . | . | 1328 | 14 | 35 | 9 | . | . | . | . | 1386 |
| 1.50-1.99 | . | . | 233 | . | 4 | 2 | . | . | . | . | 239 |
| 2.00-2.49 | . | . | 1 | 4 | . | 1 | . | 1 | . | . | 7 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1784 | 6046 | 2401 | 274 | 110 | 27 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 9961.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1406 | 2225 | 475 | 129 | 25 | 5 | . | . | . | . | 4265 |
| 0.50-0.99 | . | 3358 | 702 | 114 | 51 | 18 | 3 | 1 | . | . | 4247 |
| 1.00-1.49 | . | . | 1303 | 16 | 26 | 11 | 2 | . | . | . | 1358 |
| 1.50-1.99 | . | . | 289 | 17 | 3 | 3 | . | . | . | . | 312 |
| 2.00-2.49 | . | . | 5 | 16 | . | . | . | . | . | . | 21 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1406 | 5583 | 2774 | 293 | 105 | 37 | 5 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 9550.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 943 | 1417 | 580 | 131 | 18 | 6 | . | . | . | . | 3095 |
| 0.50-0.99 | . | 2677 | 1256 | 156 | 73 | 39 | 6 | 2 | . | . | 4209 |
| 1.00-1.49 | . | . | 1066 | 18 | 26 | 21 | 9 | 3 | . | . | 1143 |
| 1.50-1.99 | . | . | 491 | 45 | 3 | 11 | . | 1 | 1 | . | 552 |
| 2.00-2.49 | . | . | . | 38 | 1 | . | . | . | . | . | 39 |
| 2.50-2.99 | . | . | . | 3 | . | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 943 | 4094 | 3393 | 392 | 121 | 77 | 15 | 6 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 8466.

STATION S42 47.08N 88.13W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

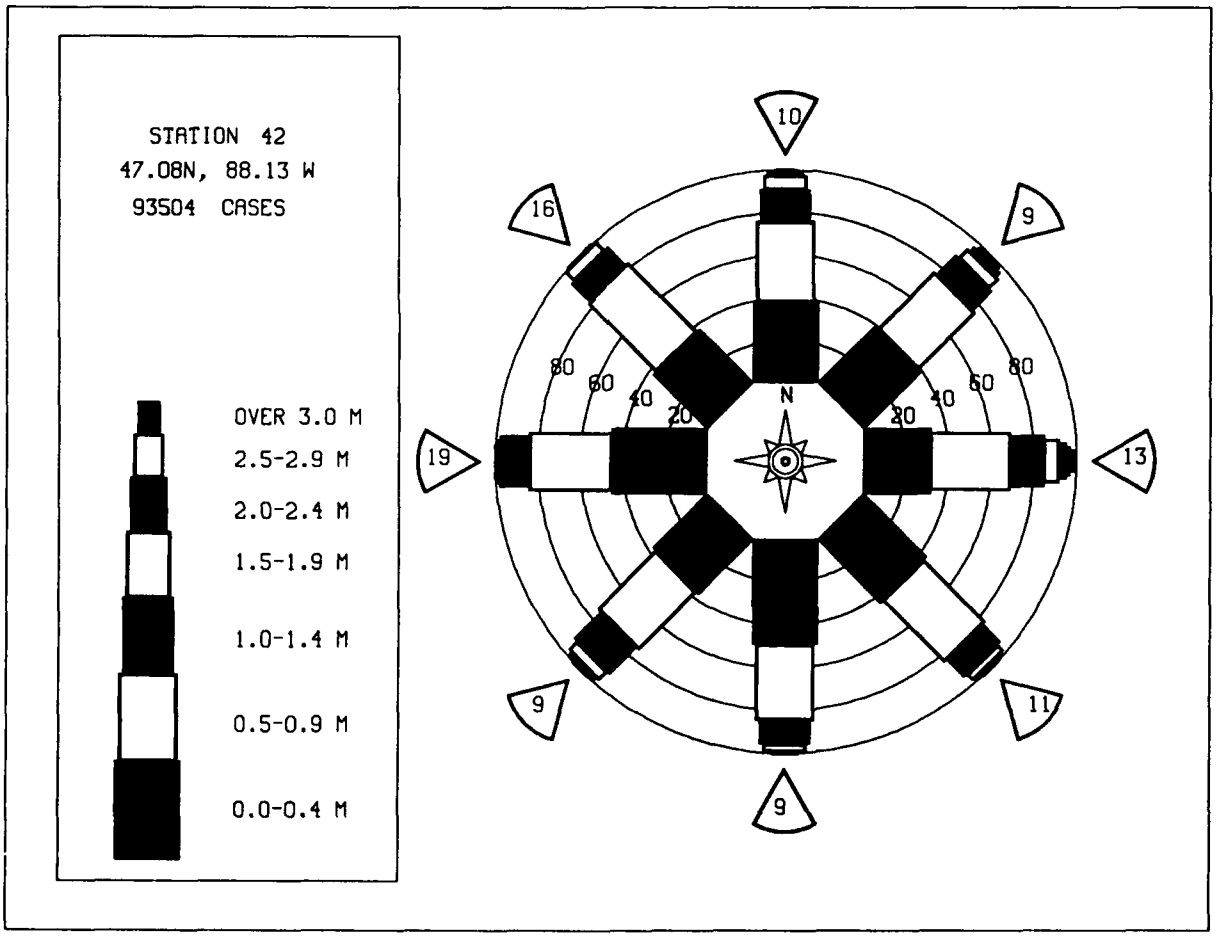
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 513 | 844 | 399 | 122 | 18 | 4 | . | . | . | . | 1900 |
| 0.50-0.99 | . | 1620 | 456 | 202 | 106 | 74 | 13 | 1 | . | . | 2472 |
| 1.00-1.49 | . | . | 642 | 16 | 48 | 70 | 26 | 7 | . | . | 809 |
| 1.50-1.99 | . | . | 315 | 22 | 7 | 24 | 2 | 9 | 1 | . | 380 |
| 2.00-2.49 | . | . | 7 | 20 | . | . | 1 | 4 | 1 | . | 33 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 513 | 2464 | 1819 | 384 | 179 | 172 | 42 | 21 | 2 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 5246.

STATION S42 47.08N 88.13W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1230 | 1857 | 669 | 166 | 17 | 3 | . | . | . | . | 3942 |
| 0.50-0.99 | . | 2289 | 1218 | 305 | 94 | 26 | 4 | . | . | . | 3936 |
| 1.00-1.49 | . | . | 1077 | 152 | 82 | 43 | 10 | 2 | . | . | 1366 |
| 1.50-1.99 | . | . | 235 | 164 | 45 | 32 | 8 | 5 | . | . | 489 |
| 2.00-2.49 | . | . | 8 | 74 | 29 | 16 | 5 | 2 | . | . | 134 |
| 2.50-2.99 | . | . | . | 7 | 27 | 16 | 5 | 2 | . | . | 57 |
| 3.00-3.49 | . | . | . | . | 3 | 17 | 5 | 2 | . | . | 27 |
| 3.50-3.99 | . | . | . | . | . | 7 | 3 | 1 | . | . | 11 |
| 4.00-4.49 | . | . | . | . | . | 1 | 5 | 1 | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1230 | 4146 | 3207 | 868 | 297 | 161 | 46 | 18 | 1 | 0 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S42 (47.08N 88.13W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.7 | 0.8 | 1.0 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.6 | 0.9 | 1.0 | 1.0 | 0.7 |
| 1957 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 0.8 | 0.7 |
| 1958 | 0.7 | 0.9 | 0.5 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 0.7 | 1.0 | 0.7 | 0.6 |
| 1959 | 0.6 | 0.7 | 0.6 | 0.6 | 0.7 | 0.4 | 0.3 | 0.4 | 0.6 | 0.7 | 0.8 | 1.2 | 0.7 |
| 1960 | 0.8 | 0.9 | 0.8 | 0.8 | 0.8 | 0.4 | 0.3 | 0.5 | 0.6 | 0.7 | 0.9 | 0.7 | 0.7 |
| 1961 | 0.6 | 0.8 | 1.1 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 |
| 1962 | 0.9 | 0.9 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.6 |
| 1963 | 0.8 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.7 | 0.9 | 0.6 |
| 1964 | 0.9 | 0.7 | 1.0 | 0.9 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1965 | 1.1 | 1.1 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.9 | 1.0 | 1.1 | 0.8 |
| 1966 | 0.9 | 1.0 | 1.3 | 0.8 | 0.8 | 0.5 | 0.6 | 0.4 | 0.6 | 0.9 | 1.1 | 1.0 | 0.8 |
| 1967 | 1.2 | 1.1 | 1.0 | 0.8 | 0.7 | 0.5 | 0.4 | 0.6 | 0.6 | 0.9 | 0.8 | 1.1 | 0.8 |
| 1968 | 1.0 | 1.1 | 1.0 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.9 | 1.1 | 1.1 | 0.8 |
| 1969 | 1.1 | 0.8 | 1.0 | 0.8 | 0.7 | 0.5 | 0.4 | 0.5 | 0.6 | 0.9 | 0.8 | 0.9 | 0.8 |
| 1970 | 1.0 | 1.1 | 0.8 | 1.0 | 0.8 | 0.5 | 0.5 | 0.5 | 0.8 | 1.0 | 1.1 | 1.0 | 0.8 |
| 1971 | 0.8 | 0.9 | 0.8 | 0.6 | 0.5 | 0.3 | 0.3 | 0.4 | 0.5 | 0.8 | 0.8 | 0.7 | 0.6 |
| 1972 | 0.8 | 0.7 | 0.9 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.9 | 0.9 | 1.0 | 0.7 |
| 1973 | 0.9 | 0.9 | 1.0 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1974 | 0.8 | 0.6 | 0.9 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 0.9 | 0.7 |
| 1975 | 1.0 | 0.7 | 1.1 | 0.7 | 0.4 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1976 | 1.0 | 1.0 | 1.2 | 0.8 | 0.6 | 0.5 | 0.3 | 0.5 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 |
| 1977 | 0.8 | 1.0 | 1.2 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.7 | 0.7 | 0.8 | 1.0 | 0.7 |
| 1978 | 0.9 | 0.7 | 0.7 | 0.9 | 0.5 | 0.4 | 0.4 | 0.5 | 0.8 | 0.5 | 0.8 | 0.9 | 0.7 |
| 1979 | 0.8 | 0.7 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.6 |
| 1980 | 0.8 | 0.6 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 0.7 | 0.8 | 0.6 |
| 1981 | 0.7 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.6 | 0.7 | 0.7 | 0.7 | 0.6 |
| 1982 | 1.1 | 0.9 | 1.1 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 0.8 | 0.7 |
| 1983 | 0.8 | 0.8 | 1.2 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.5 | 0.6 | 1.1 | 0.9 | 0.7 |
| 1984 | 0.7 | 0.8 | 0.9 | 0.9 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1985 | 0.8 | 0.8 | 1.2 | 0.6 | 0.6 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 | 0.8 | 0.8 | 0.6 |
| 1986 | 0.8 | 0.7 | 0.9 | 0.9 | 0.5 | 0.4 | 0.4 | 0.3 | 0.6 | 0.6 | 0.7 | 0.7 | 0.6 |
| 1987 | 0.7 | 0.8 | 1.1 | 0.6 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 0.7 | 0.6 |
| MEAN | 0.9 | 0.8 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 0.9 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S42 (47.08N 88.13W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.7 | 4.7 | 6.9 | 4.1 | 3.3 | 1.5 | 1.3 | 1.5 | 1.8 | 2.6 | 3.9 | 5.4 |
| 1957 | 2.0 | 2.8 | 3.7 | 4.7 | 3.4 | 1.2 | 1.3 | 1.6 | 1.7 | 2.5 | 2.5 | 3.5 |
| 1958 | 2.4 | 3.9 | 2.2 | 4.9 | 1.8 | 1.5 | 1.8 | 1.2 | 1.6 | 1.6 | 4.5 | 2.5 |
| 1959 | 1.6 | 2.4 | 3.9 | 2.3 | 2.1 | 1.2 | 1.1 | 1.7 | 1.7 | 1.8 | 3.0 | 6.3 |
| 1960 | 2.2 | 3.3 | 2.9 | 3.0 | 2.7 | 1.1 | 0.9 | 1.4 | 1.8 | 2.1 | 4.6 | 1.8 |
| 1961 | 2.1 | 2.7 | 3.2 | 3.1 | 2.7 | 1.7 | 1.6 | 1.5 | 1.7 | 2.2 | 2.8 | 1.9 |
| 1962 | 3.4 | 3.3 | 4.4 | 1.8 | 2.3 | 1.2 | 1.4 | 1.0 | 1.0 | 1.8 | 2.0 | 1.8 |
| 1963 | 3.0 | 3.4 | 2.9 | 2.1 | 1.6 | 1.6 | 1.0 | 1.8 | 2.3 | 1.4 | 2.7 | 4.6 |
| 1964 | 5.4 | 1.6 | 3.3 | 2.9 | 1.7 | 1.3 | 1.2 | 2.4 | 1.6 | 1.7 | 3.1 | 2.9 |
| 1965 | 3.2 | 4.5 | 4.1 | 2.2 | 1.3 | 1.6 | 1.9 | 2.0 | 2.0 | 2.8 | 6.7 | 3.5 |
| 1966 | 2.6 | 2.8 | 5.7 | 4.5 | 2.1 | 1.6 | 1.9 | 1.5 | 1.6 | 3.2 | 3.4 | 2.8 |
| 1967 | 6.0 | 3.6 | 2.8 | 2.7 | 2.5 | 1.7 | 1.4 | 3.0 | 2.1 | 2.2 | 2.3 | 3.1 |
| 1968 | 2.7 | 2.6 | 2.5 | 2.6 | 1.9 | 1.6 | 2.6 | 2.0 | 1.8 | 2.9 | 3.4 | 4.4 |
| 1969 | 3.4 | 2.9 | 3.9 | 3.3 | 1.7 | 2.3 | 1.4 | 2.4 | 2.1 | 2.8 | 2.2 | 3.3 |
| 1970 | 2.3 | 2.3 | 3.7 | 4.4 | 1.6 | 1.9 | 1.8 | 1.4 | 3.3 | 3.0 | 4.1 | 4.9 |
| 1971 | 2.1 | 3.9 | 3.8 | 2.0 | 3.5 | 1.5 | 1.1 | 1.1 | 1.7 | 3.7 | 3.4 | 3.4 |
| 1972 | 2.4 | 4.1 | 3.1 | 2.8 | 1.2 | 0.9 | 1.3 | 1.2 | 2.6 | 3.0 | 3.8 | 3.0 |
| 1973 | 3.5 | 3.1 | 3.9 | 2.2 | 2.8 | 1.7 | 1.3 | 1.0 | 1.7 | 2.3 | 3.2 | 3.2 |
| 1974 | 2.1 | 1.8 | 4.1 | 3.6 | 2.2 | 1.8 | 1.6 | 1.4 | 1.6 | 1.9 | 2.9 | 4.2 |
| 1975 | 4.8 | 2.1 | 5.7 | 2.6 | 1.5 | 1.4 | 1.7 | 2.0 | 2.0 | 2.8 | 5.4 | 2.6 |
| 1976 | 2.7 | 3.1 | 4.9 | 2.9 | 2.0 | 1.9 | 1.0 | 1.6 | 2.2 | 1.5 | 1.6 | 2.2 |
| 1977 | 1.9 | 7.0 | 4.9 | 2.1 | 1.8 | 1.4 | 1.9 | 1.1 | 5.1 | 3.4 | 2.8 | 6.6 |
| 1978 | 3.4 | 2.4 | 2.4 | 2.9 | 2.2 | 1.4 | 1.7 | 1.5 | 3.2 | 2.1 | 2.3 | 3.6 |
| 1979 | 2.6 | 4.0 | 3.1 | 4.8 | 2.5 | 1.7 | 1.1 | 1.2 | 1.7 | 2.5 | 2.0 | 2.5 |
| 1980 | 2.6 | 3.4 | 4.1 | 2.6 | 2.0 | 2.1 | 1.2 | 1.6 | 2.7 | 2.2 | 2.6 | 2.6 |
| 1981 | 1.7 | 2.4 | 3.3 | 3.1 | 1.6 | 2.0 | 1.2 | 1.5 | 2.6 | 2.7 | 2.1 | 1.9 |
| 1982 | 5.0 | 2.8 | 3.4 | 3.1 | 2.5 | 1.7 | 1.3 | 1.4 | 2.5 | 3.5 | 2.7 | 2.4 |
| 1983 | 3.1 | 4.1 | 3.7 | 2.7 | 2.1 | 1.4 | 2.3 | 1.5 | 1.3 | 1.9 | 4.9 | 4.0 |
| 1984 | 2.5 | 2.9 | 2.8 | 2.7 | 1.5 | 1.9 | 1.3 | 0.9 | 1.3 | 4.1 | 2.1 | 4.3 |
| 1985 | 3.0 | 3.0 | 7.5 | 3.4 | 2.0 | 2.3 | 0.9 | 1.3 | 1.4 | 1.7 | 2.4 | 3.9 |
| 1986 | 3.0 | 3.3 | 4.3 | 3.4 | 2.1 | 1.2 | 1.2 | 1.0 | 2.2 | 2.5 | 2.5 | 2.5 |
| 1987 | 1.8 | 4.7 | 4.9 | 2.5 | 2.4 | 1.0 | 1.6 | 1.3 | 1.7 | 2.0 | 2.2 | 2.3 |

32 YR. STATISTICS FOR WIS STATION S42

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.7 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 7.5 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 82.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 85030418 |

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1441 | 1435 | 9 | . | . | . | . | . | . | . | 2885 |
| 0.50-0.99 | . | 1681 | 144 | 4 | . | . | . | . | . | . | 1829 |
| 1.00-1.49 | . | . | 760 | 10 | . | . | . | . | . | . | 770 |
| 1.50-1.99 | . | . | 227 | 1 | . | . | . | . | . | . | 228 |
| 2.00-2.49 | . | . | 9 | 48 | . | . | . | . | . | . | 57 |
| 2.50-2.99 | . | . | . | 8 | . | 3 | . | . | . | . | 11 |
| 3.00-3.49 | . | . | . | 3 | . | . | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1441 | 3116 | 1149 | 74 | 0 | 3 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 5413.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 956 | 899 | 4 | . | . | . | . | . | . | . | 1859 |
| 0.50-0.99 | . | 861 | 326 | 4 | . | . | . | . | . | . | 1191 |
| 1.00-1.49 | . | . | 254 | 62 | . | . | . | . | . | . | 316 |
| 1.50-1.99 | . | . | 22 | 69 | 19 | . | . | . | . | . | 110 |
| 2.00-2.49 | . | . | . | 10 | 9 | 3 | . | . | . | . | 22 |
| 2.50-2.99 | . | . | . | . | 3 | 1 | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 956 | 1760 | 606 | 145 | 31 | 5 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 3281.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1657 | 1080 | 4 | . | . | . | . | . | . | . | 2741 |
| 0.50-0.99 | . | 849 | 903 | 1 | . | . | . | . | . | . | 1753 |
| 1.00-1.49 | . | . | 546 | 97 | . | . | . | . | . | . | 643 |
| 1.50-1.99 | . | . | 31 | 239 | 2 | . | . | . | . | . | 272 |
| 2.00-2.49 | . | . | . | 93 | 70 | . | . | . | . | . | 163 |
| 2.50-2.99 | . | . | . | 2 | 62 | . | . | . | . | . | 64 |
| 3.00-3.49 | . | . | . | . | 1 | 17 | . | . | . | . | 18 |
| 3.50-3.99 | . | . | . | . | . | 7 | . | . | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1657 | 1929 | 1484 | 432 | 135 | 27 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 5301.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1551 | 1233 | 4 | . | . | . | . | . | . | . | 2788 |
| 0.50-0.99 | . | 1341 | 328 | 1 | . | . | . | . | . | . | 1670 |
| 1.00-1.49 | . | . | 363 | 24 | . | . | . | . | . | . | 387 |
| 1.50-1.99 | . | . | 45 | 41 | . | . | . | . | . | . | 86 |
| 2.00-2.49 | . | . | 1 | 13 | 8 | . | . | . | . | . | 22 |
| 2.50-2.99 | . | . | . | 1 | 6 | 1 | . | . | . | . | 8 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1551 | 2574 | 741 | 80 | 14 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 2.9 NO. OF CASES= 4645.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 2294 | 1898 | 1 | . | . | . | . | . | . | . | 4193 |
| 0.50-0.99 | . | 2556 | 182 | 1 | . | . | . | . | . | . | 2739 |
| 1.00-1.49 | . | . | 638 | 5 | . | . | . | . | . | . | 643 |
| 1.50-1.99 | . | . | 114 | . | 1 | . | . | . | . | . | 115 |
| 2.00-2.49 | . | . | 6 | 7 | . | . | . | . | . | . | 13 |
| 2.50-2.99 | . | . | . | 3 | . | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 2294 | 4454 | 941 | 16 | 1 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 2.8 NO. OF CASES= 7209.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1357 | 958 | . | . | . | . | . | . | . | . | 2315 |
| 0.50-0.99 | . | 1307 | 167 | . | . | . | . | . | . | . | 1474 |
| 1.00-1.49 | . | . | 290 | . | . | . | . | . | . | . | 290 |
| 1.50-1.99 | . | . | 54 | 5 | . | . | . | . | . | . | 59 |
| 2.00-2.49 | . | . | 1 | 2 | . | . | . | . | . | . | 3 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1357 | 2265 | 512 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 2.8 NO. OF CASES= 3877.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1299 | 799 | . | . | . | . | . | . | . | . | 2098 |
| 0.50-0.99 | . | 1070 | 166 | . | . | . | . | . | . | . | 1236 |
| 1.00-1.49 | . | . | 142 | . | . | . | . | . | . | . | 142 |
| 1.50-1.99 | . | . | 36 | 1 | . | . | . | . | . | . | 37 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1299 | 1869 | 344 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 2.7 NO. OF CASES= 3289.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1204 | 1026 | . | . | . | . | . | . | . | . | 2230 |
| 0.50-0.99 | . | 1321 | 170 | . | . | . | . | . | . | . | 1491 |
| 1.00-1.49 | . | . | 243 | . | . | . | . | . | . | . | 243 |
| 1.50-1.99 | . | . | 55 | 7 | . | . | . | . | . | . | 62 |
| 2.00-2.49 | . | . | . | 3 | . | . | . | . | . | . | 3 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1204 | 2347 | 468 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 2.8 NO. OF CASES= 3771.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1845 | 1680 | . | . | . | . | . | . | . | . | 3525 |
| 0.50-0.99 | . | 1996 | 116 | . | . | . | . | . | . | . | 2112 |
| 1.00-1.49 | . | . | 648 | . | . | . | . | . | . | . | 648 |
| 1.50-1.99 | . | . | 116 | . | . | . | . | . | . | . | 116 |
| 2.00-2.49 | . | . | 9 | 9 | . | . | . | . | . | . | 18 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1845 | 3676 | 889 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 2.9 NO. OF CASES= 6006.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1226 | 1195 | . | . | . | . | . | . | . | . | 2421 |
| 0.50-0.99 | . | 1809 | 385 | . | . | . | . | . | . | . | 2194 |
| 1.00-1.49 | . | . | 470 | . | . | . | . | . | . | . | 470 |
| 1.50-1.99 | . | . | 190 | 34 | . | . | . | . | . | . | 224 |
| 2.00-2.49 | . | . | . | 22 | . | . | . | . | . | . | 22 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1226 | 3004 | 1045 | 56 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.0 NO. OF CASES= 4988.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1219 | 945 | . | . | . | . | . | . | . | . | 2164 |
| 0.50-0.99 | . | 1760 | 570 | . | . | . | . | . | . | . | 2330 |
| 1.00-1.49 | . | . | 421 | . | . | . | . | . | . | . | 421 |
| 1.50-1.99 | . | . | 163 | 18 | . | . | . | . | . | . | 181 |
| 2.00-2.49 | . | . | . | 12 | . | . | . | . | . | . | 12 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1219 | 2705 | 1154 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.0 NO. OF CASES= 4781.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1512 | 1456 | . | . | . | . | . | . | . | . | 2968 |
| 0.50-0.99 | . | 2417 | 437 | . | . | . | . | . | . | . | 2854 |
| 1.00-1.49 | . | . | 819 | . | . | . | . | . | . | . | 819 |
| 1.50-1.99 | . | . | 143 | 16 | . | . | . | . | . | . | 159 |
| 2.00-2.49 | . | . | 2 | 10 | . | . | . | . | . | . | 12 |
| 2.50-2.99 | . | . | . | 3 | . | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1512 | 3873 | 1401 | 29 | 1 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 6376.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 2839 | 2766 | . | . | . | . | . | . | . | . | 5605 |
| 0.50-0.99 | . | 4304 | 255 | . | . | . | . | . | . | . | 4559 |
| 1.00-1.49 | . | . | 1458 | . | . | . | . | . | . | . | 1458 |
| 1.50-1.99 | . | . | 233 | . | . | . | . | . | . | . | 233 |
| 2.00-2.49 | . | . | 1 | 4 | . | . | . | . | . | . | 5 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 2839 | 7070 | 1947 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 2.9 NO. OF CASES= 11095.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 2066 | 2533 | . | . | . | . | . | . | . | . | 4599 |
| 0.50-0.99 | . | 3611 | 550 | . | . | . | . | . | . | . | 4161 |
| 1.00-1.49 | . | . | 1450 | . | . | . | . | . | . | . | 1450 |
| 1.50-1.99 | . | . | 239 | 13 | . | . | . | . | . | . | 252 |
| 2.00-2.49 | . | . | 5 | 12 | . | . | . | . | . | . | 17 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 2066 | 6144 | 2244 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.0 NO. OF CASES= 9804.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1777 | 1470 | . | . | . | . | . | . | . | . | 3247 |
| 0.50-0.99 | . | 2834 | 1336 | . | . | . | . | . | . | . | 4170 |
| 1.00-1.49 | . | . | 1027 | . | . | . | . | . | . | . | 1027 |
| 1.50-1.99 | . | . | 491 | 51 | . | . | . | . | . | . | 542 |
| 2.00-2.49 | . | . | . | 36 | . | . | . | . | . | . | 36 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1777 | 4304 | 2854 | 91 | 1 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.2 NO. OF CASES= 8445.

STATION S43 46.95N 88.35W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

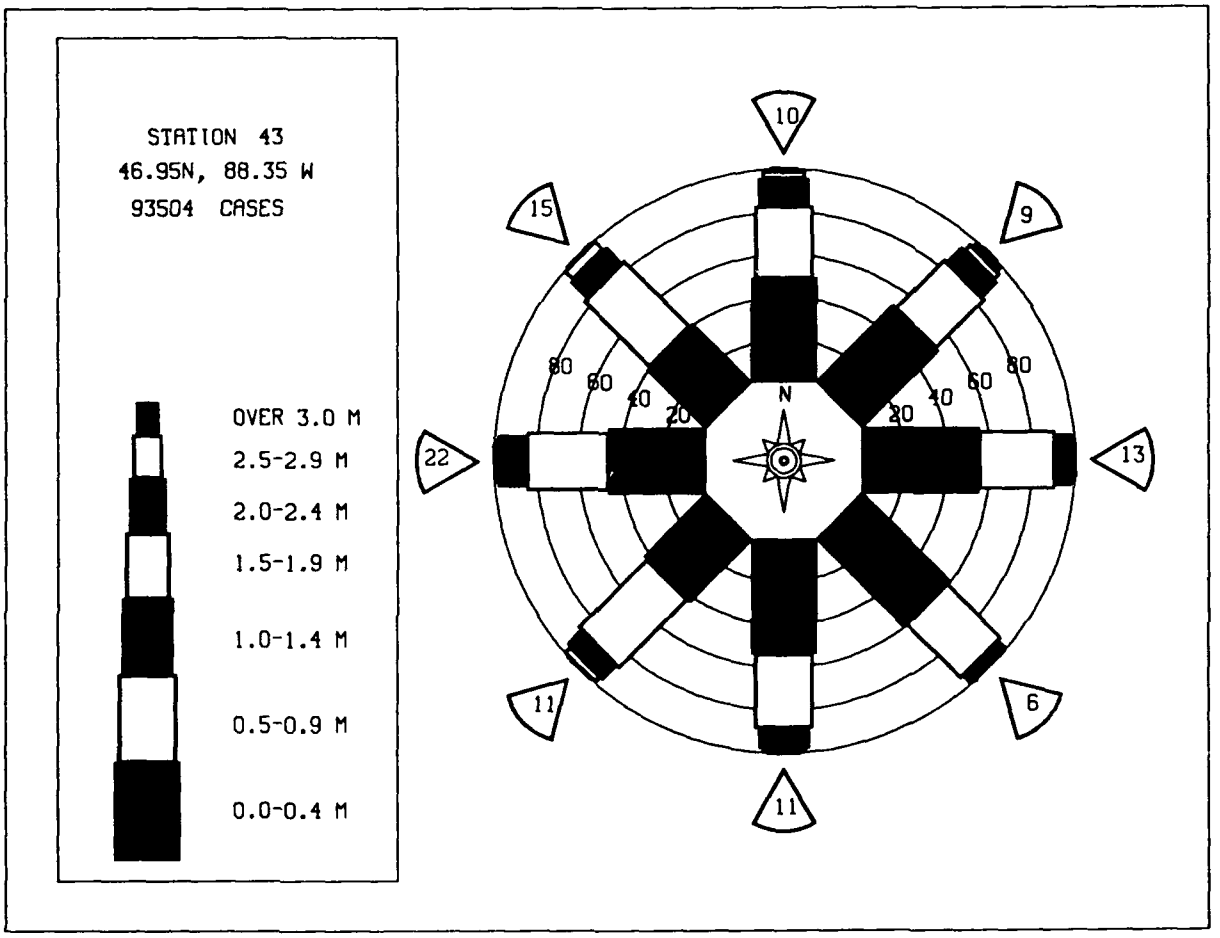
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1171 | 1071 | 4 | . | . | . | . | . | . | . | 2246 |
| 0.50-0.99 | . | 1861 | 371 | . | . | . | . | . | . | . | 2232 |
| 1.00-1.49 | . | . | 762 | . | . | . | . | . | . | . | 762 |
| 1.50-1.99 | . | . | 294 | 24 | . | . | . | . | . | . | 318 |
| 2.00-2.49 | . | . | 1 | 22 | . | . | . | . | . | . | 23 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1171 | 2932 | 1432 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 5223.

STATION S43 46.95N 88.35W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 2542 | 2245 | 2 | . | . | . | . | . | . | . | 4789 |
| 0.50-0.99 | . | 3158 | 641 | 1 | . | . | . | . | . | . | 3800 |
| 1.00-1.49 | . | . | 1029 | 19 | . | . | . | . | . | . | 1048 |
| 1.50-1.99 | . | . | 246 | 52 | 2 | . | . | . | . | . | 300 |
| 2.00-2.49 | . | . | 3 | 31 | 8 | . | . | . | . | . | 42 |
| 2.50-2.99 | . | . | . | 2 | 7 | . | . | . | . | . | 9 |
| 3.00-3.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 2542 | 5403 | 1921 | 105 | 17 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M)= 0.6 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S43 (46.95N 88.35W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 0.6 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.7 | 0.8 | 0.8 | 0.6 |
| 1957 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.7 | 0.7 | 0.6 |
| 1958 | 0.5 | 0.8 | 0.3 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.6 | 0.5 |
| 1959 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.5 | 0.8 | 0.8 | 0.5 |
| 1960 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 |
| 1961 | 0.6 | 0.6 | 0.8 | 0.6 | 0.5 | 0.5 | 0.3 | 0.3 | 0.5 | 0.6 | 0.6 | 0.7 | 0.5 |
| 1962 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.5 |
| 1963 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.5 |
| 1964 | 0.7 | 0.5 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.7 | 0.6 | 0.6 |
| 1965 | 0.9 | 0.9 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.8 | 0.9 | 1.0 | 0.7 |
| 1966 | 0.8 | 0.9 | 1.0 | 0.9 | 0.7 | 0.4 | 0.5 | 0.4 | 0.5 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1967 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.7 | 1.0 | 0.7 |
| 1968 | 0.8 | 1.1 | 0.9 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.8 | 0.9 | 0.9 | 0.7 |
| 1969 | 1.0 | 0.7 | 0.9 | 0.7 | 0.6 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.7 | 0.8 | 0.7 |
| 1970 | 0.9 | 1.0 | 0.7 | 0.8 | 0.7 | 0.4 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 0.9 | 0.7 |
| 1971 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.2 | 0.3 | 0.3 | 0.4 | 0.6 | 0.6 | 0.5 | 0.5 |
| 1972 | 0.7 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.7 | 0.7 | 0.8 | 0.5 |
| 1973 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.4 | 0.4 | 0.3 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 |
| 1974 | 0.7 | 0.5 | 0.7 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.6 | 0.7 | 0.7 | 0.5 |
| 1975 | 0.7 | 0.7 | 0.8 | 0.5 | 0.3 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.9 | 0.8 | 0.6 |
| 1976 | 0.9 | 0.9 | 0.9 | 0.7 | 0.5 | 0.5 | 0.2 | 0.4 | 0.4 | 0.3 | 0.5 | 0.6 | 0.6 |
| 1977 | 0.7 | 0.8 | 0.8 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.7 | 0.6 |
| 1978 | 0.8 | 0.6 | 0.6 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.6 | 0.5 | 0.7 | 0.7 | 0.5 |
| 1979 | 0.7 | 0.5 | 0.7 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 |
| 1980 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.6 | 0.7 | 0.5 |
| 1981 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 |
| 1982 | 0.9 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 |
| 1983 | 0.7 | 0.6 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.5 | 0.7 | 0.8 | 0.5 |
| 1984 | 0.6 | 0.6 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.7 | 0.8 | 0.5 |
| 1985 | 0.7 | 0.7 | 0.8 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.7 | 0.5 |
| 1986 | 0.7 | 0.5 | 0.7 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.6 | 0.5 |
| 1987 | 0.6 | 0.6 | 0.7 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.6 | 0.6 | 0.5 |
| MEAN | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S43 (46.95N 88.35W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.5 | 1.6 | 2.5 | 1.8 | 1.5 | 1.2 | 1.4 | 1.2 | 1.5 | 1.7 | 2.4 | 2.1 |
| 1957 | 1.6 | 1.8 | 1.7 | 1.9 | 1.9 | 1.3 | 1.2 | 1.2 | 1.6 | 1.9 | 2.5 | 1.9 |
| 1958 | 1.8 | 2.1 | 1.3 | 1.5 | 1.3 | 1.5 | 1.2 | 1.2 | 1.4 | 1.6 | 2.5 | 2.3 |
| 1959 | 1.4 | 2.0 | 3.3 | 1.4 | 1.5 | 1.0 | 1.2 | 1.2 | 1.3 | 1.6 | 2.3 | 2.0 |
| 1960 | 1.8 | 2.4 | 2.1 | 1.4 | 2.4 | 0.9 | 1.0 | 1.3 | 1.5 | 1.7 | 1.7 | 1.4 |
| 1961 | 1.6 | 2.3 | 2.0 | 1.8 | 1.8 | 1.3 | 1.0 | 1.5 | 1.5 | 1.5 | 2.0 | 1.5 |
| 1962 | 1.8 | 2.1 | 2.4 | 1.6 | 1.4 | 0.9 | 1.5 | 0.9 | 1.0 | 1.8 | 2.0 | 1.6 |
| 1963 | 2.5 | 2.1 | 1.5 | 2.0 | 1.2 | 1.4 | 0.9 | 0.9 | 1.6 | 1.4 | 2.0 | 2.3 |
| 1964 | 2.0 | 1.8 | 2.3 | 1.8 | 1.4 | 1.3 | 1.0 | 1.4 | 1.6 | 1.7 | 1.8 | 2.2 |
| 1965 | 2.6 | 3.1 | 2.9 | 1.8 | 1.1 | 1.2 | 1.4 | 1.7 | 1.5 | 2.0 | 2.6 | 2.4 |
| 1966 | 2.1 | 1.9 | 4.1 | 1.8 | 2.2 | 1.5 | 2.0 | 1.2 | 1.6 | 2.4 | 3.0 | 2.5 |
| 1967 | 3.3 | 2.9 | 2.1 | 2.4 | 2.0 | 1.3 | 1.4 | 2.8 | 1.5 | 1.9 | 1.9 | 2.4 |
| 1968 | 2.4 | 2.5 | 2.3 | 1.8 | 1.4 | 1.5 | 2.0 | 1.5 | 1.3 | 1.9 | 2.5 | 3.7 |
| 1969 | 2.4 | 2.6 | 3.3 | 2.6 | 1.8 | 1.8 | 1.4 | 1.8 | 1.8 | 2.3 | 1.8 | 2.5 |
| 1970 | 2.1 | 2.4 | 2.6 | 1.9 | 1.5 | 1.4 | 1.6 | 1.4 | 1.9 | 2.0 | 3.1 | 4.0 |
| 1971 | 1.8 | 1.9 | 3.1 | 1.8 | 1.5 | 1.2 | 1.1 | 0.9 | 1.3 | 2.0 | 2.2 | 1.7 |
| 1972 | 2.2 | 1.8 | 2.5 | 1.8 | 0.9 | 0.9 | 0.8 | 1.2 | 1.8 | 3.1 | 1.9 | 2.7 |
| 1973 | 2.2 | 2.0 | 1.7 | 1.5 | 2.7 | 1.1 | 1.3 | 0.9 | 1.6 | 1.5 | 1.5 | 2.5 |
| 1974 | 1.7 | 1.6 | 1.7 | 2.4 | 1.2 | 1.4 | 1.4 | 1.4 | 1.3 | 1.6 | 1.7 | 1.7 |
| 1975 | 2.2 | 1.9 | 3.2 | 1.3 | 1.2 | 1.4 | 1.5 | 1.7 | 1.5 | 2.0 | 4.0 | 1.9 |
| 1976 | 2.0 | 2.4 | 3.6 | 2.5 | 1.5 | 1.4 | 0.7 | 1.2 | 1.6 | 1.3 | 1.5 | 2.2 |
| 1977 | 1.9 | 2.6 | 2.1 | 1.5 | 1.0 | 0.9 | 1.4 | 1.1 | 2.7 | 1.9 | 2.1 | 2.0 |
| 1978 | 2.3 | 2.5 | 1.6 | 1.4 | 1.2 | 1.2 | 1.2 | 1.2 | 2.0 | 1.5 | 1.7 | 1.5 |
| 1979 | 1.7 | 1.8 | 2.0 | 1.6 | 1.2 | 1.2 | 1.0 | 1.2 | 1.3 | 2.1 | 1.5 | 1.5 |
| 1980 | 2.6 | 2.4 | 1.8 | 2.0 | 1.2 | 1.2 | 0.8 | 1.2 | 2.0 | 1.8 | 1.5 | 2.1 |
| 1981 | 1.6 | 1.5 | 2.1 | 1.6 | 1.2 | 1.6 | 0.9 | 0.9 | 2.0 | 1.7 | 1.9 | 1.4 |
| 1982 | 2.2 | 1.8 | 2.9 | 1.9 | 1.3 | 1.4 | 1.2 | 1.0 | 1.9 | 1.8 | 1.9 | 1.7 |
| 1983 | 2.3 | 3.0 | 2.3 | 1.4 | 2.1 | 1.5 | 1.7 | 1.0 | 1.3 | 1.3 | 2.3 | 2.3 |
| 1984 | 1.9 | 1.9 | 2.1 | 1.8 | 1.5 | 1.4 | 1.3 | 0.7 | 1.0 | 1.5 | 1.9 | 3.1 |
| 1985 | 1.9 | 2.2 | 2.7 | 1.7 | 1.5 | 1.8 | 0.7 | 1.2 | 1.4 | 1.4 | 2.0 | 2.1 |
| 1986 | 2.0 | 1.7 | 2.0 | 1.7 | 2.1 | 1.2 | 0.9 | 0.7 | 1.3 | 1.9 | 1.8 | 1.4 |
| 1987 | 1.5 | 2.1 | 2.9 | 1.3 | 1.4 | 1.0 | 0.7 | 1.2 | 1.2 | 1.8 | 2.2 | 1.9 |

32 YR. STATISTICS FOR WIS STATION S43

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 0.6 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 3.0 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.4 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 0.8 |
| LARGEST WAVE HS . . . . . | (METERS) | 4.1 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 7.7 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 42.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66032321 |

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 281 | 744 | 325 | 34 | 5 | . | . | . | . | . | 1389 |
| 0.50-0.99 | . | 588 | 1269 | 365 | 48 | 14 | . | . | . | . | 2284 |
| 1.00-1.49 | . | . | 857 | 119 | 174 | 35 | 1 | . | . | . | 1186 |
| 1.50-1.99 | . | . | 233 | 301 | 89 | 96 | 16 | . | . | . | 735 |
| 2.00-2.49 | . | . | . | 451 | 10 | 111 | 45 | 4 | . | . | 621 |
| 2.50-2.99 | . | . | . | 170 | 65 | 34 | 71 | 16 | . | . | 356 |
| 3.00-3.49 | . | . | . | 3 | 78 | 5 | 22 | 39 | . | . | 147 |
| 3.50-3.99 | . | . | . | . | 32 | 8 | 4 | 19 | 11 | . | 74 |
| 4.00-4.49 | . | . | . | . | 5 | 18 | . | 4 | 7 | . | 34 |
| 4.50-4.99 | . | . | . | . | . | 7 | . | . | 3 | . | 10 |
| 5.00-5.49 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | 3 | . | . | 1 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 281 | 1332 | 2684 | 1443 | 506 | 334 | 161 | 82 | 22 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.7 NO. OF CASES= 6417.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 224 | 511 | 245 | 22 | 3 | . | . | . | . | . | 1005 |
| 0.50-0.99 | . | 413 | 1044 | 281 | 28 | . | . | . | . | . | 1766 |
| 1.00-1.49 | . | . | 346 | 244 | 142 | 9 | . | . | . | . | 741 |
| 1.50-1.99 | . | . | 59 | 145 | 100 | 51 | 2 | . | . | . | 357 |
| 2.00-2.49 | . | . | . | 60 | 36 | 78 | 11 | 2 | . | . | 187 |
| 2.50-2.99 | . | . | . | 13 | 51 | 35 | 25 | 5 | . | . | 129 |
| 3.00-3.49 | . | . | . | . | 6 | 23 | 27 | 10 | . | . | 66 |
| 3.50-3.99 | . | . | . | . | 1 | 10 | 13 | 8 | 1 | . | 33 |
| 4.00-4.49 | . | . | . | . | 1 | 1 | 8 | 3 | 1 | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 7 | 1 | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 3 | . | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 224 | 924 | 1694 | 765 | 368 | 207 | 90 | 38 | 9 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.6 NO. OF CASES= 4059.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 286 | 705 | 310 | 31 | 1 | 1 | . | . | . | . | 1334 |
| 0.50-0.99 | . | 397 | 1557 | 258 | 14 | 3 | . | . | . | . | 2229 |
| 1.00-1.49 | . | . | 378 | 459 | 105 | 4 | . | . | . | . | 946 |
| 1.50-1.99 | . | . | 26 | 212 | 213 | 35 | . | . | . | . | 486 |
| 2.00-2.49 | . | . | . | 79 | 88 | 103 | 4 | . | . | . | 274 |
| 2.50-2.99 | . | . | . | . | 78 | 78 | 12 | 1 | . | . | 169 |
| 3.00-3.49 | . | . | . | . | 3 | 77 | 12 | 5 | . | . | 97 |
| 3.50-3.99 | . | . | . | . | . | 31 | 34 | 4 | . | . | 69 |
| 4.00-4.49 | . | . | . | . | . | . | 42 | 9 | . | . | 51 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 6 | 1 | . | 14 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 1 | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 3 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 286 | 1102 | 2271 | 1039 | 502 | 332 | 111 | 34 | 11 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.6 NO. OF CASES= 5336.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 243 | 743 | 258 | 13 | 1 | . | . | . | . | . | 1258 |
| 0.50-0.99 | . | 408 | 1496 | 185 | 12 | 2 | . | . | . | . | 2103 |
| 1.00-1.49 | . | . | 353 | 380 | 33 | . | . | . | . | . | 766 |
| 1.50-1.99 | . | . | 14 | 174 | 87 | 12 | . | . | . | . | 287 |
| 2.00-2.49 | . | . | . | 42 | 44 | 26 | 2 | . | . | . | 114 |
| 2.50-2.99 | . | . | . | . | 45 | 39 | 6 | . | . | . | 90 |
| 3.00-3.49 | . | . | . | . | 5 | 37 | 10 | 6 | . | . | 58 |
| 3.50-3.99 | . | . | . | . | . | 20 | 7 | 3 | 1 | . | 31 |
| 4.00-4.49 | . | . | . | . | . | 3 | 8 | 3 | . | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 3 | 1 | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | 2 | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 243 | 1151 | 2121 | 794 | 227 | 139 | 36 | 18 | 9 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 4448.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 361 | 1054 | 347 | 13 | 1 | . | . | . | . | . | 1776 |
| 0.50-0.99 | . | 568 | 1674 | 162 | 11 | . | . | . | . | . | 2415 |
| 1.00-1.49 | . | . | 532 | 319 | 39 | 5 | . | . | . | . | 895 |
| 1.50-1.99 | . | . | 16 | 309 | 60 | 10 | . | . | . | . | 395 |
| 2.00-2.49 | . | . | . | 97 | 40 | 12 | 2 | . | . | . | 151 |
| 2.50-2.99 | . | . | . | 2 | 83 | 17 | 2 | 2 | . | . | 106 |
| 3.00-3.49 | . | . | . | . | 6 | 54 | 5 | 3 | 1 | . | 69 |
| 3.50-3.99 | . | . | . | . | . | 34 | 6 | . | 1 | . | 41 |
| 4.00-4.49 | . | . | . | . | . | 3 | 23 | 5 | . | . | 31 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 9 | . | . | 10 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 5 | 1 | 1 | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 1 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 6 | . | 6 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 361 | 1622 | 2569 | 902 | 240 | 135 | 40 | 28 | 13 | 2 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.2 NO. OF CASES= 5545.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 429 | 777 | 333 | 19 | 1 | . | . | . | . | . | 1559 |
| 0.50-0.99 | . | 624 | 1020 | 174 | 16 | 1 | . | . | . | . | 1835 |
| 1.00-1.49 | . | . | 304 | 221 | 78 | 7 | . | . | . | . | 610 |
| 1.50-1.99 | . | . | 23 | 137 | 36 | 16 | . | . | . | . | 212 |
| 2.00-2.49 | . | . | . | 47 | 24 | 6 | 2 | 1 | . | . | 80 |
| 2.50-2.99 | . | . | . | 1 | 21 | 9 | 2 | 2 | . | . | 35 |
| 3.00-3.49 | . | . | . | . | 4 | 7 | . | 3 | . | . | 14 |
| 3.50-3.99 | . | . | . | . | . | 9 | 3 | 4 | . | . | 16 |
| 4.00-4.49 | . | . | . | . | . | 2 | 3 | 5 | . | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 429 | 1401 | 1680 | 599 | 180 | 57 | 12 | 17 | 3 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 4106.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 482 | 1111 | 659 | 186 | 2 | . | . | . | . | . | 2440 |
| 0.50-0.99 | . | 1194 | 729 | 346 | 52 | 2 | . | . | . | . | 2323 |
| 1.00-1.49 | . | . | 318 | 162 | 53 | 10 | 1 | . | . | . | 544 |
| 1.50-1.99 | . | . | 43 | 65 | 37 | 14 | . | . | . | . | 159 |
| 2.00-2.49 | . | . | 2 | 4 | 26 | 16 | 1 | . | . | . | 49 |
| 2.50-2.99 | . | . | . | . | 2 | 9 | . | . | . | . | 11 |
| 3.00-3.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 482 | 2305 | 1751 | 763 | 172 | 52 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 5180.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 755 | 1413 | 500 | 168 | 6 | . | . | . | . | . | 2842 |
| 0.50-0.99 | . | 1943 | 435 | 183 | 51 | 3 | . | . | . | . | 2615 |
| 1.00-1.49 | . | . | 495 | 66 | 48 | 13 | . | . | . | . | 622 |
| 1.50-1.99 | . | . | 114 | 12 | 14 | 8 | . | . | . | . | 148 |
| 2.00-2.49 | . | . | 3 | 9 | 12 | 6 | 1 | . | . | . | 31 |
| 2.50-2.99 | . | . | . | 1 | . | 1 | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | 1 | 1 | 1 | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 755 | 3356 | 1547 | 439 | 131 | 32 | 2 | 2 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 5868.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 737 | 1259 | 463 | 87 | 8 | 1 | . | . | . | . | 2555 |
| 0.50-0.99 | . | 1731 | 382 | 185 | 81 | 9 | . | . | . | . | 2388 |
| 1.00-1.49 | . | . | 752 | 51 | 48 | 11 | . | . | . | . | 862 |
| 1.50-1.99 | . | . | 236 | 3 | 19 | 11 | 1 | . | . | . | 270 |
| 2.00-2.49 | . | . | 10 | 23 | 1 | 8 | 1 | 1 | . | . | 44 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 737 | 2990 | 1843 | 350 | 157 | 40 | 2 | 2 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 5734.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 511 | 920 | 280 | 62 | 6 | 2 | . | . | . | . | 1781 |
| 0.50-0.99 | . | 1484 | 498 | 101 | 41 | 5 | . | . | . | . | 2129 |
| 1.00-1.49 | . | . | 468 | 21 | 25 | 17 | . | . | . | . | 531 |
| 1.50-1.99 | . | . | 253 | 43 | 3 | 4 | . | . | . | . | 303 |
| 2.00-2.49 | . | . | 2 | 29 | 1 | . | . | . | . | . | 32 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 511 | 2404 | 1501 | 258 | 76 | 28 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 4477.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 552 | 813 | 293 | 75 | 13 | 3 | . | . | . | . | 1749 |
| 0.50-0.99 | . | 1465 | 473 | 109 | 32 | 2 | . | . | . | . | 2081 |
| 1.00-1.49 | . | . | 377 | 7 | 23 | 6 | . | . | . | . | 413 |
| 1.50-1.99 | . | . | 160 | 26 | . | 6 | . | . | . | . | 192 |
| 2.00-2.49 | . | . | . | 16 | . | . | 1 | . | . | . | 17 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 552 | 2278 | 1303 | 235 | 68 | 17 | 1 | 0 | 1 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 4174.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 665 | 1019 | 315 | 74 | 18 | 3 | 2 | . | . | . | 2096 |
| 0.50-0.99 | . | 1731 | 421 | 101 | 28 | 6 | . | . | . | . | 2287 |
| 1.00-1.49 | . | . | 487 | 17 | 19 | 6 | . | . | . | . | 529 |
| 1.50-1.99 | . | . | 146 | 10 | 2 | . | . | . | . | . | 158 |
| 2.00-2.49 | . | . | . | 18 | . | . | . | . | . | . | 18 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 665 | 2750 | 1369 | 221 | 68 | 15 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 4767.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1047 | 1895 | 565 | 144 | 35 | 10 | 1 | . | . | . | 3697 |
| 0.50-0.99 | . | 2396 | 304 | 171 | 50 | 13 | 5 | . | . | . | 2939 |
| 1.00-1.49 | . | . | 718 | 13 | 48 | 9 | . | . | . | . | 788 |
| 1.50-1.99 | . | . | 141 | . | 7 | 2 | 1 | . | . | . | 151 |
| 2.00-2.49 | . | . | 3 | 1 | . | 1 | 1 | . | . | . | 6 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1047 | 4291 | 1731 | 331 | 140 | 35 | 8 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 7099.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1084 | 2560 | 557 | 122 | 13 | 12 | . | . | . | . | 4348 |
| 0.50-0.99 | . | 2990 | 845 | 188 | 65 | 19 | 1 | . | . | . | 4108 |
| 1.00-1.49 | . | . | 1512 | 21 | 35 | 8 | 3 | . | . | . | 1579 |
| 1.50-1.99 | . | . | 245 | 241 | 8 | 8 | . | . | . | . | 502 |
| 2.00-2.49 | . | . | 3 | 134 | 1 | . | . | . | . | . | 138 |
| 2.50-2.99 | . | . | . | 12 | 8 | . | . | . | . | . | 20 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | 1 | . | 2 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1084 | 5550 | 3162 | 718 | 131 | 48 | 4 | 0 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 10015.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 679 | 1488 | 590 | 96 | 6 | 3 | . | . | . | . | 2862 |
| 0.50-0.99 | . | 1519 | 2011 | 242 | 75 | 20 | 4 | . | . | . | 3871 |
| 1.00-1.49 | . | . | 2150 | 29 | 41 | 33 | 4 | . | . | . | 2257 |
| 1.50-1.99 | . | . | 242 | 782 | 8 | 6 | 8 | 3 | . | . | 1049 |
| 2.00-2.49 | . | . | . | 462 | 1 | 1 | 1 | 1 | . | . | 466 |
| 2.50-2.99 | . | . | . | 56 | 28 | . | . | 1 | . | . | 85 |
| 3.00-3.49 | . | . | . | . | 16 | . | . | . | . | . | 16 |
| 3.50-3.99 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 679 | 3007 | 4993 | 1667 | 175 | 68 | 17 | 5 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 9935.

STATION S44 46.95N 87.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

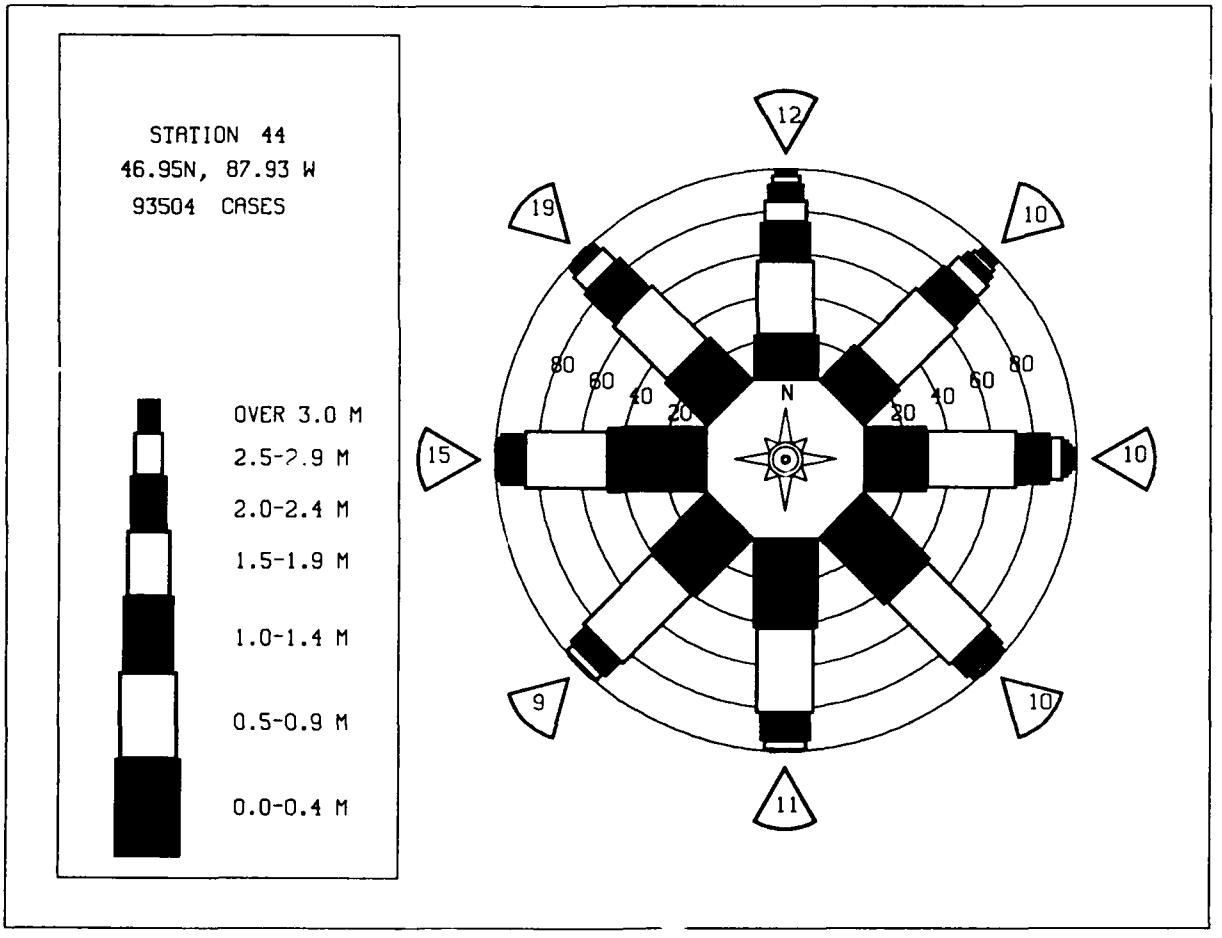
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 311 | 774 | 360 | 41 | 8 | 2 | . | . | . | . | 1496 |
| 0.50-0.99 | . | 681 | 1304 | 294 | 67 | 22 | . | . | . | . | 2368 |
| 1.00-1.49 | . | . | 1211 | 47 | 99 | 51 | 4 | . | . | . | 1412 |
| 1.50-1.99 | . | . | 233 | 459 | 26 | 77 | 27 | 3 | . | . | 825 |
| 2.00-2.49 | . | . | . | 401 | . | 31 | 22 | 9 | . | . | 463 |
| 2.50-2.99 | . | . | . | 83 | 66 | . | 6 | 17 | 3 | . | 175 |
| 3.00-3.49 | . | . | . | . | 14 | . | 1 | 9 | 2 | . | 26 |
| 3.50-3.99 | . | . | . | . | 3 | 1 | . | . | 2 | . | 6 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 311 | 1455 | 3108 | 1325 | 283 | 184 | 60 | 38 | 7 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 6344.

STATION S44 46.95N 87.93W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 865 | 1779 | 640 | 119 | 13 | 3 | . | . | . | . | 3419 |
| 0.50-0.99 | . | 2014 | 1547 | 335 | 67 | 12 | 1 | . | . | . | 3976 |
| 1.00-1.49 | . | . | 1126 | 218 | 101 | 23 | 1 | . | . | . | 1469 |
| 1.50-1.99 | . | . | 219 | 292 | 71 | 36 | 5 | . | . | . | 623 |
| 2.00-2.49 | . | . | 2 | 187 | 28 | 40 | 9 | 1 | . | . | 267 |
| 2.50-2.99 | . | . | . | 34 | 45 | 22 | 12 | 4 | . | . | 117 |
| 3.00-3.49 | . | . | . | . | 13 | 20 | 8 | 8 | . | . | 49 |
| 3.50-3.99 | . | . | . | . | 3 | 12 | 7 | 4 | 1 | . | 27 |
| 4.00-4.49 | . | . | . | . | . | 2 | 8 | 3 | . | . | 13 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 865 | 3793 | 3534 | 1185 | 341 | 170 | 52 | 23 | 2 | 0 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S44 (46.95N 87.93W)

| | MONTH | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| YEAR | | | | | | | | | | | | | MEAN |
| 1956 | 0.7 | 0.8 | 1.1 | 1.0 | 0.7 | 0.6 | 0.6 | 0.4 | 0.6 | 0.9 | 1.1 | 1.1 | 0.8 |
| 1957 | 1.0 | 0.9 | 0.9 | 0.8 | 0.8 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.9 | 1.0 | 0.8 |
| 1958 | 0.9 | 1.3 | 0.6 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 0.7 | 1.2 | 0.8 | 0.7 |
| 1959 | 0.8 | 0.8 | 0.7 | 0.6 | 0.7 | 0.4 | 0.3 | 0.5 | 0.6 | 0.8 | 1.0 | 1.3 | 0.7 |
| 1960 | 0.9 | 1.1 | 0.9 | 0.8 | 0.9 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 1.0 | 0.8 | 0.8 |
| 1961 | 0.7 | 0.8 | 1.1 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.6 | 0.8 | 0.7 | 0.9 | 0.7 |
| 1962 | 1.1 | 0.9 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 | 0.7 |
| 1963 | 0.9 | 1.0 | 1.0 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.9 | 1.1 | 0.7 |
| 1964 | 1.0 | 0.9 | 1.2 | 0.9 | 0.7 | 0.6 | 0.5 | 0.6 | 0.6 | 0.8 | 0.8 | 0.9 | 0.8 |
| 1965 | 1.3 | 1.3 | 1.3 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 0.7 | 1.1 | 1.2 | 1.3 | 1.0 |
| 1966 | 1.1 | 1.3 | 1.6 | 0.9 | 1.0 | 0.6 | 0.7 | 0.5 | 0.7 | 1.1 | 1.5 | 1.3 | 1.0 |
| 1967 | 1.4 | 1.4 | 1.1 | 1.0 | 0.8 | 0.6 | 0.6 | 0.8 | 0.8 | 1.0 | 0.9 | 1.2 | 1.0 |
| 1968 | 1.1 | 1.5 | 1.2 | 1.0 | 0.8 | 0.6 | 0.6 | 0.6 | 0.6 | 1.0 | 1.3 | 1.5 | 1.0 |
| 1969 | 1.3 | 1.0 | 1.4 | 1.1 | 0.8 | 0.6 | 0.6 | 0.6 | 0.8 | 1.1 | 1.0 | 1.2 | 1.0 |
| 1970 | 1.3 | 1.5 | 1.1 | 1.2 | 1.0 | 0.7 | 0.7 | 0.6 | 0.9 | 1.0 | 1.4 | 1.3 | 1.1 |
| 1971 | 0.8 | 1.0 | 0.9 | 0.7 | 0.6 | 0.3 | 0.4 | 0.4 | 0.5 | 0.8 | 0.9 | 0.8 | 0.7 |
| 1972 | 0.9 | 0.8 | 1.0 | 0.6 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 1.1 | 1.0 | 1.2 | 0.8 |
| 1973 | 0.9 | 1.0 | 1.1 | 0.9 | 0.8 | 0.5 | 0.5 | 0.4 | 0.6 | 0.7 | 1.0 | 1.0 | 0.8 |
| 1974 | 0.8 | 0.7 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 1.0 | 0.7 |
| 1975 | 1.0 | 0.7 | 1.2 | 0.7 | 0.4 | 0.6 | 0.5 | 0.6 | 0.7 | 0.9 | 1.3 | 1.1 | 0.8 |
| 1976 | 1.2 | 1.2 | 1.4 | 1.1 | 0.7 | 0.6 | 0.4 | 0.5 | 0.6 | 0.5 | 0.7 | 0.8 | 0.8 |
| 1977 | 0.8 | 1.1 | 1.1 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.7 | 0.7 | 0.8 | 1.0 | 0.7 |
| 1978 | 1.1 | 0.9 | 0.7 | 0.9 | 0.6 | 0.4 | 0.4 | 0.4 | 0.7 | 0.6 | 0.9 | 0.9 | 0.7 |
| 1979 | 1.0 | 0.8 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 0.8 | 0.9 | 0.7 |
| 1980 | 0.9 | 0.7 | 0.8 | 0.7 | 0.5 | 0.5 | 0.3 | 0.5 | 0.6 | 0.8 | 0.7 | 0.9 | 0.7 |
| 1981 | 0.8 | 0.8 | 0.8 | 0.7 | 0.5 | 0.4 | 0.3 | 0.4 | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 |
| 1982 | 1.2 | 0.9 | 1.1 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 0.8 | 0.9 | 0.8 |
| 1983 | 1.0 | 0.9 | 1.5 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 1.2 | 1.1 | 0.8 |
| 1984 | 0.8 | 1.0 | 1.1 | 0.9 | 0.6 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.9 | 1.0 | 0.7 |
| 1985 | 1.0 | 0.9 | 1.3 | 0.7 | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 | 0.5 | 0.9 | 0.9 | 0.7 |
| 1986 | 1.0 | 0.7 | 0.9 | 0.9 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 |
| 1987 | 0.8 | 0.8 | 1.1 | 0.7 | 0.5 | 0.3 | 0.4 | 0.4 | 0.5 | 0.7 | 0.9 | 0.8 | 0.7 |
| MEAN | 1.0 | 1.0 | 1.1 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.0 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S44 (46.95N 87.93W)

| | MONTH | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| YEAR | | | | | | | | | | | | |
| 1956 | 3.5 | 4.3 | 6.7 | 3.9 | 3.1 | 1.6 | 1.5 | 1.5 | 1.8 | 2.6 | 4.3 | 5.2 |
| 1957 | 2.2 | 2.3 | 3.0 | 4.2 | 3.2 | 1.3 | 1.6 | 1.5 | 2.3 | 3.0 | 3.3 | 4.0 |
| 1958 | 2.9 | 4.7 | 2.2 | 5.0 | 1.7 | 1.9 | 1.7 | 1.8 | 1.9 | 2.0 | 4.7 | 3.1 |
| 1959 | 2.0 | 2.7 | 5.0 | 2.1 | 2.0 | 1.2 | 1.0 | 1.7 | 2.0 | 2.1 | 3.6 | 6.3 |
| 1960 | 3.4 | 4.6 | 3.1 | 2.8 | 3.5 | 1.4 | 1.2 | 1.5 | 2.0 | 2.5 | 4.3 | 2.2 |
| 1961 | 2.4 | 3.5 | 3.2 | 2.5 | 2.7 | 1.6 | 1.3 | 1.9 | 2.0 | 2.8 | 3.2 | 2.7 |
| 1962 | 3.1 | 2.8 | 4.0 | 2.9 | 2.0 | 1.1 | 1.4 | 1.6 | 1.8 | 2.1 | 2.5 | 3.0 |
| 1963 | 3.5 | 3.6 | 3.2 | 3.2 | 1.5 | 1.6 | 1.2 | 2.4 | 3.1 | 1.9 | 3.9 | 4.7 |
| 1964 | 5.0 | 2.6 | 4.4 | 2.9 | 2.0 | 1.6 | 1.4 | 1.9 | 1.8 | 2.7 | 2.9 | 2.6 |
| 1965 | 4.3 | 6.2 | 4.9 | 2.9 | 2.2 | 1.8 | 1.8 | 2.4 | 2.1 | 3.3 | 6.9 | 4.4 |
| 1966 | 4.2 | 2.9 | 6.7 | 4.2 | 2.6 | 2.0 | 2.6 | 2.1 | 2.3 | 3.8 | 6.4 | 3.6 |
| 1967 | 5.9 | 4.7 | 3.1 | 3.1 | 2.8 | 1.9 | 2.0 | 4.0 | 2.4 | 2.8 | 2.5 | 3.9 |
| 1968 | 3.9 | 4.9 | 4.4 | 3.5 | 2.2 | 2.1 | 2.1 | 2.1 | 1.9 | 3.7 | 3.7 | 5.8 |
| 1969 | 3.5 | 4.3 | 5.7 | 4.0 | 2.6 | 1.9 | 2.0 | 2.1 | 2.1 | 3.6 | 2.7 | 3.9 |
| 1970 | 4.0 | 4.0 | 5.1 | 4.2 | 2.6 | 2.0 | 2.5 | 2.1 | 3.1 | 2.6 | 5.2 | 6.3 |
| 1971 | 2.7 | 4.1 | 4.7 | 2.6 | 3.3 | 1.5 | 1.3 | 1.3 | 1.5 | 3.7 | 3.2 | 3.7 |
| 1972 | 3.0 | 3.8 | 4.7 | 2.9 | 1.2 | 1.3 | 1.5 | 1.7 | 2.6 | 4.1 | 4.3 | 3.8 |
| 1973 | 2.9 | 3.1 | 3.3 | 2.9 | 3.2 | 1.7 | 1.2 | 1.3 | 1.6 | 3.0 | 2.9 | 4.1 |
| 1974 | 2.1 | 3.0 | 3.6 | 3.4 | 1.7 | 1.7 | 1.2 | 1.2 | 1.3 | 2.0 | 2.4 | 4.3 |
| 1975 | 3.6 | 2.5 | 5.5 | 2.4 | 1.3 | 1.6 | 1.6 | 1.9 | 2.2 | 2.4 | 6.7 | 2.8 |
| 1976 | 3.1 | 3.7 | 6.0 | 3.9 | 2.4 | 2.0 | 1.6 | 1.3 | 1.8 | 1.9 | 2.5 | 2.6 |
| 1977 | 2.4 | 5.9 | 4.4 | 2.6 | 1.7 | 1.8 | 1.5 | 1.0 | 4.7 | 2.7 | 2.2 | 6.0 |
| 1978 | 4.0 | 3.0 | 2.1 | 2.7 | 2.6 | 1.4 | 1.3 | 1.2 | 2.5 | 2.4 | 2.6 | 2.9 |
| 1979 | 2.6 | 3.2 | 3.7 | 3.8 | 2.1 | 1.5 | 1.1 | 1.3 | 1.6 | 4.4 | 2.5 | 2.6 |
| 1980 | 2.4 | 3.3 | 3.5 | 3.5 | 1.5 | 1.6 | 0.9 | 1.2 | 2.0 | 2.2 | 1.8 | 2.3 |
| 1981 | 2.2 | 2.2 | 2.6 | 2.1 | 2.2 | 1.6 | 1.1 | 1.3 | 2.7 | 3.9 | 3.1 | 2.1 |
| 1982 | 5.0 | 2.2 | 2.9 | 2.6 | 2.2 | 1.5 | 1.9 | 1.1 | 3.4 | 3.4 | 2.5 | 2.3 |
| 1983 | 3.8 | 5.5 | 3.8 | 2.3 | 2.5 | 1.4 | 1.6 | 1.5 | 1.3 | 2.1 | 4.8 | 4.1 |
| 1984 | 2.8 | 4.2 | 4.0 | 2.8 | 1.4 | 1.5 | 1.1 | 1.2 | 1.6 | 3.7 | 3.1 | 3.1 |
| 1985 | 2.8 | 2.5 | 7.0 | 4.1 | 1.5 | 1.8 | 0.8 | 1.2 | 1.6 | 2.0 | 2.4 | 6.1 |
| 1986 | 2.9 | 2.9 | 3.8 | 2.9 | 2.6 | 1.4 | 0.9 | 1.1 | 2.0 | 2.5 | 2.3 | 2.2 |
| 1987 | 2.4 | 4.0 | 4.1 | 3.3 | 1.8 | 1.0 | 1.7 | 1.3 | 1.8 | 2.8 | 2.7 | 3.6 |

32 YR. STATISTICS FOR WIS STATION S44

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 3.9 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.3 |
| LARGEST WAVE HS . . . . . | (METERS) | 7.0 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 81.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 85030418 |

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 294 | 997 | 333 | 23 | 2 | 1 | . | . | . | . | 1650 |
| 0.50-0.99 | . | 572 | 1569 | 303 | 22 | 7 | . | . | . | . | 2473 |
| 1.00-1.49 | . | . | 868 | 238 | 136 | 21 | . | . | . | . | 1263 |
| 1.50-1.99 | . | . | 205 | 310 | 174 | 67 | 3 | . | . | . | 759 |
| 2.00-2.49 | . | . | . | 377 | 64 | 125 | 17 | 1 | . | . | 584 |
| 2.50-2.99 | . | . | . | 139 | 52 | 140 | 81 | 6 | . | . | 418 |
| 3.00-3.49 | . | . | . | 5 | 64 | 26 | 99 | 33 | . | . | 227 |
| 3.50-3.99 | . | . | . | . | 26 | 4 | 26 | 63 | 5 | . | 124 |
| 4.00-4.49 | . | . | . | . | 2 | 7 | 3 | 38 | 6 | . | 56 |
| 4.50-4.99 | . | . | . | . | . | 6 | . | 12 | 22 | . | 40 |
| 5.00-5.49 | . | . | . | . | . | 1 | . | 1 | 8 | . | 10 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | 2 | . | 1 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 294 | 1569 | 2975 | 1395 | 542 | 405 | 231 | 154 | 48 | 2 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.7 NO. OF CASES= 7139.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 201 | 617 | 247 | 14 | 2 | . | . | . | . | . | 1081 |
| 0.50-0.99 | . | 451 | 1402 | 213 | 5 | 1 | . | . | . | . | 2072 |
| 1.00-1.49 | . | . | 382 | 360 | 78 | 5 | . | . | . | . | 825 |
| 1.50-1.99 | . | . | 66 | 194 | 180 | 14 | . | . | . | . | 454 |
| 2.00-2.49 | . | . | . | 55 | 83 | 70 | 2 | . | . | . | 210 |
| 2.50-2.99 | . | . | . | 8 | 75 | 65 | 10 | . | . | . | 158 |
| 3.00-3.49 | . | . | . | . | 5 | 63 | 25 | 3 | . | . | 96 |
| 3.50-3.99 | . | . | . | . | . | 25 | 26 | 7 | . | . | 58 |
| 4.00-4.49 | . | . | . | . | . | 3 | 21 | 10 | 1 | . | 35 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 16 | . | . | 21 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 2 | 3 | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 201 | 1068 | 2097 | 844 | 428 | 246 | 90 | 40 | 11 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.6 NO. OF CASES= 4715.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 242 | 767 | 267 | 13 | 1 | . | . | . | . | . | 1290 |
| 0.50-0.99 | . | 428 | 1811 | 180 | 10 | . | 1 | . | . | . | 2430 |
| 1.00-1.49 | . | . | 414 | 549 | 54 | 1 | . | . | . | . | 1018 |
| 1.50-1.99 | . | . | 26 | 237 | 194 | 14 | . | . | . | . | 471 |
| 2.00-2.49 | . | . | . | 82 | 103 | 86 | . | . | . | . | 271 |
| 2.50-2.99 | . | . | . | 1 | 108 | 72 | 5 | 1 | . | . | 187 |
| 3.00-3.49 | . | . | . | . | 5 | 98 | 9 | . | . | . | 112 |
| 3.50-3.99 | . | . | . | . | . | 35 | 41 | . | . | . | 76 |
| 4.00-4.49 | . | . | . | . | . | 3 | 43 | 7 | . | . | 53 |
| 4.50-4.99 | . | . | . | . | . | . | 10 | 9 | . | . | 19 |
| 5.00-5.49 | . | . | . | . | . | . | . | 8 | . | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 4 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 242 | 1195 | 2518 | 1062 | 475 | 309 | 109 | 28 | 10 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 5581.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 208 | 773 | 159 | 8 | . | . | . | . | . | . | 1148 |
| 0.50-0.99 | . | 388 | 1654 | 110 | 5 | . | . | . | . | . | 2157 |
| 1.00-1.49 | . | . | 313 | 379 | 27 | 1 | . | . | . | . | 720 |
| 1.50-1.99 | . | . | 14 | 149 | 103 | 7 | . | . | . | . | 273 |
| 2.00-2.49 | . | . | . | 24 | 45 | 27 | . | . | . | . | 96 |
| 2.50-2.99 | . | . | . | 1 | 41 | 32 | 8 | . | . | . | 82 |
| 3.00-3.49 | . | . | . | . | 1 | 43 | 7 | 6 | . | . | 57 |
| 3.50-3.99 | . | . | . | . | . | 12 | 9 | 1 | 1 | . | 23 |
| 4.00-4.49 | . | . | . | . | . | . | 8 | 6 | . | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | . | 5 | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 1 | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 208 | 1161 | 2140 | 671 | 222 | 122 | 32 | 23 | 5 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 4302.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 237 | 701 | 173 | 10 | . | . | . | . | . | . | 1121 |
| 0.50-0.99 | . | 427 | 1264 | 103 | 6 | . | . | . | . | . | 1800 |
| 1.00-1.49 | . | . | 314 | 273 | 27 | 2 | . | . | . | . | 616 |
| 1.50-1.99 | . | . | 8 | 173 | 64 | 8 | . | . | . | . | 253 |
| 2.00-2.49 | . | . | . | 52 | 34 | 16 | 1 | . | . | . | 103 |
| 2.50-2.99 | . | . | . | 2 | 40 | 16 | 3 | 2 | . | . | 63 |
| 3.00-3.49 | . | . | . | . | 5 | 44 | 6 | 1 | . | . | 56 |
| 3.50-3.99 | . | . | . | . | . | 27 | 7 | 1 | 1 | . | 36 |
| 4.00-4.49 | . | . | . | . | . | . | 13 | 2 | . | . | 15 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 6 | . | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 7 | 1 | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 237 | 1128 | 1759 | 613 | 176 | 113 | 32 | 20 | 9 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 3836.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 196 | 529 | 144 | 6 | 1 | . | . | . | . | . | 876 |
| 0.50-0.99 | . | 316 | 1022 | 111 | 2 | . | . | . | . | . | 1451 |
| 1.00-1.49 | . | . | 249 | 211 | 45 | 2 | . | . | . | . | 507 |
| 1.50-1.99 | . | . | 20 | 155 | 34 | 14 | . | . | . | . | 223 |
| 2.00-2.49 | . | . | . | 45 | 13 | 12 | 1 | 1 | . | . | 72 |
| 2.50-2.99 | . | . | . | 1 | 47 | 2 | 2 | 1 | . | . | 53 |
| 3.00-3.49 | . | . | . | . | 2 | 18 | . | 2 | . | . | 22 |
| 3.50-3.99 | . | . | . | . | . | 13 | 3 | 5 | . | . | 21 |
| 4.00-4.49 | . | . | . | . | . | . | 7 | 6 | . | . | 13 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | 1 | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 196 | 845 | 1435 | 529 | 144 | 61 | 14 | 18 | 4 | 2 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 3050.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 312 | 1020 | 694 | 32 | . | . | . | . | . | . | 2058 |
| 0.50-0.99 | . | 851 | 1498 | 432 | 26 | 1 | . | . | . | . | 2808 |
| 1.00-1.49 | . | . | 566 | 265 | 98 | 12 | . | . | . | . | 941 |
| 1.50-1.99 | . | . | 79 | 167 | 44 | 6 | . | . | . | . | 296 |
| 2.00-2.49 | . | . | 2 | 56 | 22 | 14 | 1 | . | . | . | 95 |
| 2.50-2.99 | . | . | . | . | 45 | 5 | 2 | . | . | . | 52 |
| 3.00-3.49 | . | . | . | . | 8 | 2 | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | 1 | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 312 | 1871 | 2839 | 952 | 243 | 42 | 3 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 5867.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 558 | 1397 | 795 | 65 | . | . | . | . | . | . | 2815 |
| 0.50-0.99 | . | 2334 | 758 | 565 | 31 | 1 | . | . | . | . | 3689 |
| 1.00-1.49 | . | . | 897 | 109 | 66 | 6 | . | . | . | . | 1078 |
| 1.50-1.99 | . | . | 269 | 44 | 18 | 4 | . | . | . | . | 335 |
| 2.00-2.49 | . | . | 10 | 20 | 3 | 3 | . | . | . | . | 36 |
| 2.50-2.99 | . | . | . | 6 | 11 | . | . | . | . | . | 17 |
| 3.00-3.49 | . | . | . | 1 | 3 | 3 | . | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 558 | 3731 | 2729 | 810 | 132 | 19 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.6 NO. OF CASES= 7472.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 582 | 1188 | 370 | 44 | 3 | . | . | . | . | . | 2187 |
| 0.50-0.99 | . | 1660 | 495 | 185 | 38 | 9 | . | . | . | . | 2387 |
| 1.00-1.49 | . | . | 668 | 56 | 54 | 14 | . | . | . | . | 792 |
| 1.50-1.99 | . | . | 348 | 5 | 13 | 7 | 2 | . | . | . | 375 |
| 2.00-2.49 | . | . | 20 | 33 | 1 | 2 | 2 | . | . | . | 58 |
| 2.50-2.99 | . | . | . | 3 | . | 1 | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 582 | 2848 | 1901 | 326 | 109 | 33 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 5436.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 427 | 864 | 249 | 50 | 2 | . | . | . | . | . | 1592 |
| 0.50-0.99 | . | 1457 | 510 | 121 | 27 | 3 | . | . | . | . | 2118 |
| 1.00-1.49 | . | . | 455 | 23 | 37 | 13 | . | . | . | . | 528 |
| 1.50-1.99 | . | . | 278 | 53 | 7 | 5 | 1 | . | . | . | 344 |
| 2.00-2.49 | . | . | 2 | 53 | . | 1 | 1 | . | . | . | 57 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | 1 | . | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 427 | 2321 | 1494 | 304 | 73 | 22 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 4351.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 426 | 857 | 306 | 38 | 3 | 2 | . | . | . | . | 1632 |
| 0.50-0.99 | . | 1593 | 483 | 114 | 33 | 5 | . | . | . | . | 2228 |
| 1.00-1.49 | . | . | 460 | 11 | 24 | 5 | . | . | . | . | 500 |
| 1.50-1.99 | . | . | 248 | 34 | . | 5 | . | . | . | . | 287 |
| 2.00-2.49 | . | . | . | 27 | . | . | . | . | . | . | 27 |
| 2.50-2.99 | . | . | . | 3 | . | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 426 | 2450 | 1497 | 227 | 60 | 17 | 0 | 0 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 4383.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 425 | 840 | 265 | 50 | 4 | . | 1 | . | . | . | 1585 |
| 0.50-0.99 | . | 1614 | 741 | 88 | 17 | 2 | 1 | . | . | . | 2463 |
| 1.00-1.49 | . | . | 612 | 22 | 20 | 5 | . | . | . | . | 659 |
| 1.50-1.99 | . | . | 254 | 109 | 3 | 1 | . | . | . | . | 367 |
| 2.00-2.49 | . | . | . | 50 | . | . | . | . | . | . | 50 |
| 2.50-2.99 | . | . | . | 8 | 2 | . | . | . | . | . | 10 |
| 3.00-3.49 | . | . | . | . | 3 | . | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 425 | 2454 | 1872 | 327 | 49 | 8 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 4811.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 559 | 1017 | 253 | 41 | 14 | 4 | . | . | . | . | 1888 |
| 0.50-0.99 | . | 1853 | 1403 | 114 | 38 | 6 | 4 | . | . | . | 3418 |
| 1.00-1.49 | . | . | 1008 | 20 | 33 | 7 | . | . | . | . | 1068 |
| 1.50-1.99 | . | . | 253 | 224 | 6 | 3 | . | . | . | . | 486 |
| 2.00-2.49 | . | . | . | 117 | . | . | . | . | . | . | 117 |
| 2.50-2.99 | . | . | . | 7 | 2 | . | . | . | . | . | 9 |
| 3.00-3.49 | . | . | . | . | 3 | . | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 559 | 2870 | 2917 | 523 | 96 | 20 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 6544.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 555 | 1402 | 283 | 56 | 3 | 2 | . | . | . | . | 2301 |
| 0.50-0.99 | . | 1867 | 2512 | 177 | 40 | 18 | . | . | . | . | 4614 |
| 1.00-1.49 | . | . | 1967 | 77 | 26 | 7 | 1 | . | . | . | 2078 |
| 1.50-1.99 | . | . | 405 | 728 | 5 | 5 | . | . | . | . | 1143 |
| 2.00-2.49 | . | . | . | 420 | 2 | 1 | . | . | . | . | 423 |
| 2.50-2.99 | . | . | . | 43 | 39 | . | . | . | . | . | 82 |
| 3.00-3.49 | . | . | . | . | 8 | . | . | . | . | . | 8 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 555 | 3269 | 5167 | 1501 | 123 | 36 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 9969.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 394 | 1186 | 388 | 48 | 4 | 1 | . | . | . | . | 2021 |
| 0.50-0.99 | . | 965 | 2464 | 213 | 55 | 11 | 3 | . | . | . | 3711 |
| 1.00-1.49 | . | . | 2217 | 49 | 38 | 22 | 5 | . | . | . | 2331 |
| 1.50-1.99 | . | . | 256 | 932 | 11 | 14 | 4 | 3 | . | . | 1220 |
| 2.00-2.49 | . | . | . | 625 | . | 4 | 1 | 1 | . | . | 631 |
| 2.50-2.99 | . | . | . | 80 | 44 | . | 2 | . | . | . | 126 |
| 3.00-3.49 | . | . | . | . | 23 | . | . | . | 1 | . | 24 |
| 3.50-3.99 | . | . | . | . | 1 | 4 | . | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 394 | 2151 | 5325 | 1947 | 176 | 57 | 15 | 4 | 1 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.2 NO. OF CASES= 9428.

STATION S45 46.95N 87.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

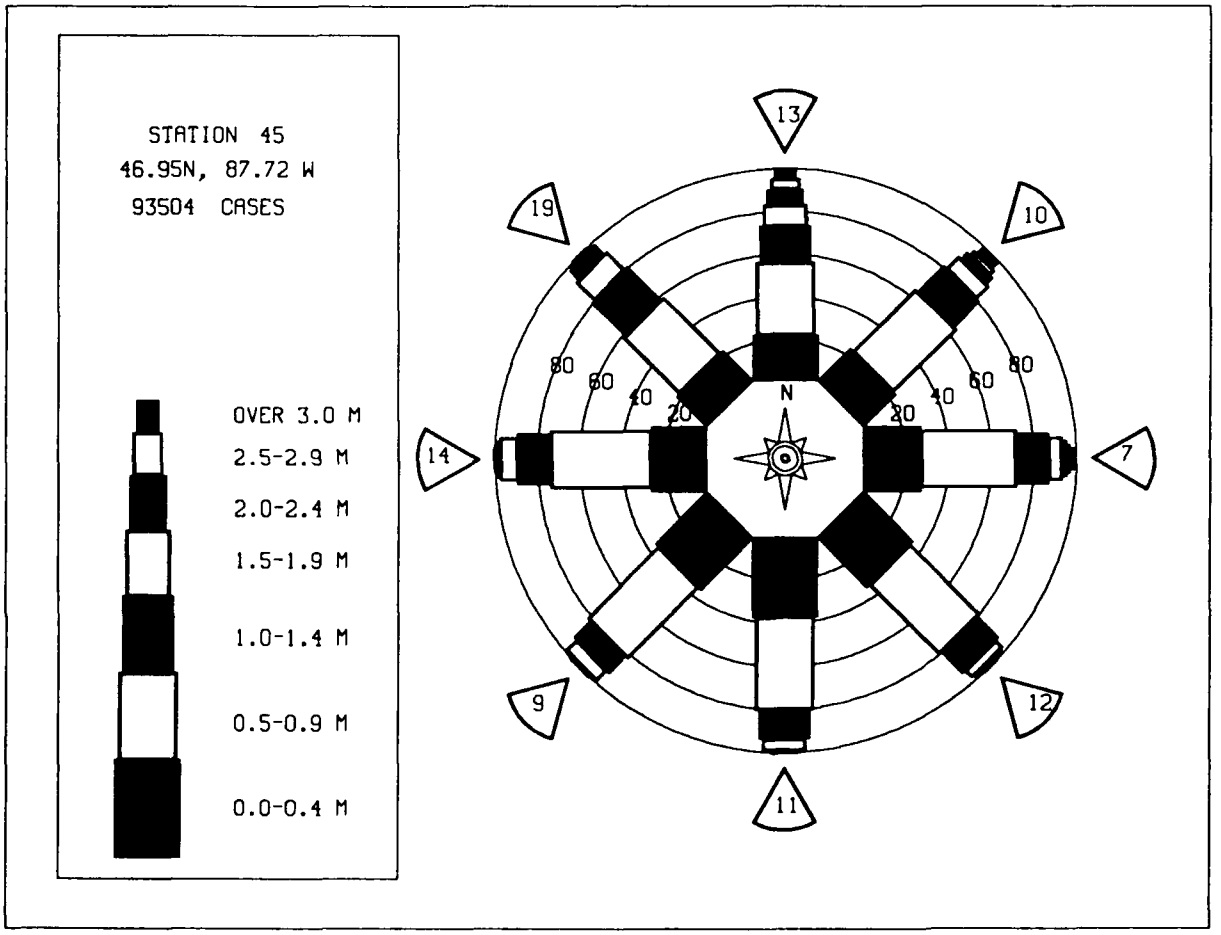
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 278 | 856 | 255 | 27 | 9 | . | . | . | . | . | 1425 |
| 0.50-0.99 | . | 611 | 1432 | 260 | 49 | 10 | . | . | . | . | 2362 |
| 1.00-1.49 | . | . | 1146 | 88 | 96 | 32 | 1 | . | . | . | 1363 |
| 1.50-1.99 | . | . | 243 | 527 | 48 | 52 | 17 | . | . | . | 887 |
| 2.00-2.49 | . | . | . | 514 | 6 | 51 | 26 | 4 | . | . | 601 |
| 2.50-2.99 | . | . | . | 140 | 97 | 18 | 31 | 18 | 2 | . | 306 |
| 3.00-3.49 | . | . | . | 2 | 42 | 1 | 4 | 24 | 5 | . | 78 |
| 3.50-3.99 | . | . | . | . | 8 | 5 | . | 12 | 6 | . | 31 |
| 4.00-4.49 | . | . | . | . | . | 4 | . | 2 | 2 | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 278 | 1467 | 3076 | 1558 | 355 | 173 | 80 | 60 | 16 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 6620.

STATION S45 46.95N 87.72W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 590 | 1501 | 518 | 53 | 5 | 1 | . | . | . | . | 2668 |
| 0.50-0.99 | . | 1739 | 2102 | 329 | 41 | 7 | . | . | . | . | 4218 |
| 1.00-1.49 | . | . | 1254 | 273 | 86 | 16 | . | . | . | . | 1629 |
| 1.50-1.99 | . | . | 297 | 404 | 91 | 23 | 2 | . | . | . | 817 |
| 2.00-2.49 | . | . | 3 | 255 | 38 | 41 | 5 | . | . | . | 342 |
| 2.50-2.99 | . | . | . | 45 | 60 | 35 | 14 | 2 | . | . | 156 |
| 3.00-3.49 | . | . | . | . | 17 | 30 | 15 | 7 | . | . | 69 |
| 3.50-3.99 | . | . | . | . | 3 | 13 | 11 | 9 | 1 | . | 37 |
| 4.00-4.49 | . | . | . | . | . | 2 | 9 | 7 | . | . | 18 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 5 | 2 | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 590 | 3240 | 4174 | 1359 | 341 | 168 | 58 | 32 | 6 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



## MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S45 (46.95N 87.72W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MONTH | | | | | | | |
| 1956 | 0.8 | 0.9 | 1.1 | 1.0 | 0.8 | 0.6 | 0.6 | 0.5 | 0.7 | 1.0 | 1.2 | 1.2 | 0.8 |
| 1957 | 1.2 | 1.1 | 1.0 | 0.9 | 0.9 | 0.6 | 0.6 | 0.7 | 0.8 | 0.8 | 1.1 | 1.2 | 0.9 |
| 1958 | 1.0 | 1.4 | 0.7 | 0.9 | 0.7 | 0.7 | 0.5 | 0.5 | 0.7 | 0.8 | 1.4 | 1.0 | 0.9 |
| 1959 | 0.8 | 0.9 | 0.7 | 0.7 | 0.8 | 0.5 | 0.4 | 0.5 | 0.7 | 0.8 | 1.1 | 1.4 | 0.8 |
| 1960 | 1.0 | 1.2 | 0.9 | 0.9 | 1.0 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 1.1 | 1.0 | 0.8 |
| 1961 | 0.8 | 0.9 | 1.2 | 0.8 | 0.7 | 0.6 | 0.4 | 0.4 | 0.7 | 0.9 | 0.9 | 0.9 | 0.8 |
| 1962 | 1.2 | 1.0 | 0.9 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.5 | 0.7 | 0.9 | 1.1 | 0.8 |
| 1963 | 1.0 | 1.1 | 1.1 | 0.8 | 0.6 | 0.6 | 0.5 | 0.6 | 0.7 | 0.7 | 1.1 | 1.2 | 0.8 |
| 1964 | 1.1 | 1.2 | 1.3 | 1.0 | 0.7 | 0.6 | 0.5 | 0.7 | 0.8 | 0.9 | 0.9 | 1.0 | 0.9 |
| 1965 | 1.4 | 1.4 | 1.4 | 0.9 | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 | 1.2 | 1.3 | 1.4 | 1.1 |
| 1966 | 1.2 | 1.4 | 1.7 | 1.0 | 1.0 | 0.7 | 0.8 | 0.6 | 0.8 | 1.2 | 1.7 | 1.5 | 1.1 |
| 1967 | 1.6 | 1.5 | 1.2 | 1.0 | 0.9 | 0.7 | 0.6 | 0.9 | 0.9 | 1.1 | 1.1 | 1.3 | 1.1 |
| 1968 | 1.2 | 1.7 | 1.4 | 1.0 | 0.9 | 0.7 | 0.6 | 0.7 | 0.7 | 1.1 | 1.4 | 1.6 | 1.1 |
| 1969 | 1.5 | 1.1 | 1.6 | 1.1 | 0.9 | 0.7 | 0.6 | 0.7 | 0.9 | 1.2 | 1.1 | 1.3 | 1.1 |
| 1970 | 1.4 | 1.6 | 1.2 | 1.3 | 1.1 | 0.7 | 0.8 | 0.7 | 1.0 | 1.2 | 1.5 | 1.4 | 1.2 |
| 1971 | 1.0 | 1.1 | 1.0 | 0.8 | 0.6 | 0.4 | 0.4 | 0.4 | 0.6 | 0.9 | 1.0 | 0.9 | 0.7 |
| 1972 | 1.0 | 0.9 | 1.1 | 0.6 | 0.4 | 0.4 | 0.6 | 0.7 | 1.0 | 1.2 | 1.1 | 1.3 | 0.9 |
| 1973 | 1.1 | 1.1 | 1.3 | 1.0 | 0.9 | 0.5 | 0.6 | 0.5 | 0.7 | 0.8 | 1.1 | 1.2 | 0.9 |
| 1974 | 0.9 | 0.8 | 1.0 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.8 | 0.9 | 1.1 | 0.8 |
| 1975 | 1.1 | 0.8 | 1.2 | 0.8 | 0.5 | 0.7 | 0.6 | 0.6 | 0.7 | 1.0 | 1.4 | 1.2 | 0.9 |
| 1976 | 1.3 | 1.3 | 1.6 | 1.2 | 0.8 | 0.7 | 0.5 | 0.6 | 0.7 | 0.6 | 0.8 | 1.0 | 0.9 |
| 1977 | 1.0 | 1.2 | 1.1 | 0.7 | 0.5 | 0.6 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 1.1 | 0.8 |
| 1978 | 1.3 | 1.0 | 0.8 | 0.9 | 0.7 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 1.0 | 1.0 | 0.8 |
| 1979 | 1.1 | 0.9 | 1.1 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.7 | 0.9 | 1.0 | 1.0 | 0.8 |
| 1980 | 1.0 | 0.8 | 1.0 | 0.8 | 0.5 | 0.5 | 0.4 | 0.5 | 0.7 | 0.9 | 0.7 | 1.0 | 0.7 |
| 1981 | 0.8 | 0.9 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.9 | 1.0 | 0.9 | 0.7 |
| 1982 | 1.4 | 1.0 | 1.3 | 0.9 | 0.6 | 0.5 | 0.5 | 0.4 | 0.8 | 0.9 | 0.9 | 1.0 | 0.9 |
| 1983 | 1.1 | 1.0 | 1.6 | 0.8 | 0.8 | 0.5 | 0.5 | 0.4 | 0.6 | 0.7 | 1.4 | 1.2 | 0.9 |
| 1984 | 1.0 | 1.1 | 1.3 | 1.0 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 1.1 | 1.2 | 0.8 |
| 1985 | 1.1 | 1.0 | 1.4 | 0.8 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.6 | 0.9 | 1.1 | 0.8 |
| 1986 | 1.1 | 0.7 | 1.0 | 0.9 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1987 | 1.0 | 0.9 | 1.2 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.8 | 1.0 | 1.0 | 0.7 |
| MEAN | 1.1 | 1.1 | 1.2 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 1.1 | 1.1 | |

## LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S45 (46.95N 87.72W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MONTH | | | | | | |
| 1956 | 3.3 | 4.3 | 6.2 | 3.7 | 2.6 | 1.6 | 1.5 | 1.5 | 1.9 | 2.4 | 4.2 | 4.9 |
| 1957 | 2.5 | 2.6 | 2.8 | 3.8 | 3.1 | 2.0 | 1.8 | 1.6 | 2.8 | 3.0 | 3.3 | 4.2 |
| 1958 | 3.0 | 4.7 | 2.1 | 5.0 | 2.2 | 2.4 | 1.4 | 1.8 | 1.9 | 2.1 | 4.8 | 3.2 |
| 1959 | 2.0 | 2.7 | 4.8 | 2.1 | 2.0 | 1.3 | 1.4 | 1.4 | 2.0 | 2.4 | 3.4 | 6.1 |
| 1960 | 3.5 | 4.9 | 3.2 | 2.5 | 3.8 | 1.6 | 1.3 | 1.8 | 2.0 | 2.6 | 3.9 | 2.6 |
| 1961 | 2.6 | 3.8 | 3.8 | 2.5 | 2.5 | 1.7 | 1.5 | 2.0 | 2.1 | 3.2 | 3.6 | 2.8 |
| 1962 | 3.3 | 2.8 | 3.8 | 3.5 | 2.3 | 1.3 | 1.9 | 2.1 | 1.9 | 2.7 | 2.8 | 3.6 |
| 1963 | 3.5 | 4.0 | 3.8 | 4.0 | 1.7 | 1.6 | 1.3 | 2.8 | 3.4 | 2.0 | 4.3 | 4.9 |
| 1964 | 4.4 | 3.1 | 4.7 | 3.3 | 2.1 | 1.9 | 1.6 | 1.6 | 2.2 | 3.5 | 2.6 | 2.7 |
| 1965 | 4.6 | 6.1 | 4.6 | 2.9 | 2.4 | 1.9 | 2.0 | 2.7 | 2.3 | 3.6 | 6.7 | 5.0 |
| 1966 | 4.5 | 3.1 | 6.5 | 4.1 | 2.8 | 2.3 | 2.8 | 2.4 | 2.2 | 4.1 | 7.3 | 3.5 |
| 1967 | 5.5 | 5.1 | 3.4 | 3.2 | 2.8 | 1.9 | 2.2 | 4.0 | 2.7 | 3.0 | 2.8 | 3.7 |
| 1968 | 4.2 | 5.5 | 4.9 | 4.0 | 2.4 | 2.5 | 2.1 | 2.2 | 2.0 | 4.2 | 4.3 | 6.0 |
| 1969 | 3.8 | 4.8 | 5.8 | 3.9 | 2.8 | 1.9 | 2.1 | 2.1 | 2.4 | 3.5 | 2.8 | 4.3 |
| 1970 | 4.4 | 4.5 | 5.3 | 4.2 | 2.8 | 2.1 | 2.5 | 2.2 | 3.5 | 3.0 | 5.1 | 6.3 |
| 1971 | 2.9 | 4.1 | 4.4 | 2.7 | 3.2 | 1.5 | 1.4 | 1.3 | 1.9 | 4.1 | 3.2 | 3.7 |
| 1972 | 3.1 | 3.7 | 4.6 | 3.1 | 1.2 | 1.2 | 1.6 | 1.8 | 2.8 | 4.2 | 4.2 | 3.9 |
| 1973 | 3.5 | 3.5 | 3.9 | 3.1 | 3.4 | 1.5 | 1.6 | 1.5 | 1.9 | 3.3 | 3.1 | 4.1 |
| 1974 | 2.2 | 3.7 | 3.2 | 3.6 | 1.7 | 1.5 | 1.6 | 1.2 | 1.6 | 2.6 | 2.8 | 4.3 |
| 1975 | 3.4 | 2.6 | 5.3 | 2.1 | 1.6 | 1.9 | 1.7 | 1.9 | 2.2 | 2.4 | 6.6 | 3.1 |
| 1976 | 3.4 | 3.8 | 6.2 | 3.9 | 2.7 | 2.1 | 1.9 | 1.5 | 1.9 | 2.1 | 2.7 | 2.9 |
| 1977 | 2.7 | 5.3 | 3.9 | 3.4 | 2.0 | 1.9 | 2.0 | 1.5 | 4.3 | 3.0 | 2.6 | 5.5 |
| 1978 | 4.8 | 2.9 | 2.6 | 3.1 | 3.1 | 1.7 | 1.4 | 1.4 | 2.3 | 2.9 | 3.2 | 3.0 |
| 1979 | 3.1 | 2.9 | 4.7 | 3.6 | 1.5 | 1.9 | 1.4 | 1.8 | 1.8 | 4.6 | 2.7 | 3.1 |
| 1980 | 3.3 | 2.5 | 3.1 | 3.9 | 2.0 | 1.6 | 1.0 | 1.4 | 2.2 | 2.5 | 2.3 | 2.7 |
| 1981 | 2.2 | 2.8 | 2.4 | 2.6 | 2.6 | 2.1 | 1.2 | 1.3 | 2.6 | 3.9 | 3.8 | 2.3 |
| 1982 | 4.5 | 2.7 | 3.4 | 2.7 | 2.5 | 1.8 | 2.0 | 1.3 | 3.7 | 3.9 | 2.9 | 2.5 |
| 1983 | 4.1 | 6.0 | 4.7 | 2.5 | 2.8 | 1.8 | 1.6 | 1.4 | 1.6 | 2.2 | 4.7 | 4.3 |
| 1984 | 3.2 | 4.9 | 4.7 | 3.5 | 1.9 | 1.5 | 1.3 | 1.4 | 1.5 | 3.3 | 3.5 | 2.9 |
| 1985 | 3.0 | 3.1 | 6.4 | 3.7 | 1.8 | 1.8 | 0.9 | 1.6 | 1.8 | 2.2 | 2.9 | 6.5 |
| 1986 | 3.4 | 2.3 | 3.7 | 2.9 | 2.4 | 1.6 | 1.0 | 1.1 | 2.0 | 2.5 | 2.6 | 1.8 |
| 1987 | 2.8 | 4.8 | 4.6 | 4.0 | 1.6 | 1.3 | 1.4 | 1.4 | 1.9 | 3.5 | 3.3 | 4.2 |

## 32 YR. STATISTICS FOR WIS STATION S45

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.0 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.2 |
| LARGEST WAVE HS | (METERS) | 7.3 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 6.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66112812 |

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 139 | 668 | 218 | 23 | 2 | . | . | . | . | . | 1050 |
| 0.50-0.99 | . | 765 | 1950 | 259 | 17 | . | . | . | . | . | 2991 |
| 1.00-1.49 | . | . | 973 | 484 | 121 | 6 | . | . | . | . | 1584 |
| 1.50-1.99 | . | . | 136 | 770 | 155 | 37 | . | . | . | . | 1098 |
| 2.00-2.49 | . | . | . | 557 | 207 | 90 | 2 | . | . | . | 856 |
| 2.50-2.99 | . | . | . | 22 | 612 | 60 | 13 | 1 | . | . | 708 |
| 3.00-3.49 | . | . | . | . | 96 | 381 | 10 | 4 | . | . | 491 |
| 3.50-3.99 | . | . | . | . | 1 | 371 | 48 | 2 | . | . | 422 |
| 4.00-4.49 | . | . | . | . | . | 84 | 214 | 16 | . | . | 314 |
| 4.50-4.99 | . | . | . | . | . | 6 | 125 | 97 | 1 | . | 229 |
| 5.00-5.49 | . | . | . | . | . | . | 8 | 122 | 3 | . | 133 |
| 5.50-5.99 | . | . | . | . | . | . | . | 60 | 24 | . | 84 |
| 6.00-6.49 | . | . | . | . | . | . | 1 | 11 | 59 | . | 71 |
| 6.50-6.99 | . | . | . | . | . | . | . | 1 | 29 | . | 30 |
| 7.00+ | . | . | . | . | . | . | . | . | 24 | 16 | 40 |
| TOTAL | 139 | 1433 | 3277 | 2115 | 1211 | 1035 | 421 | 314 | 140 | 16 | |

MEAN HS(M) = 1.7 LARGEST HS(M)= 10.0 MEAN TP(SEC)= 5.3 NO. OF CASES= 9467.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 141 | 593 | 139 | 11 | 1 | . | . | . | . | . | 885 |
| 0.50-0.99 | . | 627 | 1927 | 176 | 12 | . | . | . | . | . | 2742 |
| 1.00-1.49 | . | . | 659 | 472 | 42 | 3 | . | . | . | . | 1176 |
| 1.50-1.99 | . | . | 64 | 432 | 142 | 11 | . | . | . | . | 649 |
| 2.00-2.49 | . | . | . | 183 | 94 | 42 | . | . | . | . | 319 |
| 2.50-2.99 | . | . | . | 2 | 208 | 43 | 3 | . | . | . | 256 |
| 3.00-3.49 | . | . | . | . | 21 | 158 | 1 | 1 | . | . | 181 |
| 3.50-3.99 | . | . | . | . | . | 95 | 14 | 3 | . | . | 112 |
| 4.00-4.49 | . | . | . | . | . | 17 | 68 | 5 | . | . | 90 |
| 4.50-4.99 | . | . | . | . | . | . | 32 | 28 | 2 | . | 62 |
| 5.00-5.49 | . | . | . | . | . | . | . | 28 | . | . | 28 |
| 5.50-5.99 | . | . | . | . | . | . | . | 16 | 3 | . | 19 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 13 | . | 14 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 8 | . | 8 |
| 7.00+ | . | . | . | . | . | . | . | . | 6 | . | 6 |
| TOTAL | 141 | 1220 | 2789 | 1276 | 520 | 369 | 118 | 82 | 32 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.7 NO. OF CASES= 6139.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 168 | 757 | 149 | 8 | . | . | . | . | . | . | 1082 |
| 0.50-0.99 | . | 653 | 2853 | 137 | 10 | 1 | . | . | . | . | 3654 |
| 1.00-1.49 | . | . | 731 | 747 | 35 | 2 | . | . | . | . | 1515 |
| 1.50-1.99 | . | . | 31 | 389 | 178 | 9 | . | . | . | . | 607 |
| 2.00-2.49 | . | . | . | 133 | 124 | 79 | . | . | . | . | 336 |
| 2.50-2.99 | . | . | . | . | 210 | 53 | 8 | 1 | . | . | 272 |
| 3.00-3.49 | . | . | . | . | 3 | 179 | 3 | 1 | . | . | 186 |
| 3.50-3.99 | . | . | . | . | . | 103 | 22 | . | 1 | . | 126 |
| 4.00-4.49 | . | . | . | . | . | 4 | 67 | 6 | . | . | 77 |
| 4.50-4.99 | . | . | . | . | . | 1 | 22 | 19 | . | . | 42 |
| 5.00-5.49 | . | . | . | . | . | . | . | 12 | . | . | 12 |
| 5.50-5.99 | . | . | . | . | . | . | . | 7 | 5 | . | 12 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 6 | . | 6 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 168 | 1410 | 3764 | 1414 | 560 | 431 | 122 | 46 | 15 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.6 NO. OF CASES= 7431.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 127 | 488 | 91 | 9 | . | . | . | . | . | . | 715 |
| 0.50-0.99 | . | 351 | 1465 | 95 | 5 | 2 | . | . | . | . | 1918 |
| 1.00-1.49 | . | . | 264 | 300 | 23 | . | . | . | . | . | 587 |
| 1.50-1.99 | . | . | 11 | 140 | 70 | 9 | . | . | . | . | 230 |
| 2.00-2.49 | . | . | . | 26 | 29 | 25 | 1 | . | . | . | 81 |
| 2.50-2.99 | . | . | . | 1 | 44 | 22 | 5 | . | . | . | 72 |
| 3.00-3.49 | . | . | . | . | 1 | 29 | 5 | 2 | . | . | 37 |
| 3.50-3.99 | . | . | . | . | . | 11 | 11 | 2 | . | . | 24 |
| 4.00-4.49 | . | . | . | . | . | . | 9 | 5 | . | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | . | 8 | . | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | 2 | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 127 | 839 | 1831 | 571 | 172 | 98 | 31 | 21 | 5 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 3471.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 118 | 442 | 130 | 2 | 1 | . | . | . | . | . | 693 |
| 0.50-0.99 | . | 359 | 1081 | 97 | 5 | 1 | . | . | . | . | 1543 |
| 1.00-1.49 | . | . | 233 | 257 | 32 | . | . | . | . | . | 522 |
| 1.50-1.99 | . | . | 12 | 108 | 56 | 4 | . | . | . | . | 180 |
| 2.00-2.49 | . | . | . | 33 | 19 | 24 | . | . | . | . | 76 |
| 2.50-2.99 | . | . | . | . | 35 | 22 | 3 | 2 | . | . | 62 |
| 3.00-3.49 | . | . | . | . | 2 | 32 | 7 | 4 | . | . | 45 |
| 3.50-3.99 | . | . | . | . | . | 18 | 6 | 6 | . | . | 30 |
| 4.00-4.49 | . | . | . | . | . | . | 10 | 9 | . | . | 19 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 10 | . | . | 13 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | . | 1 | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 4 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 118 | 801 | 1456 | 497 | 150 | 101 | 29 | 37 | 6 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.4 NO. OF CASES= 3001.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 95 | 319 | 91 | 5 | . | . | . | . | . | . | 510 |
| 0.50-0.99 | . | 271 | 849 | 95 | 4 | . | . | . | . | . | 1219 |
| 1.00-1.49 | . | . | 235 | 159 | 39 | 1 | . | . | . | . | 434 |
| 1.50-1.99 | . | . | 19 | 91 | 37 | 11 | . | . | . | . | 158 |
| 2.00-2.49 | . | . | . | 28 | 13 | 12 | 2 | . | . | . | 55 |
| 2.50-2.99 | . | . | . | . | 24 | 8 | 1 | 1 | . | . | 34 |
| 3.00-3.49 | . | . | . | . | 2 | 7 | 1 | 1 | . | . | 11 |
| 3.50-3.99 | . | . | . | . | . | 7 | 2 | . | . | . | 9 |
| 4.00-4.49 | . | . | . | . | . | . | 5 | . | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 95 | 590 | 1194 | 378 | 119 | 46 | 12 | 5 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 2293.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 127 | 589 | 199 | 10 | 1 | . | . | . | . | . | 926 |
| 0.50-0.99 | . | 859 | 1321 | 115 | 10 | . | . | . | . | . | 2305 |
| 1.00-1.49 | . | . | 641 | 151 | 51 | 1 | . | . | . | . | 844 |
| 1.50-1.99 | . | . | 101 | 183 | 21 | 5 | . | . | . | . | 310 |
| 2.00-2.49 | . | . | 2 | 95 | 11 | 6 | . | . | . | . | 114 |
| 2.50-2.99 | . | . | . | 16 | 6 | 2 | 1 | . | . | . | 25 |
| 3.00-3.49 | . | . | . | . | . | 4 | 1 | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | 1 | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 127 | 1448 | 2264 | 570 | 100 | 19 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 4248.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 276 | 1310 | 223 | 13 | 1 | . | . | . | . | . | 1823 |
| 0.50-0.99 | . | 2471 | 903 | 227 | 4 | . | . | . | . | . | 3605 |
| 1.00-1.49 | . | . | 1194 | 105 | 55 | 3 | . | . | . | . | 1357 |
| 1.50-1.99 | . | . | 309 | 68 | 20 | 3 | . | . | . | . | 400 |
| 2.00-2.49 | . | . | 14 | 36 | 7 | 2 | . | . | . | . | 59 |
| 2.50-2.99 | . | . | . | 10 | 5 | 2 | 1 | . | . | . | 18 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 276 | 3781 | 2643 | 459 | 92 | 10 | 2 | 2 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 6804.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 402 | 1340 | 349 | 38 | 9 | . | . | . | . | . | 2138 |
| 0.50-0.99 | . | 2708 | 788 | 266 | 39 | 1 | . | . | . | . | 3802 |
| 1.00-1.49 | . | . | 1558 | 95 | 74 | 13 | . | . | . | . | 1740 |
| 1.50-1.99 | . | . | 745 | 5 | 9 | 10 | . | . | . | . | 769 |
| 2.00-2.49 | . | . | 34 | 72 | 2 | 4 | 2 | . | . | . | 114 |
| 2.50-2.99 | . | . | . | 8 | . | 1 | . | . | . | . | 9 |
| 3.00-3.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 402 | 4048 | 3474 | 486 | 133 | 29 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 8027.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 271 | 922 | 269 | 53 | 5 | . | . | . | . | . | 1520 |
| 0.50-0.99 | . | 2291 | 856 | 213 | 49 | 2 | . | . | . | . | 3411 |
| 1.00-1.49 | . | . | 905 | 40 | 43 | 3 | . | . | . | . | 991 |
| 1.50-1.99 | . | . | 859 | 102 | 5 | 5 | . | . | . | . | 971 |
| 2.00-2.49 | . | . | 7 | 112 | . | 2 | . | . | . | . | 121 |
| 2.50-2.99 | . | . | . | 12 | . | . | 1 | . | . | . | 13 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 271 | 3213 | 2896 | 532 | 102 | 12 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.7 NO. OF CASES= 6582.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 283 | 688 | 245 | 36 | 5 | . | . | . | . | . | 1257 |
| 0.50-0.99 | . | 1796 | 614 | 158 | 29 | 5 | 1 | . | . | . | 2603 |
| 1.00-1.49 | . | . | 472 | 24 | 25 | 8 | . | . | . | . | 529 |
| 1.50-1.99 | . | . | 385 | 62 | 3 | 3 | . | . | . | . | 453 |
| 2.00-2.49 | . | . | 1 | 57 | 1 | . | . | . | . | . | 59 |
| 2.50-2.99 | . | . | . | 8 | . | 1 | . | . | . | . | 9 |
| 3.00-3.49 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 283 | 2484 | 1717 | 345 | 65 | 17 | 1 | 0 | 1 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 4604.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 262 | 612 | 221 | 48 | 9 | 1 | . | . | . | . | 1153 |
| 0.50-0.99 | . | 1297 | 434 | 164 | 35 | 11 | 1 | . | . | . | 1942 |
| 1.00-1.49 | . | . | 396 | 35 | 36 | 13 | 1 | . | . | . | 481 |
| 1.50-1.99 | . | . | 162 | 19 | 3 | 1 | 2 | . | . | . | 187 |
| 2.00-2.49 | . | . | . | 22 | . | . | . | . | . | . | 22 |
| 2.50-2.99 | . | . | . | 5 | . | . | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 262 | 1909 | 1213 | 294 | 83 | 26 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 3553.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 393 | 953 | 412 | 103 | 26 | 3 | . | . | . | . | 1890 |
| 0.50-0.99 | . | 1378 | 545 | 319 | 130 | 39 | . | . | . | . | 2411 |
| 1.00-1.49 | . | . | 445 | 115 | 69 | 44 | 2 | 2 | . | . | 677 |
| 1.50-1.99 | . | . | 164 | 9 | 29 | 20 | 2 | . | . | . | 224 |
| 2.00-2.49 | . | . | 4 | 6 | 4 | 5 | 5 | . | 1 | . | 25 |
| 2.50-2.99 | . | . | . | 1 | 2 | . | 2 | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 393 | 2331 | 1570 | 553 | 260 | 111 | 11 | 2 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 4906.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 398 | 1285 | 394 | 65 | 14 | 1 | . | . | . | . | 2157 |
| 0.50-0.99 | . | 2143 | 991 | 371 | 101 | 26 | . | . | . | . | 3632 |
| 1.00-1.49 | . | . | 984 | 159 | 84 | 50 | 4 | . | . | . | 1281 |
| 1.50-1.99 | . | . | 325 | 102 | 27 | 31 | 6 | . | . | . | 491 |
| 2.00-2.49 | . | . | 24 | 80 | 9 | 6 | 5 | . | . | . | 124 |
| 2.50-2.99 | . | . | . | 6 | 28 | 1 | . | . | . | . | 35 |
| 3.00-3.49 | . | . | . | 1 | 4 | 1 | . | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 398 | 3428 | 2718 | 784 | 267 | 116 | 15 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 7237.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 216 | 720 | 356 | 29 | 4 | 1 | . | . | . | . | 1326 |
| 0.50-0.99 | . | 1396 | 2051 | 470 | 71 | 12 | . | . | . | . | 4000 |
| 1.00-1.49 | . | . | 1454 | 458 | 131 | 60 | 5 | . | . | . | 2108 |
| 1.50-1.99 | . | . | 294 | 814 | 73 | 52 | 2 | . | . | . | 1235 |
| 2.00-2.49 | . | . | 8 | 612 | 68 | 36 | 9 | 2 | . | . | 735 |
| 2.50-2.99 | . | . | . | 47 | 364 | 4 | 7 | . | . | . | 422 |
| 3.00-3.49 | . | . | . | . | 98 | 40 | 4 | 1 | . | . | 143 |
| 3.50-3.99 | . | . | . | . | 4 | 17 | 2 | . | . | . | 23 |
| 4.00-4.49 | . | . | . | . | . | 6 | . | 1 | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | 3 | 2 | . | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 216 | 2116 | 4163 | 2430 | 813 | 231 | 32 | 4 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 9372.

STATION S46 46.80N 87.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

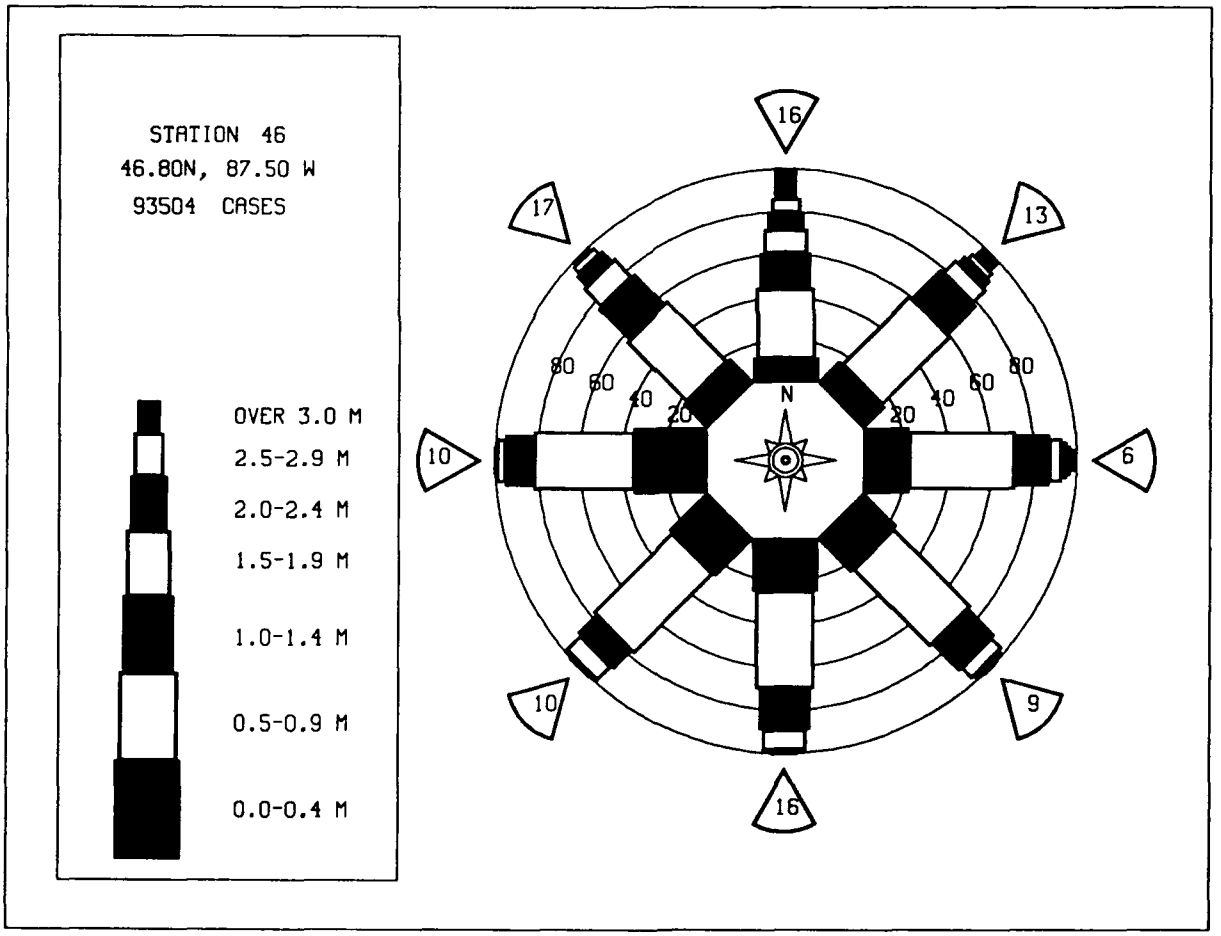
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 140 | 410 | 173 | 10 | 5 | 1 | . | . | . | . | 739 |
| 0.50-0.99 | . | 499 | 1372 | 242 | 40 | 1 | . | . | . | . | 2154 |
| 1.00-1.49 | . | 1 | 943 | 295 | 99 | 22 | . | . | . | . | 1360 |
| 1.50-1.99 | . | . | 130 | 680 | 90 | 53 | 1 | . | . | . | 954 |
| 2.00-2.49 | . | . | . | 495 | 90 | 60 | 9 | . | . | . | 654 |
| 2.50-2.99 | . | . | . | 54 | 411 | 28 | 13 | 2 | . | . | 508 |
| 3.00-3.49 | . | . | . | . | 155 | 67 | 7 | 2 | . | . | 231 |
| 3.50-3.99 | . | . | . | . | 2 | 93 | 9 | 5 | . | . | 109 |
| 4.00-4.49 | . | . | . | . | . | 13 | 25 | 5 | . | . | 43 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 10 | . | . | 18 |
| 5.00-5.49 | . | . | . | . | . | . | . | 11 | 4 | . | 15 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 140 | 910 | 2618 | 1776 | 892 | 338 | 72 | 37 | 8 | 0 | |

MEAN HS(M) = 1.4 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.9 NO. OF CASES= 6369.

STATION S46 46.80N 87.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 356 | 1210 | 366 | 47 | 8 | . | . | . | . | . | 1987 |
| 0.50-0.99 | . | 1987 | 2000 | 341 | 56 | 10 | . | . | . | . | 4394 |
| 1.00-1.49 | . | . | 1209 | 390 | 96 | 23 | 1 | . | . | . | 1719 |
| 1.50-1.99 | . | . | 375 | 398 | 92 | 27 | 1 | . | . | . | 893 |
| 2.00-2.49 | . | . | 9 | 255 | 68 | 39 | 3 | . | . | . | 374 |
| 2.50-2.99 | . | . | . | 19 | 195 | 25 | 6 | . | . | . | 245 |
| 3.00-3.49 | . | . | . | . | 38 | 90 | 4 | 1 | . | . | 133 |
| 3.50-3.99 | . | . | . | . | . | 71 | 11 | 2 | . | . | 84 |
| 4.00-4.49 | . | . | . | . | . | 12 | 40 | 5 | . | . | 57 |
| 4.50-4.99 | . | . | . | . | . | 1 | 19 | 17 | . | . | 37 |
| 5.00-5.49 | . | . | . | . | . | . | . | 18 | . | . | 18 |
| 5.50-5.99 | . | . | . | . | . | . | . | 8 | 4 | . | 12 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 8 | . | 9 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| TOTAL | 356 | 3197 | 3959 | 1450 | 553 | 298 | 85 | 52 | 19 | 1 | |

MEAN HS(M)= 1.0 LARGEST HS(M)= 10.0 MEAN TP(SEC)= 4.2 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S46 (46.80N 87.50W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.7 | 0.9 | 1.0 | 1.0 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.9 | 1.2 | 1.2 | 0.8 |
| 1957 | 1.5 | 1.4 | 1.2 | 1.0 | 1.0 | 0.8 | 0.8 | 0.9 | 1.1 | 1.0 | 1.2 | 1.5 | 1.1 |
| 1958 | 1.3 | 1.8 | 0.9 | 1.1 | 0.9 | 0.8 | 0.6 | 0.6 | 0.8 | 0.9 | 1.6 | 1.2 | 1.0 |
| 1959 | 0.9 | 0.8 | 0.8 | 0.7 | 0.7 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 1.0 | 1.4 | 0.7 |
| 1960 | 1.2 | 1.6 | 1.2 | 1.1 | 1.2 | 0.6 | 0.5 | 0.6 | 0.7 | 0.9 | 1.2 | 1.1 | 1.0 |
| 1961 | 0.9 | 1.1 | 1.4 | 0.9 | 0.8 | 0.7 | 0.5 | 0.6 | 0.9 | 1.1 | 1.1 | 1.1 | 0.9 |
| 1962 | 1.3 | 1.2 | 1.0 | 1.0 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.9 | 1.1 | 1.5 | 0.9 |
| 1963 | 1.2 | 1.4 | 1.5 | 1.0 | 0.8 | 0.7 | 0.7 | 0.8 | 0.8 | 0.9 | 1.4 | 1.5 | 1.1 |
| 1964 | 1.3 | 1.6 | 1.6 | 1.2 | 0.9 | 0.8 | 0.6 | 0.8 | 0.9 | 1.0 | 1.0 | 1.1 | 1.1 |
| 1965 | 1.5 | 1.6 | 1.6 | 1.0 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 1.4 | 1.4 | 1.5 | 1.2 |
| 1966 | 1.3 | 1.6 | 2.0 | 1.1 | 1.2 | 0.7 | 0.8 | 0.6 | 0.9 | 1.3 | 2.0 | 1.7 | 1.3 |
| 1967 | 1.8 | 1.8 | 1.4 | 1.2 | 1.0 | 0.7 | 0.7 | 1.0 | 1.0 | 1.3 | 1.2 | 1.2 | 1.2 |
| 1968 | 1.3 | 2.1 | 1.5 | 1.1 | 1.0 | 0.8 | 0.7 | 0.7 | 0.8 | 1.2 | 1.6 | 1.8 | 1.2 |
| 1969 | 1.6 | 1.3 | 1.9 | 1.3 | 1.0 | 0.8 | 0.7 | 0.8 | 1.0 | 1.3 | 1.2 | 1.6 | 1.2 |
| 1970 | 1.7 | 1.9 | 1.4 | 1.5 | 1.2 | 0.8 | 0.9 | 0.8 | 1.0 | 1.2 | 1.7 | 1.5 | 1.3 |
| 1971 | 1.0 | 1.1 | 1.1 | 0.8 | 0.7 | 0.4 | 0.4 | 0.4 | 0.5 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1972 | 1.0 | 0.9 | 1.2 | 0.6 | 0.5 | 0.4 | 0.7 | 0.7 | 1.1 | 1.3 | 1.2 | 1.5 | 0.9 |
| 1973 | 1.2 | 1.4 | 1.6 | 1.3 | 1.2 | 0.6 | 0.8 | 0.7 | 0.9 | 1.0 | 1.4 | 1.4 | 1.1 |
| 1974 | 1.0 | 1.1 | 1.1 | 1.1 | 0.7 | 0.7 | 0.5 | 0.6 | 0.8 | 1.0 | 1.1 | 1.3 | 0.9 |
| 1975 | 1.3 | 0.9 | 1.4 | 1.0 | 0.6 | 0.8 | 0.7 | 0.7 | 0.8 | 1.1 | 1.6 | 1.3 | 1.0 |
| 1976 | 1.5 | 1.4 | 1.7 | 1.4 | 0.9 | 0.7 | 0.7 | 0.7 | 0.9 | 0.8 | 1.0 | 1.2 | 1.1 |
| 1977 | 1.2 | 1.4 | 1.1 | 0.9 | 0.6 | 0.8 | 0.6 | 0.6 | 0.9 | 1.1 | 1.1 | 1.3 | 1.0 |
| 1978 | 1.7 | 1.2 | 1.0 | 1.0 | 1.0 | 0.7 | 0.7 | 0.7 | 0.8 | 1.0 | 1.2 | 1.1 | 1.0 |
| 1979 | 1.5 | 1.2 | 1.5 | 0.8 | 0.8 | 0.8 | 0.6 | 0.7 | 0.9 | 1.3 | 1.2 | 1.3 | 1.0 |
| 1980 | 1.1 | 1.0 | 1.2 | 1.1 | 0.7 | 0.7 | 0.5 | 0.6 | 0.8 | 1.0 | 0.8 | 1.1 | 0.9 |
| 1981 | 0.9 | 1.1 | 1.2 | 1.0 | 0.9 | 0.6 | 0.5 | 0.5 | 0.8 | 1.0 | 1.2 | 1.1 | 0.9 |
| 1982 | 1.6 | 1.2 | 1.5 | 1.2 | 0.7 | 0.7 | 0.6 | 0.5 | 1.1 | 1.1 | 1.1 | 1.2 | 1.0 |
| 1983 | 1.4 | 1.4 | 2.0 | 1.0 | 1.0 | 0.7 | 0.6 | 0.6 | 0.7 | 0.9 | 1.6 | 1.3 | 1.1 |
| 1984 | 1.2 | 1.5 | 1.7 | 1.2 | 0.8 | 0.7 | 0.5 | 0.6 | 0.8 | 0.9 | 1.4 | 1.3 | 1.0 |
| 1985 | 1.3 | 1.3 | 1.5 | 1.0 | 0.6 | 0.6 | 0.5 | 0.6 | 0.7 | 0.8 | 1.1 | 1.2 | 0.9 |
| 1986 | 1.4 | 0.9 | 1.3 | 1.1 | 0.6 | 0.7 | 0.5 | 0.5 | 0.6 | 0.8 | 0.9 | 1.0 | 0.9 |
| 1987 | 1.2 | 1.1 | 1.3 | 1.0 | 0.6 | 0.4 | 0.5 | 0.6 | 0.6 | 1.0 | 1.1 | 1.2 | 0.9 |
| MEAN | 1.3 | 1.3 | 1.4 | 1.1 | 0.8 | 0.7 | 0.6 | 0.6 | 0.8 | 1.0 | 1.3 | 1.3 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S46 (46.80N 87.50W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.0 | 4.3 | 5.8 | 3.6 | 2.3 | 1.8 | 1.4 | 1.3 | 2.1 | 2.8 | 4.0 | 4.7 |
| 1957 | 3.6 | 4.1 | 3.4 | 3.4 | 2.5 | 2.5 | 2.4 | 3.5 | 3.7 | 6.3 | 6.1 |
| 1958 | 4.4 | 4.9 | 2.7 | 5.1 | 2.5 | 3.0 | 2.0 | 2.2 | 3.1 | 2.5 | 5.1 | 3.7 |
| 1959 | 2.5 | 2.7 | 4.8 | 2.2 | 1.9 | 1.3 | 1.1 | 1.3 | 2.2 | 3.3 | 3.4 | 5.7 |
| 1960 | 4.1 | 6.7 | 4.7 | 3.5 | 4.9 | 2.6 | 2.2 | 1.6 | 2.5 | 4.0 | 5.0 | 3.9 |
| 1961 | 4.4 | 4.4 | 4.7 | 2.9 | 3.1 | 2.8 | 1.7 | 2.3 | 2.8 | 4.0 | 4.7 | 3.8 |
| 1962 | 3.8 | 4.6 | 4.1 | 4.3 | 2.4 | 1.9 | 2.3 | 3.5 | 2.4 | 3.9 | 3.6 | 5.1 |
| 1963 | 3.9 | 4.9 | 6.6 | 5.0 | 2.2 | 2.7 | 2.6 | 3.4 | 3.9 | 3.0 | 5.5 | 6.8 |
| 1964 | 3.8 | 4.9 | 6.0 | 4.9 | 3.0 | 3.1 | 2.2 | 2.8 | 3.1 | 5.6 | 3.1 | 2.9 |
| 1965 | 5.6 | 7.2 | 6.5 | 4.0 | 2.8 | 2.7 | 2.2 | 3.6 | 2.9 | 5.5 | 6.5 | 6.8 |
| 1966 | 5.3 | 5.1 | 6.7 | 4.1 | 3.8 | 3.1 | 3.2 | 3.4 | 3.1 | 6.2 | 10.0 | 4.6 |
| 1967 | 5.8 | 6.1 | 5.4 | 4.5 | 3.1 | 2.1 | 3.6 | 4.2 | 4.0 | 4.2 | 3.8 | 3.9 |
| 1968 | 5.4 | 7.9 | 7.4 | 6.0 | 3.6 | 2.8 | 2.3 | 3.3 | 2.9 | 6.2 | 5.9 | 6.3 |
| 1969 | 4.5 | 7.0 | 7.3 | 4.9 | 3.5 | 2.7 | 2.8 | 2.2 | 3.3 | 4.0 | 3.8 | 6.7 |
| 1970 | 6.7 | 6.4 | 5.9 | 4.2 | 4.3 | 2.9 | 4.0 | 3.0 | 3.5 | 2.9 | 5.3 | 6.6 |
| 1971 | 3.7 | 4.1 | 4.2 | 2.8 | 3.2 | 1.5 | 1.3 | 1.2 | 1.7 | 4.1 | 4.1 | 3.8 |
| 1972 | 3.6 | 3.6 | 4.6 | 3.0 | 1.3 | 1.3 | 1.9 | 2.3 | 3.3 | 5.3 | 4.4 | 4.9 |
| 1973 | 5.5 | 4.9 | 6.4 | 4.2 | 4.9 | 1.7 | 2.0 | 2.5 | 2.6 | 4.2 | 3.8 | 5.2 |
| 1974 | 3.0 | 5.6 | 3.0 | 4.3 | 2.3 | 2.3 | 1.2 | 2.1 | 2.6 | 4.1 | 4.4 | 6.1 |
| 1975 | 4.7 | 3.2 | 5.1 | 2.8 | 2.4 | 2.3 | 1.9 | 2.3 | 2.7 | 3.3 | 7.5 | 4.7 |
| 1976 | 5.5 | 6.1 | 7.1 | 4.7 | 3.4 | 2.7 | 2.8 | 2.2 | 3.1 | 2.4 | 3.7 | 5.0 |
| 1977 | 3.8 | 5.2 | 3.8 | 4.2 | 2.8 | 2.9 | 2.1 | 2.1 | 3.8 | 3.8 | 3.9 | 4.9 |
| 1978 | 7.7 | 4.3 | 3.5 | 3.7 | 4.6 | 2.6 | 2.4 | 1.7 | 2.3 | 4.5 | 4.3 | 3.0 |
| 1979 | 4.6 | 4.5 | 7.3 | 3.6 | 2.0 | 3.0 | 2.1 | 2.6 | 2.9 | 6.7 | 3.4 | 4.4 |
| 1980 | 3.4 | 4.3 | 3.8 | 4.6 | 3.0 | 2.4 | 1.7 | 1.7 | 2.7 | 3.0 | 2.4 | 4.1 |
| 1981 | 3.1 | 4.6 | 4.3 | 3.8 | 3.9 | 1.9 | 1.7 | 2.2 | 3.1 | 4.8 | 5.4 | 3.7 |
| 1982 | 5.7 | 4.3 | 4.5 | 4.0 | 3.2 | 2.5 | 3.2 | 1.7 | 4.2 | 6.3 | 5.4 | 4.3 |
| 1983 | 6.7 | 6.9 | 6.9 | 3.2 | 3.4 | 1.9 | 1.5 | 2.0 | 2.1 | 2.9 | 4.8 | 5.0 |
| 1984 | 4.3 | 6.1 | 7.4 | 4.7 | 2.9 | 2.1 | 1.7 | 2.3 | 2.0 | 2.6 | 5.1 | 4.1 |
| 1985 | 5.1 | 5.1 | 5.7 | 5.3 | 2.5 | 2.4 | 1.3 | 1.8 | 1.9 | 3.7 | 3.7 | 8.6 |
| 1986 | 5.5 | 3.3 | 6.6 | 4.5 | 2.8 | 2.3 | 1.4 | 1.7 | 2.1 | 2.9 | 2.6 | 2.7 |
| 1987 | 4.5 | 7.8 | 6.1 | 4.8 | 1.9 | 1.5 | 1.4 | 2.1 | 2.6 | 6.1 | 5.3 | 5.5 |

32 YR. STATISTICS FOR WIS STATION S46

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 1.0 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 4.2 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 0.0 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.4 |
| LARGEST WAVE HS . . . . . | (METERS) | 10.0 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 10.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66112812 |

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 124 | 578 | 112 | 13 | 3 | 1 | . | . | . | . | 831 |
| 0.50-0.99 | . | 725 | 2027 | 208 | 32 | 2 | . | . | . | . | 2994 |
| 1.00-1.49 | . | . | 845 | 697 | 100 | 11 | . | . | . | . | 1653 |
| 1.50-1.99 | . | . | 126 | 806 | 227 | 56 | . | . | . | . | 1215 |
| 2.00-2.49 | . | . | . | 527 | 228 | 121 | 2 | . | . | . | 878 |
| 2.50-2.99 | . | . | . | 21 | 658 | 91 | 11 | 3 | . | . | 784 |
| 3.00-3.49 | . | . | . | . | 109 | 585 | 17 | 4 | . | . | 715 |
| 3.50-3.99 | . | . | . | . | 1 | 435 | 52 | 1 | . | . | 489 |
| 4.00-4.49 | . | . | . | . | . | 103 | 264 | 26 | . | . | 393 |
| 4.50-4.99 | . | . | . | . | . | 5 | 171 | 145 | . | . | 321 |
| 5.00-5.49 | . | . | . | . | . | 1 | 13 | 219 | 2 | . | 235 |
| 5.50-5.99 | . | . | . | . | . | . | . | 89 | 56 | . | 145 |
| 6.00-6.49 | . | . | . | . | . | . | . | 13 | 67 | . | 80 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 63 | . | 63 |
| 7.00+ | . | . | . | . | . | . | . | . | 48 | 48 | 96 |
| TOTAL | 124 | 1303 | 3110 | 2272 | 1358 | 1411 | 530 | 500 | 236 | 48 | |

MEAN HS(M) = 2.0 LARGEST HS(M)= 11.1 MEAN TP(SEC)= 5.6 NO. OF CASES= 10205.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 84 | 469 | 77 | 9 | 2 | . | . | . | . | . | 641 |
| 0.50-0.99 | . | 531 | 2034 | 105 | 17 | 1 | . | . | . | . | 2688 |
| 1.00-1.49 | . | . | 682 | 559 | 34 | 7 | 1 | . | . | . | 1283 |
| 1.50-1.99 | . | . | 62 | 419 | 159 | 9 | . | 1 | . | . | 650 |
| 2.00-2.49 | . | . | . | 193 | 122 | 43 | . | . | . | . | 358 |
| 2.50-2.99 | . | . | . | 4 | 202 | 66 | 3 | 1 | . | . | 276 |
| 3.00-3.49 | . | . | . | . | 25 | 167 | 1 | 1 | . | . | 194 |
| 3.50-3.99 | . | . | . | . | . | 110 | 11 | 1 | 1 | . | 123 |
| 4.00-4.49 | . | . | . | . | . | 10 | 62 | 3 | 2 | . | 77 |
| 4.50-4.99 | . | . | . | . | . | . | 35 | 27 | 1 | . | 63 |
| 5.00-5.49 | . | . | . | . | . | . | . | 24 | 1 | . | 25 |
| 5.50-5.99 | . | . | . | . | . | . | . | 9 | 7 | . | 16 |
| 6.00-6.49 | . | . | . | . | . | . | . | 3 | 8 | . | 11 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 7 | 1 | 8 |
| 7.00+ | . | . | . | . | . | . | . | . | 7 | 2 | 9 |
| TOTAL | 84 | 1000 | 2855 | 1289 | 561 | 413 | 113 | 70 | 34 | 3 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.8 NO. OF CASES= 6022.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 126 | 664 | 86 | 10 | . | . | . | . | . | . | 886 |
| 0.50-0.99 | . | 564 | 2809 | 80 | 25 | 2 | . | . | . | . | 3480 |
| 1.00-1.49 | . | . | 835 | 793 | 48 | 4 | . | . | . | . | 1680 |
| 1.50-1.99 | . | . | 64 | 521 | 154 | 14 | . | . | . | . | 753 |
| 2.00-2.49 | . | . | . | 199 | 122 | 62 | 1 | . | . | . | 384 |
| 2.50-2.99 | . | . | . | 2 | 213 | 54 | 3 | . | . | . | 272 |
| 3.00-3.49 | . | . | . | . | 12 | 182 | 5 | . | . | . | 199 |
| 3.50-3.99 | . | . | . | . | . | 135 | 24 | 1 | . | . | 160 |
| 4.00-4.49 | . | . | . | . | . | 14 | 97 | 3 | . | . | 114 |
| 4.50-4.99 | . | . | . | . | . | 1 | 21 | 37 | . | . | 59 |
| 5.00-5.49 | . | . | . | . | . | . | . | 26 | . | . | 26 |
| 5.50-5.99 | . | . | . | . | . | . | . | 8 | 3 | . | 11 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 7 | . | 7 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 9 | . | 9 |
| 7.00+ | . | . | . | . | . | . | . | . | 2 | . | 2 |
| TOTAL | 126 | 1228 | 3794 | 1605 | 574 | 468 | 151 | 75 | 21 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.8 NO. OF CASES= 7538.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 110 | 408 | 74 | 5 | . | . | . | . | . | . | 597 |
| 0.50-0.99 | . | 360 | 1449 | 69 | 18 | 3 | . | . | . | . | 1899 |
| 1.00-1.49 | . | . | 288 | 209 | 23 | 5 | . | . | . | . | 525 |
| 1.50-1.99 | . | . | 7 | 99 | 33 | 9 | . | 1 | . | . | 149 |
| 2.00-2.49 | . | . | . | 34 | 12 | 20 | 2 | . | . | . | 68 |
| 2.50-2.99 | . | . | . | . | 31 | 6 | 4 | . | . | . | 41 |
| 3.00-3.49 | . | . | . | . | 8 | 12 | 6 | . | . | . | 26 |
| 3.50-3.99 | . | . | . | . | . | 14 | 6 | . | . | . | 20 |
| 4.00-4.49 | . | . | . | . | . | 3 | 9 | 2 | . | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 110 | 768 | 1818 | 416 | 125 | 72 | 27 | 5 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.2 NO. OF CASES= 3137.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 141 | 418 | 90 | 11 | . | . | . | . | . | . | 660 |
| 0.50-0.99 | . | 441 | 1094 | 57 | 25 | 1 | . | . | . | . | 1618 |
| 1.00-1.49 | . | . | 253 | 162 | 9 | 10 | 1 | . | . | . | 435 |
| 1.50-1.99 | . | . | 13 | 133 | 12 | 8 | . | 1 | . | . | 167 |
| 2.00-2.49 | . | . | . | 41 | 12 | 13 | 4 | . | . | . | 70 |
| 2.50-2.99 | . | . | . | 1 | 54 | . | . | 1 | . | . | 56 |
| 3.00-3.49 | . | . | . | . | 16 | 14 | . | . | . | . | 30 |
| 3.50-3.99 | . | . | . | . | . | 7 | . | . | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 141 | 859 | 1450 | 405 | 128 | 54 | 5 | 2 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 2860.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 110 | 355 | 84 | 8 | . | . | . | . | . | . | 557 |
| 0.50-0.99 | . | 361 | 719 | 42 | 24 | 5 | . | . | . | . | 1151 |
| 1.00-1.49 | . | . | 210 | 48 | 10 | 9 | . | . | . | . | 277 |
| 1.50-1.99 | . | . | 12 | 87 | 2 | 3 | . | 1 | . | . | 105 |
| 2.00-2.49 | . | . | . | 29 | 10 | . | . | . | . | . | 39 |
| 2.50-2.99 | . | . | . | . | 18 | . | . | . | . | . | 18 |
| 3.00-3.49 | . | . | . | . | 10 | 9 | . | . | . | . | 19 |
| 3.50-3.99 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 110 | 716 | 1025 | 214 | 74 | 33 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 2043.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 152 | 567 | 102 | 9 | 1 | . | . | . | . | . | 831 |
| 0.50-0.99 | . | 1004 | 761 | 62 | 19 | 5 | . | . | . | . | 1851 |
| 1.00-1.49 | . | . | 355 | 43 | 11 | 7 | 1 | . | . | . | 417 |
| 1.50-1.99 | . | . | 86 | 56 | 1 | 3 | 1 | . | . | . | 147 |
| 2.00-2.49 | . | . | 8 | 20 | 5 | . | . | . | . | . | 33 |
| 2.50-2.99 | . | . | . | 2 | 1 | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 152 | 1571 | 1312 | 192 | 38 | 15 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 3078.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 233 | 981 | 99 | 20 | 1 | 1 | . | . | . | . | 1335 |
| 0.50-0.99 | . | 1815 | 558 | 55 | 26 | 4 | . | . | . | . | 2458 |
| 1.00-1.49 | . | . | 736 | 19 | 4 | 4 | . | . | . | . | 763 |
| 1.50-1.99 | . | . | 183 | 12 | . | 1 | . | . | . | . | 196 |
| 2.00-2.49 | . | . | 6 | 14 | 1 | . | . | . | . | . | 21 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | 1 | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 233 | 2796 | 1582 | 121 | 32 | 10 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 4474.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 381 | 1562 | 165 | 49 | 11 | . | . | . | . | . | 2168 |
| 0.50-0.99 | . | 4070 | 596 | 78 | 38 | 8 | . | . | . | . | 4790 |
| 1.00-1.49 | . | . | 2680 | 14 | 8 | 7 | 1 | . | . | . | 2710 |
| 1.50-1.99 | . | . | 1061 | 5 | 1 | . | . | . | . | . | 1067 |
| 2.00-2.49 | . | . | 26 | 85 | . | 1 | 1 | . | . | . | 113 |
| 2.50-2.99 | . | . | . | 17 | . | . | . | . | . | . | 17 |
| 3.00-3.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 381 | 5632 | 4528 | 250 | 58 | 16 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 10171.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 319 | 919 | 146 | 39 | 7 | 1 | . | . | . | . | 1431 |
| 0.50-0.99 | . | 3012 | 1116 | 86 | 36 | 8 | . | . | . | . | 4258 |
| 1.00-1.49 | . | . | 1189 | 6 | 4 | 4 | . | . | . | . | 1203 |
| 1.50-1.99 | . | . | 1150 | 168 | . | . | . | . | . | . | 1318 |
| 2.00-2.49 | . | . | 36 | 167 | . | . | . | . | . | . | 203 |
| 2.50-2.99 | . | . | . | 22 | . | . | . | . | . | . | 22 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 319 | 3931 | 3637 | 488 | 48 | 13 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 7898.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 264 | 652 | 119 | 39 | 9 | 1 | . | . | . | . | 1084 |
| 0.50-0.99 | . | 2013 | 630 | 94 | 33 | 10 | . | . | . | . | 2780 |
| 1.00-1.49 | . | . | 552 | 17 | 6 | 10 | . | . | . | . | 585 |
| 1.50-1.99 | . | . | 423 | 85 | 1 | 1 | . | . | . | . | 510 |
| 2.00-2.49 | . | . | . | 108 | 1 | . | . | . | 1 | . | 110 |
| 2.50-2.99 | . | . | . | 20 | . | . | . | . | . | . | 20 |
| 3.00-3.49 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 264 | 2665 | 1724 | 363 | 53 | 22 | 0 | 0 | 1 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.6 NO. OF CASES= 4770.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 259 | 588 | 157 | 52 | 10 | 4 | . | . | . | . | 1070 |
| 0.50-0.99 | . | 1551 | 407 | 116 | 50 | 22 | 3 | . | . | . | 2149 |
| 1.00-1.49 | . | . | 457 | 16 | 23 | 18 | 2 | . | . | . | 516 |
| 1.50-1.99 | . | . | 251 | 33 | 3 | 2 | 3 | . | . | . | 292 |
| 2.00-2.49 | . | . | 3 | 28 | . | . | 1 | . | . | . | 32 |
| 2.50-2.99 | . | . | . | 8 | . | . | . | . | . | . | 8 |
| 3.00-3.49 | . | . | . | 1 | 1 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 259 | 2139 | 1275 | 254 | 87 | 46 | 9 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.6 NO. OF CASES= 3814.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 390 | 924 | 345 | 104 | 26 | 1 | . | . | . | . | 1790 |
| 0.50-0.99 | . | 1569 | 511 | 348 | 149 | 65 | 5 | . | . | . | 2647 |
| 1.00-1.49 | . | . | 463 | 79 | 87 | 63 | 6 | 2 | . | . | 700 |
| 1.50-1.99 | . | . | 157 | 1 | 19 | 28 | 6 | . | . | . | 211 |
| 2.00-2.49 | . | . | 4 | 8 | 1 | 7 | 4 | 3 | . | . | 27 |
| 2.50-2.99 | . | . | . | 2 | . | . | 1 | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 390 | 2493 | 1480 | 542 | 282 | 164 | 23 | 5 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 5040.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 392 | 1271 | 289 | 72 | 11 | 3 | . | . | . | . | 2038 |
| 0.50-0.99 | . | 2017 | 827 | 296 | 103 | 38 | . | . | . | . | 3281 |
| 1.00-1.49 | . | 1 | 848 | 116 | 73 | 64 | 4 | . | . | . | 1106 |
| 1.50-1.99 | . | . | 317 | 73 | 25 | 28 | 6 | 1 | . | . | 450 |
| 2.00-2.49 | . | . | 24 | 62 | 13 | 5 | 9 | . | . | . | 113 |
| 2.50-2.99 | . | . | . | 11 | 13 | 2 | 1 | 1 | . | . | 28 |
| 3.00-3.49 | . | . | . | . | 8 | 22 | . | . | . | . | 30 |
| 3.50-3.99 | . | . | . | . | . | 7 | . | . | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 392 | 3289 | 2305 | 630 | 246 | 169 | 20 | 2 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 6611.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 213 | 745 | 260 | 40 | 5 | . | . | . | . | . | 1263 |
| 0.50-0.99 | . | 1557 | 1732 | 370 | 68 | 17 | . | . | . | . | 3744 |
| 1.00-1.49 | . | . | 1219 | 480 | 124 | 55 | 9 | . | . | . | 1887 |
| 1.50-1.99 | . | . | 290 | 780 | 81 | 36 | 7 | 2 | . | . | 1196 |
| 2.00-2.49 | . | . | 6 | 449 | 159 | 34 | 19 | 2 | . | . | 669 |
| 2.50-2.99 | . | . | . | 31 | 357 | 10 | 5 | . | . | . | 403 |
| 3.00-3.49 | . | . | . | . | 64 | 163 | 3 | 1 | . | . | 231 |
| 3.50-3.99 | . | . | . | . | 1 | 84 | 2 | . | . | . | 87 |
| 4.00-4.49 | . | . | . | . | . | 20 | 4 | . | . | . | 24 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | . | 1 | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 2 | 1 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 213 | 2302 | 3507 | 2150 | 859 | 419 | 53 | 10 | 2 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 8911.

STATION S47 46.65N 87.28W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

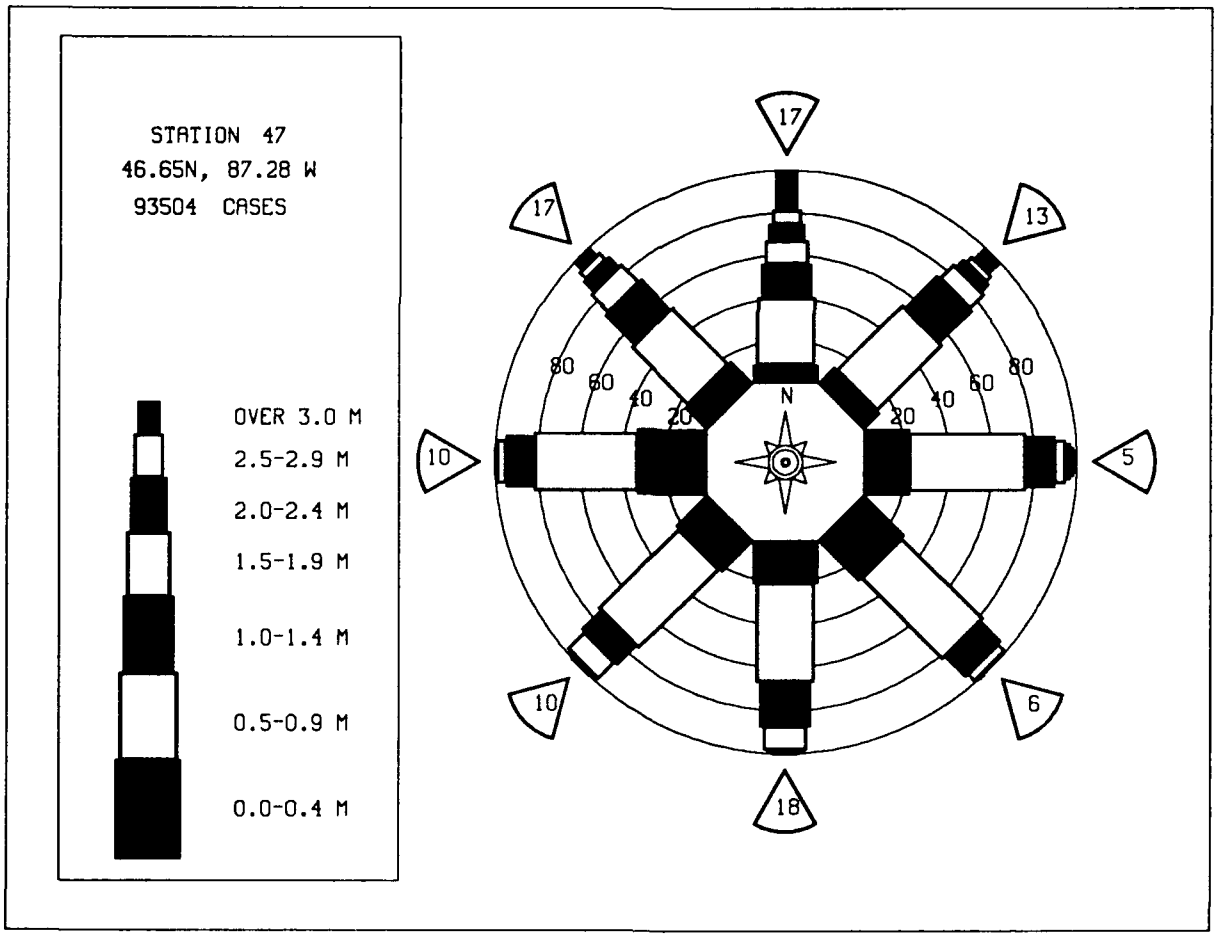
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 101 | 373 | 113 | 8 | 2 | 1 | . | . | . | . | 598 |
| 0.50-0.99 | . | 471 | 1309 | 202 | 36 | 6 | . | . | . | . | 2024 |
| 1.00-1.49 | . | . | 744 | 516 | 97 | 37 | . | . | . | . | 1394 |
| 1.50-1.99 | . | . | 109 | 707 | 131 | 56 | 2 | . | . | . | 1005 |
| 2.00-2.49 | . | . | 1 | 489 | 159 | 67 | 10 | . | . | . | 726 |
| 2.50-2.99 | . | . | . | 22 | 501 | 49 | 27 | 4 | . | . | 603 |
| 3.00-3.49 | . | . | . | . | 129 | 347 | 11 | 5 | . | . | 492 |
| 3.50-3.99 | . | . | . | . | 2 | 232 | 12 | 7 | . | . | 253 |
| 4.00-4.49 | . | . | . | . | . | 66 | 73 | 11 | . | . | 150 |
| 4.50-4.99 | . | . | . | . | . | 5 | 32 | 33 | 1 | . | 71 |
| 5.00-5.49 | . | . | . | . | . | . | 6 | 24 | 8 | . | 38 |
| 5.50-5.99 | . | . | . | . | . | . | . | 6 | 11 | . | 17 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 8 | 1 | 9 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 9 | . | 9 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 101 | 844 | 2276 | 1944 | 1057 | 866 | 173 | 90 | 37 | 3 | |

MEAN HS(M) = 1.6 LARGEST HS(M)= 8.6 MEAN TP(SEC)= 5.3 NO. OF CASES= 6932.

STATION S47 46.65N 87.28W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 340 | 1148 | 232 | 49 | 9 | 1 | . | . | . | . | 1779 |
| 0.50-0.99 | . | 2206 | 1858 | 227 | 70 | 20 | . | . | . | . | 4381 |
| 1.00-1.49 | . | . | 1236 | 378 | 66 | 32 | 2 | . | . | . | 1714 |
| 1.50-1.99 | . | . | 431 | 399 | 85 | 26 | 2 | . | . | . | 943 |
| 2.00-2.49 | . | . | 11 | 246 | 85 | 37 | 5 | . | . | . | 384 |
| 2.50-2.99 | . | . | . | 16 | 205 | 28 | 5 | 1 | . | . | 255 |
| 3.00-3.49 | . | . | . | . | 38 | 150 | 4 | 1 | . | . | 193 |
| 3.50-3.99 | . | . | . | . | . | 103 | 11 | 1 | . | . | 115 |
| 4.00-4.49 | . | . | . | . | . | 22 | 51 | 4 | . | . | 77 |
| 4.50-4.99 | . | . | . | . | . | 1 | 26 | 24 | . | . | 51 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 29 | 1 | . | 32 |
| 5.50-5.99 | . | . | . | . | . | . | . | 11 | 7 | . | 18 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 9 | . | 10 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 8 | . | 8 |
| 7.00+ | . | . | . | . | . | . | . | . | 5 | 5 | 10 |
| TOTAL | 340 | 3354 | 3768 | 1315 | 558 | 420 | 108 | 72 | 30 | 5 | |

MEAN HS(M)= 1.1 LARGEST HS(M)= 11.1 MEAN TP(SEC)= 4.3 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S47 (46.65N 87.28W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 0.8 | 0.9 | 0.9 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 0.8 | 1.1 | 1.0 | 0.7 |
| 1957 | 1.7 | 1.6 | 1.4 | 1.1 | 1.2 | 1.0 | 0.9 | 1.0 | 1.3 | 1.2 | 1.3 | 1.6 | 1.3 |
| 1958 | 1.4 | 2.1 | 1.1 | 1.1 | 1.1 | 1.0 | 0.6 | 0.6 | 0.9 | 1.0 | 1.6 | 1.3 | 1.1 |
| 1959 | 0.8 | 0.8 | 0.7 | 0.6 | 0.7 | 0.4 | 0.3 | 0.4 | 0.6 | 0.8 | 1.0 | 1.2 | 0.7 |
| 1960 | 1.4 | 1.8 | 1.3 | 1.3 | 1.4 | 0.7 | 0.6 | 0.7 | 0.8 | 1.0 | 1.3 | 1.2 | 1.1 |
| 1961 | 1.0 | 1.1 | 1.4 | 0.9 | 0.9 | 0.8 | 0.6 | 0.7 | 1.0 | 1.3 | 1.2 | 1.1 | 1.0 |
| 1962 | 1.4 | 1.3 | 1.1 | 1.2 | 0.8 | 0.7 | 0.7 | 0.7 | 0.8 | 1.1 | 1.2 | 1.6 | 1.0 |
| 1963 | 1.3 | 1.6 | 1.7 | 1.2 | 0.9 | 0.8 | 0.8 | 0.9 | 0.9 | 1.0 | 1.6 | 1.6 | 1.2 |
| 1964 | 1.4 | 1.8 | 1.8 | 1.3 | 1.0 | 0.9 | 0.8 | 0.9 | 1.0 | 1.1 | 1.1 | 1.2 | 1.2 |
| 1965 | 1.5 | 1.6 | 1.6 | 1.0 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 1.4 | 1.4 | 1.6 | 1.2 |
| 1966 | 1.3 | 1.6 | 2.0 | 1.1 | 1.2 | 0.8 | 0.8 | 0.7 | 0.9 | 1.3 | 2.2 | 1.8 | 1.3 |
| 1967 | 1.9 | 1.9 | 1.4 | 1.2 | 1.1 | 0.7 | 0.7 | 1.0 | 1.0 | 1.3 | 1.2 | 1.2 | 1.2 |
| 1968 | 1.3 | 2.2 | 1.6 | 1.1 | 1.0 | 0.8 | 0.7 | 0.8 | 0.7 | 1.2 | 1.6 | 1.9 | 1.2 |
| 1969 | 1.6 | 1.4 | 2.0 | 1.4 | 1.1 | 0.8 | 0.7 | 0.8 | 1.0 | 1.4 | 1.2 | 1.7 | 1.3 |
| 1970 | 1.8 | 2.0 | 1.5 | 1.5 | 1.3 | 0.9 | 0.9 | 0.8 | 1.1 | 1.2 | 1.8 | 1.5 | 1.3 |
| 1971 | 0.9 | 1.0 | 1.1 | 0.8 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 1.0 | 0.8 | 0.7 |
| 1972 | 0.9 | 0.9 | 1.1 | 0.6 | 0.4 | 0.4 | 0.7 | 0.7 | 1.1 | 1.4 | 1.2 | 1.5 | 0.9 |
| 1973 | 1.3 | 1.5 | 1.8 | 1.5 | 1.3 | 0.7 | 0.9 | 0.9 | 1.0 | 1.1 | 1.5 | 1.6 | 1.3 |
| 1974 | 1.0 | 1.2 | 1.2 | 1.3 | 0.8 | 0.8 | 0.6 | 0.6 | 0.9 | 1.2 | 1.1 | 1.4 | 1.0 |
| 1975 | 1.4 | 1.0 | 1.5 | 1.2 | 0.7 | 0.8 | 0.7 | 0.7 | 0.9 | 1.1 | 1.7 | 1.3 | 1.1 |
| 1976 | 1.5 | 1.5 | 1.7 | 1.5 | 0.9 | 0.7 | 0.7 | 0.8 | 1.0 | 0.9 | 1.1 | 1.3 | 1.1 |
| 1977 | 1.4 | 1.5 | 1.1 | 1.0 | 0.7 | 1.0 | 0.7 | 0.7 | 0.9 | 1.2 | 1.2 | 1.3 | 1.1 |
| 1978 | 2.0 | 1.4 | 1.1 | 1.1 | 1.2 | 0.8 | 0.8 | 0.7 | 0.9 | 1.1 | 1.3 | 1.1 | 1.1 |
| 1979 | 1.7 | 1.3 | 1.6 | 0.9 | 0.9 | 0.9 | 0.7 | 0.8 | 1.1 | 1.5 | 1.4 | 1.4 | 1.2 |
| 1980 | 1.2 | 1.1 | 1.3 | 1.2 | 0.8 | 0.8 | 0.6 | 0.6 | 0.9 | 1.0 | 0.8 | 1.1 | 1.0 |
| 1981 | 1.0 | 1.2 | 1.4 | 1.1 | 1.1 | 0.7 | 0.6 | 0.5 | 0.9 | 1.1 | 1.4 | 1.2 | 1.0 |
| 1982 | 1.8 | 1.3 | 1.6 | 1.3 | 0.8 | 0.8 | 0.7 | 0.6 | 1.2 | 1.2 | 1.2 | 1.3 | 1.2 |
| 1983 | 1.6 | 1.5 | 2.2 | 1.2 | 1.1 | 0.8 | 0.7 | 0.7 | 0.8 | 1.0 | 1.6 | 1.5 | 1.2 |
| 1984 | 1.3 | 1.7 | 2.0 | 1.3 | 0.9 | 0.8 | 0.6 | 0.7 | 0.9 | 0.9 | 1.6 | 1.4 | 1.2 |
| 1985 | 1.5 | 1.5 | 1.6 | 1.1 | 0.6 | 0.7 | 0.5 | 0.7 | 0.8 | 0.9 | 1.2 | 1.3 | 1.0 |
| 1986 | 1.6 | 1.0 | 1.4 | 1.2 | 0.7 | 0.8 | 0.5 | 0.5 | 0.6 | 0.9 | 1.0 | 1.1 | 0.9 |
| 1987 | 1.3 | 1.1 | 1.4 | 1.0 | 0.7 | 0.5 | 0.6 | 0.6 | 0.7 | 1.1 | 1.1 | 1.3 | 1.0 |
| MEAN | 1.4 | 1.4 | 1.5 | 1.1 | 0.9 | 0.7 | 0.7 | 0.7 | 0.9 | 1.1 | 1.3 | 1.4 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S47 (46.65N 87.28W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.2 | 3.0 | 4.3 | 3.2 | 2.1 | 1.6 | 1.2 | 1.3 | 2.5 | 3.0 | 4.1 | 3.3 |
| 1957 | 4.7 | 5.1 | 4.0 | 3.8 | 3.6 | 3.0 | 3.1 | 3.0 | 3.9 | 4.2 | 6.6 | 6.9 |
| 1958 | 4.7 | 4.4 | 3.1 | 3.9 | 3.2 | 3.3 | 2.1 | 2.8 | 3.6 | 3.1 | 4.3 | 3.9 |
| 1959 | 2.6 | 2.7 | 4.9 | 2.2 | 1.7 | 1.4 | 1.1 | 1.2 | 2.3 | 3.0 | 3.5 | 4.1 |
| 1960 | 4.6 | 7.7 | 5.7 | 3.8 | 5.5 | 2.9 | 2.7 | 2.0 | 2.6 | 4.9 | 5.3 | 4.4 |
| 1961 | 5.3 | 4.8 | 5.4 | 3.3 | 3.5 | 3.5 | 2.2 | 2.7 | 3.2 | 4.4 | 5.4 | 4.0 |
| 1962 | 4.2 | 5.1 | 4.5 | 4.7 | 3.2 | 2.3 | 2.7 | 4.2 | 2.8 | 4.0 | 4.1 | 5.8 |
| 1963 | 4.4 | 5.8 | 7.4 | 5.7 | 2.8 | 3.0 | 3.0 | 3.8 | 4.4 | 3.6 | 6.0 | 7.6 |
| 1964 | 4.1 | 5.6 | 6.6 | 5.5 | 3.5 | 3.8 | 3.0 | 3.0 | 3.7 | 6.6 | 3.6 | 3.5 |
| 1965 | 5.8 | 7.3 | 6.7 | 4.2 | 3.0 | 2.7 | 2.4 | 3.7 | 3.0 | 5.7 | 6.4 | 7.0 |
| 1966 | 5.6 | 5.2 | 7.1 | 2.9 | 3.8 | 3.2 | 3.2 | 3.7 | 3.7 | 6.7 | 11.1 | 4.7 |
| 1967 | 6.2 | 6.4 | 5.6 | 4.7 | 3.3 | 2.1 | 3.7 | 4.4 | 4.0 | 4.3 | 4.1 | 4.2 |
| 1968 | 5.5 | 8.6 | 7.8 | 6.3 | 3.8 | 3.2 | 2.4 | 3.5 | 3.2 | 6.7 | 5.8 | 6.7 |
| 1969 | 4.8 | 7.8 | 7.9 | 5.1 | 3.8 | 2.9 | 3.0 | 2.2 | 3.6 | 4.5 | 4.1 | 7.2 |
| 1970 | 7.1 | 6.9 | 6.0 | 4.4 | 4.8 | 3.3 | 4.3 | 3.3 | 4.1 | 3.2 | 5.6 | 6.6 |
| 1971 | 4.2 | 3.6 | 4.5 | 2.7 | 2.4 | 1.3 | 1.4 | 1.2 | 1.7 | 2.6 | 4.3 | 3.3 |
| 1972 | 4.1 | 3.3 | 4.5 | 2.5 | 1.2 | 1.4 | 2.4 | 2.7 | 3.8 | 5.9 | 3.4 | 5.7 |
| 1973 | 6.2 | 5.4 | 7.1 | 4.8 | 5.5 | 1.8 | 2.6 | 2.9 | 3.2 | 4.3 | 4.4 | 5.7 |
| 1974 | 3.4 | 6.4 | 3.7 | 4.9 | 2.5 | 2.6 | 1.8 | 2.5 | 3.3 | 4.9 | 5.1 | 7.1 |
| 1975 | 6.0 | 3.5 | 5.6 | 3.3 | 2.8 | 2.5 | 2.1 | 2.4 | 3.1 | 3.6 | 8.0 | 5.2 |
| 1976 | 5.8 | 6.4 | 7.4 | 4.9 | 3.7 | 2.9 | 3.2 | 2.8 | 3.6 | 2.7 | 4.2 | 5.8 |
| 1977 | 4.3 | 6.4 | 4.2 | 5.1 | 3.2 | 3.7 | 2.8 | 2.6 | 3.5 | 4.1 | 4.7 | 5.1 |
| 1978 | 9.5 | 5.6 | 4.2 | 4.3 | 5.2 | 3.1 | 2.9 | 1.9 | 2.4 | 5.2 | 4.9 | 3.6 |
| 1979 | 5.1 | 5.1 | 8.4 | 4.4 | 2.6 | 3.4 | 2.6 | 3.2 | 3.4 | 7.2 | 4.0 | 5.1 |
| 1980 | 3.9 | 4.8 | 4.4 | 5.1 | 3.6 | 2.9 | 2.2 | 1.8 | 3.3 | 3.6 | 2.9 | 4.7 |
| 1981 | 3.7 | 5.2 | 5.0 | 4.5 | 4.7 | 2.3 | 2.3 | 2.6 | 3.3 | 5.5 | 5.9 | 4.4 |
| 1982 | 6.4 | 5.4 | 5.2 | 4.5 | 3.6 | 2.9 | 3.4 | 2.3 | 4.5 | 6.8 | 5.7 | 4.5 |
| 1983 | 7.6 | 7.4 | 7.9 | 3.5 | 3.9 | 2.3 | 1.8 | 2.4 | 2.7 | 3.3 | 5.4 | 5.6 |
| 1984 | 4.8 | 7.0 | 8.2 | 5.2 | 3.5 | 2.5 | 2.1 | 2.9 | 2.7 | 3.0 | 5.5 | 4.9 |
| 1985 | 5.8 | 5.9 | 5.7 | 5.8 | 2.9 | 2.6 | 1.5 | 2.4 | 2.0 | 3.7 | 4.2 | 9.6 |
| 1986 | 6.7 | 3.9 | 7.1 | 5.1 | 2.7 | 2.6 | 2.0 | 2.3 | 2.1 | 3.5 | 2.9 | 3.4 |
| 1987 | 5.4 | 9.4 | 6.3 | 4.9 | 2.6 | 1.7 | 1.8 | 2.4 | 3.0 | 6.8 | 5.7 | 5.9 |

32 YR. STATISTICS FOR WIS STATION S47

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 1.1 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 4.3 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 0.0 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.9 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.5 |
| LARGEST WAVE HS . . . . . | (METERS) | 11.1 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 7.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66112812 |

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 104 | 534 | 102 | 17 | 1 | . | . | . | . | . | 758 |
| 0.50-0.99 | . | 544 | 2070 | 175 | 19 | 5 | . | . | . | . | 2813 |
| 1.00-1.49 | . | . | 750 | 751 | 69 | 11 | . | . | . | . | 1581 |
| 1.50-1.99 | . | . | 120 | 727 | 232 | 51 | . | . | . | . | 1130 |
| 2.00-2.49 | . | . | . | 434 | 214 | 143 | 4 | . | . | . | 795 |
| 2.50-2.99 | . | . | . | 11 | 585 | 115 | 12 | 2 | . | . | 725 |
| 3.00-3.49 | . | . | . | . | 79 | 540 | 14 | 4 | . | . | 637 |
| 3.50-3.99 | . | . | . | . | . | 433 | 66 | 3 | . | . | 502 |
| 4.00-4.49 | . | . | . | . | . | 88 | 288 | 28 | 2 | . | 406 |
| 4.50-4.99 | . | . | . | . | . | 2 | 158 | 117 | . | . | 277 |
| 5.00-5.49 | . | . | . | . | . | 1 | 16 | 241 | 3 | . | 261 |
| 5.50-5.99 | . | . | . | . | . | . | . | 84 | 41 | . | 125 |
| 6.00-6.49 | . | . | . | . | . | . | . | 12 | 71 | . | 83 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 58 | 1 | 59 |
| 7.00+ | . | . | . | . | . | . | . | . | 53 | 48 | 101 |
| TOTAL | 104 | 1078 | 3042 | 2115 | 1199 | 1389 | 558 | 491 | 228 | 49 | |

MEAN HS(M) = 2.0 LARGEST HS(M)= 11.0 MEAN TP(SEC)= 5.7 NO. OF CASES= 9609.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 84 | 442 | 63 | 6 | 1 | . | . | . | . | . | 596 |
| 0.50-0.99 | . | 425 | 2031 | 116 | 17 | 2 | . | . | . | . | 2591 |
| 1.00-1.49 | . | . | 671 | 553 | 26 | 8 | . | . | . | . | 1258 |
| 1.50-1.99 | . | . | 42 | 420 | 162 | 11 | 1 | . | . | . | 636 |
| 2.00-2.49 | . | . | . | 177 | 122 | 43 | . | . | . | . | 342 |
| 2.50-2.99 | . | . | . | 4 | 206 | 54 | 2 | 1 | . | . | 267 |
| 3.00-3.49 | . | . | . | . | 18 | 160 | 2 | . | . | . | 180 |
| 3.50-3.99 | . | . | . | . | . | 102 | 13 | 1 | 1 | . | 117 |
| 4.00-4.49 | . | . | . | . | . | 9 | 65 | 3 | 1 | . | 78 |
| 4.50-4.99 | . | . | . | . | . | . | 23 | 23 | 1 | . | 47 |
| 5.00-5.49 | . | . | . | . | . | . | . | 31 | . | . | 31 |
| 5.50-5.99 | . | . | . | . | . | . | . | 7 | 5 | . | 12 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 9 | . | 9 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 8 | 1 | 9 |
| 7.00+ | . | . | . | . | . | . | . | . | 6 | 2 | 8 |
| TOTAL | 84 | 867 | 2807 | 1276 | 552 | 389 | 106 | 66 | 31 | 3 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 8.4 MEAN TP(SEC)= 4.9 NO. OF CASES= 5799.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 136 | 657 | 100 | 8 | . | . | . | . | . | . | 901 |
| 0.50-0.99 | . | 519 | 2804 | 95 | 26 | 1 | . | . | . | . | 3445 |
| 1.00-1.49 | . | . | 845 | 740 | 51 | 7 | . | . | . | . | 1643 |
| 1.50-1.99 | . | . | 51 | 533 | 144 | 13 | . | . | . | . | 741 |
| 2.00-2.49 | . | . | . | 208 | 116 | 54 | 3 | . | . | . | 381 |
| 2.50-2.99 | . | . | . | 1 | 223 | 45 | 1 | . | . | . | 270 |
| 3.00-3.49 | . | . | . | . | 11 | 177 | 5 | . | . | . | 193 |
| 3.50-3.99 | . | . | . | . | . | 137 | 21 | 1 | . | . | 159 |
| 4.00-4.49 | . | . | . | . | . | 16 | 79 | 7 | . | . | 102 |
| 4.50-4.99 | . | . | . | . | . | 1 | 21 | 36 | . | . | 58 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 33 | 1 | . | 35 |
| 5.50-5.99 | . | . | . | . | . | . | . | 8 | 6 | . | 14 |
| 6.00-6.49 | . | . | . | . | . | . | . | 2 | 4 | . | 6 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 3 | 4 |
| TOTAL | 136 | 1176 | 3800 | 1585 | 571 | 451 | 131 | 87 | 17 | 3 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.8 NO. OF CASES= 7458.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 111 | 410 | 84 | 3 | . | . | . | . | . | . | 608 |
| 0.50-0.99 | . | 330 | 1425 | 89 | 23 | 5 | . | . | . | . | 1872 |
| 1.00-1.49 | . | . | 312 | 143 | 24 | 5 | . | . | . | . | 484 |
| 1.50-1.99 | . | . | 9 | 81 | 23 | 10 | . | 1 | . | . | 124 |
| 2.00-2.49 | . | . | . | 36 | 19 | 13 | 2 | . | . | . | 70 |
| 2.50-2.99 | . | . | . | 2 | 13 | 10 | 3 | . | . | . | 28 |
| 3.00-3.49 | . | . | . | . | 6 | 8 | 6 | . | . | . | 20 |
| 3.50-3.99 | . | . | . | . | 1 | 9 | 12 | 1 | . | . | 23 |
| 4.00-4.49 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 111 | 740 | 1830 | 354 | 109 | 60 | 26 | 4 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 3038.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 136 | 416 | 105 | 12 | . | . | . | . | . | . | 669 |
| 0.50-0.99 | . | 388 | 1083 | 77 | 24 | 3 | . | . | . | . | 1575 |
| 1.00-1.49 | . | . | 346 | 69 | 11 | 11 | 1 | . | . | . | 438 |
| 1.50-1.99 | . | . | 16 | 117 | 8 | 7 | 2 | . | . | . | 150 |
| 2.00-2.49 | . | . | . | 67 | 6 | 7 | 4 | . | . | . | 84 |
| 2.50-2.99 | . | . | . | 5 | 36 | . | . | 1 | . | . | 42 |
| 3.00-3.49 | . | . | . | . | 18 | . | 3 | . | . | . | 21 |
| 3.50-3.99 | . | . | . | . | 4 | 1 | . | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 136 | 804 | 1550 | 347 | 107 | 29 | 10 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 2801.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 115 | 363 | 81 | 7 | . | . | . | . | . | . | 566 |
| 0.50-0.99 | . | 324 | 786 | 60 | 36 | 6 | . | . | . | . | 1212 |
| 1.00-1.49 | . | . | 285 | 22 | 9 | 4 | . | . | . | . | 320 |
| 1.50-1.99 | . | . | 12 | 83 | . | 3 | . | . | . | . | 98 |
| 2.00-2.49 | . | . | . | 55 | 2 | . | . | . | . | . | 57 |
| 2.50-2.99 | . | . | . | 5 | 23 | . | . | . | . | . | 28 |
| 3.00-3.49 | . | . | . | . | 6 | . | . | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 115 | 687 | 1164 | 232 | 76 | 16 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 2150.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 134 | 488 | 102 | 13 | . | 1 | . | . | . | . | 738 |
| 0.50-0.99 | . | 624 | 992 | 60 | 18 | 3 | . | . | . | . | 1697 |
| 1.00-1.49 | . | . | 529 | 10 | 11 | 5 | 1 | . | . | . | 556 |
| 1.50-1.99 | . | . | 54 | 102 | 2 | 1 | 1 | . | . | . | 160 |
| 2.00-2.49 | . | . | . | 51 | . | . | . | . | . | . | 51 |
| 2.50-2.99 | . | . | . | 8 | 7 | . | . | . | . | . | 15 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 134 | 1112 | 1677 | 244 | 39 | 10 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 3019.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 196 | 906 | 84 | 10 | 1 | . | . | . | . | . | 1197 |
| 0.50-0.99 | . | 1511 | 777 | 55 | 23 | 7 | 1 | . | . | . | 2374 |
| 1.00-1.49 | . | . | 852 | 13 | 7 | 3 | . | . | . | . | 875 |
| 1.50-1.99 | . | . | 212 | 67 | 1 | . | . | . | . | . | 280 |
| 2.00-2.49 | . | . | 9 | 52 | . | . | . | . | . | . | 61 |
| 2.50-2.99 | . | . | . | 3 | 4 | . | . | . | . | . | 7 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 196 | 2417 | 1934 | 200 | 36 | 11 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 4493.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 336 | 1404 | 162 | 45 | 13 | . | . | . | . | . | 1960 |
| 0.50-0.99 | . | 3486 | 638 | 85 | 32 | 7 | . | . | . | . | 4248 |
| 1.00-1.49 | . | . | 2542 | 10 | 6 | 9 | . | . | . | . | 2567 |
| 1.50-1.99 | . | . | 967 | 1 | 2 | . | . | . | . | . | 970 |
| 2.00-2.49 | . | . | 29 | 78 | . | 1 | . | . | . | . | 108 |
| 2.50-2.99 | . | . | . | 21 | 1 | . | . | . | . | . | 22 |
| 3.00-3.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 336 | 4890 | 4338 | 242 | 54 | 17 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.6 NO. OF CASES= 9245.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 299 | 876 | 122 | 34 | 6 | 1 | . | . | . | . | 1338 |
| 0.50-0.99 | . | 2608 | 875 | 84 | 33 | 7 | . | . | . | . | 3607 |
| 1.00-1.49 | . | . | 973 | 5 | 4 | 5 | . | . | . | . | 987 |
| 1.50-1.99 | . | . | 845 | 208 | . | . | . | . | . | . | 1053 |
| 2.00-2.49 | . | . | 4 | 214 | . | . | . | . | . | . | 218 |
| 2.50-2.99 | . | . | . | 25 | . | . | . | . | . | . | 25 |
| 3.00-3.49 | . | . | . | 2 | 3 | . | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 299 | 3484 | 2819 | 572 | 46 | 13 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 6773.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 258 | 666 | 111 | 35 | 8 | 2 | . | . | . | . | 1080 |
| 0.50-0.99 | . | 2094 | 775 | 87 | 35 | 9 | 1 | . | . | . | 3001 |
| 1.00-1.49 | . | . | 770 | 9 | 10 | 11 | . | . | . | . | 800 |
| 1.50-1.99 | . | . | 685 | 110 | 1 | . | 1 | . | . | . | 797 |
| 2.00-2.49 | . | . | . | 131 | . | . | . | . | . | . | 131 |
| 2.50-2.99 | . | . | . | 21 | . | . | . | . | . | . | 21 |
| 3.00-3.49 | . | . | . | . | 3 | . | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 258 | 2760 | 2341 | 393 | 57 | 22 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 5462.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 216 | 509 | 99 | 28 | 3 | 1 | . | . | . | . | 856 |
| 0.50-0.99 | . | 1618 | 605 | 83 | 39 | 10 | 1 | . | . | . | 2356 |
| 1.00-1.49 | . | . | 548 | 11 | 13 | 24 | 4 | . | . | . | 600 |
| 1.50-1.99 | . | . | 298 | 113 | 2 | 3 | 4 | . | . | . | 420 |
| 2.00-2.49 | . | . | 2 | 84 | . | . | . | 1 | . | . | 87 |
| 2.50-2.99 | . | . | . | 17 | 1 | . | . | . | . | . | 18 |
| 3.00-3.49 | . | . | . | 1 | 6 | . | . | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 216 | 2127 | 1552 | 337 | 66 | 38 | 9 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.7 NO. OF CASES= 4073.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 263 | 470 | 176 | 33 | 4 | 3 | . | . | . | . | 949 |
| 0.50-0.99 | . | 1521 | 1174 | 211 | 116 | 34 | 3 | . | . | . | 3059 |
| 1.00-1.49 | . | . | 676 | 22 | 55 | 69 | 3 | . | . | . | 825 |
| 1.50-1.99 | . | . | 239 | 174 | 7 | 10 | 7 | 2 | . | . | 439 |
| 2.00-2.49 | . | . | . | 152 | . | 3 | 6 | . | . | . | 161 |
| 2.50-2.99 | . | . | . | 17 | 3 | 1 | 1 | . | . | . | 22 |
| 3.00-3.49 | . | . | . | . | 3 | 1 | . | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 263 | 1991 | 2265 | 609 | 190 | 121 | 20 | 2 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 5118.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 271 | 638 | 166 | 47 | 3 | . | . | . | . | . | 1125 |
| 0.50-0.99 | . | 1690 | 2211 | 256 | 94 | 18 | . | . | . | . | 4269 |
| 1.00-1.49 | . | 1 | 1175 | 204 | 109 | 79 | 4 | . | . | . | 1572 |
| 1.50-1.99 | . | . | 356 | 466 | 42 | 37 | 7 | . | . | . | 908 |
| 2.00-2.49 | . | . | 1 | 356 | 43 | 14 | 16 | . | . | . | 430 |
| 2.50-2.99 | . | . | . | 55 | 74 | 2 | 4 | 1 | . | . | 136 |
| 3.00-3.49 | . | . | . | . | 29 | 34 | . | . | . | . | 63 |
| 3.50-3.99 | . | . | . | . | 1 | 17 | 1 | . | . | . | 19 |
| 4.00-4.49 | . | . | . | . | . | 7 | 1 | . | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 271 | 2329 | 3909 | 1384 | 395 | 208 | 36 | 1 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 7992.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 146 | 559 | 174 | 27 | 1 | . | . | . | . | . | 907 |
| 0.50-0.99 | . | 839 | 2364 | 361 | 51 | 7 | . | . | . | . | 3622 |
| 1.00-1.49 | . | . | 1333 | 816 | 140 | 53 | 3 | 1 | . | . | 2346 |
| 1.50-1.99 | . | . | 175 | 874 | 162 | 77 | 12 | 1 | . | . | 1301 |
| 2.00-2.49 | . | . | 2 | 485 | 266 | 66 | 20 | 1 | . | . | 840 |
| 2.50-2.99 | . | . | . | 33 | 463 | 51 | 19 | 3 | . | . | 569 |
| 3.00-3.49 | . | . | . | 1 | 79 | 339 | 2 | 1 | . | . | 422 |
| 3.50-3.99 | . | . | . | . | 3 | 260 | 3 | . | . | . | 266 |
| 4.00-4.49 | . | . | . | . | . | 63 | 40 | 2 | . | . | 105 |
| 4.50-4.99 | . | . | . | . | . | 3 | 17 | 2 | 1 | . | 23 |
| 5.00-5.49 | . | . | . | . | . | . | 7 | 2 | 2 | . | 11 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | 6 | . | . | 6 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 146 | 1398 | 4048 | 2597 | 1165 | 919 | 123 | 19 | 4 | 0 | |

MEAN HS(M) = 1.4 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 9757.

STATION S48 46.65N 87.07W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

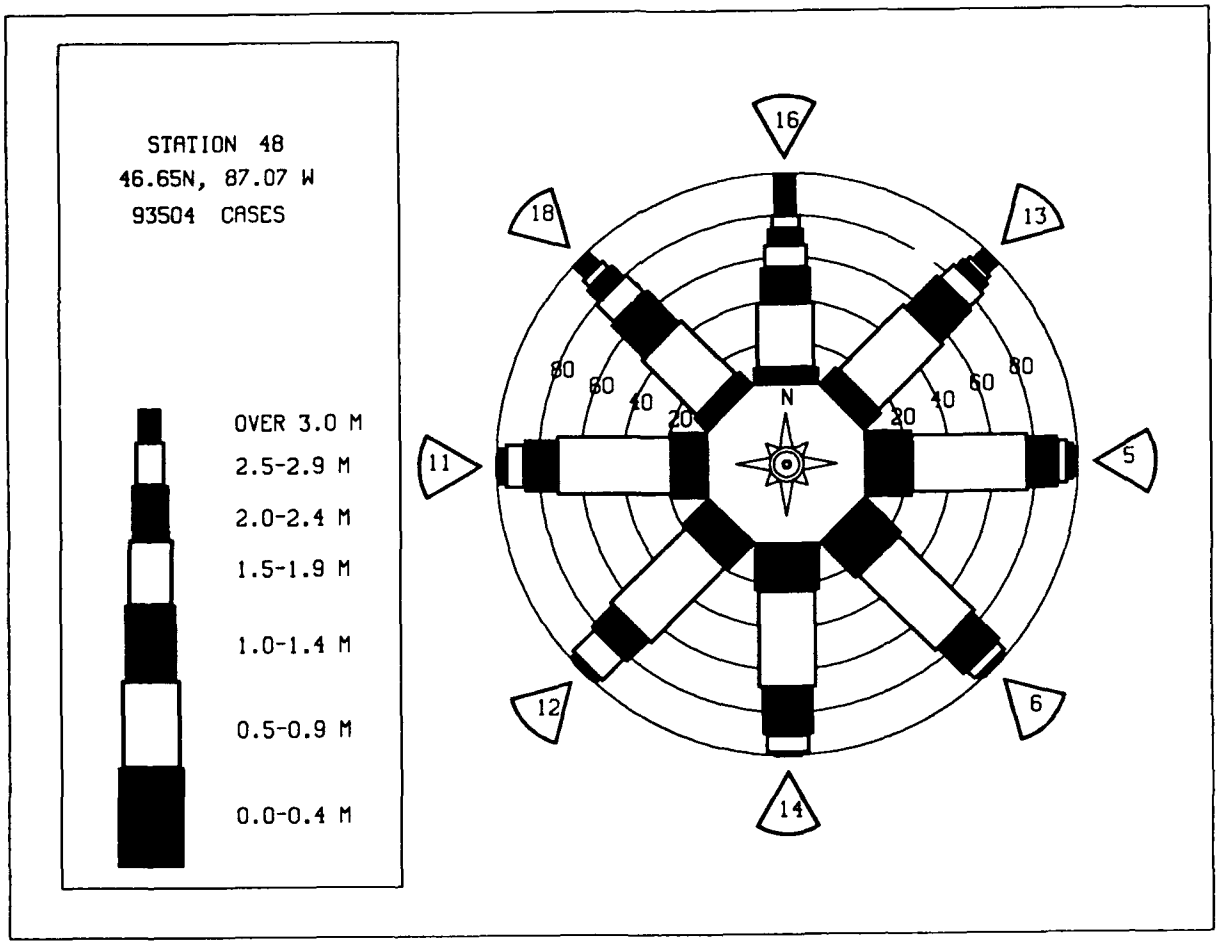
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 94 | 358 | 70 | 5 | 1 | 1 | . | . | . | . | 529 |
| 0.50-0.99 | . | 407 | 1355 | 183 | 32 | 7 | . | . | . | . | 1984 |
| 1.00-1.49 | . | . | 608 | 621 | 101 | 17 | . | . | . | . | 1347 |
| 1.50-1.99 | . | . | 82 | 571 | 192 | 66 | 2 | . | . | . | 913 |
| 2.00-2.49 | . | . | 2 | 319 | 192 | 98 | 14 | . | . | . | 625 |
| 2.50-2.99 | . | . | . | 13 | 403 | 72 | 26 | 4 | . | . | 518 |
| 3.00-3.49 | . | . | . | . | 49 | 395 | 19 | 10 | . | . | 473 |
| 3.50-3.99 | . | . | . | . | 1 | 283 | 33 | 5 | 1 | . | 323 |
| 4.00-4.49 | . | . | . | . | . | 68 | 101 | 17 | . | . | 186 |
| 4.50-4.99 | . | . | . | . | . | . | 63 | 57 | 2 | . | 122 |
| 5.00-5.49 | . | . | . | . | . | . | 7 | 55 | 11 | . | 73 |
| 5.50-5.99 | . | . | . | . | . | . | . | 12 | 20 | . | 32 |
| 6.00-6.49 | . | . | . | . | . | . | . | 2 | 17 | 1 | 20 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 12 | . | 12 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 4 | 5 |
| TOTAL | 94 | 765 | 2117 | 1712 | 971 | 1007 | 265 | 162 | 64 | 5 | |

MEAN HS(M) = 1.7 LARGEST HS(M)= 8.8 MEAN TP(SEC)= 5.5 NO. OF CASES= 6717.

STATION S48 46.65N 87.07W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 290 | 970 | 180 | 33 | 4 | . | . | . | . | . | 1477 |
| 0.50-0.99 | . | 1893 | 2197 | 208 | 62 | 13 | . | . | . | . | 4373 |
| 1.00-1.49 | . | . | 1322 | 400 | 65 | 32 | 1 | . | . | . | 1820 |
| 1.50-1.99 | . | . | 417 | 465 | 98 | 29 | 3 | . | . | . | 1012 |
| 2.00-2.49 | . | . | 5 | 290 | 98 | 44 | 7 | . | . | . | 444 |
| 2.50-2.99 | . | . | . | 24 | 204 | 35 | 7 | 1 | . | . | 271 |
| 3.00-3.49 | . | . | . | . | 31 | 165 | 5 | 1 | . | . | 202 |
| 3.50-3.99 | . | . | . | . | 1 | 125 | 15 | 1 | . | . | 142 |
| 4.00-4.49 | . | . | . | . | . | 25 | 57 | 5 | . | . | 87 |
| 4.50-4.99 | . | . | . | . | . | . | 28 | 23 | . | . | 51 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 36 | 1 | . | 40 |
| 5.50-5.99 | . | . | . | . | . | . | . | 11 | 7 | . | 18 |
| 6.00-6.49 | . | . | . | . | . | . | . | 2 | 10 | . | 12 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 8 | . | 8 |
| 7.00+ | . | . | . | . | . | . | . | . | 6 | 5 | 11 |
| TOTAL | 290 | 2863 | 4121 | 1420 | 563 | 468 | 126 | 80 | 32 | 5 | |

MEAN HS(M)= 1.1 LARGEST HS(M)= 11.0 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S48 (46.65N 87.07W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 0.9 | 0.9 | 1.0 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 0.9 | 1.1 | 1.0 | 0.8 |
| 1957 | 1.9 | 1.7 | 1.4 | 1.2 | 1.2 | 1.0 | 1.0 | 1.1 | 1.3 | 1.3 | 1.4 | 1.8 | 1.4 |
| 1958 | 1.5 | 2.2 | 1.2 | 1.2 | 1.1 | 1.0 | 0.7 | 0.7 | 0.9 | 1.1 | 1.8 | 1.4 | 1.2 |
| 1959 | 0.9 | 0.9 | 0.8 | 0.6 | 0.7 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 1.1 | 1.2 | 0.7 |
| 1960 | 1.4 | 1.9 | 1.3 | 1.3 | 1.4 | 0.8 | 0.7 | 0.7 | 0.8 | 1.1 | 1.4 | 1.3 | 1.2 |
| 1961 | 1.1 | 1.1 | 1.5 | 1.0 | 1.0 | 0.9 | 0.6 | 0.7 | 1.1 | 1.3 | 1.3 | 1.2 | 1.1 |
| 1962 | 1.5 | 1.3 | 1.1 | 1.2 | 0.9 | 0.7 | 0.7 | 0.7 | 0.9 | 1.1 | 1.3 | 1.7 | 1.1 |
| 1963 | 1.4 | 1.7 | 1.8 | 1.2 | 1.0 | 0.9 | 0.8 | 0.9 | 1.0 | 1.0 | 1.7 | 1.7 | 1.2 |
| 1964 | 1.5 | 1.9 | 1.9 | 1.4 | 1.1 | 1.0 | 0.8 | 0.9 | 1.0 | 1.2 | 1.1 | 1.3 | 1.3 |
| 1965 | 1.7 | 1.7 | 1.7 | 1.0 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 1.5 | 1.5 | 1.6 | 1.2 |
| 1966 | 1.4 | 1.7 | 2.1 | 1.1 | 1.2 | 0.8 | 0.9 | 0.7 | 0.9 | 1.4 | 2.2 | 1.9 | 1.4 |
| 1967 | 1.9 | 2.0 | 1.4 | 1.2 | 1.1 | 0.8 | 0.8 | 1.0 | 1.0 | 1.4 | 1.3 | 1.3 | 1.3 |
| 1968 | 1.4 | 2.4 | 1.6 | 1.2 | 1.0 | 0.8 | 0.7 | 0.8 | 0.8 | 1.3 | 1.7 | 1.9 | 1.3 |
| 1969 | 1.7 | 1.5 | 2.0 | 1.4 | 1.1 | 0.8 | 0.8 | 0.8 | 1.1 | 1.4 | 1.3 | 1.7 | 1.3 |
| 1970 | 1.9 | 2.1 | 1.5 | 1.5 | 1.3 | 0.9 | 0.9 | 0.8 | 1.1 | 1.2 | 1.8 | 1.6 | 1.4 |
| 1971 | 1.1 | 1.1 | 1.2 | 0.8 | 0.6 | 0.4 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.0 | 0.8 |
| 1972 | 1.1 | 1.0 | 1.2 | 0.7 | 0.4 | 0.5 | 0.7 | 0.8 | 1.2 | 1.4 | 1.2 | 1.5 | 1.0 |
| 1973 | 1.4 | 1.6 | 1.9 | 1.6 | 1.4 | 0.7 | 1.0 | 0.9 | 1.1 | 1.2 | 1.6 | 1.6 | 1.3 |
| 1974 | 1.1 | 1.2 | 1.2 | 1.3 | 0.8 | 0.8 | 0.6 | 0.6 | 0.9 | 1.2 | 1.2 | 1.5 | 1.0 |
| 1975 | 1.5 | 1.0 | 1.5 | 1.2 | 0.8 | 0.8 | 0.7 | 0.7 | 0.9 | 1.1 | 1.7 | 1.4 | 1.1 |
| 1976 | 1.6 | 1.6 | 1.8 | 1.5 | 0.9 | 0.7 | 0.8 | 0.8 | 1.1 | 0.9 | 1.2 | 1.5 | 1.2 |
| 1977 | 1.5 | 1.6 | 1.2 | 1.0 | 0.7 | 1.0 | 0.8 | 0.8 | 1.0 | 1.2 | 1.3 | 1.4 | 1.1 |
| 1978 | 2.1 | 1.4 | 1.2 | 1.2 | 1.2 | 0.9 | 0.8 | 0.8 | 0.9 | 1.2 | 1.3 | 1.2 | 1.2 |
| 1979 | 1.8 | 1.3 | 1.7 | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 | 1.1 | 1.6 | 1.4 | 1.5 | 1.2 |
| 1980 | 1.3 | 1.1 | 1.4 | 1.3 | 0.8 | 0.8 | 0.6 | 0.7 | 0.9 | 1.1 | 0.9 | 1.2 | 1.0 |
| 1981 | 1.0 | 1.3 | 1.5 | 1.2 | 1.1 | 0.7 | 0.6 | 0.5 | 1.0 | 1.2 | 1.5 | 1.3 | 1.1 |
| 1982 | 1.9 | 1.4 | 1.8 | 1.4 | 0.9 | 0.8 | 0.8 | 0.7 | 1.3 | 1.2 | 1.3 | 1.4 | 1.2 |
| 1983 | 1.7 | 1.5 | 2.3 | 1.2 | 1.2 | 0.8 | 0.7 | 0.8 | 0.8 | 1.0 | 1.7 | 1.6 | 1.3 |
| 1984 | 1.4 | 1.7 | 2.0 | 1.3 | 1.0 | 0.8 | 0.7 | 0.7 | 1.0 | 1.0 | 1.7 | 1.5 | 1.2 |
| 1985 | 1.6 | 1.6 | 1.7 | 1.2 | 0.6 | 0.7 | 0.6 | 0.7 | 0.8 | 0.9 | 1.2 | 1.5 | 1.1 |
| 1986 | 1.7 | 1.0 | 1.5 | 1.2 | 0.8 | 0.8 | 0.5 | 0.6 | 0.7 | 0.9 | 1.0 | 1.2 | 1.0 |
| 1987 | 1.4 | 1.1 | 1.4 | 1.1 | 0.7 | 0.5 | 0.6 | 0.7 | 0.7 | 1.2 | 1.2 | 1.4 | 1.0 |
| MEAN | 1.5 | 1.5 | 1.5 | 1.2 | 0.9 | 0.8 | 0.7 | 0.7 | 0.9 | 1.2 | 1.4 | 1.4 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S48 (46.65N 87.07W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.9 | 3.3 | 3.7 | 3.3 | 2.0 | 1.6 | 1.2 | 1.3 | 2.8 | 3.4 | 4.1 | 3.2 |
| 1957 | 5.1 | 5.5 | 4.1 | 3.7 | 3.6 | 3.2 | 3.8 | 3.3 | 4.0 | 4.1 | 6.6 | 6.9 |
| 1958 | 4.6 | 4.3 | 3.2 | 3.8 | 3.2 | 3.5 | 2.3 | 2.9 | 3.7 | 3.6 | 4.7 | 3.8 |
| 1959 | 2.6 | 2.8 | 5.1 | 2.4 | 2.2 | 1.5 | 1.1 | 1.1 | 2.6 | 2.8 | 3.5 | 3.9 |
| 1960 | 4.6 | 7.7 | 5.6 | 3.8 | 5.5 | 3.0 | 2.7 | 2.4 | 2.8 | 5.1 | 5.4 | 4.5 |
| 1961 | 5.5 | 4.8 | 5.4 | 3.4 | 3.4 | 3.6 | 2.2 | 2.7 | 3.2 | 4.4 | 5.3 | 4.3 |
| 1962 | 4.3 | 5.1 | 4.5 | 4.6 | 3.4 | 2.4 | 2.7 | 4.2 | 2.9 | 4.1 | 4.2 | 6.1 |
| 1963 | 4.5 | 5.7 | 7.4 | 5.7 | 3.0 | 3.1 | 2.9 | 3.8 | 4.5 | 3.7 | 5.6 | 7.6 |
| 1964 | 4.0 | 5.7 | 6.6 | 5.5 | 3.5 | 3.7 | 2.9 | 3.1 | 3.8 | 6.8 | 3.8 | 3.5 |
| 1965 | 5.7 | 7.2 | 6.7 | 4.1 | 2.9 | 2.8 | 2.3 | 3.7 | 3.1 | 5.7 | 6.4 | 7.0 |
| 1966 | 5.7 | 5.0 | 6.7 | 3.2 | 3.8 | 3.2 | 3.2 | 3.7 | 3.7 | 6.4 | 11.0 | 5.2 |
| 1967 | 6.3 | 6.4 | 5.6 | 4.7 | 3.3 | 2.3 | 3.7 | 4.1 | 4.1 | 4.3 | 4.6 | 4.1 |
| 1968 | 5.5 | 8.8 | 7.7 | 6.2 | 3.7 | 3.3 | 2.4 | 3.5 | 3.2 | 6.7 | 5.8 | 6.8 |
| 1969 | 5.0 | 7.7 | 7.8 | 5.0 | 3.8 | 2.9 | 3.1 | 2.2 | 3.6 | 4.8 | 4.2 | 7.0 |
| 1970 | 7.0 | 6.9 | 5.8 | 4.4 | 4.7 | 3.3 | 4.4 | 3.5 | 4.2 | 3.6 | 5.7 | 6.3 |
| 1971 | 4.4 | 4.0 | 4.5 | 2.9 | 2.2 | 1.2 | 1.5 | 1.4 | 1.8 | 3.0 | 4.3 | 3.7 |
| 1972 | 4.3 | 3.8 | 4.7 | 2.4 | 1.6 | 1.4 | 2.5 | 2.8 | 4.2 | 6.2 | 3.5 | 6.2 |
| 1973 | 6.3 | 5.3 | 7.2 | 4.8 | 5.5 | 1.8 | 2.7 | 3.1 | 3.6 | 4.0 | 4.4 | 5.6 |
| 1974 | 3.8 | 6.8 | 3.9 | 4.8 | 2.5 | 2.6 | 1.9 | 2.6 | 3.4 | 5.1 | 5.3 | 7.2 |
| 1975 | 6.2 | 3.6 | 5.6 | 3.2 | 2.7 | 2.6 | 2.2 | 2.5 | 3.1 | 3.9 | 8.0 | 5.5 |
| 1976 | 6.0 | 6.3 | 7.2 | 4.9 | 3.8 | 2.9 | 3.1 | 2.9 | 3.7 | 2.8 | 4.2 | 5.9 |
| 1977 | 4.4 | 6.5 | 4.3 | 5.3 | 3.3 | 3.7 | 3.1 | 2.8 | 3.7 | 4.2 | 4.9 | 5.1 |
| 1978 | 10.2 | 5.7 | 4.4 | 4.4 | 5.3 | 3.1 | 3.0 | 2.1 | 2.6 | 5.3 | 5.0 | 3.6 |
| 1979 | 5.1 | 5.1 | 8.6 | 4.6 | 2.6 | 3.5 | 2.7 | 3.3 | 3.3 | 7.1 | 4.4 | 5.2 |
| 1980 | 4.1 | 4.7 | 4.6 | 5.2 | 3.7 | 3.1 | 2.2 | 1.8 | 3.5 | 4.2 | 3.2 | 4.7 |
| 1981 | 3.8 | 5.4 | 5.0 | 4.4 | 4.7 | 2.4 | 2.3 | 2.6 | 3.9 | 5.5 | 5.8 | 4.7 |
| 1982 | 6.3 | 5.5 | 5.4 | 5.0 | 3.6 | 2.9 | 3.3 | 2.3 | 4.6 | 6.6 | 5.8 | 4.6 |
| 1983 | 7.3 | 7.4 | 8.0 | 3.5 | 4.0 | 2.4 | 1.9 | 2.7 | 2.8 | 3.7 | 5.6 | 5.5 |
| 1984 | 4.9 | 7.1 | 8.2 | 5.2 | 3.5 | 2.5 | 2.3 | 2.9 | 2.6 | 3.2 | 5.4 | 4.9 |
| 1985 | 6.2 | 6.0 | 5.5 | 5.9 | 2.9 | 3.2 | 1.5 | 2.4 | 2.1 | 3.7 | 4.4 | 9.6 |
| 1986 | 7.2 | 4.3 | 7.3 | 5.2 | 2.9 | 2.8 | 2.1 | 2.4 | 2.2 | 4.0 | 2.9 | 3.6 |
| 1987 | 5.5 | 9.4 | 6.3 | 4.7 | 2.6 | 1.8 | 1.9 | 2.5 | 2.9 | 6.9 | 5.6 | 6.0 |

32 YR. STATISTICS FOR WIS STATION S48

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.1 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.4 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.9 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.5 |
| LARGEST WAVE HS | (METERS) | 11.0 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 5.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66112812 |

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 99 | 547 | 110 | 13 | 1 | . | . | . | . | . | 770 |
| 0.50-0.99 | . | 487 | 2027 | 191 | 23 | 4 | . | . | . | . | 2732 |
| 1.00-1.49 | . | . | 678 | 762 | 75 | 9 | . | . | . | . | 1524 |
| 1.50-1.99 | . | . | 97 | 685 | 247 | 44 | 1 | . | . | . | 1074 |
| 2.00-2.49 | . | . | . | 381 | 237 | 146 | 2 | . | . | . | 766 |
| 2.50-2.99 | . | . | . | 9 | 537 | 93 | 18 | 3 | . | . | 660 |
| 3.00-3.49 | . | . | . | . | 68 | 531 | 12 | 6 | . | . | 617 |
| 3.50-3.99 | . | . | . | . | 1 | 405 | 68 | 5 | . | . | 479 |
| 4.00-4.49 | . | . | . | . | . | 80 | 297 | 25 | 2 | . | 404 |
| 4.50-4.99 | . | . | . | . | . | 3 | 156 | 133 | 1 | . | 293 |
| 5.00-5.49 | . | . | . | . | . | . | 11 | 202 | 6 | . | 219 |
| 5.50-5.99 | . | . | . | . | . | . | . | 79 | 42 | . | 121 |
| 6.00-6.49 | . | . | . | . | . | . | . | 14 | 57 | . | 71 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 55 | 1 | 56 |
| 7.00+ | . | . | . | . | . | . | . | . | 48 | 44 | 92 |
| TOTAL | 99 | 1034 | 2912 | 2041 | 1189 | 1315 | 565 | 467 | 211 | 45 | |

MEAN HS(M) = 2.0 LARGEST HS(M)= 10.9 MEAN TP(SEC)= 5.7 NO. OF CASES= 9259.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 77 | 453 | 82 | 8 | 1 | . | . | . | . | . | 621 |
| 0.50-0.99 | . | 429 | 1989 | 126 | 17 | 2 | . | . | . | . | 2563 |
| 1.00-1.49 | . | . | 633 | 532 | 38 | 5 | . | . | . | . | 1208 |
| 1.50-1.99 | . | . | 38 | 411 | 135 | 13 | 1 | . | . | . | 598 |
| 2.00-2.49 | . | . | . | 187 | 128 | 34 | . | . | . | . | 349 |
| 2.50-2.99 | . | . | . | 3 | 205 | 34 | 2 | 1 | . | . | 245 |
| 3.00-3.49 | . | . | . | . | 24 | 160 | 1 | . | . | . | 185 |
| 3.50-3.99 | . | . | . | . | . | 98 | 16 | 1 | . | . | 115 |
| 4.00-4.49 | . | . | . | . | . | 11 | 47 | 2 | . | . | 60 |
| 4.50-4.99 | . | . | . | . | . | 1 | 17 | 11 | . | . | 29 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 18 | . | . | 20 |
| 5.50-5.99 | . | . | . | . | . | . | . | 9 | 3 | . | 12 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 7 | . | 7 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | 3 | . | 3 |
| TOTAL | 77 | 882 | 2742 | 1267 | 548 | 358 | 86 | 42 | 16 | 0 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 4.8 NO. OF CASES= 5641.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 165 | 702 | 129 | 9 | 3 | . | . | . | . | . | 1008 |
| 0.50-0.99 | . | 567 | 2851 | 124 | 25 | 2 | . | . | . | . | 3569 |
| 1.00-1.49 | . | . | 865 | 628 | 57 | 7 | . | . | . | . | 1557 |
| 1.50-1.99 | . | . | 43 | 561 | 73 | 14 | 1 | . | . | . | 692 |
| 2.00-2.49 | . | . | . | 220 | 152 | 36 | . | . | . | . | 408 |
| 2.50-2.99 | . | . | . | 4 | 238 | 43 | 4 | . | . | . | 289 |
| 3.00-3.49 | . | . | . | . | 19 | 173 | 2 | . | . | . | 194 |
| 3.50-3.99 | . | . | . | . | . | 110 | 20 | . | . | . | 130 |
| 4.00-4.49 | . | . | . | . | . | 16 | 53 | 4 | . | . | 73 |
| 4.50-4.99 | . | . | . | . | . | 2 | 18 | 13 | . | . | 33 |
| 5.00-5.49 | . | . | . | . | . | . | 4 | 7 | . | . | 11 |
| 5.50-5.99 | . | . | . | . | . | . | . | 7 | 3 | . | 10 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 165 | 1269 | 3888 | 1546 | 567 | 403 | 102 | 32 | 4 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.6 NO. OF CASES= 7475.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 124 | 423 | 106 | 6 | . | . | . | . | . | . | 659 |
| 0.50-0.99 | . | 375 | 1309 | 103 | 26 | 5 | . | . | . | . | 1818 |
| 1.00-1.49 | . | . | 276 | 111 | 29 | 4 | . | . | . | . | 420 |
| 1.50-1.99 | . | . | 16 | 70 | 17 | 11 | 1 | . | . | . | 115 |
| 2.00-2.49 | . | . | . | 36 | 10 | 17 | 2 | . | . | . | 65 |
| 2.50-2.99 | . | . | . | 2 | 18 | 11 | 3 | . | . | . | 34 |
| 3.00-3.49 | . | . | . | . | 2 | 18 | 10 | 1 | . | . | 31 |
| 3.50-3.99 | . | . | . | . | . | 12 | 3 | . | . | . | 15 |
| 4.00-4.49 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 124 | 798 | 1707 | 328 | 102 | 78 | 22 | 2 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 2968.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 128 | 398 | 118 | 12 | . | . | . | . | . | . | 656 |
| 0.50-0.99 | . | 464 | 906 | 90 | 28 | 3 | . | . | . | . | 1491 |
| 1.00-1.49 | . | . | 337 | 40 | 18 | 11 | 1 | . | . | . | 407 |
| 1.50-1.99 | . | . | 37 | 64 | 6 | 12 | 3 | . | . | . | 122 |
| 2.00-2.49 | . | . | . | 50 | 1 | 7 | 4 | 1 | . | . | 63 |
| 2.50-2.99 | . | . | . | 19 | 6 | 1 | 5 | . | . | . | 31 |
| 3.00-3.49 | . | . | . | . | 2 | . | 5 | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 128 | 862 | 1398 | 275 | 61 | 34 | 18 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 4.0 NO. OF CASES= 2609.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 106 | 362 | 88 | 11 | . | . | . | . | . | . | 567 |
| 0.50-0.99 | . | 548 | 602 | 75 | 40 | 4 | . | . | . | . | 1269 |
| 1.00-1.49 | . | . | 209 | 16 | 7 | 9 | . | . | . | . | 241 |
| 1.50-1.99 | . | . | 41 | 43 | 1 | 3 | . | 1 | . | . | 89 |
| 2.00-2.49 | . | . | . | 48 | . | . | . | 1 | . | . | 49 |
| 2.50-2.99 | . | . | . | 10 | 4 | . | . | . | 1 | . | 15 |
| 3.00-3.49 | . | . | . | . | 4 | . | . | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 106 | 910 | 940 | 203 | 56 | 16 | 0 | 2 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 2099.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 136 | 493 | 103 | 12 | . | . | . | . | . | . | 744 |
| 0.50-0.99 | . | 1208 | 427 | 79 | 33 | 5 | . | . | . | . | 1752 |
| 1.00-1.49 | . | . | 221 | 8 | 20 | 9 | 2 | . | . | . | 260 |
| 1.50-1.99 | . | . | 77 | 6 | . | 2 | 1 | . | . | . | 86 |
| 2.00-2.49 | . | . | . | 7 | . | . | 1 | 1 | . | . | 9 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 136 | 1701 | 828 | 112 | 53 | 16 | 4 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 2673.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 172 | 495 | 97 | 10 | . | . | . | . | . | . | 774 |
| 0.50-0.99 | . | 1265 | 760 | 67 | 25 | 7 | 1 | . | . | . | 2125 |
| 1.00-1.49 | . | . | 466 | 9 | 5 | 2 | . | . | . | . | 482 |
| 1.50-1.99 | . | . | 170 | 124 | . | . | . | . | . | . | 294 |
| 2.00-2.49 | . | . | . | 63 | . | . | . | . | . | . | 63 |
| 2.50-2.99 | . | . | . | 7 | 3 | . | . | . | . | . | 10 |
| 3.00-3.49 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 172 | 1760 | 1493 | 280 | 35 | 9 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 3512.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 235 | 555 | 99 | 25 | 5 | . | . | . | . | . | 919 |
| 0.50-0.99 | . | 1881 | 2579 | 68 | 28 | 4 | . | . | . | . | 4560 |
| 1.00-1.49 | . | . | 2204 | 5 | 5 | 6 | . | . | . | . | 2220 |
| 1.50-1.99 | . | . | 838 | 1313 | 1 | 1 | . | . | . | . | 2153 |
| 2.00-2.49 | . | . | 1 | 812 | . | . | . | . | . | . | 813 |
| 2.50-2.99 | . | . | . | 140 | 32 | . | . | . | . | . | 172 |
| 3.00-3.49 | . | . | . | . | 47 | . | . | . | . | . | 47 |
| 3.50-3.99 | . | . | . | . | 12 | . | . | . | . | . | 12 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 235 | 2436 | 5721 | 2363 | 130 | 13 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.2 NO. OF CASES= 10198.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 222 | 726 | 97 | 23 | 4 | 1 | . | . | . | . | 1073 |
| 0.50-0.99 | . | 2688 | 1257 | 75 | 29 | 4 | . | . | . | . | 4053 |
| 1.00-1.49 | . | . | 1660 | 5 | 12 | 2 | . | . | . | . | 1679 |
| 1.50-1.99 | . | . | 1064 | 459 | . | 1 | . | . | . | . | 1524 |
| 2.00-2.49 | . | . | 3 | 452 | . | . | . | . | . | . | 455 |
| 2.50-2.99 | . | . | . | 57 | 5 | . | . | . | . | . | 62 |
| 3.00-3.49 | . | . | . | 2 | 22 | . | . | . | . | . | 24 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 222 | 3414 | 4081 | 1073 | 73 | 9 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.9 NO. OF CASES= 8306.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 186 | 589 | 82 | 21 | 5 | . | . | . | . | . | 883 |
| 0.50-0.99 | . | 1931 | 574 | 94 | 43 | 7 | 1 | . | . | . | 2650 |
| 1.00-1.49 | . | . | 845 | 9 | 17 | 7 | 2 | . | . | . | 880 |
| 1.50-1.99 | . | . | 545 | 116 | . | . | 1 | . | . | . | 662 |
| 2.00-2.49 | . | . | . | 118 | . | . | . | . | . | . | 118 |
| 2.50-2.99 | . | . | . | 17 | . | . | . | . | . | . | 17 |
| 3.00-3.49 | . | . | . | . | 3 | . | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 186 | 2520 | 2046 | 375 | 68 | 14 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 4882.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 160 | 463 | 86 | 22 | 1 | . | . | . | . | . | 732 |
| 0.50-0.99 | . | 1364 | 582 | 81 | 38 | 9 | 1 | . | . | . | 2075 |
| 1.00-1.49 | . | . | 546 | 14 | 20 | 11 | 4 | . | . | . | 595 |
| 1.50-1.99 | . | . | 255 | 101 | 1 | 3 | 3 | . | . | . | 363 |
| 2.00-2.49 | . | . | 3 | 89 | 1 | . | . | . | . | . | 93 |
| 2.50-2.99 | . | . | . | 12 | 16 | . | . | . | . | . | 28 |
| 3.00-3.49 | . | . | . | 1 | 11 | . | . | . | . | . | 12 |
| 3.50-3.99 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 160 | 1827 | 1472 | 320 | 88 | 29 | 8 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 3662.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 185 | 580 | 130 | 34 | 2 | 2 | . | . | . | . | 933 |
| 0.50-0.99 | . | 1019 | 1466 | 196 | 84 | 25 | . | . | . | . | 2790 |
| 1.00-1.49 | . | . | 957 | 42 | 55 | 45 | 1 | . | . | . | 1100 |
| 1.50-1.99 | . | . | 118 | 320 | 5 | 22 | 3 | . | . | . | 468 |
| 2.00-2.49 | . | . | 2 | 265 | 2 | 6 | 6 | 2 | . | . | 283 |
| 2.50-2.99 | . | . | . | 20 | 51 | . | . | . | . | . | 71 |
| 3.00-3.49 | . | . | . | . | 20 | . | . | . | . | . | 20 |
| 3.50-3.99 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 185 | 1599 | 2673 | 877 | 219 | 105 | 10 | 2 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.1 NO. OF CASES= 5313.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 211 | 712 | 135 | 24 | 1 | . | . | . | . | . | 1083 |
| 0.50-0.99 | . | 1036 | 2515 | 289 | 64 | 7 | . | . | . | . | 3911 |
| 1.00-1.49 | . | 1 | 1738 | 385 | 120 | 66 | 3 | . | . | . | 2313 |
| 1.50-1.99 | . | . | 199 | 684 | 88 | 55 | 7 | . | . | . | 1033 |
| 2.00-2.49 | . | . | . | 542 | 77 | 14 | 12 | 3 | . | . | 648 |
| 2.50-2.99 | . | . | . | 77 | 227 | 19 | 7 | 1 | . | . | 331 |
| 3.00-3.49 | . | . | . | . | 57 | 67 | . | 1 | . | . | 125 |
| 3.50-3.99 | . | . | . | . | 1 | 68 | 2 | . | . | . | 71 |
| 4.00-4.49 | . | . | . | . | . | 13 | 12 | . | . | . | 25 |
| 4.50-4.99 | . | . | . | . | . | 2 | 10 | 1 | . | . | 13 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 211 | 1749 | 4587 | 2001 | 635 | 311 | 54 | 8 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 8953.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 112 | 556 | 152 | 23 | 4 | . | . | . | . | . | 847 |
| 0.50-0.99 | . | 612 | 2143 | 337 | 41 | 6 | . | . | . | . | 3139 |
| 1.00-1.49 | . | . | 1102 | 925 | 168 | 42 | 1 | . | . | . | 2238 |
| 1.50-1.99 | . | . | 130 | 810 | 220 | 78 | 10 | . | . | . | 1248 |
| 2.00-2.49 | . | . | 1 | 366 | 279 | 97 | 22 | 1 | . | . | 766 |
| 2.50-2.99 | . | . | . | 19 | 485 | 58 | 36 | 7 | . | . | 605 |
| 3.00-3.49 | . | . | . | . | 63 | 377 | 9 | 3 | . | . | 452 |
| 3.50-3.99 | . | . | . | . | 3 | 298 | 9 | 2 | 1 | . | 313 |
| 4.00-4.49 | . | . | . | . | . | 87 | 36 | 9 | 1 | . | 133 |
| 4.50-4.99 | . | . | . | . | . | 2 | 32 | 7 | 4 | . | 45 |
| 5.00-5.49 | . | . | . | . | . | . | 8 | 6 | 3 | . | 17 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | 4 | 1 | . | 5 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 112 | 1168 | 3528 | 2480 | 1263 | 1045 | 163 | 41 | 11 | 0 | |

MEAN HS(M) = 1.4 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 5.1 NO. OF CASES= 9194.

STATION S49 46.65N 86.85W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

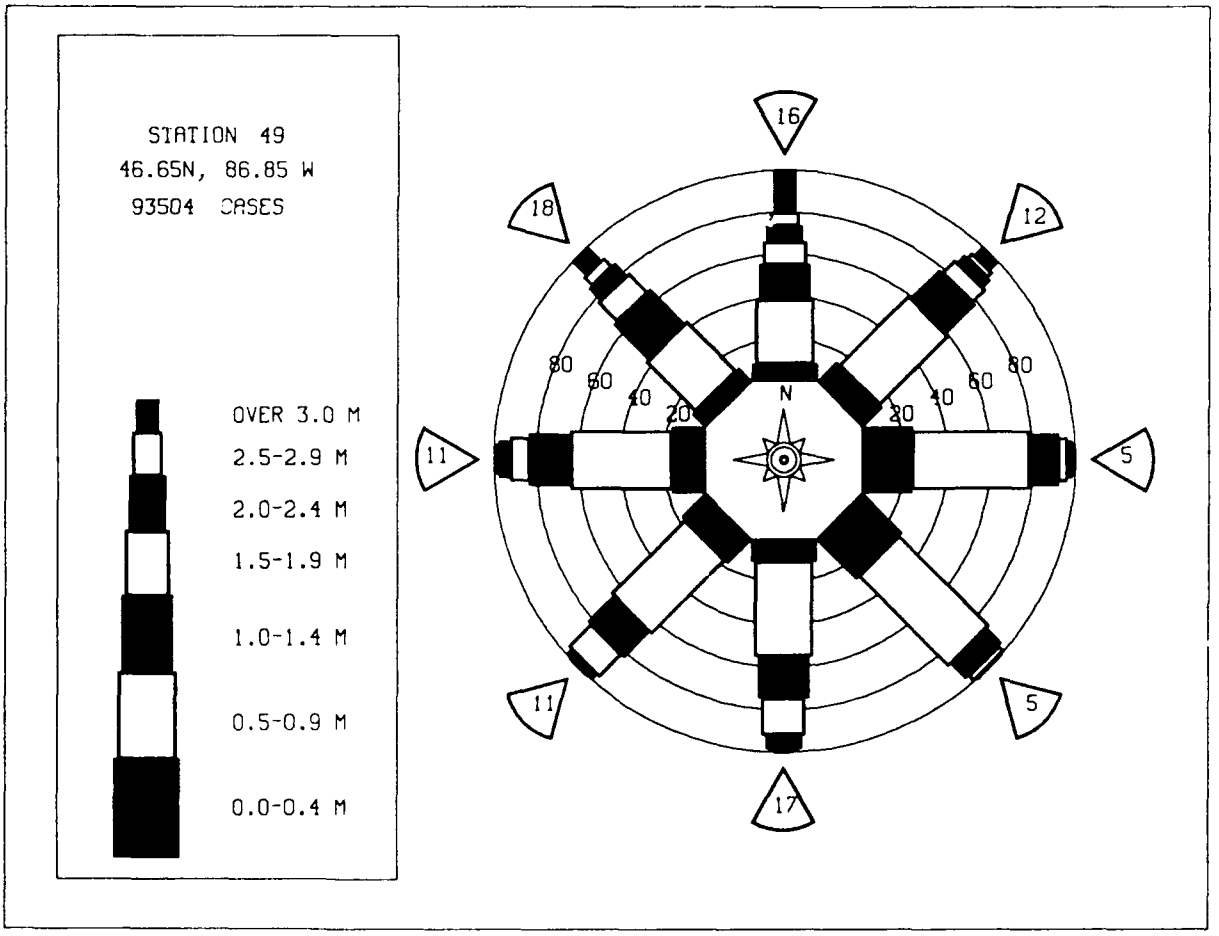
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 78 | 309 | 70 | 13 | 2 | . | . | . | . | . | 472 |
| 0.50-0.99 | . | 420 | 1346 | 181 | 26 | 6 | 2 | . | . | . | 1981 |
| 1.00-1.49 | . | . | 533 | 719 | 115 | 17 | . | . | . | . | 1384 |
| 1.50-1.99 | . | . | 68 | 533 | 238 | 67 | 1 | . | . | . | 907 |
| 2.00-2.49 | . | . | . | 284 | 213 | 128 | 8 | . | . | . | 633 |
| 2.50-2.99 | . | . | . | 10 | 335 | 91 | 33 | 4 | . | . | 473 |
| 3.00-3.49 | . | . | . | . | 43 | 379 | 24 | 12 | . | . | 458 |
| 3.50-3.99 | . | . | . | . | 1 | 288 | 48 | 10 | . | . | 347 |
| 4.00-4.49 | . | . | . | . | . | 77 | 121 | 25 | . | . | 223 |
| 4.50-4.99 | . | . | . | . | . | 2 | 69 | 73 | 1 | . | 145 |
| 5.00-5.49 | . | . | . | . | . | . | 8 | 59 | 12 | 1 | 80 |
| 5.50-5.99 | . | . | . | . | . | . | 1 | 18 | 31 | . | 50 |
| 6.00-6.49 | . | . | . | . | . | . | . | 3 | 27 | 1 | 31 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 11 | . | 11 |
| 7.00+ | . | . | . | . | . | . | . | . | 2 | 6 | 8 |
| TOTAL | 78 | 729 | 2017 | 1740 | 973 | 1055 | 315 | 204 | 84 | 8 | |

MEAN HS(M) = 1.8 LARGEST HS(M)= 8.8 MEAN TP(SEC)= 5.6 NO. OF CASES= 6760.

STATION S49 46.65N 86.85W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 240 | 836 | 169 | 27 | 3 | . | . | . | . | . | 1275 |
| 0.50-0.99 | . | 1630 | 2334 | 218 | 57 | 10 | . | . | . | . | 4249 |
| 1.00-1.49 | . | . | 1327 | 421 | 77 | 25 | 1 | . | . | . | 1851 |
| 1.50-1.99 | . | . | 374 | 630 | 103 | 33 | 3 | . | . | . | 1143 |
| 2.00-2.49 | . | . | 1 | 392 | 110 | 48 | 5 | . | . | . | 556 |
| 2.50-2.99 | . | . | . | 41 | 216 | 35 | 11 | 1 | . | . | 304 |
| 3.00-3.49 | . | . | . | . | 39 | 170 | 6 | 2 | . | . | 217 |
| 3.50-3.99 | . | . | . | . | 2 | 128 | 16 | 1 | . | . | 147 |
| 4.00-4.49 | . | . | . | . | . | 29 | 57 | 6 | . | . | 92 |
| 4.50-4.99 | . | . | . | . | . | 1 | 30 | 24 | . | . | 55 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 29 | 2 | . | 34 |
| 5.50-5.99 | . | . | . | . | . | . | . | 11 | 8 | . | 19 |
| 6.00-6.49 | . | . | . | . | . | . | . | 2 | 9 | . | 11 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 7 | . | 7 |
| 7.00+ | . | . | . | . | . | . | . | . | 5 | 5 | 10 |
| TOTAL | 240 | 2466 | 4205 | 1729 | 607 | 479 | 132 | 76 | 31 | 5 | |

MEAN HS(M)= 1.2 LARGEST HS(M)= 10.9 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S49 (46.65N 86.85W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 0.9 | 0.9 | 0.9 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 0.9 | 1.1 | 1.0 | 0.8 |
| 1957 | 2.0 | 1.8 | 1.5 | 1.2 | 1.2 | 1.1 | 1.0 | 1.1 | 1.4 | 1.3 | 1.6 | 1.8 | 1.4 |
| 1958 | 1.4 | 2.2 | 1.2 | 1.2 | 1.2 | 1.1 | 0.7 | 0.7 | 1.0 | 1.1 | 1.8 | 1.5 | 1.3 |
| 1959 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 1.1 | 1.2 | 0.8 |
| 1960 | 1.5 | 1.8 | 1.3 | 1.3 | 1.4 | 0.8 | 0.7 | 0.8 | 0.9 | 1.2 | 1.5 | 1.4 | 1.2 |
| 1961 | 1.2 | 1.2 | 1.6 | 1.0 | 1.0 | 0.9 | 0.6 | 0.7 | 1.1 | 1.4 | 1.3 | 1.3 | 1.1 |
| 1962 | 1.6 | 1.4 | 1.1 | 1.2 | 0.9 | 0.7 | 0.8 | 0.8 | 0.9 | 1.2 | 1.4 | 1.8 | 1.1 |
| 1963 | 1.5 | 1.7 | 1.8 | 1.3 | 1.0 | 0.9 | 0.8 | 0.9 | 1.0 | 1.1 | 1.7 | 1.7 | 1.3 |
| 1964 | 1.6 | 2.0 | 1.9 | 1.4 | 1.1 | 1.0 | 0.8 | 1.0 | 1.1 | 1.4 | 1.2 | 1.4 | 1.3 |
| 1965 | 1.7 | 1.8 | 1.6 | 1.1 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 1.6 | 1.6 | 1.7 | 1.3 |
| 1966 | 1.5 | 1.8 | 2.1 | 1.1 | 1.3 | 0.8 | 0.9 | 0.7 | 1.0 | 1.5 | 2.3 | 2.0 | 1.4 |
| 1967 | 2.0 | 2.0 | 1.5 | 1.3 | 1.1 | 0.8 | 0.8 | 1.0 | 1.1 | 1.5 | 1.4 | 1.5 | 1.3 |
| 1968 | 1.5 | 2.4 | 1.8 | 1.3 | 1.0 | 0.8 | 0.8 | 0.9 | 0.8 | 1.4 | 1.7 | 2.0 | 1.4 |
| 1969 | 1.8 | 1.6 | 2.0 | 1.4 | 1.2 | 0.9 | 0.8 | 0.9 | 1.1 | 1.5 | 1.4 | 1.8 | 1.4 |
| 1970 | 2.0 | 2.2 | 1.5 | 1.6 | 1.3 | 0.9 | 0.9 | 0.9 | 1.2 | 1.4 | 1.9 | 1.7 | 1.5 |
| 1971 | 1.2 | 1.1 | 1.2 | 0.9 | 0.6 | 0.4 | 0.5 | 0.5 | 0.6 | 0.9 | 1.1 | 1.0 | 0.8 |
| 1972 | 1.2 | 1.0 | 1.2 | 0.7 | 0.4 | 0.5 | 0.8 | 0.8 | 1.2 | 1.4 | 1.2 | 1.6 | 1.0 |
| 1973 | 1.5 | 1.6 | 1.9 | 1.6 | 1.3 | 0.7 | 1.0 | 1.0 | 1.1 | 1.3 | 1.6 | 1.7 | 1.4 |
| 1974 | 1.2 | 1.3 | 1.3 | 1.3 | 0.9 | 0.8 | 0.6 | 0.7 | 1.0 | 1.3 | 1.3 | 1.5 | 1.1 |
| 1975 | 1.6 | 1.1 | 1.6 | 1.2 | 0.8 | 0.9 | 0.8 | 0.7 | 0.9 | 1.3 | 1.8 | 1.5 | 1.2 |
| 1976 | 1.7 | 1.6 | 1.8 | 1.5 | 0.9 | 0.8 | 0.8 | 0.9 | 1.1 | 1.0 | 1.3 | 1.5 | 1.3 |
| 1977 | 1.6 | 1.7 | 1.3 | 1.1 | 0.7 | 1.0 | 0.8 | 0.8 | 1.0 | 1.3 | 1.4 | 1.4 | 1.2 |
| 1978 | 2.1 | 1.4 | 1.2 | 1.2 | 1.2 | 0.9 | 0.9 | 0.8 | 0.9 | 1.3 | 1.4 | 1.3 | 1.2 |
| 1979 | 1.8 | 1.4 | 1.8 | 0.9 | 1.0 | 1.0 | 0.8 | 0.9 | 1.2 | 1.6 | 1.5 | 1.6 | 1.3 |
| 1980 | 1.4 | 1.2 | 1.4 | 1.3 | 0.8 | 0.8 | 0.6 | 0.7 | 1.0 | 1.2 | 0.9 | 1.3 | 1.1 |
| 1981 | 1.1 | 1.3 | 1.5 | 1.2 | 1.1 | 0.8 | 0.6 | 0.5 | 1.0 | 1.3 | 1.5 | 1.3 | 1.1 |
| 1982 | 2.0 | 1.4 | 1.9 | 1.5 | 0.9 | 0.9 | 0.8 | 0.7 | 1.3 | 1.3 | 1.4 | 1.5 | 1.3 |
| 1983 | 1.8 | 1.6 | 2.2 | 1.2 | 1.2 | 0.9 | 0.7 | 0.8 | 0.9 | 1.1 | 1.7 | 1.7 | 1.3 |
| 1984 | 1.5 | 1.8 | 2.0 | 1.3 | 1.0 | 0.9 | 0.7 | 0.7 | 1.0 | 1.1 | 1.9 | 1.7 | 1.3 |
| 1985 | 1.6 | 1.7 | 1.7 | 1.2 | 0.7 | 0.7 | 0.6 | 0.7 | 0.9 | 1.0 | 1.3 | 1.5 | 1.1 |
| 1986 | 1.7 | 1.0 | 1.6 | 1.3 | 0.8 | 0.9 | 0.6 | 0.6 | 0.7 | 0.9 | 1.1 | 1.3 | 1.0 |
| 1987 | 1.5 | 1.2 | 1.4 | 1.1 | 0.7 | 0.5 | 0.6 | 0.7 | 0.7 | 1.2 | 1.2 | 1.5 | 1.0 |
| MEAN | 1.5 | 1.5 | 1.6 | 1.2 | 1.0 | 0.8 | 0.7 | 0.8 | 1.0 | 1.2 | 1.5 | 1.5 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S49 (46.65N 86.85W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.7 | 3.3 | 3.1 | 3.2 | 2.0 | 1.6 | 1.3 | 1.3 | 2.8 | 3.5 | 3.6 | 3.1 |
| 1957 | 5.2 | 5.6 | 4.2 | 3.6 | 3.7 | 3.4 | 3.8 | 3.4 | 4.0 | 4.0 | 6.7 | 6.7 |
| 1958 | 4.7 | 4.4 | 3.5 | 3.7 | 3.0 | 3.5 | 2.5 | 2.9 | 3.6 | 3.9 | 4.8 | 3.6 |
| 1959 | 2.8 | 2.9 | 4.5 | 2.4 | 2.3 | 1.5 | 1.3 | 1.3 | 2.8 | 3.1 | 3.3 | 4.3 |
| 1960 | 4.4 | 7.6 | 5.5 | 3.7 | 5.2 | 3.0 | 3.0 | 2.6 | 2.9 | 5.3 | 5.7 | 4.5 |
| 1961 | 6.5 | 4.7 | 5.2 | 3.5 | 3.5 | 3.5 | 2.1 | 2.7 | 3.4 | 4.0 | 5.2 | 4.3 |
| 1962 | 4.4 | 5.1 | 4.0 | 4.6 | 3.2 | 2.4 | 2.6 | 4.0 | 2.9 | 4.7 | 4.0 | 6.0 |
| 1963 | 4.3 | 5.5 | 7.4 | 5.7 | 3.0 | 3.2 | 2.9 | 3.7 | 4.0 | 3.7 | 5.3 | 7.4 |
| 1964 | 4.3 | 5.9 | 6.3 | 5.5 | 3.7 | 3.5 | 3.0 | 3.1 | 3.8 | 6.9 | 4.0 | 3.7 |
| 1965 | 5.6 | 7.1 | 6.4 | 4.0 | 2.9 | 2.8 | 2.4 | 3.7 | 2.9 | 5.7 | 6.4 | 7.2 |
| 1966 | 5.5 | 4.8 | 6.1 | 3.2 | 3.9 | 3.1 | 2.9 | 3.7 | 3.8 | 6.1 | 10.9 | 5.1 |
| 1967 | 6.0 | 6.2 | 5.5 | 4.7 | 3.3 | 2.5 | 3.7 | 3.9 | 4.2 | 4.2 | 4.7 | 3.9 |
| 1968 | 5.6 | 8.5 | 7.5 | 6.0 | 3.6 | 3.4 | 2.5 | 3.4 | 3.1 | 6.3 | 5.7 | 6.2 |
| 1969 | 5.0 | 7.6 | 7.7 | 4.9 | 3.8 | 2.8 | 3.2 | 2.4 | 3.4 | 5.0 | 4.5 | 7.1 |
| 1970 | 6.9 | 6.7 | 5.3 | 4.3 | 4.7 | 3.3 | 4.4 | 3.4 | 4.2 | 3.8 | 5.3 | 6.7 |
| 1971 | 4.9 | 4.2 | 4.5 | 2.9 | 2.0 | 1.2 | 1.7 | 1.5 | 2.0 | 3.1 | 4.3 | 4.0 |
| 1972 | 4.6 | 4.3 | 4.5 | 2.7 | 1.6 | 1.7 | 2.4 | 2.8 | 4.3 | 6.3 | 3.9 | 6.3 |
| 1973 | 6.3 | 5.2 | 7.3 | 4.5 | 5.4 | 2.0 | 2.7 | 3.2 | 3.9 | 4.2 | 4.4 | 5.4 |
| 1974 | 3.9 | 6.8 | 4.2 | 4.8 | 2.6 | 2.5 | 2.1 | 2.5 | 3.6 | 4.8 | 5.4 | 7.2 |
| 1975 | 6.1 | 3.7 | 5.4 | 2.9 | 2.6 | 2.8 | 2.4 | 2.4 | 3.1 | 4.1 | 7.8 | 5.7 |
| 1976 | 6.1 | 6.3 | 7.0 | 4.8 | 3.5 | 2.9 | 2.7 | 3.0 | 3.7 | 3.0 | 3.7 | 6.0 |
| 1977 | 4.7 | 6.5 | 4.3 | 5.4 | 3.2 | 3.5 | 3.3 | 2.9 | 3.8 | 4.2 | 5.3 | 4.9 |
| 1978 | 10.3 | 5.7 | 4.7 | 4.6 | 5.3 | 3.0 | 3.0 | 2.6 | 2.6 | 5.2 | 4.9 | 3.8 |
| 1979 | 5.0 | 4.9 | 8.7 | 4.6 | 2.8 | 3.5 | 2.8 | 3.4 | 3.3 | 6.7 | 4.0 | 5.2 |
| 1980 | 4.2 | 4.7 | 4.6 | 5.2 | 3.4 | 3.1 | 2.2 | 1.9 | 3.7 | 4.9 | 3.5 | 4.7 |
| 1981 | 3.8 | 5.4 | 4.8 | 4.1 | 4.6 | 2.6 | 2.2 | 2.6 | 4.0 | 4.6 | 5.8 | 4.5 |
| 1982 | 5.9 | 5.5 | 5.5 | 5.8 | 3.4 | 2.9 | 3.2 | 2.3 | 4.5 | 6.2 | 5.8 | 4.7 |
| 1983 | 7.3 | 7.3 | 8.0 | 3.2 | 3.7 | 2.4 | 2.2 | 2.8 | 2.9 | 4.0 | 5.1 | 5.4 |
| 1984 | 4.9 | 7.1 | 8.0 | 5.2 | 3.4 | 2.6 | 2.5 | 2.8 | 2.4 | 3.4 | 5.3 | 4.9 |
| 1985 | 6.2 | 6.0 | 5.5 | 6.0 | 2.9 | 3.4 | 1.9 | 2.2 | 2.2 | 3.7 | 4.0 | 9.5 |
| 1986 | 7.3 | 4.3 | 7.3 | 5.2 | 3.1 | 2.8 | 1.9 | 2.5 | 2.4 | 4.0 | 3.2 | 3.6 |
| 1987 | 5.5 | 9.2 | 6.4 | 4.4 | 2.3 | 1.8 | 2.0 | 2.4 | 2.9 | 6.9 | 5.6 | 5.9 |

32 YR. STATISTICS FOR WIS STATION S49

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.2 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.5 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 180.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.9 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 10.9 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 4.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66112812 |

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 105 | 565 | 147 | 22 | 1 | . | . | . | . | . | 840 |
| 0.50-0.99 | . | 473 | 2044 | 195 | 23 | 1 | . | . | . | . | 2736 |
| 1.00-1.49 | . | . | 621 | 773 | 85 | 3 | . | . | . | . | 1482 |
| 1.50-1.99 | . | . | 94 | 658 | 243 | 39 | 2 | . | . | . | 1036 |
| 2.00-2.49 | . | . | . | 331 | 239 | 152 | 3 | . | . | . | 725 |
| 2.50-2.99 | . | . | . | 10 | 510 | 95 | 17 | 3 | . | . | 635 |
| 3.00-3.49 | . | . | . | . | 64 | 466 | 12 | 3 | . | . | 545 |
| 3.50-3.99 | . | . | . | . | 3 | 393 | 50 | 7 | . | . | 453 |
| 4.00-4.49 | . | . | . | . | . | 60 | 290 | 33 | 1 | . | 384 |
| 4.50-4.99 | . | . | . | . | . | 2 | 147 | 128 | 1 | . | 278 |
| 5.00-5.49 | . | . | . | . | . | . | 10 | 185 | 6 | . | 201 |
| 5.50-5.99 | . | . | . | . | . | . | . | 67 | 36 | . | 103 |
| 6.00-6.49 | . | . | . | . | . | . | . | 6 | 49 | . | 55 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 56 | 1 | 57 |
| 7.00+ | . | . | . | . | . | . | . | . | 34 | 37 | 71 |
| TOTAL | 105 | 1038 | 2906 | 1989 | 1168 | 1211 | 531 | 432 | 183 | 38 | |

MEAN HS(M) = 1.9 LARGEST HS(M)= 10.5 MEAN TP(SEC)= 5.6 NO. OF CASES= 8999.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 105 | 471 | 126 | 9 | 1 | . | . | . | . | . | 712 |
| 0.50-0.99 | . | 437 | 1950 | 136 | 17 | 1 | . | . | . | . | 2541 |
| 1.00-1.49 | . | . | 553 | 510 | 51 | 4 | . | . | . | . | 1118 |
| 1.50-1.99 | . | . | 45 | 379 | 154 | 18 | 1 | . | . | . | 597 |
| 2.00-2.49 | . | . | . | 159 | 103 | 37 | . | . | . | . | 299 |
| 2.50-2.99 | . | . | . | 4 | 168 | 26 | 2 | 1 | . | . | 201 |
| 3.00-3.49 | . | . | . | . | 18 | 157 | 1 | . | . | . | 176 |
| 3.50-3.99 | . | . | . | . | . | 84 | 9 | . | . | . | 93 |
| 4.00-4.49 | . | . | . | . | . | 7 | 51 | 1 | . | . | 59 |
| 4.50-4.99 | . | . | . | . | . | . | 16 | 11 | . | . | 27 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 19 | . | . | 21 |
| 5.50-5.99 | . | . | . | . | . | . | . | 8 | 1 | . | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 7 | . | 8 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| TOTAL | 105 | 908 | 2674 | 1197 | 512 | 334 | 82 | 41 | 13 | 1 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.6 MEAN TP(SEC)= 4.8 NO. OF CASES= 5502.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 238 | 772 | 190 | 10 | . | . | . | . | . | . | 1210 |
| 0.50-0.99 | . | 680 | 2723 | 183 | 26 | 3 | . | . | . | . | 3615 |
| 1.00-1.49 | . | . | 868 | 529 | 57 | 5 | . | . | . | . | 1459 |
| 1.50-1.99 | . | . | 32 | 427 | 93 | 14 | 1 | . | . | . | 567 |
| 2.00-2.49 | . | . | . | 164 | 116 | 35 | 1 | . | . | . | 316 |
| 2.50-2.99 | . | . | . | 4 | 182 | 56 | 1 | . | . | . | 243 |
| 3.00-3.49 | . | . | . | . | 14 | 177 | 3 | . | . | . | 194 |
| 3.50-3.99 | . | . | . | . | . | 104 | 19 | 1 | . | . | 124 |
| 4.00-4.49 | . | . | . | . | . | 10 | 58 | 2 | . | . | 70 |
| 4.50-4.99 | . | . | . | . | . | 1 | 27 | 11 | . | . | 39 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 9 | . | . | 10 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | 2 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 7 | . | 8 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 238 | 1452 | 3813 | 1317 | 488 | 405 | 111 | 29 | 11 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.5 NO. OF CASES= 7372.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 160 | 423 | 179 | 13 | . | . | . | . | . | . | 775 |
| 0.50-0.99 | . | 604 | 1053 | 124 | 34 | 5 | . | . | . | . | 1820 |
| 1.00-1.49 | . | . | 172 | 96 | 34 | 12 | . | . | . | . | 314 |
| 1.50-1.99 | . | . | 24 | 34 | 21 | 17 | 2 | . | . | . | 98 |
| 2.00-2.49 | . | . | 1 | 19 | 10 | 18 | 1 | . | . | . | 49 |
| 2.50-2.99 | . | . | . | 1 | 7 | 8 | 5 | 1 | . | . | 22 |
| 3.00-3.49 | . | . | . | . | 2 | 10 | 3 | . | . | . | 15 |
| 3.50-3.99 | . | . | . | . | . | 6 | 3 | . | . | . | 9 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 160 | 1027 | 1429 | 287 | 108 | 76 | 16 | 2 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 2914.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 151 | 322 | 172 | 8 | . | . | . | . | . | . | 653 |
| 0.50-0.99 | . | 894 | 620 | 117 | 34 | 5 | . | . | . | . | 1670 |
| 1.00-1.49 | . | . | 166 | 32 | 32 | 16 | 3 | . | . | . | 249 |
| 1.50-1.99 | . | . | 50 | 12 | 2 | 20 | 2 | 1 | . | . | 87 |
| 2.00-2.49 | . | . | . | 28 | 2 | 6 | 8 | . | . | . | 44 |
| 2.50-2.99 | . | . | . | 3 | . | 3 | 7 | 1 | . | . | 14 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 151 | 1216 | 1008 | 200 | 70 | 50 | 20 | 2 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 2550.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 140 | 342 | 118 | 13 | . | . | . | . | . | . | 613 |
| 0.50-0.99 | . | 878 | 451 | 89 | 42 | 6 | . | . | . | . | 1466 |
| 1.00-1.49 | . | . | 164 | 16 | 7 | 8 | 1 | . | . | . | 196 |
| 1.50-1.99 | . | . | 71 | 28 | 3 | 2 | 1 | 1 | . | . | 106 |
| 2.00-2.49 | . | . | 1 | 33 | . | . | 2 | 1 | . | . | 37 |
| 2.50-2.99 | . | . | . | 4 | . | . | 1 | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 140 | 1220 | 805 | 183 | 54 | 16 | 5 | 2 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 2276.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 187 | 501 | 154 | 10 | 1 | . | . | . | . | . | 853 |
| 0.50-0.99 | . | 1358 | 412 | 80 | 41 | 5 | . | . | . | . | 1896 |
| 1.00-1.49 | . | . | 203 | 10 | 10 | 5 | 1 | . | . | . | 229 |
| 1.50-1.99 | . | . | 103 | 6 | . | . | 1 | . | . | . | 110 |
| 2.00-2.49 | . | . | 2 | 7 | . | . | . | . | . | . | 9 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 187 | 1859 | 874 | 114 | 52 | 10 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.5 NO. OF CASES= 2904.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 237 | 715 | 126 | 37 | 2 | 1 | . | . | . | . | 1118 |
| 0.50-0.99 | . | 1306 | 259 | 88 | 24 | 7 | 1 | . | . | . | 1685 |
| 1.00-1.49 | . | . | 328 | 5 | 4 | 2 | . | . | . | . | 339 |
| 1.50-1.99 | . | . | 104 | . | . | . | . | . | . | . | 104 |
| 2.00-2.49 | . | . | . | 9 | . | . | . | . | . | . | 9 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 237 | 2021 | 817 | 139 | 30 | 10 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 3051.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 290 | 1093 | 209 | 48 | 10 | 1 | . | . | . | . | 1651 |
| 0.50-0.99 | . | 2022 | 250 | 93 | 39 | 3 | . | . | . | . | 2407 |
| 1.00-1.49 | . | . | 867 | 5 | 9 | 4 | . | . | . | . | 885 |
| 1.50-1.99 | . | . | 539 | 1 | 1 | 2 | . | . | . | . | 543 |
| 2.00-2.49 | . | . | 24 | 65 | . | . | . | . | . | . | 89 |
| 2.50-2.99 | . | . | . | 10 | . | . | . | . | . | . | 10 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 290 | 3115 | 1889 | 223 | 59 | 10 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 5230.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 284 | 1519 | 144 | 40 | 8 | 1 | . | . | . | . | 1996 |
| 0.50-0.99 | . | 3162 | 1781 | 85 | 20 | 4 | . | . | . | . | 5052 |
| 1.00-1.49 | . | . | 2998 | 62 | 11 | 2 | . | . | . | . | 3073 |
| 1.50-1.99 | . | . | 739 | 488 | . | . | . | . | . | . | 1227 |
| 2.00-2.49 | . | . | 21 | 674 | . | . | . | . | . | . | 695 |
| 2.50-2.99 | . | . | . | 94 | 143 | . | . | . | . | . | 237 |
| 3.00-3.49 | . | . | . | 1 | 60 | . | . | . | . | . | 61 |
| 3.50-3.99 | . | . | . | . | 2 | 8 | . | . | . | . | 10 |
| 4.00-4.49 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 284 | 4681 | 5683 | 1444 | 244 | 19 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 11563.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 232 | 866 | 104 | 21 | 4 | 1 | . | . | . | . | 1228 |
| 0.50-0.99 | . | 957 | 1488 | 93 | 32 | 7 | . | . | . | . | 2577 |
| 1.00-1.49 | . | . | 1275 | 19 | 17 | 1 | 2 | . | . | . | 1314 |
| 1.50-1.99 | . | . | 177 | 395 | 1 | . | . | . | . | . | 573 |
| 2.00-2.49 | . | . | . | 456 | . | . | . | . | . | . | 456 |
| 2.50-2.99 | . | . | . | 65 | 94 | . | . | . | . | . | 159 |
| 3.00-3.49 | . | . | . | . | 42 | . | . | . | . | . | 42 |
| 3.50-3.99 | . | . | . | . | 1 | 6 | . | . | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 232 | 1823 | 3044 | 1049 | 191 | 19 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.1 NO. OF CASES= 5955.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 177 | 587 | 79 | 25 | . | . | . | . | . | . | 868 |
| 0.50-0.99 | . | 679 | 1167 | 101 | 23 | 5 | . | . | . | . | 1975 |
| 1.00-1.49 | . | . | 826 | 31 | 25 | 8 | 2 | 1 | . | . | 893 |
| 1.50-1.99 | . | . | 106 | 270 | 3 | 8 | 2 | 1 | . | . | 390 |
| 2.00-2.49 | . | . | . | 217 | 4 | . | . | . | . | . | 221 |
| 2.50-2.99 | . | . | . | 33 | 34 | . | . | . | . | . | 67 |
| 3.00-3.49 | . | . | . | . | 18 | 4 | . | . | . | . | 22 |
| 3.50-3.99 | . | . | . | . | 2 | 7 | . | . | . | . | 9 |
| 4.00-4.49 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 177 | 1266 | 2178 | 677 | 109 | 36 | 5 | 2 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 4171.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 179 | 654 | 113 | 19 | 4 | 2 | . | . | . | . | 971 |
| 0.50-0.99 | . | 626 | 1796 | 197 | 64 | 17 | . | . | . | . | 2700 |
| 1.00-1.49 | . | . | 982 | 157 | 58 | 39 | 3 | . | . | . | 1239 |
| 1.50-1.99 | . | . | 84 | 411 | 4 | 22 | 2 | . | . | . | 523 |
| 2.00-2.49 | . | . | . | 305 | 38 | 3 | 6 | 1 | . | . | 353 |
| 2.50-2.99 | . | . | . | 10 | 157 | . | . | . | . | . | 167 |
| 3.00-3.49 | . | . | . | . | 33 | 17 | . | . | . | . | 50 |
| 3.50-3.99 | . | . | . | . | . | 13 | . | . | . | . | 13 |
| 4.00-4.49 | . | . | . | . | . | 6 | . | . | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 179 | 1280 | 2975 | 1099 | 358 | 119 | 13 | 1 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.3 NO. OF CASES= 5646.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 201 | 774 | 151 | 19 | 3 | . | . | . | . | . | 1148 |
| 0.50-0.99 | . | 780 | 2769 | 290 | 58 | 6 | . | . | . | . | 3903 |
| 1.00-1.49 | . | . | 1444 | 628 | 154 | 49 | 2 | . | . | . | 2277 |
| 1.50-1.99 | . | . | 116 | 812 | 148 | 63 | 7 | . | . | . | 1146 |
| 2.00-2.49 | . | . | . | 423 | 176 | 38 | 11 | 2 | . | . | 650 |
| 2.50-2.99 | . | . | . | 10 | 406 | 24 | 10 | 4 | . | . | 454 |
| 3.00-3.49 | . | . | . | . | 113 | 117 | 1 | 1 | . | . | 232 |
| 3.50-3.99 | . | . | . | . | 2 | 86 | 5 | 4 | . | . | 97 |
| 4.00-4.49 | . | . | . | . | . | 25 | 21 | 6 | 2 | . | 54 |
| 4.50-4.99 | . | . | . | . | . | . | 16 | 5 | 1 | . | 22 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 4 | . | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 201 | 1554 | 4480 | 2182 | 1060 | 408 | 75 | 28 | 3 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.7 NO. OF CASES= 9361.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 110 | 579 | 161 | 20 | 6 | . | 1 | . | . | . | 877 |
| 0.50-0.99 | . | 557 | 2235 | 350 | 35 | 8 | . | . | . | . | 3185 |
| 1.00-1.49 | . | . | 829 | 1073 | 188 | 39 | 3 | . | . | . | 2132 |
| 1.50-1.99 | . | . | 100 | 751 | 272 | 83 | 7 | 1 | . | . | 1214 |
| 2.00-2.49 | . | . | . | 287 | 284 | 157 | 17 | 1 | . | . | 746 |
| 2.50-2.99 | . | . | . | 6 | 443 | 99 | 40 | 8 | . | . | 596 |
| 3.00-3.49 | . | . | . | . | 73 | 328 | 17 | 14 | . | . | 432 |
| 3.50-3.99 | . | . | . | . | . | 265 | 64 | 9 | . | . | 338 |
| 4.00-4.49 | . | . | . | . | . | 97 | 60 | 59 | . | . | 216 |
| 4.50-4.99 | . | . | . | . | . | 2 | 32 | 52 | 5 | . | 91 |
| 5.00-5.49 | . | . | . | . | . | . | 11 | 18 | 10 | . | 39 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 6 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | 2 | 3 | 1 | 6 |
| 6.50-6.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 110 | 1136 | 3325 | 2487 | 1301 | 1078 | 252 | 167 | 24 | 1 | |

MEAN HS(M) = 1.5 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 5.3 NO. OF CASES= 9261.

STATION S50 46.65N 86.65W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

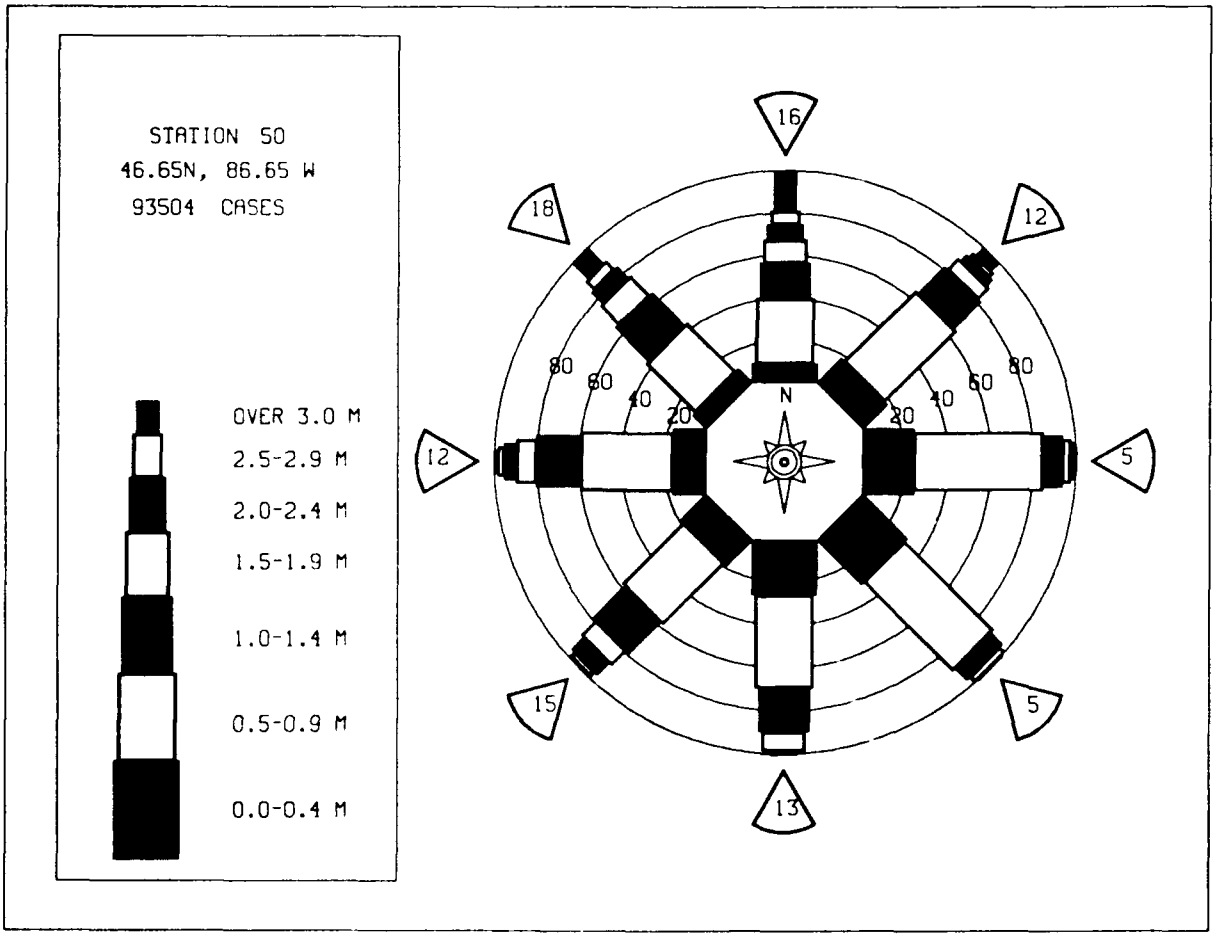
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 90 | 320 | 95 | 11 | 4 | . | . | . | . | . | 520 |
| 0.50-0.99 | . | 365 | 1310 | 195 | 18 | 5 | 1 | . | . | . | 1894 |
| 1.00-1.49 | . | . | 498 | 780 | 104 | 14 | . | . | . | . | 1396 |
| 1.50-1.99 | . | . | 64 | 532 | 276 | 67 | 1 | . | . | . | 940 |
| 2.00-2.49 | . | . | . | 262 | 166 | 177 | 5 | . | . | . | 610 |
| 2.50-2.99 | . | . | . | 6 | 332 | 98 | 34 | 2 | . | . | 472 |
| 3.00-3.49 | . | . | . | . | 39 | 349 | 28 | 14 | 1 | . | 431 |
| 3.50-3.99 | . | . | . | . | . | 249 | 74 | 13 | . | . | 336 |
| 4.00-4.49 | . | . | . | . | . | 45 | 151 | 35 | . | . | 231 |
| 4.50-4.99 | . | . | . | . | . | . | 53 | 102 | 2 | . | 157 |
| 5.00-5.49 | . | . | . | . | . | . | 8 | 74 | 17 | . | 99 |
| 5.50-5.99 | . | . | . | . | . | . | . | 12 | 37 | 1 | 50 |
| 6.00-6.49 | . | . | . | . | . | . | . | 3 | 29 | . | 32 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 14 | 1 | 15 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 6 | 7 |
| TOTAL | 90 | 685 | 1967 | 1786 | 939 | 1004 | 355 | 255 | 101 | 8 | |

MEAN HS(M) = 1.8 LARGEST HS(M)= 8.5 MEAN TP(SEC)= 5.6 NO. OF CASES= 6749.

STATION S50 46.65N 86.65W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 289 | 1051 | 227 | 33 | 4 | . | . | . | . | . | 1604 |
| 0.50-0.99 | . | 1578 | 2231 | 242 | 53 | 9 | . | . | . | . | 4113 |
| 1.00-1.49 | . | . | 1280 | 473 | 85 | 21 | 1 | . | . | . | 1860 |
| 1.50-1.99 | . | . | 245 | 521 | 122 | 35 | 3 | . | . | . | 926 |
| 2.00-2.49 | . | . | 5 | 344 | 114 | 62 | 5 | . | . | . | 530 |
| 2.50-2.99 | . | . | . | 26 | 248 | 41 | 11 | 2 | . | . | 328 |
| 3.00-3.49 | . | . | . | . | 48 | 162 | 6 | 3 | . | . | 219 |
| 3.50-3.99 | . | . | . | . | 1 | 122 | 22 | 3 | . | . | 148 |
| 4.00-4.49 | . | . | . | . | . | 26 | 63 | 13 | . | . | 102 |
| 4.50-4.99 | . | . | . | . | . | . | 29 | 31 | . | . | 60 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 31 | 3 | . | 37 |
| 5.50-5.99 | . | . | . | . | . | . | . | 9 | 8 | . | 17 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 9 | . | 10 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 7 | . | 7 |
| 7.00+ | . | . | . | . | . | . | . | . | 3 | 4 | 7 |
| TOTAL | 289 | 2629 | 3988 | 1639 | 675 | 478 | 143 | 93 | 30 | 4 | |

MEAN HS(M)= 1.2 LARGEST HS(M)= 10.5 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S50 (46.65N 86.65W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 0.9 | 0.9 | 0.9 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 0.8 | 1.1 | 1.0 | 0.7 |
| 1957 | 2.1 | 1.8 | 1.4 | 1.2 | 1.2 | 1.0 | 1.0 | 1.1 | 1.4 | 1.3 | 1.6 | 1.8 | 1.4 |
| 1958 | 1.4 | 2.2 | 1.1 | 1.1 | 1.1 | 1.0 | 0.7 | 0.7 | 0.9 | 1.1 | 1.9 | 1.5 | 1.2 |
| 1959 | 1.0 | 0.9 | 0.8 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 1.2 | 1.2 | 0.8 |
| 1960 | 1.5 | 1.8 | 1.3 | 1.3 | 1.3 | 0.7 | 0.7 | 0.7 | 0.8 | 1.2 | 1.6 | 1.4 | 1.2 |
| 1961 | 1.2 | 1.1 | 1.5 | 1.0 | 0.9 | 0.8 | 0.6 | 0.7 | 1.1 | 1.4 | 1.4 | 1.3 | 1.1 |
| 1962 | 1.7 | 1.3 | 1.0 | 1.2 | 0.8 | 0.6 | 0.7 | 0.7 | 0.9 | 1.1 | 1.3 | 1.9 | 1.1 |
| 1963 | 1.5 | 1.7 | 1.7 | 1.2 | 0.9 | 0.8 | 0.8 | 0.9 | 1.0 | 1.1 | 1.8 | 1.7 | 1.3 |
| 1964 | 1.7 | 2.1 | 1.9 | 1.4 | 1.1 | 1.0 | 0.7 | 1.0 | 1.1 | 1.3 | 1.2 | 1.4 | 1.3 |
| 1965 | 1.8 | 1.9 | 1.6 | 1.0 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 1.6 | 1.6 | 1.8 | 1.3 |
| 1966 | 1.5 | 1.8 | 2.1 | 1.1 | 1.3 | 0.8 | 0.9 | 0.7 | 1.0 | 1.5 | 2.3 | 2.0 | 1.4 |
| 1967 | 2.0 | 2.1 | 1.5 | 1.2 | 1.1 | 0.7 | 0.8 | 1.0 | 1.1 | 1.4 | 1.4 | 1.4 | 1.3 |
| 1968 | 1.4 | 2.5 | 1.7 | 1.2 | 1.0 | 0.8 | 0.8 | 0.8 | 0.8 | 1.3 | 1.7 | 1.9 | 1.3 |
| 1969 | 1.8 | 1.5 | 2.0 | 1.4 | 1.1 | 0.8 | 0.7 | 0.9 | 1.1 | 1.5 | 1.4 | 1.8 | 1.3 |
| 1970 | 2.0 | 2.3 | 1.5 | 1.5 | 1.3 | 0.9 | 0.9 | 0.9 | 1.2 | 1.2 | 1.8 | 1.6 | 1.4 |
| 1971 | 1.2 | 1.1 | 1.3 | 0.9 | 0.7 | 0.4 | 0.5 | 0.5 | 0.6 | 0.8 | 1.1 | 1.1 | 0.9 |
| 1972 | 1.3 | 1.1 | 1.2 | 0.7 | 0.4 | 0.5 | 0.7 | 0.7 | 1.2 | 1.5 | 1.2 | 1.5 | 1.0 |
| 1973 | 1.5 | 1.5 | 1.8 | 1.5 | 1.2 | 0.6 | 0.9 | 0.9 | 1.1 | 1.2 | 1.6 | 1.7 | 1.3 |
| 1974 | 1.2 | 1.2 | 1.3 | 1.3 | 0.8 | 0.7 | 0.6 | 0.6 | 1.0 | 1.3 | 1.3 | 1.5 | 1.1 |
| 1975 | 1.6 | 1.1 | 1.5 | 1.1 | 0.7 | 0.8 | 0.7 | 0.7 | 0.9 | 1.2 | 1.7 | 1.5 | 1.1 |
| 1976 | 1.7 | 1.7 | 1.8 | 1.5 | 0.9 | 0.7 | 0.7 | 0.8 | 1.1 | 0.9 | 1.4 | 1.6 | 1.2 |
| 1977 | 1.6 | 1.7 | 1.2 | 1.0 | 0.7 | 1.0 | 0.8 | 0.8 | 1.0 | 1.3 | 1.4 | 1.4 | 1.1 |
| 1978 | 2.2 | 1.4 | 1.2 | 1.1 | 1.1 | 0.8 | 0.8 | 0.9 | 0.9 | 1.3 | 1.4 | 1.3 | 1.2 |
| 1979 | 1.8 | 1.3 | 1.6 | 0.9 | 0.8 | 0.9 | 0.7 | 0.9 | 1.2 | 1.5 | 1.6 | 1.6 | 1.2 |
| 1980 | 1.4 | 1.2 | 1.4 | 1.2 | 0.8 | 0.8 | 0.6 | 0.7 | 1.0 | 1.2 | 0.9 | 1.3 | 1.0 |
| 1981 | 1.1 | 1.3 | 1.5 | 1.2 | 1.0 | 0.7 | 0.6 | 0.5 | 1.0 | 1.2 | 1.5 | 1.4 | 1.1 |
| 1982 | 2.0 | 1.4 | 1.8 | 1.4 | 0.8 | 0.8 | 0.8 | 0.7 | 1.3 | 1.2 | 1.3 | 1.5 | 1.2 |
| 1983 | 1.7 | 1.5 | 2.2 | 1.1 | 1.1 | 0.8 | 0.7 | 0.7 | 0.8 | 1.1 | 1.7 | 1.7 | 1.3 |
| 1984 | 1.5 | 1.7 | 1.9 | 1.2 | 1.0 | 0.8 | 0.6 | 0.7 | 1.0 | 1.1 | 1.8 | 1.7 | 1.3 |
| 1985 | 1.7 | 1.7 | 1.7 | 1.1 | 0.6 | 0.7 | 0.5 | 0.7 | 0.9 | 1.0 | 1.3 | 1.6 | 1.1 |
| 1986 | 1.8 | 1.0 | 1.6 | 1.2 | 0.7 | 0.8 | 0.5 | 0.6 | 0.7 | 0.9 | 1.2 | 1.3 | 1.0 |
| 1987 | 1.4 | 1.1 | 1.4 | 1.0 | 0.7 | 0.4 | 0.6 | 0.6 | 0.7 | 1.2 | 1.2 | 1.4 | 1.0 |
| MEAN | 1.6 | 1.5 | 1.5 | 1.2 | 0.9 | 0.8 | 0.7 | 0.7 | 1.0 | 1.2 | 1.5 | 1.5 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S50 (46.65N 86.65W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.8 | 3.5 | 2.9 | 3.4 | 2.0 | 1.6 | 1.3 | 1.4 | 2.8 | 3.6 | 3.6 | 3.2 |
| 1957 | 5.1 | 5.7 | 4.4 | 4.0 | 3.6 | 3.6 | 3.7 | 3.4 | 4.1 | 3.8 | 6.8 | 6.7 |
| 1958 | 4.5 | 4.7 | 3.7 | 4.0 | 3.2 | 3.5 | 2.5 | 2.9 | 3.6 | 3.9 | 4.9 | 3.9 |
| 1959 | 2.9 | 3.1 | 4.7 | 2.6 | 2.7 | 1.7 | 1.3 | 1.4 | 2.8 | 3.4 | 3.8 | 4.6 |
| 1960 | 4.2 | 7.2 | 5.0 | 3.7 | 5.0 | 3.0 | 3.1 | 2.7 | 2.9 | 5.6 | 5.8 | 4.1 |
| 1961 | 6.5 | 4.5 | 5.1 | 3.6 | 3.4 | 3.4 | 2.3 | 2.7 | 3.4 | 4.5 | 5.0 | 4.3 |
| 1962 | 4.4 | 5.2 | 4.3 | 4.5 | 3.2 | 2.2 | 2.6 | 3.8 | 2.7 | 5.1 | 3.9 | 6.0 |
| 1963 | 4.2 | 5.5 | 7.1 | 5.7 | 3.1 | 3.0 | 2.6 | 3.6 | 4.2 | 3.6 | 5.3 | 7.2 |
| 1964 | 5.1 | 5.8 | 6.1 | 5.2 | 3.7 | 3.8 | 2.9 | 3.1 | 3.8 | 6.7 | 4.2 | 3.9 |
| 1965 | 5.6 | 6.4 | 6.1 | 3.9 | 2.8 | 2.7 | 2.4 | 3.6 | 3.0 | 5.7 | 5.9 | 7.2 |
| 1966 | 5.0 | 4.8 | 6.6 | 3.3 | 4.3 | 3.1 | 3.1 | 3.6 | 3.8 | 6.0 | 10.5 | 5.0 |
| 1967 | 6.0 | 6.1 | 5.4 | 4.7 | 3.6 | 2.6 | 3.7 | 3.7 | 4.2 | 4.2 | 4.5 | 3.9 |
| 1968 | 5.7 | 8.3 | 7.4 | 5.7 | 3.5 | 3.5 | 3.0 | 3.4 | 3.1 | 6.1 | 6.1 | 6.2 |
| 1969 | 5.2 | 7.2 | 7.5 | 4.8 | 3.6 | 2.8 | 3.1 | 3.1 | 3.3 | 4.8 | 4.7 | 6.9 |
| 1970 | 6.8 | 6.4 | 5.4 | 4.3 | 4.7 | 3.3 | 4.1 | 3.3 | 4.2 | 4.1 | 5.7 | 6.6 |
| 1971 | 5.4 | 4.5 | 4.5 | 3.1 | 1.9 | 1.2 | 1.8 | 1.5 | 2.2 | 2.9 | 4.7 | 4.3 |
| 1972 | 5.0 | 4.7 | 4.5 | 2.8 | 1.7 | 1.7 | 2.4 | 2.9 | 4.3 | 6.7 | 4.0 | 6.3 |
| 1973 | 6.0 | 4.9 | 7.3 | 4.5 | 5.2 | 1.8 | 2.6 | 3.3 | 3.9 | 4.6 | 4.6 | 5.1 |
| 1974 | 4.3 | 6.6 | 4.3 | 4.6 | 2.4 | 2.3 | 2.3 | 2.3 | 3.6 | 4.9 | 5.2 | 7.0 |
| 1975 | 5.9 | 3.8 | 5.1 | 3.0 | 2.4 | 2.8 | 2.4 | 2.7 | 3.1 | 4.2 | 7.3 | 5.6 |
| 1976 | 6.1 | 6.4 | 6.7 | 4.6 | 3.5 | 2.9 | 2.6 | 3.0 | 3.7 | 3.1 | 4.1 | 6.0 |
| 1977 | 4.7 | 5.8 | 4.4 | 5.1 | 3.1 | 3.3 | 3.6 | 2.9 | 4.3 | 4.0 | 6.3 | 4.7 |
| 1978 | 10.1 | 5.5 | 4.7 | 5.1 | 5.1 | 3.0 | 2.9 | 2.5 | 2.8 | 4.9 | 4.7 | 4.0 |
| 1979 | 4.8 | 4.8 | 8.5 | 4.3 | 3.0 | 3.4 | 2.7 | 3.5 | 3.3 | 6.3 | 3.9 | 5.2 |
| 1980 | 4.2 | 4.5 | 4.6 | 5.0 | 3.3 | 3.0 | 2.1 | 2.1 | 3.6 | 5.1 | 3.8 | 4.6 |
| 1981 | 4.1 | 5.2 | 4.7 | 4.1 | 4.5 | 2.7 | 1.8 | 2.3 | 4.0 | 4.8 | 5.7 | 4.4 |
| 1982 | 6.6 | 5.2 | 5.8 | 6.2 | 3.3 | 2.6 | 3.5 | 2.3 | 4.3 | 5.8 | 5.6 | 4.7 |
| 1983 | 7.1 | 7.1 | 8.0 | 3.1 | 3.7 | 2.3 | 2.3 | 2.7 | 3.0 | 4.2 | 5.0 | 5.3 |
| 1984 | 4.6 | 7.0 | 7.6 | 5.2 | 3.5 | 3.0 | 2.4 | 2.8 | 2.5 | 3.6 | 5.0 | 4.6 |
| 1985 | 6.0 | 6.1 | 5.5 | 5.9 | 2.9 | 3.6 | 1.6 | 2.5 | 2.6 | 3.6 | 4.1 | 9.2 |
| 1986 | 7.3 | 4.3 | 7.3 | 5.1 | 3.2 | 2.8 | 1.9 | 2.5 | 2.6 | 4.2 | 3.9 | 3.7 |
| 1987 | 5.5 | 8.8 | 6.2 | 4.4 | 2.5 | 1.8 | 2.0 | 2.4 | 3.1 | 6.8 | 5.4 | 5.7 |

32 YR. STATISTICS FOR WIS STATION S50

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.2 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.5 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 202.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 1.0 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.5 |
| LARGEST WAVE HS | (METERS) | 10.5 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 3.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66112812 |

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 137 | 620 | 196 | 20 | 2 | . | . | . | . | . | 975 |
| 0.50-0.99 | . | 532 | 2123 | 287 | 26 | 3 | . | . | . | . | 2971 |
| 1.00-1.49 | . | . | 662 | 814 | 89 | 4 | . | . | . | . | 1569 |
| 1.50-1.99 | . | . | 90 | 654 | 294 | 49 | 1 | . | . | . | 1088 |
| 2.00-2.49 | . | . | . | 339 | 210 | 157 | 5 | . | . | . | 711 |
| 2.50-2.99 | . | . | . | 12 | 453 | 98 | 17 | 4 | . | . | 584 |
| 3.00-3.49 | . | . | . | . | 49 | 433 | 8 | 3 | . | . | 493 |
| 3.50-3.99 | . | . | . | . | . | 339 | 63 | 8 | . | . | 410 |
| 4.00-4.49 | . | . | . | . | . | 48 | 251 | 38 | 1 | . | 338 |
| 4.50-4.99 | . | . | . | . | . | 1 | 130 | 102 | 3 | . | 236 |
| 5.00-5.49 | . | . | . | . | . | . | 5 | 128 | 6 | . | 139 |
| 5.50-5.99 | . | . | . | . | . | . | 1 | 55 | 36 | . | 92 |
| 6.00-6.49 | . | . | . | . | . | . | . | 6 | 45 | . | 51 |
| 6.50-6.99 | . | . | . | . | . | . | . | 1 | 52 | 1 | 54 |
| 7.00+ | . | . | . | . | . | . | . | . | 13 | 24 | 37 |
| TOTAL | 137 | 1152 | 3071 | 2126 | 1123 | 1132 | 481 | 345 | 156 | 25 | |

MEAN HS(M) = 1.7 LARGEST HS(M)= 10.1 MEAN TP(SEC)= 5.5 NO. OF CASES= 9136.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 131 | 549 | 216 | 17 | 1 | . | . | . | . | . | 914 |
| 0.50-0.99 | . | 518 | 1916 | 199 | 18 | 1 | . | . | . | . | 2652 |
| 1.00-1.49 | . | . | 543 | 522 | 91 | 3 | . | . | . | . | 1159 |
| 1.50-1.99 | . | . | 23 | 342 | 131 | 22 | 1 | . | . | . | 519 |
| 2.00-2.49 | . | . | . | 125 | 84 | 29 | . | . | . | . | 238 |
| 2.50-2.99 | . | . | . | . | 151 | 24 | 2 | 1 | . | . | 178 |
| 3.00-3.49 | . | . | . | . | 17 | 103 | . | . | . | . | 120 |
| 3.50-3.99 | . | . | . | . | . | 74 | 10 | . | . | . | 84 |
| 4.00-4.49 | . | . | . | . | . | 10 | 28 | 2 | . | . | 40 |
| 4.50-4.99 | . | . | . | . | . | . | 16 | 8 | . | . | 24 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 8 | . | . | 11 |
| 5.50-5.99 | . | . | . | . | . | . | . | 9 | 1 | . | 10 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 131 | 1067 | 2698 | 1205 | 493 | 266 | 60 | 29 | 7 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.6 NO. OF CASES= 5586.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 313 | 839 | 328 | 18 | 1 | . | . | . | . | . | 1499 |
| 0.50-0.99 | . | 836 | 2127 | 268 | 27 | 4 | . | . | . | . | 3262 |
| 1.00-1.49 | . | . | 609 | 342 | 50 | 8 | 1 | . | . | . | 1010 |
| 1.50-1.99 | . | . | 24 | 322 | 74 | 13 | 1 | . | . | . | 434 |
| 2.00-2.49 | . | . | 2 | 120 | 81 | 25 | . | . | . | . | 228 |
| 2.50-2.99 | . | . | . | 4 | 181 | 48 | 3 | . | . | . | 236 |
| 3.00-3.49 | . | . | . | . | 14 | 142 | 2 | . | . | . | 158 |
| 3.50-3.99 | . | . | . | . | . | 75 | 28 | . | . | . | 103 |
| 4.00-4.49 | . | . | . | . | . | 6 | 45 | 4 | . | . | 55 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 7 | . | . | 15 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 7 | . | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 10 | . | . | 10 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 313 | 1675 | 3090 | 1074 | 428 | 321 | 89 | 29 | 1 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.4 NO. OF CASES= 6582.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 211 | 562 | 305 | 19 | 4 | . | . | . | . | . | 1101 |
| 0.50-0.99 | . | 557 | 576 | 152 | 48 | 5 | . | . | . | . | 1338 |
| 1.00-1.49 | . | . | 79 | 67 | 27 | 20 | . | . | . | . | 193 |
| 1.50-1.99 | . | . | 6 | 24 | 19 | 14 | 1 | . | . | . | 64 |
| 2.00-2.49 | . | . | 1 | 5 | 3 | 11 | 5 | 1 | . | . | 26 |
| 2.50-2.99 | . | . | . | 2 | 4 | 3 | . | . | . | . | 9 |
| 3.00-3.49 | . | . | . | . | . | 7 | . | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 211 | 1119 | 967 | 269 | 105 | 60 | 7 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 2572.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 209 | 690 | 389 | 31 | 3 | | . | . | . | . | 1322 |
| 0.50-0.99 | . | 574 | 336 | 171 | 52 | 12 | . | . | . | . | 1145 |
| 1.00-1.49 | . | . | 69 | 29 | 36 | 34 | 2 | . | . | . | 170 |
| 1.50-1.99 | . | . | 20 | 2 | 1 | 25 | 19 | . | . | . | 67 |
| 2.00-2.49 | . | . | . | . | 1 | 4 | 5 | 1 | . | . | 11 |
| 2.50-2.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 209 | 1264 | 814 | 233 | 93 | 75 | 27 | 1 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 2548.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 198 | 564 | 203 | 39 | 7 | | . | . | . | . | 1011 |
| 0.50-0.99 | . | 777 | 242 | 105 | 49 | 17 | . | . | . | . | 1190 |
| 1.00-1.49 | . | . | 102 | 13 | 7 | 13 | 6 | . | . | . | 141 |
| 1.50-1.99 | . | . | 54 | . | . | 10 | 7 | 2 | . | . | 73 |
| 2.00-2.49 | . | . | 3 | . | . | . | 1 | . | . | . | 4 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 198 | 1341 | 604 | 157 | 63 | 40 | 14 | 2 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 2272.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 221 | 551 | 192 | 22 | 2 | | . | . | . | . | 988 |
| 0.50-0.99 | . | 1251 | 352 | 93 | 33 | 7 | 1 | . | . | . | 1737 |
| 1.00-1.49 | . | . | 155 | 2 | 8 | 3 | . | . | . | . | 168 |
| 1.50-1.99 | . | . | 68 | 6 | . | . | . | . | . | . | 74 |
| 2.00-2.49 | . | . | 1 | 2 | . | . | . | . | . | . | 3 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 221 | 1802 | 768 | 125 | 43 | 10 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 2783.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 244 | 735 | 185 | 38 | 6 | 2 | . | . | . | . | 1210 |
| 0.50-0.99 | . | 1284 | 345 | 80 | 13 | 4 | . | . | . | . | 1726 |
| 1.00-1.49 | . | . | 321 | 6 | 5 | 2 | 1 | . | . | . | 335 |
| 1.50-1.99 | . | . | 118 | 5 | . | . | . | . | . | . | 123 |
| 2.00-2.49 | . | . | 1 | 6 | . | . | . | . | . | . | 7 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 244 | 2019 | 970 | 136 | 24 | 8 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 3189.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 436 | 1157 | 271 | 47 | 9 | 1 | . | . | . | . | 1921 |
| 0.50-0.99 | . | 2098 | 337 | 115 | 21 | 4 | . | . | . | . | 2575 |
| 1.00-1.49 | . | . | 1519 | 6 | 4 | 1 | . | . | . | . | 1530 |
| 1.50-1.99 | . | . | 459 | . | . | 1 | . | . | . | . | 460 |
| 2.00-2.49 | . | . | 10 | 53 | . | . | . | . | . | . | 63 |
| 2.50-2.99 | . | . | . | 5 | . | . | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 436 | 3255 | 2596 | 226 | 34 | 7 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 6136.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 374 | 1483 | 197 | 43 | 12 | . | . | . | . | . | 2109 |
| 0.50-0.99 | . | 3163 | 448 | 100 | 22 | 3 | . | . | . | . | 3736 |
| 1.00-1.49 | . | . | 1301 | 16 | 12 | 2 | . | . | . | . | 1331 |
| 1.50-1.99 | . | . | 434 | 32 | . | . | . | . | . | . | 466 |
| 2.00-2.49 | . | . | 9 | 132 | . | . | . | . | . | . | 141 |
| 2.50-2.99 | . | . | . | 20 | . | . | . | . | . | . | 20 |
| 3.00-3.49 | . | . | . | 3 | 1 | . | . | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 374 | 4646 | 2389 | 346 | 47 | 5 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 7308.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 241 | 1184 | 155 | 22 | 2 | . | . | . | . | . | 1604 |
| 0.50-0.99 | . | 1740 | 1758 | 119 | 23 | 6 | . | . | . | . | 3646 |
| 1.00-1.49 | . | . | 905 | 422 | 12 | 6 | 1 | . | . | . | 1346 |
| 1.50-1.99 | . | . | 671 | 360 | 4 | . | . | . | . | . | 1035 |
| 2.00-2.49 | . | . | 25 | 134 | 44 | . | . | . | . | . | 203 |
| 2.50-2.99 | . | . | . | 18 | 12 | 1 | . | . | . | . | 31 |
| 3.00-3.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 241 | 2924 | 3514 | 1077 | 97 | 13 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 7367.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 160 | 805 | 105 | 13 | 1 | . | . | . | . | . | 1084 |
| 0.50-0.99 | . | 940 | 1450 | 102 | 22 | 4 | . | . | . | . | 2518 |
| 1.00-1.49 | . | . | 790 | 208 | 20 | 11 | 1 | . | . | . | 1030 |
| 1.50-1.99 | . | . | 93 | 434 | 1 | 5 | 3 | . | . | . | 536 |
| 2.00-2.49 | . | . | 6 | 222 | 50 | 1 | . | . | . | . | 279 |
| 2.50-2.99 | . | . | . | 8 | 55 | 1 | . | . | . | . | 64 |
| 3.00-3.49 | . | . | . | . | 6 | 11 | . | . | . | . | 17 |
| 3.50-3.99 | . | . | . | . | . | 6 | . | . | . | . | 6 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 160 | 1745 | 2444 | 987 | 155 | 39 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 5185.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 189 | 819 | 133 | 12 | 2 | . | . | . | . | . | 1155 |
| 0.50-0.99 | . | 817 | 1982 | 194 | 45 | 11 | . | . | . | . | 3049 |
| 1.00-1.49 | . | . | 983 | 425 | 63 | 36 | 3 | . | . | . | 1510 |
| 1.50-1.99 | . | . | 99 | 480 | 36 | 29 | 2 | . | . | . | 646 |
| 2.00-2.49 | . | . | . | 256 | 72 | 3 | 4 | 2 | . | . | 337 |
| 2.50-2.99 | . | . | . | 17 | 163 | 1 | . | . | . | . | 181 |
| 3.00-3.49 | . | . | . | . | 32 | 52 | . | . | . | . | 84 |
| 3.50-3.99 | . | . | . | . | . | 25 | . | . | . | . | 25 |
| 4.00-4.49 | . | . | . | . | . | 10 | 3 | . | . | . | 13 |
| 4.50-4.99 | . | . | . | . | . | 1 | 4 | . | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 189 | 1636 | 3197 | 1384 | 413 | 168 | 17 | 2 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 6565.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 197 | 893 | 209 | 18 | 1 | . | . | . | . | . | 1318 |
| 0.50-0.99 | . | 814 | 2893 | 309 | 48 | 3 | . | . | . | . | 4067 |
| 1.00-1.49 | . | . | 1134 | 1050 | 188 | 28 | . | . | . | . | 2400 |
| 1.50-1.99 | . | . | 114 | 801 | 222 | 79 | 4 | . | . | . | 1220 |
| 2.00-2.49 | . | . | . | 329 | 188 | 70 | 7 | 2 | . | . | 596 |
| 2.50-2.99 | . | . | . | 6 | 392 | 44 | 12 | 5 | . | . | 459 |
| 3.00-3.49 | . | . | . | . | 55 | 217 | 5 | . | . | . | 277 |
| 3.50-3.99 | . | . | . | . | . | 115 | 6 | . | . | . | 121 |
| 4.00-4.49 | . | . | . | . | . | 19 | 35 | 1 | . | . | 55 |
| 4.50-4.99 | . | . | . | . | . | 1 | 14 | 7 | . | . | 22 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 8 | 1 | . | 11 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 1 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 197 | 1707 | 4350 | 2513 | 1094 | 576 | 85 | 26 | 2 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.8 NO. OF CASES= 9881.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 134 | 626 | 240 | 34 | 4 | . | 1 | . | . | . | 1039 |
| 0.50-0.99 | . | 592 | 2368 | 368 | 59 | 13 | 1 | . | . | . | 3401 |
| 1.00-1.49 | . | . | 722 | 1143 | 181 | 53 | 3 | . | . | . | 2102 |
| 1.50-1.99 | . | . | 84 | 579 | 443 | 109 | 11 | . | . | . | 1226 |
| 2.00-2.49 | . | . | . | 228 | 191 | 249 | 25 | 2 | . | . | 695 |
| 2.50-2.99 | . | . | . | 8 | 332 | 110 | 56 | 19 | . | . | 525 |
| 3.00-3.49 | . | . | . | . | 36 | 310 | 41 | 18 | . | . | 405 |
| 3.50-3.99 | . | . | . | . | 1 | 190 | 71 | 20 | 1 | . | 283 |
| 4.00-4.49 | . | . | . | . | . | 9 | 147 | 56 | 3 | . | 215 |
| 4.50-4.99 | . | . | . | . | . | 1 | 20 | 104 | 6 | . | 131 |
| 5.00-5.49 | . | . | . | . | . | . | . | 73 | 18 | 1 | 92 |
| 5.50-5.99 | . | . | . | . | . | . | . | 9 | 24 | . | 33 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 7 | 1 | 8 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | 2 | 5 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 3 | 4 |
| TOTAL | 134 | 1218 | 3414 | 2360 | 1247 | 1044 | 376 | 301 | 63 | 7 | |

MEAN HS(M) = 1.5 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 5.3 NO. OF CASES= 9529.

STATION S51 46.65N 86.43W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

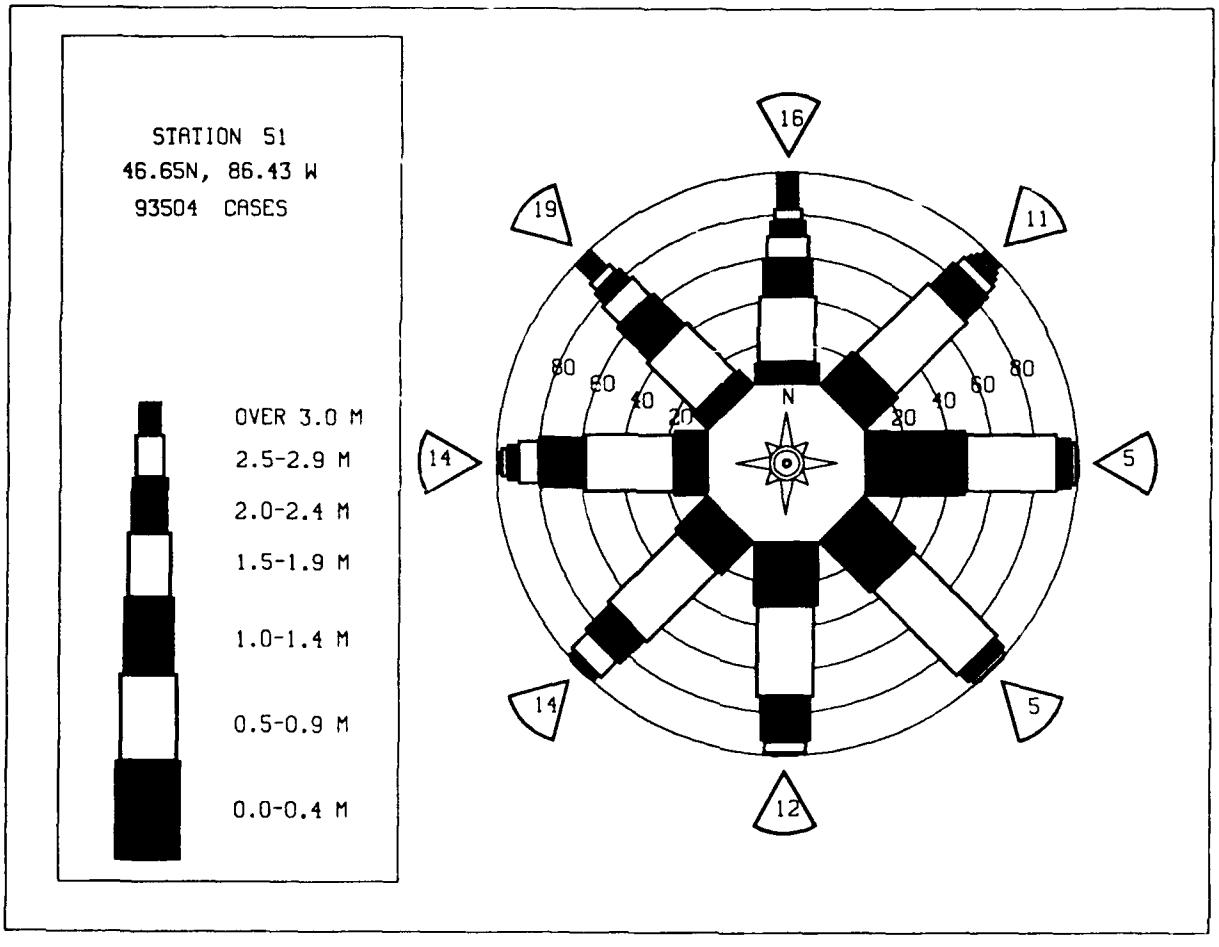
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 105 | 302 | 117 | 6 | 2 | . | . | . | . | . | 532 |
| 0.50-0.99 | . | 368 | 1251 | 212 | 19 | 1 | . | . | . | . | 1851 |
| 1.00-1.49 | . | . | 496 | 771 | 124 | 8 | . | . | . | . | 1399 |
| 1.50-1.99 | . | . | 83 | 489 | 344 | 71 | 1 | . | . | . | 988 |
| 2.00-2.49 | . | . | . | 227 | 145 | 219 | 3 | . | . | . | 594 |
| 2.50-2.99 | . | . | . | 7 | 324 | 114 | 41 | 5 | . | . | 491 |
| 3.00-3.49 | . | . | . | . | 26 | 298 | 31 | 12 | 1 | . | 368 |
| 3.50-3.99 | . | . | . | . | . | 262 | 87 | 20 | 1 | . | 370 |
| 4.00-4.49 | . | . | . | . | . | 18 | 193 | 59 | 3 | . | 273 |
| 4.50-4.99 | . | . | . | . | . | . | 57 | 135 | 6 | . | 198 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 100 | 22 | . | 123 |
| 5.50-5.99 | . | . | . | . | . | . | . | 14 | 57 | . | 71 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 33 | 1 | 35 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 14 | 2 | 16 |
| 7.00+ | . | . | . | . | . | . | . | . | 2 | 7 | 9 |
| TOTAL | 105 | 670 | 1947 | 1712 | 984 | 991 | 414 | 346 | 139 | 10 | |

MEAN HS(M) = 1.8 LARGEST HS(M)= 8.1 MEAN TP(SEC)= 5.7 NO. OF CASES= 6865.

STATION S51 46.65N 86.43W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 351 | 1238 | 344 | 40 | 6 | . | . | . | . | . | 1979 |
| 0.50-0.99 | . | 1686 | 2051 | 288 | 53 | 10 | . | . | . | . | 4088 |
| 1.00-1.49 | . | . | 1039 | 584 | 92 | 23 | 1 | . | . | . | 1739 |
| 1.50-1.99 | . | . | 244 | 453 | 157 | 43 | 5 | . | . | . | 902 |
| 2.00-2.49 | . | . | 6 | 218 | 107 | 77 | 5 | . | . | . | 413 |
| 2.50-2.99 | . | . | . | 11 | 207 | 44 | 13 | 3 | . | . | 278 |
| 3.00-3.49 | . | . | . | . | 23 | 157 | 8 | 3 | . | . | 191 |
| 3.50-3.99 | . | . | . | . | . | 108 | 26 | 4 | . | . | 138 |
| 4.00-4.49 | . | . | . | . | . | 12 | 70 | 16 | . | . | 98 |
| 4.50-4.99 | . | . | . | . | . | . | 25 | 36 | 1 | . | 62 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 32 | 4 | . | 37 |
| 5.50-5.99 | . | . | . | . | . | . | . | 10 | 12 | . | 22 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 9 | . | 9 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 7 | . | 7 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 3 | 4 |
| TOTAL | 351 | 2924 | 3684 | 1594 | 645 | 474 | 154 | 104 | 34 | 3 | |

MEAN HS(M)= 1.1 LARGEST HS(M)= 10.1 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.



## MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S51 (46.65N 86.43W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MONTH | | | | | | | |
| 1956 | 0.6 | 0.9 | 0.9 | 0.9 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 0.8 | 1.1 | 1.0 | 0.7 |
| 1957 | 2.1 | 1.7 | 1.4 | 1.1 | 1.1 | 0.9 | 0.9 | 1.0 | 1.3 | 1.2 | 1.5 | 1.8 | 1.3 |
| 1958 | 1.3 | 2.3 | 1.1 | 1.1 | 1.1 | 1.0 | 0.6 | 0.7 | 0.9 | 1.0 | 1.8 | 1.5 | 1.2 |
| 1959 | 1.0 | 0.9 | 0.9 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.7 | 0.8 | 1.2 | 1.1 | 0.8 |
| 1960 | 1.4 | 1.7 | 1.2 | 1.2 | 1.2 | 0.7 | 0.6 | 0.7 | 0.8 | 1.1 | 1.5 | 1.4 | 1.1 |
| 1961 | 1.2 | 1.1 | 1.4 | 0.9 | 0.9 | 0.8 | 0.5 | 0.6 | 1.0 | 1.3 | 1.3 | 1.3 | 1.0 |
| 1962 | 1.6 | 1.2 | 0.9 | 1.1 | 0.7 | 0.6 | 0.7 | 0.6 | 0.8 | 1.1 | 1.2 | 1.8 | 1.0 |
| 1963 | 1.4 | 1.7 | 1.6 | 1.1 | 0.9 | 0.7 | 0.7 | 0.8 | 0.9 | 1.0 | 1.7 | 1.6 | 1.2 |
| 1964 | 1.6 | 1.9 | 1.8 | 1.3 | 1.0 | 0.9 | 0.7 | 0.9 | 1.0 | 1.3 | 1.2 | 1.3 | 1.2 |
| 1965 | 1.7 | 1.8 | 1.5 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 1.5 | 1.6 | 1.6 | 1.2 |
| 1966 | 1.5 | 1.7 | 2.0 | 1.1 | 1.2 | 0.8 | 0.8 | 0.7 | 1.0 | 1.5 | 2.2 | 1.9 | 1.3 |
| 1967 | 1.9 | 2.0 | 1.4 | 1.1 | 1.0 | 0.7 | 0.7 | 0.9 | 1.0 | 1.3 | 1.4 | 1.4 | 1.2 |
| 1968 | 1.4 | 2.6 | 1.6 | 1.1 | 0.9 | 0.7 | 0.7 | 0.8 | 0.8 | 1.3 | 1.7 | 1.9 | 1.3 |
| 1969 | 1.8 | 1.5 | 1.9 | 1.3 | 1.0 | 0.7 | 0.7 | 0.8 | 1.0 | 1.5 | 1.4 | 1.7 | 1.3 |
| 1970 | 1.9 | 2.1 | 1.4 | 1.4 | 1.2 | 0.8 | 0.8 | 0.8 | 1.1 | 1.2 | 1.8 | 1.5 | 1.3 |
| 1971 | 1.3 | 1.1 | 1.3 | 0.9 | 0.7 | 0.4 | 0.6 | 0.5 | 0.6 | 0.8 | 1.1 | 1.1 | 0.9 |
| 1972 | 1.4 | 1.1 | 1.2 | 0.7 | 0.4 | 0.6 | 0.7 | 0.7 | 1.2 | 1.5 | 1.1 | 1.5 | 1.0 |
| 1973 | 1.4 | 1.4 | 1.7 | 1.4 | 1.1 | 0.6 | 0.8 | 0.8 | 1.0 | 1.1 | 1.6 | 1.5 | 1.2 |
| 1974 | 1.1 | 1.1 | 1.2 | 1.2 | 0.7 | 0.7 | 0.6 | 0.6 | 0.9 | 1.2 | 1.2 | 1.4 | 1.0 |
| 1975 | 1.5 | 1.0 | 1.4 | 1.0 | 0.6 | 0.7 | 0.7 | 0.6 | 0.9 | 1.1 | 1.6 | 1.4 | 1.1 |
| 1976 | 1.6 | 1.6 | 1.7 | 1.4 | 0.9 | 0.7 | 0.7 | 0.8 | 1.1 | 0.9 | 1.4 | 1.5 | 1.2 |
| 1977 | 1.6 | 1.6 | 1.2 | 0.9 | 0.6 | 0.9 | 0.7 | 0.7 | 0.9 | 1.2 | 1.3 | 1.3 | 1.1 |
| 1978 | 2.1 | 1.3 | 1.1 | 1.0 | 1.0 | 0.7 | 0.7 | 0.8 | 0.8 | 1.2 | 1.3 | 1.3 | 1.1 |
| 1979 | 1.8 | 1.3 | 1.5 | 0.8 | 0.8 | 0.8 | 0.6 | 0.8 | 1.1 | 1.4 | 1.5 | 1.5 | 1.1 |
| 1980 | 1.3 | 1.1 | 1.3 | 1.1 | 0.7 | 0.7 | 0.5 | 0.6 | 0.9 | 1.2 | 0.9 | 1.2 | 1.0 |
| 1981 | 1.0 | 1.2 | 1.4 | 1.1 | 0.9 | 0.7 | 0.5 | 0.4 | 0.9 | 1.1 | 1.4 | 1.3 | 1.0 |
| 1982 | 2.0 | 1.3 | 1.7 | 1.4 | 0.7 | 0.7 | 0.7 | 0.6 | 1.1 | 1.2 | 1.3 | 1.4 | 1.2 |
| 1983 | 1.6 | 1.3 | 2.0 | 1.0 | 1.0 | 0.7 | 0.6 | 0.7 | 0.8 | 1.0 | 1.6 | 1.6 | 1.2 |
| 1984 | 1.4 | 1.6 | 1.8 | 1.1 | 0.9 | 0.7 | 0.6 | 0.6 | 0.9 | 1.0 | 1.7 | 1.6 | 1.2 |
| 1985 | 1.6 | 1.6 | 1.5 | 1.0 | 0.5 | 0.6 | 0.5 | 0.6 | 0.8 | 0.9 | 1.2 | 1.5 | 1.0 |
| 1986 | 1.7 | 0.9 | 1.4 | 1.1 | 0.7 | 0.7 | 0.5 | 0.5 | 0.6 | 0.9 | 1.1 | 1.2 | 0.9 |
| 1987 | 1.4 | 1.1 | 1.3 | 0.9 | 0.6 | 0.4 | 0.5 | 0.6 | 0.6 | 1.2 | 1.1 | 1.4 | 0.9 |
| MEAN | 1.5 | 1.5 | 1.4 | 1.1 | 0.8 | 0.7 | 0.6 | 0.7 | 0.9 | 1.2 | 1.4 | 1.5 | |

## LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S51 (46.65N 86.43W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MONTH | | | | | | |
| 1956 | 1.8 | 4.1 | 3.3 | 3.4 | 2.0 | 1.7 | 1.5 | 1.7 | 2.8 | 4.5 | 4.0 | 3.8 |
| 1957 | 5.8 | 5.8 | 4.4 | 4.6 | 3.6 | 3.7 | 3.9 | 3.2 | 4.8 | 4.1 | 6.9 | 6.4 |
| 1958 | 5.4 | 5.3 | 3.8 | 4.1 | 3.6 | 3.7 | 2.4 | 2.7 | 3.6 | 3.7 | 5.7 | 4.4 |
| 1959 | 3.5 | 3.7 | 4.6 | 2.5 | 3.0 | 1.9 | 1.4 | 1.5 | 3.6 | 3.8 | 4.4 | 5.0 |
| 1960 | 4.8 | 6.7 | 4.8 | 3.5 | 4.7 | 2.9 | 2.7 | 2.5 | 2.8 | 6.4 | 5.8 | 4.0 |
| 1961 | 6.5 | 4.3 | 5.6 | 3.6 | 3.4 | 3.4 | 2.5 | 2.5 | 3.6 | 4.9 | 4.6 | 4.5 |
| 1962 | 4.7 | 5.1 | 3.7 | 4.2 | 3.2 | 2.0 | 2.9 | 3.6 | 2.7 | 5.1 | 3.8 | 5.7 |
| 1963 | 3.9 | 6.0 | 6.9 | 5.3 | 3.2 | 2.9 | 2.5 | 3.4 | 3.8 | 3.5 | 5.9 | 7.1 |
| 1964 | 5.7 | 5.6 | 5.8 | 4.6 | 3.7 | 4.1 | 2.7 | 3.0 | 4.0 | 6.6 | 4.3 | 4.4 |
| 1965 | 5.5 | 5.9 | 5.9 | 3.7 | 2.6 | 2.5 | 2.4 | 3.4 | 2.8 | 5.7 | 5.6 | 6.9 |
| 1966 | 4.7 | 4.9 | 6.5 | 3.8 | 4.6 | 2.9 | 2.8 | 3.6 | 3.8 | 5.5 | 10.1 | 5.1 |
| 1967 | 6.0 | 5.9 | 5.3 | 4.6 | 4.2 | 2.5 | 3.4 | 3.3 | 4.0 | 4.1 | 5.0 | 3.9 |
| 1968 | 5.7 | 7.6 | 7.1 | 5.5 | 3.4 | 2.9 | 2.7 | 3.2 | 2.8 | 5.8 | 6.6 | 6.1 |
| 1969 | 6.1 | 6.9 | 7.0 | 4.5 | 3.5 | 2.4 | 3.0 | 2.9 | 3.5 | 5.0 | 4.8 | 7.1 |
| 1970 | 6.5 | 6.2 | 5.0 | 5.0 | 4.8 | 3.2 | 4.0 | 3.1 | 4.6 | 4.5 | 6.4 | 7.1 |
| 1971 | 5.5 | 5.3 | 5.2 | 3.5 | 1.9 | 1.2 | 2.3 | 2.0 | 2.5 | 3.4 | 4.7 | 5.0 |
| 1972 | 6.5 | 5.3 | 4.7 | 3.2 | 1.8 | 1.8 | 2.7 | 3.2 | 4.5 | 7.9 | 4.2 | 7.0 |
| 1973 | 5.7 | 4.5 | 7.2 | 4.3 | 4.6 | 1.7 | 2.3 | 3.5 | 4.3 | 5.3 | 5.5 | 4.8 |
| 1974 | 5.1 | 6.3 | 4.4 | 4.4 | 2.3 | 2.2 | 2.4 | 2.0 | 3.4 | 4.6 | 5.0 | 6.9 |
| 1975 | 5.5 | 3.7 | 4.9 | 2.9 | 2.1 | 2.9 | 1.9 | 2.4 | 3.0 | 4.3 | 7.0 | 5.5 |
| 1976 | 6.0 | 6.5 | 6.3 | 4.6 | 3.5 | 2.7 | 2.3 | 3.1 | 3.7 | 3.2 | 4.7 | 6.0 |
| 1977 | 5.1 | 5.3 | 5.1 | 5.0 | 2.7 | 3.3 | 3.5 | 3.0 | 4.8 | 3.8 | 6.6 | 4.4 |
| 1978 | 9.7 | 5.2 | 5.0 | 5.4 | 4.7 | 2.8 | 2.6 | 2.4 | 2.5 | 4.3 | 4.6 | 4.2 |
| 1979 | 4.8 | 4.9 | 8.0 | 5.1 | 2.9 | 3.2 | 2.4 | 3.8 | 3.1 | 5.7 | 4.2 | 5.0 |
| 1980 | 4.7 | 4.4 | 5.1 | 4.7 | 3.3 | 2.9 | 1.7 | 1.8 | 3.9 | 5.3 | 4.3 | 4.6 |
| 1981 | 3.8 | 4.8 | 4.8 | 4.2 | 4.1 | 2.6 | 1.7 | 2.2 | 4.6 | 5.0 | 5.6 | 4.3 |
| 1982 | 8.0 | 4.8 | 5.8 | 6.4 | 3.1 | 2.8 | 3.1 | 2.1 | 4.3 | 5.6 | 5.6 | 4.5 |
| 1983 | 6.8 | 6.7 | 7.5 | 3.0 | 3.3 | 2.5 | 2.1 | 2.7 | 2.8 | 4.3 | 4.8 | 5.7 |
| 1984 | 4.8 | 6.5 | 7.3 | 5.1 | 3.6 | 2.7 | 2.0 | 2.4 | 2.0 | 3.8 | 5.0 | 5.7 |
| 1985 | 5.6 | 6.1 | 5.4 | 5.7 | 2.6 | 3.6 | 1.4 | 2.1 | 2.3 | 3.4 | 4.1 | 8.7 |
| 1986 | 7.1 | 4.0 | 6.9 | 4.8 | 3.8 | 2.5 | 1.6 | 2.7 | 2.6 | 4.5 | 3.2 | 4.1 |
| 1987 | 5.1 | 8.4 | 6.1 | 4.1 | 2.8 | 1.7 | 1.5 | 2.8 | 3.2 | 6.4 | 5.2 | 5.7 |

## 32 YR. STATISTICS FOR WIS STATION S51

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.1 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.4 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.9 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.5 |
| LARGEST WAVE HS | (METERS) | 10.1 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 1.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66112812 |

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 150 | 641 | 240 | 6 | . | . | . | . | . | . | 1037 |
| 0.50-0.99 | . | 464 | 2277 | 250 | 10 | 1 | . | . | . | . | 3002 |
| 1.00-1.49 | . | . | 639 | 873 | 93 | 3 | . | . | . | . | 1608 |
| 1.50-1.99 | . | . | 55 | 574 | 257 | 41 | . | . | . | . | 927 |
| 2.00-2.49 | . | . | . | 255 | 186 | 131 | . | . | . | . | 572 |
| 2.50-2.99 | . | . | . | 7 | 361 | 60 | 7 | 1 | . | . | 436 |
| 3.00-3.49 | . | . | . | . | 36 | 379 | 8 | 2 | . | . | 425 |
| 3.50-3.99 | . | . | . | . | . | 275 | 60 | 2 | . | . | 337 |
| 4.00-4.49 | . | . | . | . | . | 22 | 199 | 7 | . | . | 228 |
| 4.50-4.99 | . | . | . | . | . | . | 71 | 48 | 1 | . | 120 |
| 5.00-5.49 | . | . | . | . | . | . | 9 | 62 | 3 | . | 74 |
| 5.50-5.99 | . | . | . | . | . | . | . | 41 | 8 | . | 49 |
| 6.00-6.49 | . | . | . | . | . | . | . | 5 | 11 | . | 16 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 7 | . | 7 |
| 7.00+ | . | . | . | . | . | . | . | . | 9 | 4 | 13 |
| TOTAL | 150 | 1105 | 3211 | 1965 | 943 | 912 | 354 | 168 | 39 | 4 | |

MEAN HS(M) = 1.5 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 5.2 NO. OF CASES= 8298.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 152 | 758 | 285 | 7 | . | . | . | . | . | . | 1202 |
| 0.50-0.99 | . | 528 | 2209 | 212 | 14 | . | . | . | . | . | 2963 |
| 1.00-1.49 | . | . | 490 | 496 | 51 | 4 | . | . | . | . | 1041 |
| 1.50-1.99 | . | . | 21 | 314 | 89 | 7 | . | . | . | . | 431 |
| 2.00-2.49 | . | . | . | 99 | 86 | 18 | . | . | . | . | 203 |
| 2.50-2.99 | . | . | . | 1 | 134 | 23 | . | . | . | . | 158 |
| 3.00-3.49 | . | . | . | . | 18 | 109 | . | . | . | . | 127 |
| 3.50-3.99 | . | . | . | . | . | 73 | 2 | . | . | . | 75 |
| 4.00-4.49 | . | . | . | . | . | 12 | 23 | 1 | . | . | 36 |
| 4.50-4.99 | . | . | . | . | . | . | 10 | 4 | . | . | 14 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 8 | . | . | 10 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 152 | 1286 | 3005 | 1129 | 392 | 246 | 37 | 16 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 5871.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 177 | 761 | 223 | 7 | . | . | . | . | . | . | 1168 |
| 0.50-0.99 | . | 405 | 1620 | 121 | 4 | 1 | . | . | . | . | 2151 |
| 1.00-1.49 | . | . | 388 | 449 | 36 | 3 | . | . | . | . | 876 |
| 1.50-1.99 | . | . | 22 | 242 | 97 | 2 | . | . | . | . | 363 |
| 2.00-2.49 | . | . | . | 94 | 77 | 21 | . | . | . | . | 192 |
| 2.50-2.99 | . | . | . | 2 | 137 | 25 | . | . | . | . | 164 |
| 3.00-3.49 | . | . | . | . | 4 | 110 | . | . | . | . | 114 |
| 3.50-3.99 | . | . | . | . | . | 72 | 3 | . | . | . | 75 |
| 4.00-4.49 | . | . | . | . | . | 2 | 18 | . | . | . | 20 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 2 | . | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 4 | . | . | 7 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 177 | 1166 | 2253 | 915 | 355 | 236 | 31 | 6 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.4 NO. OF CASES= 4816.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 111 | 551 | 160 | 5 | . | . | . | . | . | . | 827 |
| 0.50-0.99 | . | 288 | 1205 | 73 | 2 | 2 | . | . | . | . | 1570 |
| 1.00-1.49 | . | . | 224 | 320 | 16 | . | . | . | . | . | 560 |
| 1.50-1.99 | . | . | 9 | 161 | 83 | 2 | . | . | . | . | 255 |
| 2.00-2.49 | . | . | . | 38 | 39 | 31 | . | . | . | . | 108 |
| 2.50-2.99 | . | . | . | 1 | 59 | 29 | . | . | . | . | 89 |
| 3.00-3.49 | . | . | . | . | . | 69 | . | 1 | . | . | 70 |
| 3.50-3.99 | . | . | . | . | . | 39 | 3 | . | . | . | 42 |
| 4.00-4.49 | . | . | . | . | . | . | 10 | . | . | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 1 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 111 | 839 | 1598 | 598 | 199 | 172 | 16 | 3 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.4 NO. OF CASES= 3318.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 90 | 487 | 133 | 3 | . | . | . | . | . | . | 713 |
| 0.50-0.99 | . | 254 | 1100 | 82 | 3 | . | . | . | . | . | 1439 |
| 1.00-1.49 | . | . | 209 | 353 | 20 | 1 | . | . | . | . | 583 |
| 1.50-1.99 | . | . | 8 | 125 | 100 | . | . | . | . | . | 233 |
| 2.00-2.49 | . | . | . | 29 | 47 | 36 | . | . | . | . | 112 |
| 2.50-2.99 | . | . | . | 1 | 40 | 26 | . | . | . | . | 67 |
| 3.00-3.49 | . | . | . | . | 2 | 57 | 4 | . | . | . | 63 |
| 3.50-3.99 | . | . | . | . | . | 28 | 8 | . | . | . | 36 |
| 4.00-4.49 | . | . | . | . | . | . | 18 | . | . | . | 18 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 90 | 741 | 1450 | 593 | 212 | 148 | 31 | 3 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.5 NO. OF CASES= 3068.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 70 | 403 | 97 | 5 | . | . | . | . | . | . | 575 |
| 0.50-0.99 | . | 385 | 839 | 117 | 3 | . | . | . | . | . | 1344 |
| 1.00-1.49 | . | . | 175 | 259 | 38 | . | . | . | . | . | 472 |
| 1.50-1.99 | . | . | 21 | 85 | 79 | 4 | . | . | . | . | 189 |
| 2.00-2.49 | . | . | 1 | 20 | 34 | 13 | . | . | . | . | 68 |
| 2.50-2.99 | . | . | . | 1 | 13 | 10 | . | . | . | . | 24 |
| 3.00-3.49 | . | . | . | . | 1 | 9 | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | . | 4 | 5 | . | . | . | 9 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 70 | 788 | 1133 | 487 | 168 | 40 | 7 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 2529.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 120 | 656 | 189 | 9 | 1 | . | . | . | . | . | 975 |
| 0.50-0.99 | . | 889 | 913 | 225 | 5 | 1 | . | . | . | . | 2033 |
| 1.00-1.49 | . | . | 281 | 288 | 68 | 1 | . | . | . | . | 638 |
| 1.50-1.99 | . | . | 128 | 56 | 83 | 6 | . | . | . | . | 273 |
| 2.00-2.49 | . | . | 3 | 11 | 18 | 11 | . | . | . | . | 43 |
| 2.50-2.99 | . | . | . | . | . | 3 | 1 | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 120 | 1545 | 1514 | 589 | 175 | 23 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 3719.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 152 | 817 | 240 | 9 | . | . | . | . | . | . | 1218 |
| 0.50-0.99 | . | 957 | 1006 | 233 | 4 | 1 | . | . | . | . | 2201 |
| 1.00-1.49 | . | . | 302 | 314 | 72 | 3 | . | . | . | . | 691 |
| 1.50-1.99 | . | . | 118 | 51 | 79 | 13 | . | . | . | . | 261 |
| 2.00-2.49 | . | . | 11 | 9 | 5 | 3 | . | . | . | . | 28 |
| 2.50-2.99 | . | . | . | 1 | 1 | 2 | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 152 | 1774 | 1677 | 617 | 161 | 22 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 4127.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 191 | 1028 | 305 | 22 | 1 | . | . | . | . | . | 1547 |
| 0.50-0.99 | . | 887 | 1111 | 231 | 14 | 3 | . | . | . | . | 2246 |
| 1.00-1.49 | . | 1 | 424 | 232 | 79 | 4 | . | . | . | . | 740 |
| 1.50-1.99 | . | . | 187 | 47 | 48 | 4 | . | . | . | . | 286 |
| 2.00-2.49 | . | . | 22 | 11 | 3 | 4 | . | . | . | . | 40 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 191 | 1916 | 2049 | 543 | 145 | 15 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 4551.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 182 | 1228 | 266 | 18 | . | . | . | . | . | . | 1694 |
| 0.50-0.99 | . | 1646 | 1087 | 190 | 10 | 1 | . | . | . | . | 2934 |
| 1.00-1.49 | . | . | 967 | 174 | 14 | 1 | . | . | . | . | 1156 |
| 1.50-1.99 | . | . | 356 | 79 | 27 | 3 | . | . | . | . | 465 |
| 2.00-2.49 | . | . | 23 | 83 | 5 | 7 | . | . | . | . | 118 |
| 2.50-2.99 | . | . | . | 14 | 10 | . | . | . | . | . | 24 |
| 3.00-3.49 | . | . | . | 1 | 6 | . | . | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 182 | 2874 | 2699 | 559 | 72 | 14 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 5996.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 120 | 1002 | 375 | 13 | . | . | . | . | . | . | 1510 |
| 0.50-0.99 | . | 895 | 2641 | 242 | 16 | 2 | . | . | . | . | 3796 |
| 1.00-1.49 | . | . | 1009 | 793 | 42 | . | . | . | . | . | 1844 |
| 1.50-1.99 | . | . | 183 | 571 | 226 | 1 | . | . | . | . | 981 |
| 2.00-2.49 | . | . | . | 424 | 86 | 36 | . | . | . | . | 546 |
| 2.50-2.99 | . | . | . | 103 | 51 | 21 | 1 | . | . | . | 176 |
| 3.00-3.49 | . | . | . | . | 38 | 4 | . | . | . | . | 42 |
| 3.50-3.99 | . | . | . | . | 2 | 2 | . | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 120 | 1897 | 4208 | 2146 | 461 | 67 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.4 NO. OF CASES= 8333.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 118 | 644 | 202 | 7 | . | . | . | . | . | . | 971 |
| 0.50-0.99 | . | 395 | 1915 | 134 | 16 | 2 | . | . | . | . | 2462 |
| 1.00-1.49 | . | . | 762 | 420 | 20 | 7 | 1 | . | . | . | 1210 |
| 1.50-1.99 | . | . | 68 | 434 | 28 | 2 | . | . | . | . | 532 |
| 2.00-2.49 | . | . | . | 151 | 130 | 2 | . | . | . | . | 283 |
| 2.50-2.99 | . | . | . | 31 | 91 | 12 | . | . | . | . | 134 |
| 3.00-3.49 | . | . | . | . | 22 | 32 | . | . | . | . | 54 |
| 3.50-3.99 | . | . | . | . | 4 | 8 | . | . | . | . | 12 |
| 4.00-4.49 | . | . | . | . | . | 6 | 2 | . | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 1 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 118 | 1039 | 2947 | 1177 | 311 | 71 | 5 | 3 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.4 NO. OF CASES= 5315.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 119 | 793 | 202 | 2 | . | . | . | . | . | . | 1116 |
| 0.50-0.99 | . | 501 | 2353 | 182 | 16 | 3 | . | . | . | . | 3055 |
| 1.00-1.49 | . | . | 790 | 760 | 64 | 17 | . | . | . | . | 1631 |
| 1.50-1.99 | . | . | 52 | 493 | 147 | 21 | 4 | . | . | . | 717 |
| 2.00-2.49 | . | . | . | 157 | 126 | 39 | 3 | . | . | . | 325 |
| 2.50-2.99 | . | . | . | 3 | 203 | 45 | . | . | . | . | 251 |
| 3.00-3.49 | . | . | . | . | 13 | 137 | . | . | . | . | 150 |
| 3.50-3.99 | . | . | . | . | . | 56 | 1 | . | . | . | 57 |
| 4.00-4.49 | . | . | . | . | . | 9 | 24 | . | . | . | 33 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | . | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 3 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 119 | 1294 | 3397 | 1597 | 569 | 327 | 38 | 4 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.6 NO. OF CASES= 6881.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 131 | 945 | 346 | 22 | 4 | . | . | . | . | . | 1448 |
| 0.50-0.99 | . | 614 | 3207 | 351 | 36 | 5 | 1 | . | . | . | 4214 |
| 1.00-1.49 | . | 1 | 932 | 1279 | 182 | 40 | 1 | . | . | . | 2435 |
| 1.50-1.99 | . | . | 84 | 596 | 318 | 71 | 2 | . | . | . | 1071 |
| 2.00-2.49 | . | . | . | 220 | 198 | 152 | 10 | . | . | . | 580 |
| 2.50-2.99 | . | . | . | 5 | 273 | 98 | 14 | 5 | . | . | 395 |
| 3.00-3.49 | . | . | . | . | 14 | 293 | 8 | 8 | 1 | . | 324 |
| 3.50-3.99 | . | . | . | . | . | 175 | 37 | 3 | . | . | 215 |
| 4.00-4.49 | . | . | . | . | . | 19 | 73 | 8 | . | . | 100 |
| 4.50-4.99 | . | . | . | . | . | 1 | 27 | 31 | 2 | . | 61 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 21 | 4 | . | 26 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 5 | . | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 131 | 1560 | 4569 | 2473 | 1025 | 854 | 174 | 78 | 15 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.9 NO. OF CASES= 10194.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 91 | 645 | 398 | 56 | 11 | . | . | . | . | . | 1201 |
| 0.50-0.99 | . | 499 | 2442 | 462 | 99 | 14 | . | . | . | . | 3516 |
| 1.00-1.49 | . | 1 | 678 | 1163 | 248 | 47 | 2 | . | . | . | 2139 |
| 1.50-1.99 | . | . | 54 | 534 | 456 | 144 | 4 | . | . | . | 1192 |
| 2.00-2.49 | . | . | . | 196 | 164 | 285 | 21 | . | . | 1 | 667 |
| 2.50-2.99 | . | . | . | 4 | 252 | 121 | 71 | 19 | . | . | 467 |
| 3.00-3.49 | . | . | . | . | 25 | 273 | 40 | 21 | . | . | 359 |
| 3.50-3.99 | . | . | . | . | . | 146 | 104 | 26 | 1 | . | 277 |
| 4.00-4.49 | . | . | . | . | . | 5 | 130 | 64 | 3 | . | 202 |
| 4.50-4.99 | . | . | . | . | . | . | 16 | 89 | 4 | . | 109 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 66 | 19 | . | 86 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 14 | . | 16 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 6 | . | 6 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| TOTAL | 91 | 1145 | 3572 | 2415 | 1255 | 1035 | 389 | 287 | 51 | 3 | |

MEAN HS(M) = 1.4 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 5.3 NO. OF CASES= 9601.

STATION S52 46.80N 86.22W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

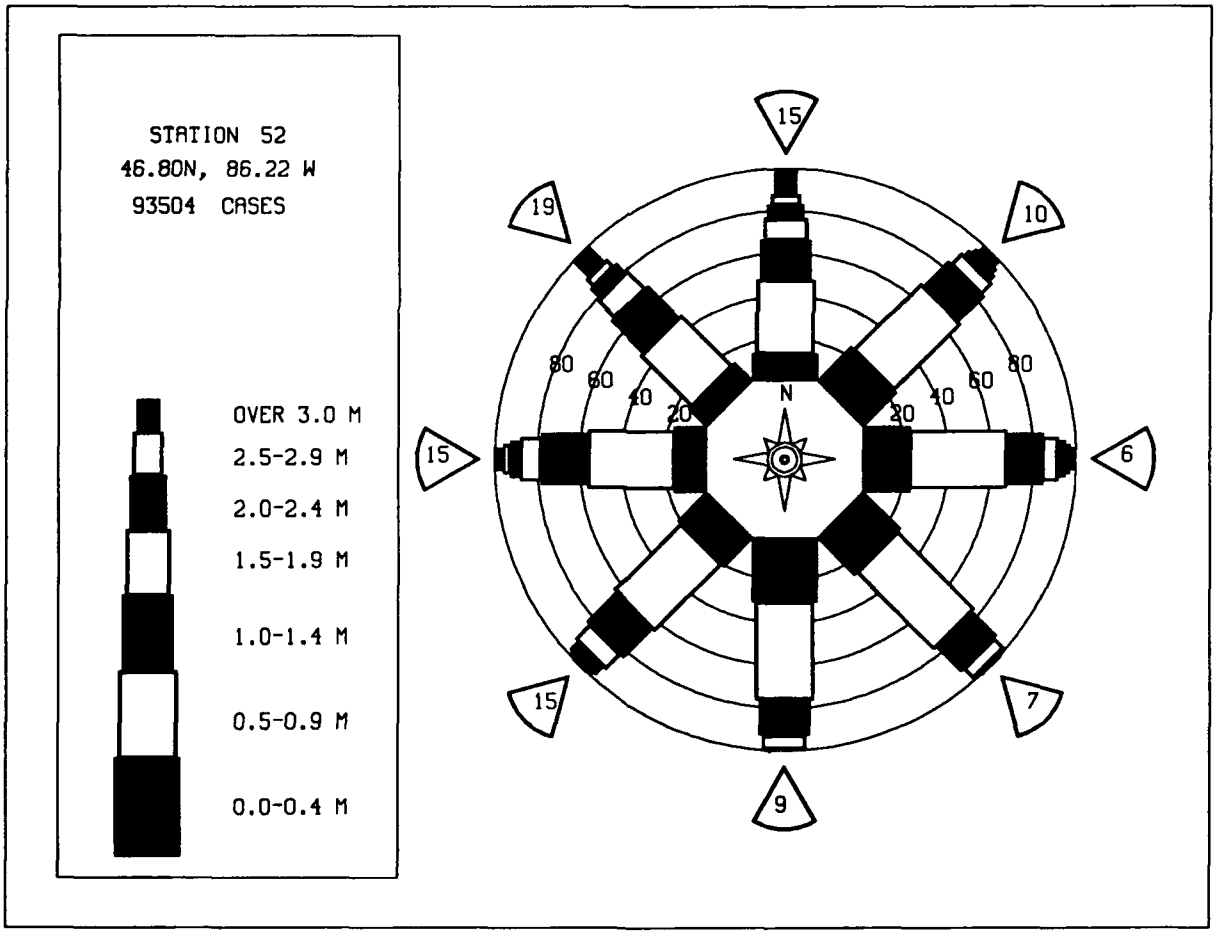
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 82 | 464 | 154 | 3 | . | . | . | . | . | . | 703 |
| 0.50-0.99 | . | 300 | 1463 | 201 | 16 | . | . | . | . | . | 1980 |
| 1.00-1.49 | . | . | 518 | 867 | 115 | 3 | . | . | . | . | 1503 |
| 1.50-1.99 | . | . | 63 | 468 | 389 | 62 | . | . | . | . | 982 |
| 2.00-2.49 | . | . | . | 211 | 163 | 213 | 3 | . | . | . | 590 |
| 2.50-2.99 | . | . | . | 8 | 311 | 103 | 40 | 3 | . | . | 465 |
| 3.00-3.49 | . | . | . | . | 20 | 290 | 28 | 16 | 1 | . | 355 |
| 3.50-3.99 | . | . | . | . | 1 | 185 | 86 | 10 | . | . | 282 |
| 4.00-4.49 | . | . | . | . | . | 13 | 149 | 43 | 1 | . | 206 |
| 4.50-4.99 | . | . | . | . | . | . | 25 | 109 | 5 | . | 139 |
| 5.00-5.49 | . | . | . | . | . | . | . | 71 | 12 | . | 83 |
| 5.50-5.99 | . | . | . | . | . | . | . | 14 | 22 | . | 36 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 16 | . | 16 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| TOTAL | 82 | 764 | 2198 | 1758 | 1015 | 869 | 331 | 266 | 62 | 1 | |

MEAN HS(M) = 1.6 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 5.5 NO. OF CASES= 6887.

STATION S52 46.80N 86.22W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 206 | 1183 | 382 | 20 | 1 | . | . | . | . | . | 1792 |
| 0.50-0.99 | . | 991 | 2739 | 331 | 27 | 3 | . | . | . | . | 4091 |
| 1.00-1.49 | . | . | 879 | 904 | 116 | 13 | . | . | . | . | 1912 |
| 1.50-1.99 | . | . | 143 | 483 | 251 | 38 | 1 | . | . | . | 916 |
| 2.00-2.49 | . | . | 6 | 201 | 137 | 100 | 3 | . | . | . | 447 |
| 2.50-2.99 | . | . | . | 18 | 194 | 58 | 13 | 2 | . | . | 285 |
| 3.00-3.49 | . | . | . | . | 20 | 176 | 9 | 4 | . | . | 209 |
| 3.50-3.99 | . | . | . | . | . | 106 | 31 | 4 | . | . | 141 |
| 4.00-4.49 | . | . | . | . | . | 9 | 65 | 12 | . | . | 86 |
| 4.50-4.99 | . | . | . | . | . | . | 17 | 28 | 1 | . | 46 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 24 | 3 | . | 28 |
| 5.50-5.99 | . | . | . | . | . | . | . | 6 | 5 | . | 11 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 206 | 2174 | 4149 | 1957 | 746 | 503 | 140 | 80 | 14 | 0 | |

MEAN HS(M)= 1.1 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 4.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S52 (46.80N 86.22W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.8 | 1.1 | 1.0 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 1.0 | 1.2 | 1.2 | 0.9 |
| 1957 | 2.0 | 1.6 | 1.3 | 1.1 | 1.1 | 0.9 | 0.8 | 0.9 | 1.3 | 1.1 | 1.5 | 1.9 | 1.3 |
| 1958 | 1.4 | 2.2 | 1.0 | 1.2 | 1.0 | 0.9 | 0.6 | 0.6 | 0.9 | 1.0 | 2.0 | 1.5 | 1.2 |
| 1959 | 1.2 | 1.2 | 1.0 | 0.9 | 0.9 | 0.6 | 0.5 | 0.5 | 0.8 | 1.0 | 1.4 | 1.5 | 1.0 |
| 1960 | 1.4 | 1.6 | 1.1 | 1.1 | 1.1 | 0.6 | 0.6 | 0.6 | 0.7 | 1.1 | 1.6 | 1.4 | 1.1 |
| 1961 | 1.1 | 1.1 | 1.5 | 0.9 | 0.9 | 0.7 | 0.5 | 0.6 | 1.0 | 1.2 | 1.3 | 1.3 | 1.0 |
| 1962 | 1.7 | 1.3 | 0.9 | 1.1 | 0.7 | 0.5 | 0.6 | 0.6 | 0.8 | 1.0 | 1.2 | 1.7 | 1.0 |
| 1963 | 1.4 | 1.6 | 1.5 | 1.1 | 0.8 | 0.7 | 0.7 | 0.7 | 0.8 | 1.0 | 1.6 | 1.6 | 1.1 |
| 1964 | 1.7 | 1.8 | 1.7 | 1.3 | 1.0 | 0.8 | 0.6 | 0.9 | 1.0 | 1.2 | 1.3 | 1.3 | 1.2 |
| 1965 | 1.8 | 1.8 | 1.4 | 0.9 | 0.8 | 0.8 | 0.7 | 0.7 | 0.8 | 1.5 | 1.7 | 1.7 | 1.2 |
| 1966 | 1.6 | 1.7 | 2.0 | 1.1 | 1.1 | 0.7 | 0.8 | 0.7 | 1.0 | 1.5 | 2.0 | 1.9 | 1.3 |
| 1967 | 1.9 | 2.0 | 1.4 | 1.1 | 1.0 | 0.7 | 0.7 | 0.8 | 1.0 | 1.3 | 1.4 | 1.5 | 1.2 |
| 1968 | 1.5 | 2.5 | 1.6 | 1.1 | 0.9 | 0.7 | 0.7 | 0.8 | 0.8 | 1.3 | 1.8 | 1.9 | 1.3 |
| 1969 | 1.8 | 1.4 | 1.7 | 1.2 | 0.9 | 0.7 | 0.6 | 0.8 | 1.0 | 1.5 | 1.4 | 1.7 | 1.2 |
| 1970 | 1.8 | 2.0 | 1.4 | 1.4 | 1.1 | 0.8 | 0.8 | 0.8 | 1.1 | 1.2 | 1.7 | 1.6 | 1.3 |
| 1971 | 1.5 | 1.5 | 1.5 | 1.0 | 0.8 | 0.5 | 0.6 | 0.6 | 0.7 | 1.0 | 1.2 | 1.4 | 1.0 |
| 1972 | 1.6 | 1.3 | 1.4 | 0.8 | 0.8 | 0.6 | 0.7 | 0.7 | 1.2 | 1.5 | 1.2 | 1.6 | 1.1 |
| 1973 | 1.5 | 1.4 | 1.6 | 1.3 | 1.0 | 0.6 | 0.7 | 0.7 | 1.0 | 1.1 | 1.6 | 1.5 | 1.2 |
| 1974 | 1.2 | 1.1 | 1.3 | 1.1 | 0.7 | 0.7 | 0.6 | 0.6 | 0.9 | 1.2 | 1.2 | 1.4 | 1.0 |
| 1975 | 1.5 | 1.0 | 1.3 | 0.9 | 0.5 | 0.7 | 0.6 | 0.7 | 0.9 | 1.2 | 1.6 | 1.4 | 1.0 |
| 1976 | 1.7 | 1.7 | 1.8 | 1.3 | 0.9 | 0.7 | 0.6 | 0.7 | 1.0 | 0.9 | 1.4 | 1.5 | 1.2 |
| 1977 | 1.5 | 1.6 | 1.2 | 0.8 | 0.6 | 0.7 | 0.6 | 0.7 | 0.9 | 1.1 | 1.3 | 1.4 | 1.0 |
| 1978 | 1.9 | 1.2 | 1.1 | 1.0 | 0.8 | 0.7 | 0.6 | 0.8 | 0.9 | 1.2 | 1.4 | 1.3 | 1.1 |
| 1979 | 1.6 | 1.3 | 1.4 | 0.8 | 0.7 | 0.7 | 0.5 | 0.7 | 1.0 | 1.2 | 1.5 | 1.5 | 1.1 |
| 1980 | 1.3 | 1.0 | 1.3 | 1.0 | 0.6 | 0.6 | 0.5 | 0.6 | 0.9 | 1.2 | 1.0 | 1.3 | 1.0 |
| 1981 | 1.0 | 1.2 | 1.2 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.9 | 1.1 | 1.4 | 1.3 | 0.9 |
| 1982 | 2.0 | 1.3 | 1.7 | 1.3 | 0.6 | 0.6 | 0.6 | 0.6 | 1.1 | 1.1 | 1.2 | 1.4 | 1.1 |
| 1983 | 1.5 | 1.2 | 1.9 | 0.9 | 0.9 | 0.6 | 0.6 | 0.6 | 0.8 | 1.0 | 1.7 | 1.6 | 1.1 |
| 1984 | 1.3 | 1.5 | 1.7 | 1.1 | 0.8 | 0.6 | 0.5 | 0.5 | 0.9 | 1.0 | 1.7 | 1.7 | 1.1 |
| 1985 | 1.6 | 1.6 | 1.5 | 1.0 | 0.5 | 0.6 | 0.5 | 0.6 | 0.8 | 1.0 | 1.2 | 1.5 | 1.0 |
| 1986 | 1.6 | 0.9 | 1.4 | 1.1 | 0.6 | 0.7 | 0.4 | 0.5 | 0.7 | 0.8 | 1.2 | 1.3 | 1.0 |
| 1987 | 1.4 | 1.1 | 1.3 | 0.9 | 0.6 | 0.4 | 0.5 | 0.6 | 0.7 | 1.2 | 1.3 | 1.4 | 1.0 |
| MEAN | 1.5 | 1.5 | 1.4 | 1.1 | 0.8 | 0.7 | 0.6 | 0.7 | 0.9 | 1.2 | 1.4 | 1.5 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S52 (46.80N 86.22W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.2 | 4.0 | 4.0 | 3.6 | 2.0 | 1.8 | 1.5 | 1.8 | 2.8 | 4.9 | 3.7 | 3.9 |
| 1957 | 5.3 | 5.3 | 4.2 | 4.3 | 3.2 | 3.4 | 4.3 | 2.8 | 4.6 | 4.0 | 6.1 | 5.5 |
| 1958 | 5.0 | 5.2 | 3.8 | 4.2 | 3.9 | 3.5 | 2.2 | 2.5 | 3.5 | 3.6 | 5.3 | 4.4 |
| 1959 | 3.5 | 4.1 | 4.6 | 2.9 | 3.6 | 2.4 | 1.4 | 1.4 | 3.6 | 4.3 | 4.6 | 5.4 |
| 1960 | 4.8 | 5.4 | 4.3 | 3.5 | 4.1 | 2.5 | 2.6 | 2.2 | 2.5 | 5.9 | 5.6 | 4.0 |
| 1961 | 6.3 | 3.8 | 5.3 | 3.4 | 3.0 | 2.8 | 2.5 | 2.4 | 3.1 | 4.7 | 4.1 | 4.7 |
| 1962 | 4.7 | 4.7 | 3.7 | 3.8 | 3.1 | 1.9 | 2.6 | 2.9 | 2.8 | 4.9 | 3.7 | 5.1 |
| 1963 | 3.6 | 5.8 | 6.1 | 5.1 | 3.0 | 2.6 | 2.3 | 3.0 | 3.4 | 3.2 | 6.0 | 5.8 |
| 1964 | 5.1 | 4.8 | 5.1 | 4.1 | 3.4 | 4.1 | 2.3 | 2.6 | 4.1 | 5.4 | 4.7 | 4.1 |
| 1965 | 5.1 | 5.4 | 5.3 | 3.5 | 2.1 | 2.4 | 2.2 | 2.9 | 2.5 | 5.4 | 5.9 | 5.8 |
| 1966 | 4.7 | 5.1 | 6.0 | 3.7 | 4.4 | 2.9 | 2.9 | 3.1 | 3.7 | 5.0 | 8.3 | 4.9 |
| 1967 | 6.0 | 5.8 | 4.4 | 4.0 | 3.7 | 2.3 | 3.4 | 2.7 | 3.5 | 3.8 | 4.5 | 4.1 |
| 1968 | 5.0 | 6.3 | 6.1 | 4.7 | 2.9 | 2.8 | 3.1 | 3.0 | 2.3 | 4.9 | 6.3 | 6.0 |
| 1969 | 5.6 | 5.9 | 6.0 | 3.9 | 2.9 | 2.7 | 2.7 | 2.8 | 3.3 | 4.4 | 4.9 | 6.8 |
| 1970 | 5.7 | 5.7 | 4.1 | 4.9 | 4.2 | 2.8 | 3.2 | 3.0 | 4.5 | 4.3 | 6.5 | 6.8 |
| 1971 | 5.5 | 5.7 | 5.3 | 3.5 | 2.9 | 1.1 | 2.3 | 2.0 | 2.6 | 3.4 | 4.3 | 5.1 |
| 1972 | 6.6 | 5.2 | 4.4 | 3.6 | 1.8 | 1.8 | 2.4 | 2.8 | 4.6 | 7.7 | 4.5 | 7.0 |
| 1973 | 4.8 | 4.0 | 6.2 | 3.7 | 3.8 | 1.6 | 2.0 | 3.0 | 4.0 | 5.2 | 4.9 | 4.1 |
| 1974 | 5.2 | 5.5 | 3.9 | 3.9 | 2.0 | 2.1 | 1.8 | 2.0 | 3.0 | 3.9 | 4.4 | 5.7 |
| 1975 | 4.6 | 3.7 | 4.3 | 3.1 | 1.7 | 2.7 | 1.9 | 2.4 | 2.7 | 4.3 | 5.8 | 4.7 |
| 1976 | 5.7 | 6.1 | 5.4 | 3.7 | 3.6 | 2.0 | 2.0 | 3.1 | 3.3 | 3.5 | 4.7 | 5.4 |
| 1977 | 4.9 | 5.0 | 5.4 | 4.2 | 2.4 | 2.9 | 3.1 | 3.0 | 5.4 | 3.5 | 5.6 | 4.1 |
| 1978 | 7.8 | 4.4 | 5.3 | 4.9 | 3.8 | 2.2 | 1.9 | 2.6 | 3.0 | 3.9 | 4.2 | 4.2 |
| 1979 | 4.5 | 4.1 | 6.8 | 5.0 | 2.5 | 2.6 | 1.9 | 3.8 | 3.0 | 4.8 | 4.2 | 4.8 |
| 1980 | 5.4 | 3.8 | 5.3 | 4.2 | 3.1 | 2.4 | 1.9 | 1.8 | 3.9 | 5.1 | 4.4 | 4.5 |
| 1981 | 3.5 | 4.3 | 4.7 | 3.8 | 3.4 | 3.1 | 1.6 | 1.8 | 4.8 | 4.5 | 4.7 | 4.0 |
| 1982 | 7.0 | 4.1 | 6.0 | 5.4 | 2.5 | 2.6 | 2.6 | 2.1 | 3.8 | 4.9 | 5.5 | 4.0 |
| 1983 | 5.8 | 5.3 | 6.7 | 2.6 | 3.2 | 2.3 | 2.1 | 2.0 | 2.5 | 4.5 | 4.6 | 5.4 |
| 1984 | 5.1 | 5.6 | 5.8 | 4.2 | 3.4 | 2.8 | 1.6 | 2.2 | 2.4 | 3.9 | 5.4 | 5.6 |
| 1985 | 4.9 | 5.5 | 4.8 | 5.0 | 2.2 | 3.5 | 1.2 | 2.5 | 2.8 | 3.2 | 3.7 | 7.5 |
| 1986 | 6.1 | 3.6 | 6.1 | 4.3 | 3.4 | 2.3 | 1.2 | 1.9 | 2.9 | 4.2 | 3.9 | 3.5 |
| 1987 | 4.9 | 7.2 | 5.2 | 4.1 | 3.1 | 1.7 | 1.7 | 2.9 | 2.8 | 5.6 | 4.5 | 5.3 |

32 YR. STATISTICS FOR WIS STATION S52

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 1.1 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 4.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.9 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.4 |
| LARGEST WAVE HS . . . . . | (METERS) | 8.3 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 5.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66112812 |

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 158 | 853 | 347 | 10 | . | . | . | . | . | . | 1368 |
| 0.50-0.99 | . | 485 | 2305 | 233 | 9 | 1 | . | . | . | . | 3033 |
| 1.00-1.49 | . | . | 581 | 822 | 120 | 3 | . | . | . | . | 1526 |
| 1.50-1.99 | . | . | 53 | 467 | 236 | 36 | . | . | . | . | 792 |
| 2.00-2.49 | . | . | . | 195 | 151 | 119 | 3 | . | . | . | 468 |
| 2.50-2.99 | . | . | . | 8 | 345 | 57 | 6 | 1 | . | . | 417 |
| 3.00-3.49 | . | . | . | . | 36 | 296 | 2 | 2 | . | . | 336 |
| 3.50-3.99 | . | . | . | . | 1 | 225 | 17 | 1 | . | . | 244 |
| 4.00-4.49 | . | . | . | . | . | 51 | 72 | 1 | . | . | 124 |
| 4.50-4.99 | . | . | . | . | . | 1 | 68 | 5 | 1 | . | 75 |
| 5.00-5.49 | . | . | . | . | . | . | 13 | 26 | 3 | . | 42 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | . | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | 7 | 4 | . | 11 |
| 6.50-6.99 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 7.00+ | | | | | | | | | 1 | | 1 |
| TOTAL | 158 | 1338 | 3286 | 1735 | 898 | 789 | 181 | 49 | 11 | 0 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.9 NO. OF CASES= 7915.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 118 | 691 | 213 | 5 | . | . | . | . | . | . | 1027 |
| 0.50-0.99 | . | 405 | 1710 | 144 | 5 | . | 1 | . | . | . | 2265 |
| 1.00-1.49 | . | . | 396 | 423 | 35 | 1 | . | . | . | . | 855 |
| 1.50-1.99 | . | . | 12 | 286 | 84 | 7 | . | . | . | . | 389 |
| 2.00-2.49 | . | . | . | 106 | 80 | 17 | . | . | . | . | 203 |
| 2.50-2.99 | . | . | . | 1 | 133 | 16 | . | . | . | . | 150 |
| 3.00-3.49 | . | . | . | . | 19 | 99 | 1 | . | . | . | 119 |
| 3.50-3.99 | . | . | . | . | 1 | 82 | 6 | . | . | . | 89 |
| 4.00-4.49 | . | . | . | . | . | 16 | 13 | 2 | . | . | 31 |
| 4.50-4.99 | . | . | . | . | . | 1 | 6 | . | . | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 1 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 118 | 1096 | 2331 | 965 | 357 | 239 | 30 | 3 | 1 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.5 NO. OF CASES= 4819.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 130 | 602 | 161 | 2 | . | . | . | . | . | . | 895 |
| 0.50-0.99 | . | 274 | 1374 | 99 | 6 | 1 | . | . | . | . | 1754 |
| 1.00-1.49 | . | . | 363 | 427 | 14 | 2 | . | . | . | . | 806 |
| 1.50-1.99 | . | . | 14 | 235 | 58 | 1 | . | . | . | . | 308 |
| 2.00-2.49 | . | . | . | 106 | 74 | 17 | . | . | . | . | 197 |
| 2.50-2.99 | . | . | . | . | 127 | 21 | 1 | . | . | . | 149 |
| 3.00-3.49 | . | . | . | . | 5 | 90 | . | . | . | . | 95 |
| 3.50-3.99 | . | . | . | . | . | 33 | . | . | . | . | 33 |
| 4.00-4.49 | . | . | . | . | . | 9 | 5 | . | . | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | . | . | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 130 | 876 | 1912 | 869 | 284 | 174 | 12 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 3993.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 77 | 516 | 103 | 2 | . | . | . | . | . | . | 698 |
| 0.50-0.99 | . | 291 | 1223 | 68 | 5 | . | . | . | . | . | 1587 |
| 1.00-1.49 | . | . | 260 | 332 | 13 | 1 | . | . | . | . | 606 |
| 1.50-1.99 | . | . | 14 | 157 | 80 | 2 | . | . | . | . | 253 |
| 2.00-2.49 | . | . | . | 41 | 47 | 10 | . | . | . | . | 98 |
| 2.50-2.99 | . | . | . | . | 71 | 35 | . | . | . | . | 106 |
| 3.00-3.49 | . | . | . | . | 2 | 81 | 1 | . | . | . | 84 |
| 3.50-3.99 | . | . | . | . | . | 25 | 2 | . | . | . | 27 |
| 4.00-4.49 | . | . | . | . | . | 1 | 8 | . | . | . | 9 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 77 | 807 | 1600 | 600 | 218 | 155 | 12 | 1 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 3256.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 72 | 520 | 125 | 3 | . | . | . | . | . | . | 720 |
| 0.50-0.99 | . | 297 | 1258 | 68 | 2 | . | . | . | . | . | 1625 |
| 1.00-1.49 | . | . | 264 | 404 | 18 | . | . | . | . | . | 686 |
| 1.50-1.99 | . | . | 13 | 186 | 106 | 2 | . | . | . | . | 307 |
| 2.00-2.49 | . | . | . | 34 | 75 | 22 | . | . | . | . | 131 |
| 2.50-2.99 | . | . | . | . | 63 | 35 | . | . | . | . | 98 |
| 3.00-3.49 | . | . | . | . | 1 | 70 | 2 | . | . | . | 73 |
| 3.50-3.99 | . | . | . | . | . | 34 | 5 | . | . | . | 39 |
| 4.00-4.49 | . | . | . | . | . | 5 | 7 | . | . | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 1 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 72 | 817 | 1660 | 695 | 265 | 168 | 16 | 1 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.5 NO. OF CASES= 3464.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 90 | 494 | 109 | 3 | . | . | . | . | . | . | 696 |
| 0.50-0.99 | . | 439 | 946 | 120 | 3 | . | . | . | . | . | 1508 |
| 1.00-1.49 | . | . | 223 | 316 | 39 | 1 | . | . | . | . | 579 |
| 1.50-1.99 | . | . | 23 | 125 | 115 | 3 | . | . | . | . | 266 |
| 2.00-2.49 | . | . | 2 | 40 | 43 | 13 | . | . | . | . | 98 |
| 2.50-2.99 | . | . | . | 1 | 20 | 11 | . | . | . | . | 32 |
| 3.00-3.49 | . | . | . | . | . | 14 | . | . | . | . | 14 |
| 3.50-3.99 | . | . | . | . | . | 10 | 1 | . | . | . | 11 |
| 4.00-4.49 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 90 | 933 | 1303 | 605 | 220 | 52 | 4 | 2 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 3012.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 115 | 773 | 163 | 9 | . | . | . | . | . | . | 1060 |
| 0.50-0.99 | . | 1014 | 1205 | 251 | 3 | . | . | . | . | . | 2473 |
| 1.00-1.49 | . | . | 352 | 436 | 74 | 1 | . | . | . | . | 863 |
| 1.50-1.99 | . | . | 146 | 72 | 118 | 7 | . | . | . | . | 343 |
| 2.00-2.49 | . | . | 4 | 11 | 23 | 17 | . | . | . | . | 55 |
| 2.50-2.99 | . | . | . | 1 | 1 | 4 | 1 | . | . | . | 7 |
| 3.00-3.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 115 | 1787 | 1870 | 780 | 219 | 29 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 4.1 NO. OF CASES= 4500.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 175 | 1137 | 255 | 7 | . | . | . | . | . | . | 1574 |
| 0.50-0.99 | . | 1143 | 1317 | 294 | 7 | . | . | . | . | . | 2761 |
| 1.00-1.49 | . | . | 388 | 394 | 104 | 3 | . | . | . | . | 889 |
| 1.50-1.99 | . | . | 137 | 39 | 100 | 13 | . | . | . | . | 289 |
| 2.00-2.49 | . | . | 7 | 4 | 6 | 2 | . | . | . | . | 19 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 175 | 2280 | 2104 | 738 | 217 | 18 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 5182.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 241 | 1129 | 288 | 10 | . | . | . | . | . | . | 1668 |
| 0.50-0.99 | . | 845 | 879 | 174 | 11 | 1 | . | . | . | . | 1910 |
| 1.00-1.49 | . | . | 394 | 168 | 53 | 2 | . | . | . | . | 617 |
| 1.50-1.99 | . | . | 110 | 18 | 20 | 5 | . | . | . | . | 153 |
| 2.00-2.49 | . | . | 7 | 3 | . | 3 | . | . | . | . | 13 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 241 | 1974 | 1678 | 373 | 84 | 11 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 4086.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 247 | 1013 | 225 | 8 | . | . | . | . | . | . | 1493 |
| 0.50-0.99 | . | 1343 | 579 | 159 | 7 | 1 | . | . | . | . | 2089 |
| 1.00-1.49 | . | . | 511 | 90 | 21 | 1 | . | . | . | . | 623 |
| 1.50-1.99 | . | . | 98 | 3 | 12 | 3 | . | . | . | . | 116 |
| 2.00-2.49 | . | . | 4 | 3 | . | 1 | . | . | . | . | 8 |
| 2.50-2.99 | . | . | . | 2 | . | . | 1 | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 247 | 2356 | 1417 | 265 | 40 | 6 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 4058.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 152 | 975 | 607 | 18 | . | . | . | . | . | . | 1752 |
| 0.50-0.99 | . | 1306 | 1384 | 579 | 13 | 1 | . | . | . | . | 3283 |
| 1.00-1.49 | . | . | 367 | 592 | 267 | 4 | . | . | . | . | 1230 |
| 1.50-1.99 | . | . | 194 | 241 | 147 | 55 | . | . | . | . | 637 |
| 2.00-2.49 | . | . | 11 | 65 | 62 | 32 | . | . | . | . | 170 |
| 2.50-2.99 | . | . | . | 7 | 10 | 4 | . | . | . | . | 21 |
| 3.00-3.49 | . | . | . | 2 | . | 1 | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 152 | 2281 | 2563 | 1504 | 499 | 97 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 4.2 NO. OF CASES= 6647.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 128 | 733 | 355 | 5 | . | . | . | . | . | . | 1221 |
| 0.50-0.99 | . | 671 | 1946 | 264 | 16 | 1 | . | . | . | . | 2898 |
| 1.00-1.49 | . | . | 531 | 685 | 50 | 4 | . | . | . | . | 1270 |
| 1.50-1.99 | . | . | 47 | 334 | 176 | 4 | . | . | . | . | 561 |
| 2.00-2.49 | . | . | 2 | 99 | 177 | 17 | . | . | . | . | 295 |
| 2.50-2.99 | . | . | . | 2 | 43 | 42 | . | . | . | . | 87 |
| 3.00-3.49 | . | . | . | . | 3 | 11 | . | . | . | . | 14 |
| 3.50-3.99 | . | . | . | . | . | 5 | 3 | . | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 128 | 1404 | 2881 | 1389 | 465 | 84 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 5951.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 151 | 898 | 343 | 3 | | | | | | | 1395 |
| 0.50-0.99 | . | 563 | 2475 | 252 | 14 | 1 | 1 | . | . | . | 3306 |
| 1.00-1.49 | . | . | 803 | 865 | 60 | 10 | . | . | . | . | 1738 |
| 1.50-1.99 | . | . | 57 | 500 | 181 | 24 | 1 | . | . | . | 763 |
| 2.00-2.49 | . | . | . | 142 | 190 | 58 | 1 | . | . | . | 391 |
| 2.50-2.99 | . | . | . | 5 | 182 | 71 | . | . | . | . | 258 |
| 3.00-3.49 | . | . | . | . | 8 | 145 | 2 | . | . | . | 155 |
| 3.50-3.99 | . | . | . | . | . | 74 | 11 | . | . | . | 85 |
| 4.00-4.49 | . | . | . | . | . | 6 | 26 | . | . | . | 32 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 2 | . | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 151 | 1461 | 3678 | 1767 | 635 | 389 | 48 | 7 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 7624.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 133 | 1125 | 558 | 28 | 6 | 1 | . | . | . | . | 1851 |
| 0.50-0.99 | . | 664 | 3365 | 416 | 56 | 13 | 1 | . | 1 | . | 4516 |
| 1.00-1.49 | . | 1 | 945 | 1294 | 181 | 36 | 3 | 1 | . | . | 2461 |
| 1.50-1.99 | . | . | 81 | 620 | 343 | 74 | 2 | . | 1 | . | 1121 |
| 2.00-2.49 | . | . | 1 | 208 | 208 | 176 | 10 | 1 | . | 1 | 605 |
| 2.50-2.99 | . | . | . | 6 | 254 | 115 | 20 | 3 | . | . | 398 |
| 3.00-3.49 | . | . | . | . | 20 | 278 | 18 | 5 | . | . | 321 |
| 3.50-3.99 | . | . | . | . | . | 155 | 55 | 8 | 1 | . | 219 |
| 4.00-4.49 | . | . | . | . | . | 19 | 100 | 12 | 2 | . | 133 |
| 4.50-4.99 | . | . | . | . | . | . | 21 | 32 | 1 | . | 54 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 28 | 3 | . | 33 |
| 5.50-5.99 | . | . | . | . | . | . | . | 6 | 8 | 2 | 16 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 133 | 1790 | 4950 | 2572 | 1068 | 867 | 232 | 96 | 21 | 4 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.9 NO. OF CASES= 10990.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 144 | 819 | 550 | 74 | 10 | . | . | . | . | . | 1597 |
| 0.50-0.99 | . | 495 | 2577 | 557 | 113 | 11 | . | . | . | . | 3753 |
| 1.00-1.49 | . | . | 737 | 1190 | 305 | 45 | 2 | . | . | . | 2279 |
| 1.50-1.99 | . | . | 79 | 555 | 482 | 150 | 5 | 1 | . | . | 1272 |
| 2.00-2.49 | . | . | . | 210 | 199 | 270 | 20 | . | . | . | 699 |
| 2.50-2.99 | . | . | . | 8 | 251 | 125 | 64 | 10 | . | . | 458 |
| 3.00-3.49 | . | . | . | . | 25 | 289 | 48 | 34 | . | . | 396 |
| 3.50-3.99 | . | . | . | . | . | 144 | 84 | 34 | 1 | . | 263 |
| 4.00-4.49 | . | . | . | . | . | 6 | 114 | 55 | 7 | . | 182 |
| 4.50-4.99 | . | . | . | . | . | . | 20 | 59 | 25 | . | 104 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 49 | 17 | . | 67 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | 28 | 2 | 35 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 7 | 2 | 9 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | 2 | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | 2 | 3 | 5 |
| TOTAL | 144 | 1314 | 3943 | 2594 | 1385 | 1040 | 358 | 247 | 89 | 9 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 5.3 NO. OF CASES= 10423.

STATION S53 46.80N 86.00W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

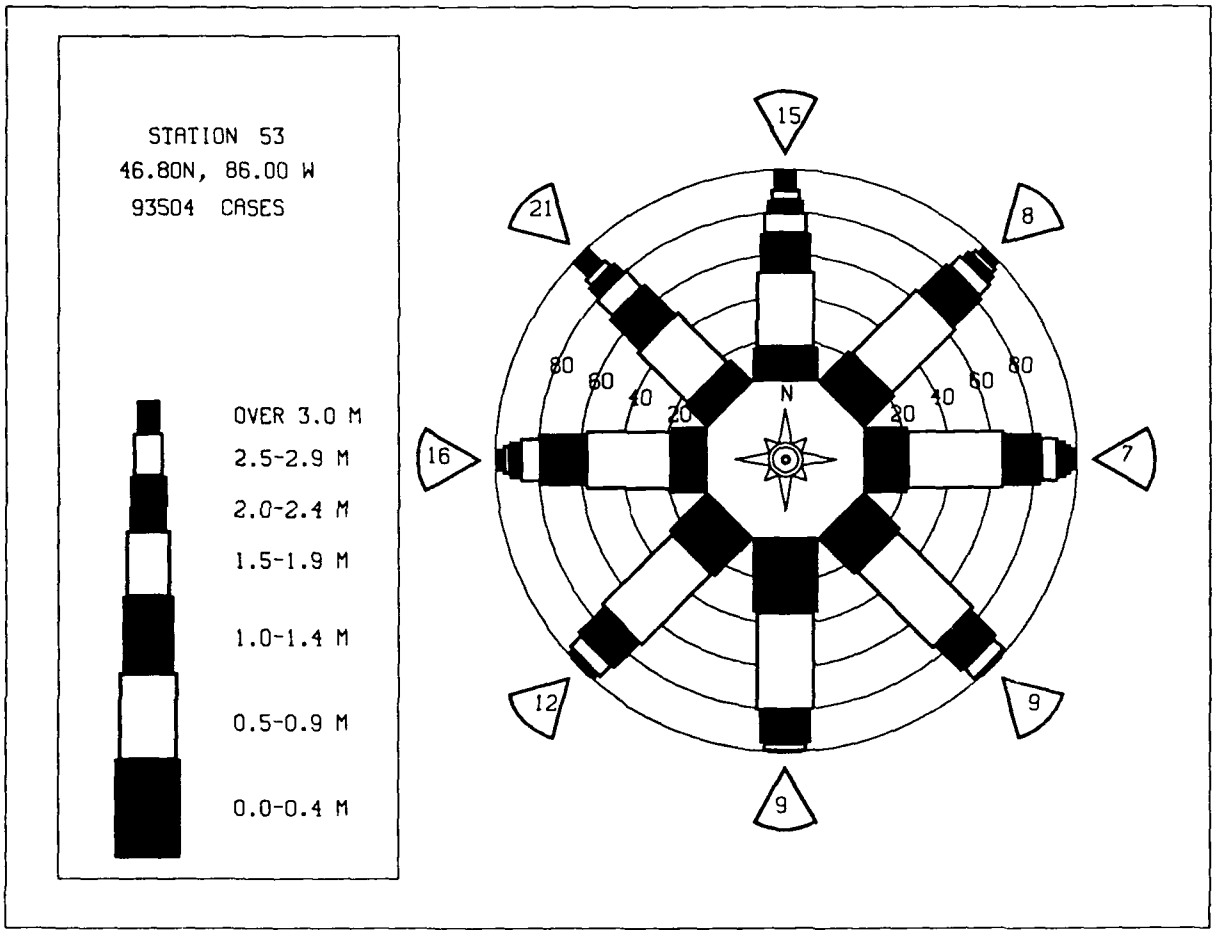
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 141 | 625 | 197 | 3 | 2 | . | . | . | . | . | 968 |
| 0.50-0.99 | . | 342 | 1780 | 239 | 12 | . | . | . | . | . | 2373 |
| 1.00-1.49 | . | . | 525 | 905 | 121 | 2 | . | . | . | . | 1553 |
| 1.50-1.99 | . | . | 54 | 505 | 419 | 77 | . | . | . | . | 1055 |
| 2.00-2.49 | . | . | . | 209 | 185 | 236 | 4 | . | . | . | 634 |
| 2.50-2.99 | . | . | . | 6 | 306 | 122 | 48 | 4 | . | . | 486 |
| 3.00-3.49 | . | . | . | . | 43 | 281 | 32 | 13 | . | . | 369 |
| 3.50-3.99 | . | . | . | . | 1 | 166 | 64 | 16 | 1 | . | 248 |
| 4.00-4.49 | . | . | . | . | . | 22 | 105 | 62 | 4 | . | 193 |
| 4.50-4.99 | . | . | . | . | . | 1 | 39 | 62 | 7 | . | 109 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 38 | 20 | . | 59 |
| 5.50-5.99 | . | . | . | . | . | . | . | 8 | 14 | 2 | 24 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 12 | . | 12 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 141 | 967 | 2556 | 1867 | 1089 | 907 | 293 | 203 | 62 | 4 | |

MEAN HS(M) = 1.5 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 5.3 NO. OF CASES= 7584.

STATION S53 46.80N 86.00W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 228 | 1291 | 460 | 19 | 1 | . | . | . | . | . | 1999 |
| 0.50-0.99 | . | 1058 | 2633 | 392 | 28 | 3 | . | . | . | . | 4114 |
| 1.00-1.49 | . | . | 764 | 935 | 148 | 11 | . | . | . | . | 1858 |
| 1.50-1.99 | . | . | 114 | 434 | 268 | 46 | . | . | . | . | 862 |
| 2.00-2.49 | . | . | 4 | 148 | 152 | 101 | 3 | . | . | . | 408 |
| 2.50-2.99 | . | . | . | 5 | 181 | 66 | 14 | 1 | . | . | 267 |
| 3.00-3.49 | . | . | . | . | 16 | 166 | 10 | 5 | . | . | 197 |
| 3.50-3.99 | . | . | . | . | . | 95 | 25 | 5 | . | . | 125 |
| 4.00-4.49 | . | . | . | . | . | 13 | 45 | 13 | 1 | . | 72 |
| 4.50-4.99 | . | . | . | . | . | . | 17 | 16 | 3 | . | 36 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 14 | 4 | . | 20 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 5 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 228 | 2349 | 3975 | 1933 | 794 | 501 | 116 | 56 | 16 | 0 | |

MEAN HS(M)= 1.1 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 4.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S53 (46.80N 86.00W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.8 | 1.2 | 1.1 | 1.1 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 1.0 | 1.2 | 1.2 | 0.9 |
| 1957 | 1.8 | 1.5 | 1.3 | 1.0 | 1.0 | 0.8 | 0.7 | 0.8 | 1.1 | 1.1 | 1.5 | 1.8 | 1.2 |
| 1958 | 1.3 | 2.1 | 1.0 | 1.1 | 1.0 | 0.8 | 0.6 | 0.6 | 0.8 | 1.0 | 2.0 | 1.4 | 1.1 |
| 1959 | 1.3 | 1.3 | 1.1 | 0.9 | 1.0 | 0.6 | 0.6 | 0.6 | 0.9 | 1.1 | 1.5 | 1.6 | 1.0 |
| 1960 | 1.4 | 1.5 | 1.0 | 1.1 | 1.0 | 0.6 | 0.6 | 0.6 | 0.7 | 1.1 | 1.6 | 1.3 | 1.0 |
| 1961 | 1.1 | 1.1 | 1.5 | 0.9 | 0.8 | 0.7 | 0.5 | 0.5 | 0.9 | 1.1 | 1.3 | 1.3 | 1.0 |
| 1962 | 1.6 | 1.2 | 0.9 | 1.0 | 0.7 | 0.5 | 0.5 | 0.6 | 0.8 | 0.9 | 1.1 | 1.6 | 1.0 |
| 1963 | 1.3 | 1.5 | 1.3 | 1.1 | 0.8 | 0.6 | 0.6 | 0.7 | 0.7 | 0.9 | 1.6 | 1.6 | 1.0 |
| 1964 | 1.6 | 1.7 | 1.6 | 1.2 | 1.0 | 0.7 | 0.6 | 0.9 | 1.0 | 1.2 | 1.3 | 1.3 | 1.2 |
| 1965 | 1.7 | 1.8 | 1.3 | 0.9 | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 | 1.4 | 1.6 | 1.6 | 1.2 |
| 1966 | 1.6 | 1.6 | 1.9 | 1.1 | 1.1 | 0.7 | 0.8 | 0.7 | 1.0 | 1.5 | 1.8 | 1.7 | 1.3 |
| 1967 | 1.8 | 1.9 | 1.4 | 1.1 | 1.0 | 0.6 | 0.7 | 0.8 | 0.9 | 1.3 | 1.4 | 1.5 | 1.2 |
| 1968 | 1.4 | 2.5 | 1.5 | 1.1 | 0.9 | 0.6 | 0.7 | 0.7 | 0.8 | 1.2 | 1.8 | 1.8 | 1.2 |
| 1969 | 1.8 | 1.3 | 1.6 | 1.1 | 0.8 | 0.7 | 0.6 | 0.7 | 0.9 | 1.3 | 1.4 | 1.6 | 1.1 |
| 1970 | 1.6 | 1.8 | 1.3 | 1.2 | 1.0 | 0.7 | 0.7 | 0.7 | 1.0 | 1.1 | 1.6 | 1.5 | 1.2 |
| 1971 | 1.6 | 1.5 | 1.6 | 1.1 | 0.8 | 0.5 | 0.6 | 0.6 | 0.7 | 1.0 | 1.2 | 1.4 | 1.1 |
| 1972 | 1.7 | 1.4 | 1.4 | 0.9 | 0.6 | 0.6 | 0.7 | 0.7 | 1.1 | 1.5 | 1.2 | 1.6 | 1.1 |
| 1973 | 1.4 | 1.3 | 1.5 | 1.2 | 0.9 | 0.5 | 0.7 | 0.7 | 1.0 | 1.1 | 1.6 | 1.4 | 1.1 |
| 1974 | 1.2 | 1.1 | 1.3 | 1.0 | 0.7 | 0.6 | 0.6 | 0.6 | 0.8 | 1.1 | 1.2 | 1.3 | 0.9 |
| 1975 | 1.4 | 1.0 | 1.3 | 0.8 | 0.5 | 0.6 | 0.6 | 0.6 | 0.8 | 1.1 | 1.5 | 1.4 | 1.0 |
| 1976 | 1.7 | 1.6 | 1.7 | 1.2 | 0.8 | 0.6 | 0.6 | 0.7 | 1.0 | 0.9 | 1.4 | 1.5 | 1.1 |
| 1977 | 1.5 | 1.6 | 1.2 | 0.7 | 0.5 | 0.7 | 0.6 | 0.6 | 0.8 | 1.0 | 1.2 | 1.4 | 1.0 |
| 1978 | 1.8 | 1.1 | 1.0 | 1.0 | 0.7 | 0.6 | 0.6 | 0.8 | 0.8 | 1.1 | 1.3 | 1.3 | 1.0 |
| 1979 | 1.5 | 1.2 | 1.3 | 0.8 | 0.6 | 0.6 | 0.5 | 0.7 | 0.9 | 1.1 | 1.4 | 1.5 | 1.0 |
| 1980 | 1.3 | 1.0 | 1.3 | 0.9 | 0.6 | 0.6 | 0.4 | 0.5 | 0.9 | 1.2 | 1.0 | 1.3 | 0.9 |
| 1981 | 1.0 | 1.1 | 1.2 | 0.9 | 0.7 | 0.6 | 0.4 | 0.4 | 0.9 | 1.0 | 1.3 | 1.2 | 0.9 |
| 1982 | 1.9 | 1.2 | 1.6 | 1.2 | 0.6 | 0.6 | 0.6 | 0.5 | 1.0 | 1.0 | 1.2 | 1.3 | 1.0 |
| 1983 | 1.4 | 1.1 | 1.7 | 0.9 | 0.8 | 0.5 | 0.5 | 0.5 | 0.7 | 1.0 | 1.6 | 1.6 | 1.0 |
| 1984 | 1.2 | 1.3 | 1.5 | 1.0 | 0.8 | 0.6 | 0.5 | 0.5 | 0.8 | 1.0 | 1.6 | 1.6 | 1.0 |
| 1985 | 1.6 | 1.4 | 1.4 | 0.9 | 0.5 | 0.6 | 0.4 | 0.5 | 0.7 | 0.9 | 1.2 | 1.4 | 1.0 |
| 1986 | 1.5 | 0.9 | 1.3 | 1.1 | 0.6 | 0.6 | 0.4 | 0.5 | 0.7 | 0.8 | 1.1 | 1.3 | 0.9 |
| 1987 | 1.4 | 1.1 | 1.3 | 0.9 | 0.6 | 0.5 | 0.5 | 0.6 | 0.7 | 1.1 | 1.3 | 1.3 | 0.9 |
| MEAN | 1.5 | 1.4 | 1.3 | 1.0 | 0.8 | 0.6 | 0.6 | 0.6 | 0.9 | 1.1 | 1.4 | 1.5 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S53 (46.80N 86.00W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 5.2 | 4.1 | 3.8 | 3.9 | 2.4 | 1.9 | 1.8 | 2.0 | 3.1 | 5.0 | 4.0 | 4.1 |
| 1957 | 5.3 | 5.4 | 4.4 | 4.0 | 2.9 | 3.4 | 4.6 | 2.7 | 4.5 | 3.8 | 5.9 | 5.5 |
| 1958 | 5.3 | 5.5 | 4.1 | 4.4 | 3.7 | 3.3 | 2.1 | 2.3 | 3.6 | 3.4 | 5.4 | 4.4 |
| 1959 | 3.6 | 3.9 | 5.1 | 2.9 | 3.6 | 2.6 | 1.7 | 1.5 | 3.6 | 4.5 | 4.6 | 6.0 |
| 1960 | 4.7 | 5.0 | 4.1 | 3.4 | 3.5 | 2.3 | 2.6 | 2.2 | 2.8 | 6.0 | 5.6 | 4.0 |
| 1961 | 6.2 | 3.7 | 5.5 | 3.6 | 2.8 | 2.8 | 2.3 | 2.5 | 3.2 | 4.3 | 4.3 | 5.0 |
| 1962 | 4.6 | 4.5 | 3.6 | 3.8 | 3.2 | 1.5 | 2.1 | 2.6 | 2.8 | 4.7 | 3.8 | 5.1 |
| 1963 | 3.6 | 5.9 | 5.4 | 5.6 | 3.1 | 2.3 | 2.3 | 2.7 | 3.1 | 2.9 | 5.7 | 4.9 |
| 1964 | 5.6 | 4.4 | 4.7 | 3.8 | 3.3 | 4.0 | 1.8 | 2.6 | 4.4 | 4.5 | 5.1 | 3.9 |
| 1965 | 4.7 | 5.1 | 4.9 | 3.3 | 1.9 | 2.3 | 2.2 | 2.6 | 2.9 | 3.4 | 6.0 | 5.3 |
| 1966 | 5.5 | 5.1 | 6.0 | 3.7 | 4.3 | 2.9 | 2.7 | 2.8 | 3.8 | 5.9 | 7.0 | 5.0 |
| 1967 | 6.0 | 6.2 | 4.4 | 3.6 | 3.6 | 2.5 | 3.0 | 2.5 | 3.2 | 3.6 | 4.3 | 4.1 |
| 1968 | 4.5 | 6.3 | 5.5 | 4.1 | 2.8 | 2.3 | 2.9 | 3.0 | 2.1 | 4.3 | 6.3 | 6.1 |
| 1969 | 5.7 | 5.1 | 5.2 | 3.6 | 2.5 | 2.3 | 2.6 | 2.7 | 3.2 | 4.0 | 4.5 | 6.5 |
| 1970 | 4.9 | 5.2 | 3.9 | 4.8 | 4.1 | 2.6 | 2.8 | 3.0 | 4.3 | 4.4 | 6.7 | 6.7 |
| 1971 | 6.1 | 6.0 | 5.6 | 3.5 | 2.8 | 1.2 | 2.3 | 2.2 | 2.8 | 3.6 | 4.0 | 5.2 |
| 1972 | 6.9 | 5.7 | 4.3 | 3.7 | 2.1 | 1.8 | 2.4 | 2.8 | 4.5 | 7.9 | 4.3 | 6.9 |
| 1973 | 4.6 | 3.9 | 5.5 | 3.1 | 3.3 | 1.4 | 1.9 | 3.1 | 4.0 | 5.6 | 5.2 | 3.6 |
| 1974 | 5.4 | 4.9 | 3.8 | 3.5 | 1.6 | 1.7 | 1.8 | 1.7 | 2.8 | 3.6 | 3.8 | 5.0 |
| 1975 | 4.6 | 4.1 | 3.9 | 3.0 | 1.5 | 2.4 | 1.8 | 2.6 | 2.4 | 4.3 | 5.1 | 4.6 |
| 1976 | 5.6 | 5.8 | 5.4 | 3.3 | 3.7 | 1.9 | 1.8 | 3.2 | 3.6 | 3.6 | 4.8 | 4.8 |
| 1977 | 5.0 | 4.8 | 5.7 | 3.6 | 2.3 | 2.8 | 3.0 | 2.9 | 4.9 | 3.4 | 5.4 | 3.8 |
| 1978 | 6.6 | 4.0 | 5.1 | 4.5 | 3.2 | 1.8 | 1.9 | 2.3 | 2.6 | 3.6 | 3.8 | 3.9 |
| 1979 | 4.2 | 4.0 | 5.4 | 4.6 | 2.4 | 2.1 | 1.7 | 3.8 | 2.5 | 4.1 | 4.2 | 5.2 |
| 1980 | 5.4 | 3.4 | 5.7 | 3.5 | 2.8 | 2.3 | 1.5 | 1.6 | 3.8 | 5.0 | 5.0 | 4.7 |
| 1981 | 3.2 | 4.1 | 4.6 | 3.6 | 3.0 | 2.8 | 1.3 | 1.4 | 4.8 | 4.7 | 5.1 | 3.3 |
| 1982 | 7.3 | 4.1 | 6.3 | 5.5 | 2.2 | 2.4 | 2.4 | 2.0 | 3.8 | 4.5 | 5.3 | 4.0 |
| 1983 | 5.2 | 4.7 | 5.4 | 2.3 | 2.8 | 2.1 | 1.9 | 1.8 | 2.2 | 4.2 | 4.4 | 5.1 |
| 1984 | 5.0 | 4.8 | 5.2 | 3.8 | 3.3 | 2.3 | 1.4 | 1.8 | 2.0 | 3.9 | 6.1 | 5.4 |
| 1985 | 4.5 | 5.3 | 4.8 | 4.9 | 1.8 | 3.4 | 1.2 | 2.1 | 2.6 | 3.3 | 3.7 | 6.4 |
| 1986 | 6.1 | 3.3 | 5.7 | 3.6 | 3.2 | 2.2 | 1.1 | 2.4 | 2.8 | 4.0 | 3.3 | 3.4 |
| 1987 | 5.0 | 6.5 | 4.5 | 4.2 | 3.0 | 1.7 | 1.5 | 3.1 | 2.6 | 5.1 | 4.4 | 4.7 |

32 YR. STATISTICS FOR WIS STATION S53

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.1 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 7.9 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 312.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 72100900 |

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 118 | 654 | 190 | 1 | . | 1 | . | . | . | . | 964 |
| 0.50-0.99 | . | 370 | 1692 | 210 | 6 | . | . | . | . | . | 2278 |
| 1.00-1.49 | . | . | 652 | 423 | 109 | 4 | . | . | . | . | 1188 |
| 1.50-1.99 | . | . | 98 | 281 | 207 | 52 | 1 | . | . | . | 639 |
| 2.00-2.49 | . | . | . | 205 | 146 | 135 | 2 | . | . | . | 488 |
| 2.50-2.99 | . | . | . | 57 | 79 | 211 | 13 | 1 | . | . | 361 |
| 3.00-3.49 | . | . | . | 1 | 23 | 156 | 35 | 3 | . | . | 218 |
| 3.50-3.99 | . | . | . | . | 3 | 38 | 71 | 9 | . | . | 121 |
| 4.00-4.49 | . | . | . | . | . | 2 | 43 | 28 | 1 | . | 74 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 13 | 2 | . | 17 |
| 5.00-5.49 | . | . | . | . | . | . | . | 9 | 2 | . | 11 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 118 | 1024 | 2632 | 1178 | 573 | 599 | 167 | 64 | 8 | 0 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.9 NO. OF CASES= 5967.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 82 | 401 | 124 | 3 | . | . | . | . | . | . | 610 |
| 0.50-0.99 | . | 272 | 1261 | 97 | 5 | . | . | . | . | . | 1635 |
| 1.00-1.49 | . | . | 441 | 342 | 43 | 1 | . | . | . | . | 827 |
| 1.50-1.99 | . | . | 37 | 271 | 109 | 16 | . | . | . | . | 433 |
| 2.00-2.49 | . | . | . | 93 | 78 | 25 | 1 | . | . | . | 197 |
| 2.50-2.99 | . | . | . | 17 | 97 | 53 | 3 | . | . | . | 170 |
| 3.00-3.49 | . | . | . | . | 16 | 124 | 17 | 2 | . | . | 159 |
| 3.50-3.99 | . | . | . | . | 3 | 47 | 17 | 3 | . | . | 70 |
| 4.00-4.49 | . | . | . | . | . | 10 | 10 | 4 | . | . | 24 |
| 4.50-4.99 | . | . | . | . | . | 1 | 3 | 1 | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | 1 | . | 1 | 1 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 82 | 673 | 1863 | 823 | 351 | 278 | 51 | 12 | 1 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 3876.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 83 | 474 | 108 | 1 | . | . | . | . | . | . | 666 |
| 0.50-0.99 | . | 268 | 1285 | 89 | 9 | . | . | . | . | . | 1651 |
| 1.00-1.49 | . | . | 356 | 425 | 17 | 3 | . | . | . | . | 801 |
| 1.50-1.99 | . | . | 8 | 233 | 67 | 2 | . | . | . | . | 310 |
| 2.00-2.49 | . | . | . | 71 | 59 | 8 | 1 | . | . | . | 139 |
| 2.50-2.99 | . | . | . | . | 106 | 25 | . | . | . | . | 131 |
| 3.00-3.49 | . | . | . | . | 3 | 99 | . | . | . | . | 102 |
| 3.50-3.99 | . | . | . | . | . | 27 | 1 | . | . | . | 28 |
| 4.00-4.49 | . | . | . | . | . | 6 | 6 | . | . | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 83 | 742 | 1757 | 819 | 261 | 170 | 10 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.5 NO. OF CASES= 3604.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 62 | 457 | 64 | 1 | . | . | . | . | . | . | 584 |
| 0.50-0.99 | . | 300 | 1226 | 66 | 3 | . | . | . | . | . | 1595 |
| 1.00-1.49 | . | . | 315 | 353 | 11 | 2 | . | . | . | . | 681 |
| 1.50-1.99 | . | . | 13 | 183 | 74 | 2 | . | . | . | . | 272 |
| 2.00-2.49 | . | . | . | 42 | 54 | 5 | . | . | . | . | 101 |
| 2.50-2.99 | . | . | . | . | 90 | 20 | . | . | . | . | 110 |
| 3.00-3.49 | . | . | . | . | 5 | 63 | . | . | . | . | 68 |
| 3.50-3.99 | . | . | . | . | . | 22 | . | . | . | . | 22 |
| 4.00-4.49 | . | . | . | . | . | 1 | 2 | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 62 | 757 | 1618 | 645 | 237 | 115 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.4 NO. OF CASES= 3225.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 77 | 583 | 90 | 2 | . | . | . | . | . | . | 752 |
| 0.50-0.99 | . | 382 | 1589 | 60 | 1 | . | . | . | . | . | 2032 |
| 1.00-1.49 | . | . | 343 | 449 | 10 | . | . | . | . | . | 802 |
| 1.50-1.99 | . | . | 17 | 250 | 127 | 1 | . | . | . | . | 395 |
| 2.00-2.49 | . | . | . | 62 | 85 | 9 | . | . | . | . | 156 |
| 2.50-2.99 | . | . | . | 1 | 118 | 23 | . | . | . | . | 142 |
| 3.00-3.49 | . | . | . | . | 1 | 89 | . | . | . | . | 90 |
| 3.50-3.99 | . | . | . | . | . | 34 | . | . | . | . | 34 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 77 | 965 | 2039 | 824 | 342 | 157 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.4 NO. OF CASES= 4131.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 70 | 630 | 108 | 2 | . | . | . | . | . | . | 810 |
| 0.50-0.99 | . | 539 | 1390 | 105 | 1 | . | . | . | . | . | 2035 |
| 1.00-1.49 | . | . | 340 | 408 | 26 | . | . | . | . | . | 774 |
| 1.50-1.99 | . | . | 23 | 203 | 142 | 2 | . | . | . | . | 370 |
| 2.00-2.49 | . | . | 1 | 70 | 64 | 14 | . | . | . | . | 149 |
| 2.50-2.99 | . | . | . | 2 | 42 | 10 | . | . | . | . | 54 |
| 3.00-3.49 | . | . | . | . | 1 | 27 | . | . | . | . | 28 |
| 3.50-3.99 | . | . | . | . | . | 11 | . | . | . | . | 11 |
| 4.00-4.49 | . | . | . | . | . | . | 4 | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 70 | 1169 | 1862 | 790 | 276 | 64 | 6 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 3972.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 147 | 1122 | 185 | 8 | . | . | . | . | . | . | 1462 |
| 0.50-0.99 | . | 1384 | 1807 | 267 | 5 | . | . | . | . | . | 3463 |
| 1.00-1.49 | . | . | 457 | 662 | 75 | . | . | . | . | . | 1194 |
| 1.50-1.99 | . | . | 181 | 131 | 228 | 14 | . | . | . | . | 554 |
| 2.00-2.49 | . | . | 12 | 18 | 28 | 22 | . | . | . | . | 80 |
| 2.50-2.99 | . | . | . | . | 1 | 4 | 1 | . | . | . | 6 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 147 | 2506 | 2642 | 1086 | 337 | 40 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 4.1 NO. OF CASES= 6331.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 179 | 1144 | 199 | 6 | . | . | . | . | . | . | 1528 |
| 0.50-0.99 | . | 1186 | 1356 | 260 | 2 | . | . | . | . | . | 2804 |
| 1.00-1.49 | . | . | 351 | 406 | 71 | 2 | . | . | . | . | 830 |
| 1.50-1.99 | . | . | 118 | 40 | 62 | 6 | . | . | . | . | 226 |
| 2.00-2.49 | . | . | 3 | 2 | 1 | 3 | . | . | . | . | 9 |
| 2.50-2.99 | . | . | . | 1 | . | . | 1 | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 179 | 2330 | 2027 | 715 | 136 | 11 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.9 NO. OF CASES= 5056.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 210 | 907 | 174 | 11 | 1 | . | . | . | . | . | 1303 |
| 0.50-0.99 | . | 799 | 593 | 130 | 6 | 1 | . | . | . | . | 1529 |
| 1.00-1.49 | . | . | 272 | 83 | 23 | 1 | . | . | . | . | 379 |
| 1.50-1.99 | . | . | 45 | 3 | 20 | . | . | . | . | . | 68 |
| 2.00-2.49 | . | . | 3 | 1 | . | 1 | . | . | . | . | 5 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 210 | 1706 | 1087 | 228 | 50 | 3 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 3079.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 234 | 829 | 163 | 7 | . | . | . | . | . | . | 1233 |
| 0.50-0.99 | . | 988 | 405 | 93 | 9 | . | . | . | . | . | 1495 |
| 1.00-1.49 | . | . | 300 | 51 | 23 | 1 | . | . | . | . | 375 |
| 1.50-1.99 | . | . | 55 | 4 | 4 | 4 | . | . | . | . | 67 |
| 2.00-2.49 | . | . | 1 | 2 | . | . | . | . | . | . | 3 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 234 | 1817 | 924 | 158 | 36 | 5 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 2974.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 152 | 912 | 524 | 26 | . | . | . | . | . | . | 1614 |
| 0.50-0.99 | . | 1304 | 687 | 469 | 39 | . | . | . | . | . | 2499 |
| 1.00-1.49 | . | . | 333 | 156 | 225 | 31 | . | . | . | . | 745 |
| 1.50-1.99 | . | . | 260 | 21 | 27 | 40 | 2 | . | . | . | 350 |
| 2.00-2.49 | . | . | 16 | 28 | 4 | 4 | . | . | . | . | 52 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 152 | 2216 | 1820 | 705 | 295 | 75 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 4933.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 143 | 812 | 552 | 19 | . | . | . | . | . | . | 1526 |
| 0.50-0.99 | . | 882 | 1558 | 601 | 23 | . | . | . | . | . | 3064 |
| 1.00-1.49 | . | . | 325 | 612 | 243 | 10 | . | . | . | . | 1190 |
| 1.50-1.99 | . | . | 129 | 145 | 214 | 16 | . | . | . | . | 504 |
| 2.00-2.49 | . | . | 16 | 39 | 82 | 52 | . | . | . | . | 189 |
| 2.50-2.99 | . | . | . | 5 | 10 | 17 | . | . | . | . | 32 |
| 3.00-3.49 | . | . | . | . | 1 | 7 | 3 | . | . | . | 11 |
| 3.50-3.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 143 | 1694 | 2580 | 1421 | 573 | 102 | 5 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.4 NO. OF CASES= 6105.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 160 | 920 | 512 | 3 | 1 | . | . | . | . | . | 1596 |
| 0.50-0.99 | . | 591 | 2734 | 366 | 13 | 1 | 1 | . | . | . | 3706 |
| 1.00-1.49 | . | . | 749 | 983 | 75 | 7 | . | . | . | . | 1814 |
| 1.50-1.99 | . | . | 74 | 501 | 239 | 22 | . | . | . | . | 836 |
| 2.00-2.49 | . | . | . | 161 | 205 | 75 | 2 | . | . | . | 443 |
| 2.50-2.99 | . | . | . | 7 | 171 | 79 | 2 | . | . | . | 259 |
| 3.00-3.49 | . | . | . | . | 11 | 158 | 6 | . | . | . | 175 |
| 3.50-3.99 | . | . | . | . | . | 65 | 24 | . | . | . | 89 |
| 4.00-4.49 | . | . | . | . | . | 5 | 35 | 4 | . | . | 44 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 1 | . | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | . | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 160 | 1511 | 4069 | 2021 | 715 | 412 | 76 | 11 | 1 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.6 NO. OF CASES= 8409.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 194 | 1201 | 687 | 43 | 10 | . | . | . | . | . | 2135 |
| 0.50-0.99 | . | 701 | 3453 | 513 | 81 | 11 | 3 | . | 1 | . | 4763 |
| 1.00-1.49 | . | . | 898 | 1311 | 190 | 44 | 1 | 1 | 1 | . | 2446 |
| 1.50-1.99 | . | . | 83 | 608 | 349 | 70 | 4 | 1 | . | . | 1115 |
| 2.00-2.49 | . | . | 1 | 257 | 214 | 176 | 10 | 2 | 1 | . | 661 |
| 2.50-2.99 | . | . | . | 12 | 272 | 113 | 18 | 4 | . | 1 | 420 |
| 3.00-3.49 | . | . | . | . | 32 | 278 | 24 | 5 | 1 | . | 340 |
| 3.50-3.99 | . | . | . | . | . | 145 | 59 | 8 | 3 | . | 215 |
| 4.00-4.49 | . | . | . | . | . | 14 | 109 | 17 | 1 | . | 141 |
| 4.50-4.99 | . | . | . | . | . | . | 28 | 43 | 2 | . | 73 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 35 | 4 | . | 41 |
| 5.50-5.99 | . | . | . | . | . | . | . | 7 | 10 | 1 | 18 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 9 | 2 | 12 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 194 | 1902 | 5122 | 2744 | 1148 | 851 | 258 | 124 | 35 | 5 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 11602.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 188 | 1120 | 659 | 69 | 5 | . | . | . | . | . | 2041 |
| 0.50-0.99 | . | 622 | 2973 | 697 | 120 | 8 | 1 | . | . | . | 4421 |
| 1.00-1.49 | . | . | 794 | 1222 | 337 | 42 | . | . | . | . | 2395 |
| 1.50-1.99 | . | . | 72 | 655 | 447 | 136 | 4 | . | . | . | 1314 |
| 2.00-2.49 | . | . | . | 269 | 216 | 268 | 14 | . | . | . | 767 |
| 2.50-2.99 | . | . | . | 17 | 337 | 127 | 56 | 8 | . | . | 545 |
| 3.00-3.49 | . | . | . | . | 36 | 296 | 36 | 23 | . | . | 391 |
| 3.50-3.99 | . | . | . | . | . | 182 | 99 | 32 | 3 | . | 316 |
| 4.00-4.49 | . | . | . | . | . | 22 | 108 | 57 | 12 | . | 199 |
| 4.50-4.99 | . | . | . | . | . | 1 | 23 | 54 | 17 | . | 95 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 37 | 26 | . | 65 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | 33 | . | 38 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 7 | 3 | 11 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | 2 | 5 | 7 |
| TOTAL | 188 | 1742 | 4498 | 2929 | 1498 | 1082 | 343 | 217 | 102 | 8 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 8.0 MEAN TP(SEC)= 5.1 NO. OF CASES= 11811.

STATION S54 46.80N 85.78W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

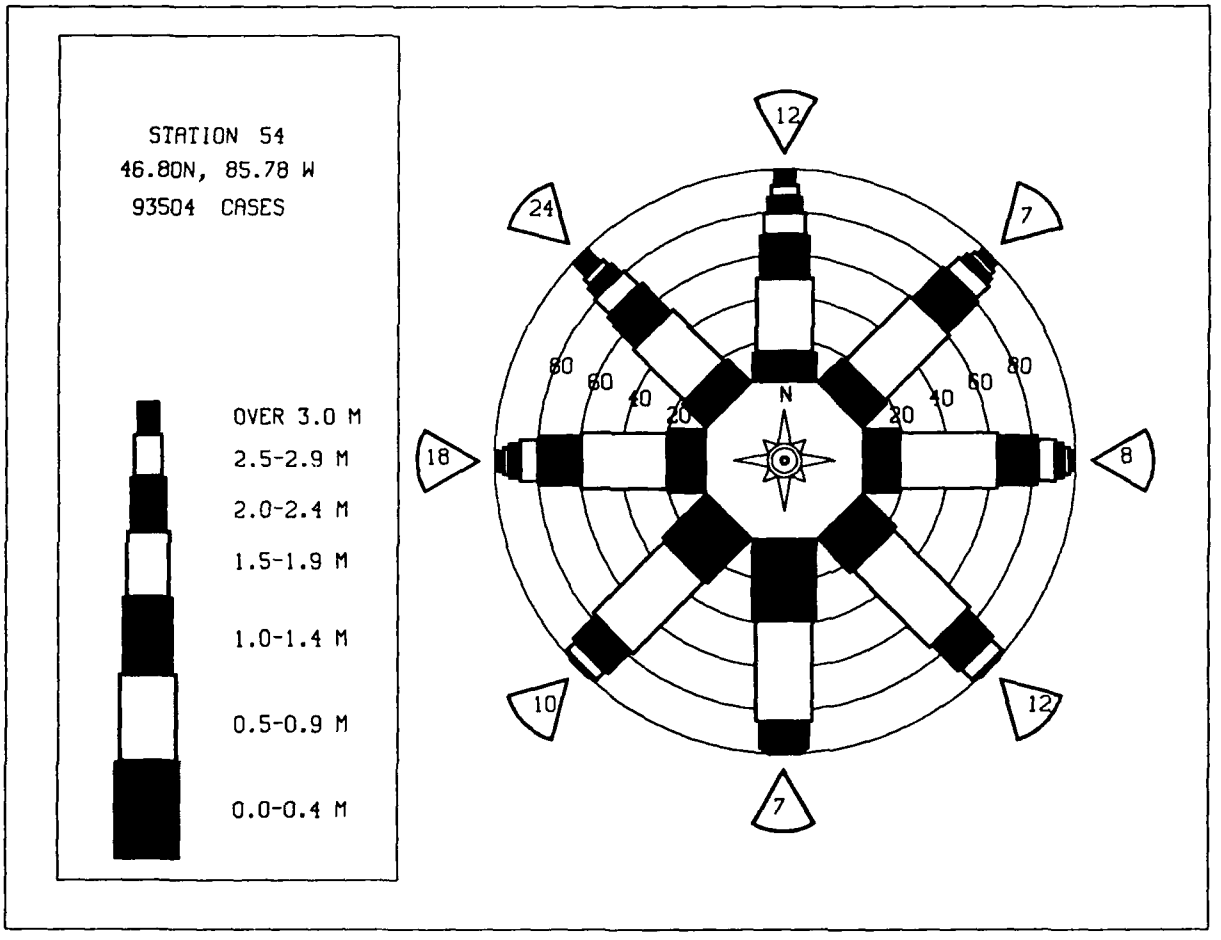
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 162 | 746 | 252 | 5 | 1 | . | . | . | . | . | 1166 |
| 0.50-0.99 | . | 484 | 2151 | 263 | 13 | . | . | . | . | . | 2911 |
| 1.00-1.49 | . | . | 849 | 773 | 186 | 4 | . | . | . | . | 1812 |
| 1.50-1.99 | . | . | 81 | 515 | 390 | 89 | . | . | . | . | 1075 |
| 2.00-2.49 | . | . | . | 238 | 209 | 234 | 1 | . | . | . | 682 |
| 2.50-2.99 | . | . | . | 23 | 220 | 196 | 48 | 5 | . | . | 492 |
| 3.00-3.49 | . | . | . | 1 | 33 | 256 | 38 | 16 | . | . | 344 |
| 3.50-3.99 | . | . | . | . | 2 | 110 | 84 | 34 | 1 | . | 231 |
| 4.00-4.49 | . | . | . | . | . | 3 | 82 | 50 | 2 | . | 137 |
| 4.50-4.99 | . | . | . | . | . | . | 12 | 62 | 10 | . | 84 |
| 5.00-5.49 | . | . | . | . | . | . | . | 20 | 12 | 1 | 33 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 17 | . | 20 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 7 | . | 7 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 162 | 1230 | 3333 | 1818 | 1054 | 892 | 265 | 190 | 49 | 4 | |

MEAN HS(M) = 1.4 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 5.1 NO. OF CASES= 8429.

STATION S54 46.80N 85.78W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 226 | 1292 | 459 | 21 | 1 | . | . | . | . | . | 1999 |
| 0.50-0.99 | . | 1107 | 2616 | 429 | 34 | 2 | . | . | . | . | 4188 |
| 1.00-1.49 | . | . | 778 | 866 | 167 | 15 | . | . | . | . | 1826 |
| 1.50-1.99 | . | . | 130 | 405 | 271 | 47 | 1 | . | . | . | 854 |
| 2.00-2.49 | . | . | 5 | 156 | 145 | 103 | 3 | . | . | . | 412 |
| 2.50-2.99 | . | . | . | 15 | 154 | 88 | 14 | 1 | . | . | 272 |
| 3.00-3.49 | . | . | . | . | 16 | 155 | 16 | 5 | . | . | 192 |
| 3.50-3.99 | . | . | . | . | . | 68 | 36 | 8 | . | . | 112 |
| 4.00-4.49 | . | . | . | . | . | 6 | 40 | 16 | 1 | . | 63 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 17 | 3 | . | 28 |
| 5.00-5.49 | . | . | . | . | . | . | . | 10 | 4 | . | 14 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 6 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 226 | 2399 | 3988 | 1892 | 788 | 484 | 118 | 58 | 16 | 0 | |

MEAN HS(M)= 1.0 LARGEST HS(M)= 8.0 MEAN TP(SEC)= 4.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S54 (46.80N 85.78W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.9 | 1.2 | 1.1 | 1.2 | 0.8 | 0.7 | 0.6 | 0.6 | 0.8 | 1.1 | 1.3 | 1.3 | 1.0 |
| 1957 | 1.7 | 1.4 | 1.2 | 1.0 | 1.0 | 0.8 | 0.7 | 0.7 | 1.1 | 1.0 | 1.5 | 1.8 | 1.2 |
| 1958 | 1.3 | 2.1 | 1.0 | 1.1 | 1.0 | 0.8 | 0.6 | 0.6 | 0.8 | 1.0 | 1.9 | 1.4 | 1.1 |
| 1959 | 1.4 | 1.4 | 1.2 | 1.0 | 1.0 | 0.7 | 0.6 | 0.6 | 0.9 | 1.2 | 1.6 | 1.7 | 1.1 |
| 1960 | 1.4 | 1.5 | 1.0 | 1.0 | 0.9 | 0.6 | 0.6 | 0.6 | 0.7 | 1.1 | 1.5 | 1.3 | 1.0 |
| 1961 | 1.1 | 1.1 | 1.5 | 0.9 | 0.9 | 0.7 | 0.5 | 0.5 | 0.9 | 1.0 | 1.3 | 1.3 | 1.0 |
| 1962 | 1.6 | 1.2 | 0.8 | 1.0 | 0.6 | 0.5 | 0.5 | 0.5 | 0.8 | 0.9 | 1.1 | 1.5 | 0.9 |
| 1963 | 1.3 | 1.4 | 1.3 | 1.0 | 0.8 | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 1.5 | 1.5 | 1.0 |
| 1964 | 1.6 | 1.5 | 1.6 | 1.2 | 1.0 | 0.7 | 0.6 | 0.8 | 1.0 | 1.1 | 1.3 | 1.3 | 1.1 |
| 1965 | 1.7 | 1.7 | 1.3 | 0.8 | 0.7 | 0.7 | 0.7 | 0.6 | 0.8 | 1.4 | 1.6 | 1.5 | 1.1 |
| 1966 | 1.7 | 1.5 | 1.8 | 1.1 | 1.1 | 0.7 | 0.8 | 0.7 | 1.1 | 1.5 | 1.7 | 1.7 | 1.3 |
| 1967 | 1.7 | 1.8 | 1.3 | 1.1 | 1.0 | 0.6 | 0.7 | 0.7 | 0.9 | 1.3 | 1.4 | 1.5 | 1.2 |
| 1968 | 1.4 | 2.5 | 1.5 | 1.1 | 0.9 | 0.6 | 0.7 | 0.7 | 0.8 | 1.2 | 1.8 | 1.7 | 1.2 |
| 1969 | 1.7 | 1.9 | 1.5 | 1.0 | 0.8 | 0.7 | 0.6 | 0.7 | 0.9 | 1.3 | 1.3 | 1.5 | 1.1 |
| 1970 | 1.5 | 1.7 | 1.3 | 1.2 | 0.9 | 0.6 | 0.7 | 0.7 | 1.0 | 1.1 | 1.6 | 1.5 | 1.2 |
| 1971 | 1.6 | 1.6 | 1.6 | 1.1 | 0.8 | 0.5 | 0.7 | 0.7 | 0.8 | 1.0 | 1.3 | 1.5 | 1.1 |
| 1972 | 1.8 | 1.4 | 1.5 | 0.9 | 0.6 | 0.7 | 0.7 | 0.7 | 1.1 | 1.5 | 1.2 | 1.5 | 1.1 |
| 1973 | 1.4 | 1.3 | 1.4 | 1.1 | 0.9 | 0.5 | 0.6 | 0.6 | 0.9 | 1.1 | 1.6 | 1.3 | 1.1 |
| 1974 | 1.2 | 1.1 | 1.3 | 1.0 | 0.7 | 0.6 | 0.6 | 0.5 | 0.8 | 1.1 | 1.2 | 1.2 | 0.9 |
| 1975 | 1.4 | 1.0 | 1.2 | 0.8 | 0.5 | 0.6 | 0.6 | 0.7 | 0.8 | 1.1 | 1.4 | 1.3 | 1.0 |
| 1976 | 1.7 | 1.5 | 1.7 | 1.1 | 0.8 | 0.6 | 0.6 | 0.7 | 0.9 | 0.9 | 1.5 | 1.5 | 1.1 |
| 1977 | 1.4 | 1.5 | 1.2 | 0.7 | 0.5 | 0.6 | 0.6 | 0.6 | 0.8 | 1.0 | 1.2 | 1.4 | 1.0 |
| 1978 | 1.7 | 1.0 | 1.0 | 0.9 | 0.6 | 0.6 | 0.5 | 0.8 | 0.8 | 1.1 | 1.4 | 1.4 | 1.0 |
| 1979 | 1.4 | 1.1 | 1.2 | 0.7 | 0.6 | 0.6 | 0.5 | 0.6 | 0.8 | 1.0 | 1.4 | 1.5 | 1.0 |
| 1980 | 1.3 | 0.9 | 1.3 | 0.9 | 0.6 | 0.6 | 0.4 | 0.5 | 0.9 | 1.2 | 1.0 | 1.3 | 0.9 |
| 1981 | 1.0 | 1.1 | 1.1 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.8 | 1.0 | 1.2 | 1.1 | 0.9 |
| 1982 | 1.8 | 1.1 | 1.5 | 1.1 | 0.5 | 0.5 | 0.5 | 0.5 | 0.9 | 1.0 | 1.2 | 1.3 | 1.0 |
| 1983 | 1.4 | 1.1 | 1.5 | 0.8 | 0.8 | 0.5 | 0.5 | 0.5 | 0.7 | 1.0 | 1.5 | 1.5 | 1.0 |
| 1984 | 1.2 | 1.2 | 1.4 | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 | 0.8 | 0.9 | 1.5 | 1.5 | 1.0 |
| 1985 | 1.5 | 1.4 | 1.3 | 0.9 | 0.5 | 0.6 | 0.4 | 0.5 | 0.7 | 0.9 | 1.2 | 1.4 | 0.9 |
| 1986 | 1.4 | 0.9 | 1.3 | 1.1 | 0.6 | 0.6 | 0.4 | 0.5 | 0.8 | 0.8 | 1.2 | 1.3 | 0.9 |
| 1987 | 1.4 | 1.1 | 1.2 | 0.9 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.1 | 1.3 | 1.3 | 0.9 |
| MEAN | 1.5 | 1.4 | 1.3 | 1.0 | 0.8 | 0.6 | 0.6 | 0.6 | 0.9 | 1.1 | 1.4 | 1.4 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S54 (46.80N 85.78W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.3 | 4.5 | 3.7 | 4.0 | 2.6 | 2.4 | 1.9 | 2.2 | 3.5 | 5.1 | 4.1 | 4.3 |
| 1957 | 5.1 | 5.1 | 4.3 | 3.7 | 2.8 | 3.3 | 4.9 | 2.6 | 4.6 | 3.8 | 5.6 | 6.0 |
| 1958 | 5.2 | 5.7 | 4.1 | 4.6 | 3.5 | 3.1 | 2.0 | 2.3 | 3.8 | 3.3 | 5.3 | 4.3 |
| 1959 | 3.9 | 4.2 | 5.4 | 3.3 | 3.9 | 2.9 | 1.7 | 1.6 | 3.9 | 4.9 | 4.8 | 6.3 |
| 1960 | 4.6 | 4.5 | 3.5 | 3.2 | 3.6 | 2.0 | 2.7 | 2.1 | 3.0 | 5.4 | 5.0 | 4.2 |
| 1961 | 5.8 | 3.9 | 5.5 | 3.6 | 2.8 | 2.6 | 2.0 | 2.7 | 3.2 | 4.0 | 4.5 | 5.3 |
| 1962 | 4.7 | 4.4 | 3.4 | 3.6 | 3.2 | 1.4 | 1.9 | 2.3 | 2.9 | 4.8 | 4.3 | 5.1 |
| 1963 | 3.7 | 5.7 | 4.7 | 5.5 | 3.4 | 1.9 | 2.2 | 2.5 | 3.0 | 3.1 | 5.8 | 4.4 |
| 1964 | 5.6 | 4.6 | 5.1 | 3.8 | 3.4 | 3.7 | 1.6 | 2.9 | 4.7 | 3.8 | 5.9 | 3.8 |
| 1965 | 5.0 | 5.5 | 4.8 | 3.1 | 1.7 | 2.2 | 2.2 | 2.2 | 3.3 | 5.6 | 6.3 | 5.0 |
| 1966 | 6.4 | 5.0 | 5.7 | 3.7 | 4.6 | 2.6 | 2.6 | 2.9 | 4.3 | 6.2 | 5.6 | 5.3 |
| 1967 | 6.3 | 6.3 | 4.9 | 3.5 | 3.8 | 2.5 | 3.0 | 2.3 | 3.2 | 3.7 | 4.3 | 4.3 |
| 1968 | 4.1 | 7.0 | 4.8 | 4.2 | 2.7 | 2.2 | 3.1 | 2.8 | 2.0 | 3.9 | 6.1 | 5.9 |
| 1969 | 5.2 | 5.0 | 4.4 | 3.6 | 2.3 | 2.1 | 2.5 | 2.8 | 3.0 | 3.7 | 4.4 | 5.7 |
| 1970 | 4.3 | 5.0 | 4.0 | 4.8 | 4.0 | 2.4 | 2.4 | 2.8 | 4.1 | 4.4 | 6.7 | 6.2 |
| 1971 | 5.6 | 6.3 | 5.9 | 4.0 | 2.6 | 1.3 | 2.4 | 2.4 | 3.0 | 3.9 | 4.2 | 5.4 |
| 1972 | 7.2 | 5.8 | 4.3 | 3.7 | 2.4 | 2.4 | 2.4 | 2.8 | 4.5 | 8.0 | 4.4 | 6.8 |
| 1973 | 4.3 | 3.3 | 4.9 | 3.0 | 3.1 | 1.6 | 1.8 | 2.9 | 4.2 | 5.6 | 5.2 | 3.5 |
| 1974 | 5.7 | 5.4 | 3.8 | 3.1 | 2.2 | 1.8 | 1.7 | 1.6 | 2.9 | 3.5 | 3.3 | 4.3 |
| 1975 | 4.4 | 4.4 | 3.7 | 3.1 | 1.5 | 2.4 | 1.9 | 3.0 | 2.4 | 4.4 | 5.1 | 4.7 |
| 1976 | 6.0 | 5.6 | 5.6 | 3.2 | 4.2 | 1.7 | 1.8 | 3.2 | 3.7 | 3.8 | 5.3 | 4.3 |
| 1977 | 5.2 | 5.0 | 5.9 | 3.1 | 2.0 | 2.6 | 2.9 | 2.9 | 4.4 | 3.4 | 5.3 | 3.5 |
| 1978 | 6.4 | 3.5 | 5.1 | 4.1 | 2.9 | 1.8 | 1.9 | 2.1 | 2.4 | 3.3 | 3.9 | 3.9 |
| 1979 | 4.1 | 3.9 | 4.8 | 4.4 | 2.3 | 1.8 | 1.6 | 3.6 | 2.3 | 3.4 | 4.2 | 4.7 |
| 1980 | 5.8 | 3.1 | 6.0 | 3.3 | 2.6 | 1.9 | 1.3 | 1.6 | 3.7 | 5.2 | 5.5 | 4.8 |
| 1981 | 2.8 | 3.9 | 4.6 | 3.4 | 2.5 | 2.8 | 1.2 | 1.3 | 5.0 | 4.7 | 5.1 | 3.1 |
| 1982 | 7.4 | 4.3 | 6.5 | 5.7 | 2.1 | 2.1 | 2.2 | 1.8 | 4.0 | 4.6 | 5.1 | 3.9 |
| 1983 | 4.2 | 4.5 | 4.5 | 2.2 | 2.7 | 2.0 | 1.8 | 1.7 | 2.4 | 4.0 | 4.3 | 5.0 |
| 1984 | 5.1 | 4.2 | 5.2 | 3.1 | 3.2 | 2.1 | 1.4 | 1.5 | 2.1 | 3.9 | 6.1 | 5.5 |
| 1985 | 4.1 | 4.3 | 4.6 | 4.6 | 1.5 | 3.3 | 1.2 | 1.9 | 2.6 | 3.4 | 3.8 | 5.5 |
| 1986 | 5.3 | 3.0 | 5.1 | 3.5 | 3.1 | 2.0 | 1.1 | 2.3 | 3.0 | 3.9 | 3.6 | 3.5 |
| 1987 | 4.8 | 5.7 | 4.3 | 4.4 | 2.9 | 2.0 | 1.4 | 3.4 | 2.7 | 4.6 | 4.7 | 4.2 |

32 YR. STATISTICS FOR WIS STATION S54

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.0 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 8.0 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 311.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 72101703 |

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 65 | 317 | 83 | . | . | . | . | . | . | . | 465 |
| 0.50-0.99 | . | 240 | 1103 | 113 | 8 | . | . | . | . | . | 1464 |
| 1.00-1.49 | . | . | 373 | 547 | 94 | 2 | . | . | . | . | 1016 |
| 1.50-1.99 | . | . | 25 | 375 | 207 | 34 | . | . | . | . | 641 |
| 2.00-2.49 | . | . | . | 130 | 145 | 108 | 3 | . | . | . | 386 |
| 2.50-2.99 | . | . | . | 13 | 208 | 67 | 18 | . | . | . | 306 |
| 3.00-3.49 | . | . | . | . | 19 | 179 | 10 | 3 | . | . | 211 |
| 3.50-3.99 | . | . | . | . | . | 119 | 13 | 6 | . | . | 138 |
| 4.00-4.49 | . | . | . | . | . | 22 | 43 | 4 | . | . | 69 |
| 4.50-4.99 | . | . | . | . | . | . | 17 | 5 | . | . | 22 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 11 | . | . | 13 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 65 | 557 | 1584 | 1178 | 681 | 531 | 106 | 30 | 1 | 0 | |

MEAN HS(M) = 1.4 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 5.2 NO. OF CASES= 4441.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 63 | 300 | 73 | 2 | . | . | . | . | . | . | 438 |
| 0.50-0.99 | . | 254 | 974 | 99 | 5 | . | . | . | . | . | 1332 |
| 1.00-1.49 | . | . | 295 | 434 | 63 | 2 | . | . | . | . | 794 |
| 1.50-1.99 | . | . | 20 | 244 | 101 | 21 | . | . | . | . | 386 |
| 2.00-2.49 | . | . | . | 69 | 74 | 31 | 1 | . | . | . | 175 |
| 2.50-2.99 | . | . | . | 2 | 124 | 28 | 6 | . | . | . | 160 |
| 3.00-3.49 | . | . | . | . | 6 | 143 | 5 | . | . | . | 154 |
| 3.50-3.99 | . | . | . | . | . | 50 | 3 | 1 | . | . | 54 |
| 4.00-4.49 | . | . | . | . | . | 4 | 12 | . | . | . | 16 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | . | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 2 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 63 | 554 | 1362 | 850 | 373 | 279 | 33 | 3 | 0 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.9 NO. OF CASES= 3300.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 90 | 394 | 90 | 3 | . | . | . | . | . | . | 577 |
| 0.50-0.99 | . | 260 | 1189 | 81 | 7 | . | . | . | . | . | 1537 |
| 1.00-1.49 | . | . | 337 | 433 | 37 | 2 | 1 | . | . | . | 810 |
| 1.50-1.99 | . | . | 7 | 233 | 66 | 13 | . | . | . | . | 319 |
| 2.00-2.49 | . | . | . | 57 | 63 | 10 | 1 | . | . | . | 131 |
| 2.50-2.99 | . | . | . | . | 93 | 34 | . | . | . | . | 127 |
| 3.00-3.49 | . | . | . | . | 2 | 84 | . | . | . | . | 86 |
| 3.50-3.99 | . | . | . | . | . | 29 | . | . | . | . | 29 |
| 4.00-4.49 | . | . | . | . | . | 1 | 5 | . | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 90 | 654 | 1623 | 807 | 268 | 173 | 7 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 3398.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 48 | 449 | 42 | 2 | . | . | . | . | . | . | 541 |
| 0.50-0.99 | . | 337 | 1375 | 65 | 1 | . | . | . | . | . | 1778 |
| 1.00-1.49 | . | . | 373 | 356 | 23 | 3 | . | . | . | . | 755 |
| 1.50-1.99 | . | . | 7 | 229 | 51 | 4 | . | . | . | . | 291 |
| 2.00-2.49 | . | . | . | 40 | 69 | 3 | . | . | . | . | 112 |
| 2.50-2.99 | . | . | . | . | 95 | 7 | . | . | . | . | 102 |
| 3.00-3.49 | . | . | . | . | 6 | 37 | . | . | . | . | 43 |
| 3.50-3.99 | . | . | . | . | . | 8 | . | . | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 48 | 786 | 1797 | 692 | 245 | 64 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.4 NO. OF CASES= 3406.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 68 | 703 | 70 | 3 | . | . | . | . | . | . | 844 |
| 0.50-0.99 | . | 559 | 1995 | 63 | 6 | . | . | . | . | . | 2623 |
| 1.00-1.49 | . | . | 468 | 475 | 17 | 1 | . | . | . | . | 961 |
| 1.50-1.99 | . | . | 18 | 345 | 73 | 2 | . | . | . | . | 438 |
| 2.00-2.49 | . | . | . | 94 | 105 | 2 | . | . | . | . | 201 |
| 2.50-2.99 | . | . | . | 2 | 182 | . | . | . | . | . | 184 |
| 3.00-3.49 | . | . | . | . | 14 | 75 | . | . | . | . | 89 |
| 3.50-3.99 | . | . | . | . | . | 14 | . | . | . | . | 14 |
| 4.00-4.49 | . | . | . | . | . | 1 | 2 | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 68 | 1262 | 2551 | 982 | 397 | 95 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.4 NO. OF CASES= 5021.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 96 | 1017 | 81 | 2 | . | . | . | . | . | . | 1196 |
| 0.50-0.99 | . | 801 | 1949 | 101 | 3 | . | . | . | . | . | 2854 |
| 1.00-1.49 | . | . | 614 | 599 | 6 | . | . | . | . | . | 1219 |
| 1.50-1.99 | . | . | 29 | 393 | 177 | 1 | . | . | . | . | 600 |
| 2.00-2.49 | . | . | . | 90 | 144 | 23 | . | . | . | . | 257 |
| 2.50-2.99 | . | . | . | 3 | 89 | 16 | . | . | . | . | 108 |
| 3.00-3.49 | . | . | . | . | 6 | 31 | . | . | . | . | 37 |
| 3.50-3.99 | . | . | . | . | 1 | 11 | . | . | . | . | 12 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 96 | 1818 | 2673 | 1188 | 426 | 83 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 5888.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 155 | 1250 | 154 | 5 | . | . | . | . | . | . | 1564 |
| 0.50-0.99 | . | 1699 | 2338 | 218 | 5 | 1 | . | . | . | . | 4261 |
| 1.00-1.49 | . | . | 671 | 860 | 47 | . | . | . | . | . | 1578 |
| 1.50-1.99 | . | . | 162 | 216 | 333 | 6 | . | . | . | . | 717 |
| 2.00-2.49 | . | . | 8 | 22 | 84 | 35 | . | . | . | . | 149 |
| 2.50-2.99 | . | . | . | 2 | 1 | 3 | 1 | . | . | . | 7 |
| 3.00-3.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 155 | 2949 | 3333 | 1323 | 470 | 46 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 7747.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 158 | 961 | 128 | 11 | . | . | . | . | . | . | 1258 |
| 0.50-0.99 | . | 1134 | 1040 | 161 | 3 | 1 | . | . | . | . | 2339 |
| 1.00-1.49 | . | 1 | 234 | 255 | 33 | 4 | . | . | . | . | 527 |
| 1.50-1.99 | . | . | 69 | 7 | 42 | 4 | . | . | . | . | 122 |
| 2.00-2.49 | . | . | 3 | 1 | . | 2 | . | . | . | . | 6 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 158 | 2096 | 1474 | 435 | 78 | 11 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 3983.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 166 | 724 | 97 | 7 | . | . | . | . | . | . | 994 |
| 0.50-0.99 | . | 693 | 390 | 60 | 4 | 1 | . | . | . | . | 1148 |
| 1.00-1.49 | . | . | 224 | 53 | 16 | 1 | . | . | . | . | 294 |
| 1.50-1.99 | . | . | 29 | 2 | 6 | 3 | . | . | . | . | 40 |
| 2.00-2.49 | . | . | 1 | . | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 166 | 1417 | 741 | 122 | 26 | 5 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 2322.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 146 | 658 | 68 | 5 | 1 | . | . | . | . | . | 878 |
| 0.50-0.99 | . | 756 | 329 | 75 | 9 | . | . | . | . | . | 1169 |
| 1.00-1.49 | . | . | 253 | 36 | 11 | 2 | . | . | . | . | 302 |
| 1.50-1.99 | . | . | 49 | 6 | 5 | 2 | . | . | . | . | 62 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 146 | 1414 | 699 | 124 | 26 | 4 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 2263.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 158 | 722 | 263 | 12 | . | . | . | . | . | . | 1155 |
| 0.50-0.99 | . | 1138 | 476 | 245 | 43 | 2 | . | . | . | . | 1904 |
| 1.00-1.49 | . | . | 355 | 40 | 101 | 17 | . | . | . | . | 513 |
| 1.50-1.99 | . | . | 209 | 10 | 7 | 8 | 1 | . | . | . | 235 |
| 2.00-2.49 | . | . | 4 | 19 | . | 1 | 1 | . | . | . | 25 |
| 2.50-2.99 | . | . | . | 5 | . | . | 1 | . | . | . | 6 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 158 | 1860 | 1307 | 332 | 151 | 28 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 3600.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 127 | 673 | 516 | 47 | . | . | . | . | . | . | 1363 |
| 0.50-0.99 | . | 1109 | 1045 | 783 | 129 | 1 | . | . | . | . | 3067 |
| 1.00-1.49 | . | . | 355 | 364 | 273 | 35 | 1 | . | . | . | 1028 |
| 1.50-1.99 | . | . | 207 | 64 | 122 | 29 | . | . | . | . | 422 |
| 2.00-2.49 | . | . | 18 | 40 | 28 | 37 | . | . | . | . | 123 |
| 2.50-2.99 | . | . | . | 7 | 6 | 6 | 1 | . | . | . | 20 |
| 3.00-3.49 | . | . | . | 1 | . | 2 | 4 | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 127 | 1782 | 2141 | 1308 | 558 | 111 | 6 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 5651.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 217 | 980 | 542 | 7 | . | . | . | . | . | . | 1746 |
| 0.50-0.99 | . | 724 | 2658 | 471 | 18 | 1 | 3 | . | . | . | 3875 |
| 1.00-1.49 | . | 1 | 710 | 1027 | 122 | 8 | 1 | . | 1 | . | 1870 |
| 1.50-1.99 | . | . | 105 | 512 | 300 | 19 | . | . | . | . | 936 |
| 2.00-2.49 | . | . | . | 203 | 185 | 93 | 1 | 1 | . | . | 483 |
| 2.50-2.99 | . | . | . | 9 | 183 | 103 | 3 | . | . | . | 298 |
| 3.00-3.49 | . | . | . | . | 12 | 142 | 10 | 1 | . | . | 165 |
| 3.50-3.99 | . | . | . | . | 1 | 70 | 34 | 2 | . | . | 107 |
| 4.00-4.49 | . | . | . | . | . | 1 | 42 | 7 | . | . | 50 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 14 | . | . | 17 |
| 5.00-5.49 | . | . | . | . | . | . | . | 6 | . | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 217 | 1705 | 4015 | 2229 | 821 | 437 | 97 | 32 | 2 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 8950.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 270 | 1239 | 727 | 43 | 13 | 2 | . | . | . | . | 2294 |
| 0.50-0.99 | . | 869 | 3604 | 643 | 96 | 18 | 3 | . | 1 | . | 5234 |
| 1.00-1.49 | . | 1 | 967 | 1240 | 233 | 34 | 2 | 1 | 4 | . | 2482 |
| 1.50-1.99 | . | . | 119 | 680 | 356 | 85 | 1 | 1 | . | . | 1242 |
| 2.00-2.49 | . | . | 1 | 273 | 224 | 155 | 10 | 1 | 1 | . | 665 |
| 2.50-2.99 | . | . | . | 20 | 312 | 95 | 24 | 2 | . | 1 | 454 |
| 3.00-3.49 | . | . | . | 1 | 48 | 272 | 20 | 5 | . | . | 346 |
| 3.50-3.99 | . | . | . | . | 1 | 166 | 62 | 12 | 1 | . | 242 |
| 4.00-4.49 | . | . | . | . | . | 25 | 127 | 17 | 2 | . | 171 |
| 4.50-4.99 | . | . | . | . | . | . | 27 | 52 | 4 | . | 83 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 48 | 3 | . | 52 |
| 5.50-5.99 | . | . | . | . | . | . | . | 10 | 19 | . | 29 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 9 | 1 | 10 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 9 | 1 | 10 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 270 | 2109 | 5418 | 2900 | 1283 | 852 | 277 | 149 | 53 | 4 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.9 NO. OF CASES= 12471.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 211 | 1157 | 547 | 48 | 5 | . | . | . | . | . | 1968 |
| 0.50-0.99 | . | 979 | 3481 | 747 | 102 | 9 | . | . | . | . | 5318 |
| 1.00-1.49 | . | 1 | 1155 | 1250 | 342 | 43 | 3 | . | . | . | 2794 |
| 1.50-1.99 | . | . | 77 | 853 | 408 | 136 | 4 | . | . | . | 1478 |
| 2.00-2.49 | . | . | 1 | 375 | 257 | 238 | 14 | . | . | . | 885 |
| 2.50-2.99 | . | . | . | 16 | 465 | 117 | 47 | 6 | . | . | 651 |
| 3.00-3.49 | . | . | . | . | 63 | 411 | 24 | 23 | 2 | . | 523 |
| 3.50-3.99 | . | . | . | . | 1 | 220 | 85 | 24 | 1 | . | 331 |
| 4.00-4.49 | . | . | . | . | . | 25 | 116 | 49 | 13 | . | 203 |
| 4.50-4.99 | . | . | . | . | . | 3 | 27 | 63 | 13 | . | 106 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 35 | 13 | . | 50 |
| 5.50-5.99 | . | . | . | . | . | . | . | 12 | 40 | 1 | 53 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 19 | 3 | 22 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | 3 | 7 | 10 |
| TOTAL | 211 | 2137 | 5261 | 3289 | 1643 | 1202 | 322 | 212 | 107 | 11 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 8.1 MEAN TP(SEC)= 5.1 NO. OF CASES= 13483.

STATION S55 46.80N 85.57W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

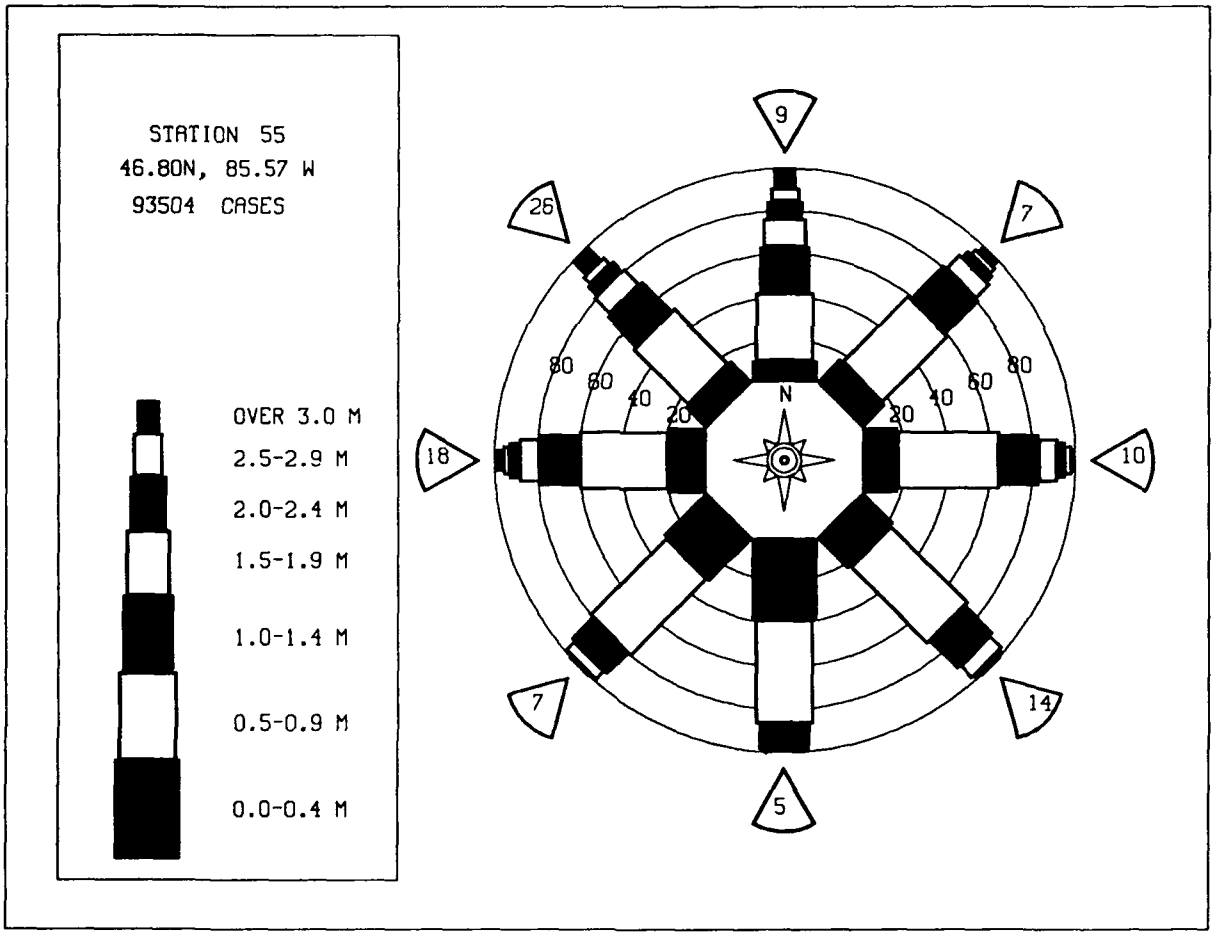
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 84 | 505 | 94 | 5 | . | . | . | . | . | . | 688 |
| 0.50-0.99 | . | 457 | 1929 | 183 | 3 | 1 | . | . | . | . | 2573 |
| 1.00-1.49 | . | 1 | 849 | 714 | 121 | 3 | . | . | . | . | 1688 |
| 1.50-1.99 | . | . | 52 | 597 | 326 | 85 | . | . | . | . | 1060 |
| 2.00-2.49 | . | . | 1 | 282 | 228 | 190 | 2 | . | . | . | 703 |
| 2.50-2.99 | . | . | . | 21 | 325 | 118 | 43 | 6 | . | . | 513 |
| 3.00-3.49 | . | . | . | . | 43 | 250 | 36 | 19 | . | . | 348 |
| 3.50-3.99 | . | . | . | . | . | 168 | 60 | 22 | . | . | 250 |
| 4.00-4.49 | . | . | . | . | . | 23 | 63 | 41 | 6 | . | 133 |
| 4.50-4.99 | . | . | . | . | . | 2 | 20 | 38 | 11 | . | 71 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 16 | 19 | 1 | 37 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 10 | 1 | 12 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 6 | . | 6 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 84 | 963 | 2925 | 1802 | 1046 | 840 | 225 | 143 | 53 | 4 | |

MEAN HS(M) = 1.5 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 5.2 NO. OF CASES= 7580.

STATION S55 46.80N 85.57W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 212 | 1205 | 358 | 20 | 2 | . | . | . | . | . | 1797 |
| 0.50-0.99 | . | 1201 | 2588 | 411 | 44 | 3 | . | . | . | . | 4247 |
| 1.00-1.49 | . | . | 823 | 869 | 154 | 16 | . | . | . | . | 1862 |
| 1.50-1.99 | . | . | 119 | 477 | 258 | 45 | . | . | . | . | 899 |
| 2.00-2.49 | . | . | 3 | 170 | 161 | 93 | 3 | . | . | . | 430 |
| 2.50-2.99 | . | . | . | 10 | 208 | 59 | 14 | 1 | . | . | 292 |
| 3.00-3.49 | . | . | . | . | 22 | 163 | 11 | 5 | . | . | 201 |
| 3.50-3.99 | . | . | . | . | . | 86 | 25 | 6 | . | . | 117 |
| 4.00-4.49 | . | . | . | . | . | 10 | 41 | 11 | 2 | . | 64 |
| 4.50-4.99 | . | . | . | . | . | . | 10 | 17 | 2 | . | 29 |
| 5.00-5.49 | . | . | . | . | . | . | . | 11 | 3 | . | 14 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 7 | . | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 212 | 2406 | 3891 | 1957 | 849 | 475 | 104 | 53 | 18 | 1 | |

MEAN HS(M)= 1.1 LARGEST HS(M)= 8.1 MEAN TP(SEC)= 4.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S55 (46.80N 85.57W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.0 | 1.3 | 1.2 | 1.2 | 0.9 | 0.7 | 0.7 | 0.6 | 0.8 | 1.1 | 1.4 | 1.4 | 1.0 |
| 1957 | 1.7 | 1.4 | 1.3 | 1.0 | 1.0 | 0.8 | 0.7 | 0.7 | 1.1 | 1.0 | 1.6 | 1.8 | 1.2 |
| 1958 | 1.3 | 2.1 | 1.1 | 1.2 | 1.0 | 0.9 | 0.6 | 0.7 | 0.9 | 1.1 | 1.9 | 1.4 | 1.2 |
| 1959 | 1.5 | 1.5 | 1.3 | 1.1 | 1.1 | 0.8 | 0.7 | 0.7 | 1.0 | 1.3 | 1.7 | 1.7 | 1.2 |
| 1960 | 1.4 | 1.5 | 1.0 | 1.0 | 0.9 | 0.6 | 0.6 | 0.6 | 0.8 | 1.1 | 1.6 | 1.3 | 1.0 |
| 1961 | 1.1 | 1.1 | 1.5 | 0.9 | 0.9 | 0.7 | 0.5 | 0.6 | 1.0 | 1.1 | 1.3 | 1.4 | 1.0 |
| 1962 | 1.6 | 1.2 | 0.8 | 1.0 | 0.7 | 0.5 | 0.5 | 0.6 | 0.9 | 0.9 | 1.1 | 1.5 | 1.0 |
| 1963 | 1.3 | 1.4 | 1.3 | 1.1 | 0.8 | 0.6 | 0.6 | 0.7 | 0.7 | 0.8 | 1.5 | 1.5 | 1.0 |
| 1964 | 1.7 | 1.5 | 1.6 | 1.2 | 1.0 | 0.7 | 0.6 | 0.9 | 1.1 | 1.1 | 1.4 | 1.3 | 1.2 |
| 1965 | 1.8 | 1.8 | 1.3 | 0.9 | 0.8 | 0.8 | 0.7 | 0.7 | 0.9 | 1.5 | 1.6 | 1.5 | 1.2 |
| 1966 | 1.8 | 1.5 | 1.8 | 1.2 | 1.1 | 0.7 | 0.8 | 0.8 | 1.2 | 1.5 | 1.8 | 1.7 | 1.3 |
| 1967 | 1.8 | 1.8 | 1.4 | 1.1 | 1.0 | 0.7 | 0.7 | 0.7 | 0.9 | 1.3 | 1.4 | 1.6 | 1.2 |
| 1968 | 1.5 | 2.5 | 1.5 | 1.2 | 0.9 | 0.7 | 0.7 | 0.8 | 0.8 | 1.2 | 1.8 | 1.8 | 1.3 |
| 1969 | 1.8 | 1.3 | 1.5 | 1.0 | 0.8 | 0.7 | 0.6 | 0.8 | 0.9 | 1.3 | 1.3 | 1.5 | 1.1 |
| 1970 | 1.5 | 1.7 | 1.4 | 1.1 | 0.9 | 0.7 | 0.7 | 0.7 | 1.1 | 1.2 | 1.6 | 1.5 | 1.2 |
| 1971 | 1.7 | 1.6 | 1.7 | 1.2 | 0.9 | 0.6 | 0.7 | 0.7 | 0.8 | 1.0 | 1.4 | 1.6 | 1.2 |
| 1972 | 1.9 | 1.5 | 1.5 | 1.0 | 0.7 | 0.7 | 0.7 | 0.7 | 1.2 | 1.5 | 1.2 | 1.5 | 1.2 |
| 1973 | 1.5 | 1.3 | 1.4 | 1.2 | 0.9 | 0.6 | 0.6 | 0.6 | 1.0 | 1.1 | 1.7 | 1.3 | 1.1 |
| 1974 | 1.2 | 1.1 | 1.4 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.8 | 1.1 | 1.2 | 1.2 | 1.0 |
| 1975 | 1.4 | 1.1 | 1.3 | 0.9 | 0.5 | 0.6 | 0.6 | 0.7 | 0.8 | 1.1 | 1.4 | 1.3 | 1.0 |
| 1976 | 1.7 | 1.6 | 1.7 | 1.1 | 0.9 | 0.6 | 0.6 | 0.7 | 1.0 | 1.0 | 1.6 | 1.5 | 1.2 |
| 1977 | 1.4 | 1.6 | 1.2 | 0.8 | 0.6 | 0.6 | 0.6 | 0.6 | 0.8 | 1.0 | 1.2 | 1.4 | 1.0 |
| 1978 | 1.6 | 1.0 | 1.0 | 1.0 | 0.6 | 0.6 | 0.5 | 0.8 | 0.8 | 1.1 | 1.4 | 1.4 | 1.0 |
| 1979 | 1.4 | 1.1 | 1.2 | 0.8 | 0.6 | 0.6 | 0.5 | 0.6 | 0.8 | 0.9 | 1.4 | 1.6 | 1.0 |
| 1980 | 1.4 | 0.9 | 1.3 | 0.9 | 0.6 | 0.6 | 0.4 | 0.6 | 0.9 | 1.2 | 1.0 | 1.4 | 0.9 |
| 1981 | 1.0 | 1.1 | 1.1 | 0.9 | 0.6 | 0.5 | 0.4 | 0.4 | 0.9 | 1.0 | 1.2 | 1.2 | 0.9 |
| 1982 | 1.8 | 1.1 | 1.5 | 1.1 | 0.5 | 0.5 | 0.5 | 0.5 | 0.9 | 1.0 | 1.2 | 1.3 | 1.0 |
| 1983 | 1.4 | 1.1 | 1.5 | 0.8 | 0.8 | 0.5 | 0.5 | 0.5 | 0.7 | 1.0 | 1.6 | 1.5 | 1.0 |
| 1984 | 1.2 | 1.3 | 1.4 | 1.0 | 0.8 | 0.6 | 0.5 | 0.4 | 0.8 | 0.9 | 1.5 | 1.5 | 1.0 |
| 1985 | 1.5 | 1.3 | 1.3 | 0.9 | 0.5 | 0.6 | 0.4 | 0.5 | 0.7 | 0.9 | 1.2 | 1.4 | 0.9 |
| 1986 | 1.4 | 0.9 | 1.3 | 1.1 | 0.6 | 0.6 | 0.4 | 0.5 | 0.8 | 0.8 | 1.2 | 1.3 | 0.9 |
| 1987 | 1.4 | 1.2 | 1.3 | 1.0 | 0.7 | 0.6 | 0.6 | 0.7 | 0.7 | 1.1 | 1.4 | 1.3 | 1.0 |
| MEAN | 1.5 | 1.4 | 1.3 | 1.0 | 0.8 | 0.6 | 0.6 | 0.6 | 0.9 | 1.1 | 1.4 | 1.5 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S55 (46.80N 85.57W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.5 | 4.8 | 3.8 | 4.3 | 2.8 | 2.5 | 2.1 | 2.3 | 3.7 | 5.2 | 4.2 | 4.4 |
| 1957 | 4.9 | 5.0 | 4.4 | 3.7 | 3.0 | 3.2 | 5.0 | 2.8 | 4.9 | 4.1 | 5.6 | 5.8 |
| 1958 | 5.2 | 5.9 | 4.1 | 4.7 | 3.2 | 3.1 | 2.0 | 2.5 | 3.7 | 3.3 | 5.4 | 4.3 |
| 1959 | 4.0 | 4.4 | 5.4 | 3.6 | 4.2 | 3.2 | 2.1 | 1.9 | 4.0 | 4.9 | 4.9 | 6.8 |
| 1960 | 4.6 | 4.7 | 3.5 | 3.1 | 3.5 | 2.2 | 2.7 | 2.1 | 3.5 | 5.7 | 5.0 | 4.1 |
| 1961 | 5.7 | 4.1 | 5.7 | 3.7 | 3.3 | 2.8 | 2.0 | 2.9 | 3.4 | 4.0 | 4.7 | 5.6 |
| 1962 | 4.7 | 4.1 | 3.9 | 3.6 | 3.1 | 1.3 | 1.9 | 2.0 | 3.2 | 4.9 | 4.4 | 5.1 |
| 1963 | 3.9 | 6.2 | 4.6 | 6.1 | 3.5 | 2.0 | 2.4 | 2.5 | 2.9 | 3.3 | 6.4 | 4.5 |
| 1964 | 6.0 | 4.9 | 5.3 | 3.7 | 3.7 | 3.8 | 1.8 | 3.2 | 5.0 | 4.0 | 6.3 | 4.1 |
| 1965 | 5.8 | 5.8 | 4.6 | 2.9 | 2.4 | 2.6 | 2.4 | 2.4 | 3.6 | 6.0 | 6.6 | 5.1 |
| 1966 | 6.7 | 5.1 | 5.5 | 3.7 | 4.8 | 2.4 | 2.5 | 3.1 | 5.0 | 6.5 | 5.3 | 5.7 |
| 1967 | 6.6 | 6.4 | 5.2 | 3.5 | 3.8 | 2.6 | 3.0 | 2.3 | 3.5 | 3.9 | 4.4 | 4.5 |
| 1968 | 3.9 | 7.2 | 4.8 | 4.6 | 2.6 | 2.1 | 3.1 | 2.7 | 2.2 | 4.0 | 6.1 | 5.4 |
| 1969 | 5.0 | 5.2 | 4.9 | 3.5 | 2.1 | 2.1 | 2.5 | 3.0 | 2.8 | 3.4 | 4.5 | 5.5 |
| 1970 | 4.3 | 5.2 | 4.0 | 4.8 | 3.6 | 2.3 | 2.3 | 2.7 | 4.0 | 4.2 | 7.0 | 5.9 |
| 1971 | 5.1 | 6.6 | 5.9 | 4.0 | 2.8 | 1.5 | 2.6 | 2.5 | 3.6 | 4.1 | 4.4 | 5.8 |
| 1972 | 7.4 | 6.2 | 4.5 | 3.7 | 2.7 | 2.3 | 2.4 | 2.8 | 4.5 | 8.1 | 4.4 | 6.8 |
| 1973 | 4.2 | 3.7 | 4.7 | 3.1 | 3.5 | 1.7 | 1.9 | 3.1 | 4.4 | 6.0 | 5.4 | 3.5 |
| 1974 | 5.9 | 5.9 | 4.3 | 3.2 | 2.6 | 1.9 | 1.6 | 1.7 | 3.0 | 3.6 | 3.7 | 4.2 |
| 1975 | 4.6 | 4.4 | 3.8 | 3.2 | 1.6 | 2.5 | 2.4 | 2.9 | 2.7 | 4.4 | 5.8 | 5.0 |
| 1976 | 6.4 | 5.9 | 5.9 | 3.1 | 4.3 | 1.7 | 2.5 | 3.2 | 4.0 | 4.6 | 5.6 | 5.0 |
| 1977 | 5.5 | 5.3 | 6.3 | 3.1 | 2.4 | 2.6 | 3.0 | 2.7 | 4.2 | 3.5 | 5.2 | 3.4 |
| 1978 | 6.4 | 3.4 | 5.5 | 4.1 | 2.6 | 1.7 | 1.8 | 2.7 | 2.6 | 3.4 | 4.2 | 4.6 |
| 1979 | 4.1 | 3.9 | 4.4 | 4.3 | 2.2 | 1.8 | 1.8 | 4.0 | 2.2 | 3.3 | 4.0 | 4.6 |
| 1980 | 5.7 | 3.1 | 6.5 | 3.3 | 2.5 | 2.0 | 1.2 | 1.5 | 3.9 | 5.3 | 5.7 | 5.1 |
| 1981 | 3.1 | 3.6 | 4.4 | 3.8 | 2.4 | 2.8 | 1.2 | 1.2 | 5.5 | 4.8 | 5.3 | 3.4 |
| 1982 | 7.4 | 4.2 | 6.7 | 5.9 | 1.6 | 2.2 | 2.1 | 2.2 | 4.3 | 4.7 | 4.9 | 3.8 |
| 1983 | 4.1 | 4.4 | 5.1 | 2.2 | 2.8 | 1.9 | 1.7 | 1.6 | 2.5 | 3.8 | 4.3 | 4.7 |
| 1984 | 5.6 | 4.2 | 5.7 | 3.4 | 3.3 | 1.9 | 1.5 | 1.4 | 2.6 | 3.9 | 6.3 | 5.6 |
| 1985 | 4.3 | 4.0 | 4.4 | 4.4 | 1.4 | 3.2 | 1.4 | 1.6 | 2.8 | 3.9 | 3.7 | 5.5 |
| 1986 | 5.0 | 3.1 | 4.9 | 3.3 | 3.1 | 2.1 | 1.3 | 2.1 | 3.5 | 4.0 | 3.6 | 3.7 |
| 1987 | 5.0 | 5.3 | 4.4 | 4.7 | 2.8 | 2.6 | 1.9 | 3.7 | 3.2 | 4.6 | 5.4 | 4.2 |

32 YR. STATISTICS FOR WIS STATION S55

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.1 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 8.1 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 310.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 72101703 |

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 50 | 242 | 49 | 1 | . | . | . | . | . | . | 342 |
| 0.50-0.99 | . | 233 | 906 | 89 | 5 | . | . | . | . | . | 1233 |
| 1.00-1.49 | . | . | 371 | 489 | 78 | . | . | . | . | . | 938 |
| 1.50-1.99 | . | . | 18 | 373 | 188 | 52 | . | . | . | . | 631 |
| 2.00-2.49 | . | . | 1 | 151 | 134 | 113 | 5 | . | . | . | 404 |
| 2.50-2.99 | . | . | . | 8 | 216 | 58 | 14 | 1 | . | . | 297 |
| 3.00-3.49 | . | . | . | . | 14 | 132 | 10 | 7 | . | . | 163 |
| 3.50-3.99 | . | . | . | . | 4 | 124 | 12 | 5 | 1 | . | 146 |
| 4.00-4.49 | . | . | . | . | . | 4 | 39 | 3 | . | . | 46 |
| 4.50-4.99 | . | . | . | . | . | . | 10 | 7 | . | . | 17 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 4 | . | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 50 | 475 | 1345 | 1111 | 639 | 483 | 91 | 27 | 1 | 0 | |

MEAN HS(M) = 1.5 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 5.3 NO. OF CASES= 3964.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 50 | 288 | 57 | . | . | . | . | . | . | . | 395 |
| 0.50-0.99 | . | 289 | 869 | 86 | 8 | . | . | . | . | . | 1252 |
| 1.00-1.49 | . | . | 303 | 458 | 62 | 3 | . | . | . | . | 826 |
| 1.50-1.99 | . | . | 12 | 269 | 90 | 16 | . | . | . | . | 387 |
| 2.00-2.49 | . | . | . | 87 | 74 | 36 | 4 | . | . | . | 201 |
| 2.50-2.99 | . | . | . | 2 | 152 | 25 | 8 | . | . | . | 187 |
| 3.00-3.49 | . | . | . | . | 13 | 82 | 1 | . | . | . | 96 |
| 3.50-3.99 | . | . | . | . | . | 27 | . | . | . | . | 27 |
| 4.00-4.49 | . | . | . | . | . | 3 | 9 | . | . | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 1 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 50 | 577 | 1241 | 902 | 399 | 192 | 25 | 1 | 0 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 3182.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 81 | 303 | 47 | . | . | . | . | . | . | . | 431 |
| 0.50-0.99 | . | 271 | 1058 | 79 | 3 | . | . | . | . | . | 1411 |
| 1.00-1.49 | . | . | 337 | 405 | 40 | 2 | . | . | . | . | 784 |
| 1.50-1.99 | . | . | 13 | 276 | 39 | 13 | . | . | . | . | 341 |
| 2.00-2.49 | . | . | . | 96 | 65 | 13 | 5 | . | . | . | 179 |
| 2.50-2.99 | . | . | . | 2 | 137 | 6 | 1 | 1 | . | . | 147 |
| 3.00-3.49 | . | . | . | . | 9 | 42 | . | . | . | . | 51 |
| 3.50-3.99 | . | . | . | . | . | 10 | . | . | . | . | 10 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 81 | 574 | 1455 | 858 | 293 | 86 | 7 | 1 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.6 NO. OF CASES= 3150.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 47 | 440 | 41 | 2 | . | . | . | . | . | . | 530 |
| 0.50-0.99 | . | 397 | 1542 | 86 | 6 | . | . | . | . | . | 2031 |
| 1.00-1.49 | . | . | 463 | 229 | 34 | . | . | . | . | . | 726 |
| 1.50-1.99 | . | . | 10 | 286 | 8 | 7 | . | . | . | . | 311 |
| 2.00-2.49 | . | . | . | 99 | 50 | 4 | 1 | . | . | . | 154 |
| 2.50-2.99 | . | . | . | 1 | 79 | 1 | . | . | . | . | 81 |
| 3.00-3.49 | . | . | . | . | 9 | 16 | . | . | . | . | 25 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 47 | 837 | 2056 | 703 | 186 | 31 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 3619.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 74 | 885 | 40 | 2 | . | . | . | . | . | . | 1001 |
| 0.50-0.99 | . | 767 | 2406 | 68 | 3 | . | . | . | . | . | 3244 |
| 1.00-1.49 | . | . | 749 | 255 | 24 | 1 | . | . | . | . | 1029 |
| 1.50-1.99 | . | . | 25 | 417 | 8 | 7 | . | . | . | . | 457 |
| 2.00-2.49 | . | . | . | 203 | 89 | . | . | . | . | . | 292 |
| 2.50-2.99 | . | . | . | . | 182 | . | . | . | . | . | 182 |
| 3.00-3.49 | . | . | . | . | 23 | 10 | . | . | . | . | 33 |
| 3.50-3.99 | . | . | . | . | . | 5 | . | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 74 | 1652 | 3220 | 945 | 329 | 26 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 5851.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 115 | 1053 | 43 | 4 | . | . | . | . | . | . | 1215 |
| 0.50-0.99 | . | 1067 | 2383 | 52 | 7 | . | . | . | . | . | 3510 |
| 1.00-1.49 | . | . | 1165 | 652 | 12 | . | . | . | . | . | 1829 |
| 1.50-1.99 | . | . | 50 | 735 | 103 | . | . | . | . | . | 888 |
| 2.00-2.49 | . | . | . | 222 | 340 | 11 | . | . | . | . | 573 |
| 2.50-2.99 | . | . | . | 7 | 137 | 40 | . | . | . | . | 184 |
| 3.00-3.49 | . | . | . | . | 24 | 17 | . | . | . | . | 41 |
| 3.50-3.99 | . | . | . | . | . | 6 | . | . | . | . | 6 |
| 4.00-4.49 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 115 | 2120 | 3641 | 1672 | 623 | 78 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 7725.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 139 | 1014 | 82 | 4 | . | . | . | . | . | . | 1239 |
| 0.50-0.99 | . | 1622 | 2487 | 93 | 5 | . | . | . | . | . | 4207 |
| 1.00-1.49 | . | . | 901 | 931 | 18 | 4 | . | . | . | . | 1854 |
| 1.50-1.99 | . | . | 70 | 437 | 229 | 3 | . | . | . | . | 739 |
| 2.00-2.49 | . | . | 5 | 25 | 217 | 23 | . | . | . | . | 270 |
| 2.50-2.99 | . | . | . | 1 | 1 | 24 | . | . | . | . | 26 |
| 3.00-3.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 139 | 2636 | 3545 | 1491 | 470 | 56 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 4.2 NO. OF CASES= 7804.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 124 | 803 | 105 | 7 | 1 | . | . | . | . | . | 1040 |
| 0.50-0.99 | . | 1004 | 762 | 65 | 3 | 1 | . | . | . | . | 1835 |
| 1.00-1.49 | . | . | 264 | 161 | 8 | 2 | . | . | . | . | 435 |
| 1.50-1.99 | . | . | 50 | 21 | 23 | 1 | . | . | . | . | 95 |
| 2.00-2.49 | . | . | 3 | . | 4 | 1 | . | . | . | . | 8 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 124 | 1807 | 1184 | 254 | 39 | 5 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 3197.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 115 | 533 | 55 | 9 | 1 | . | . | . | . | . | 713 |
| 0.50-0.99 | . | 654 | 336 | 41 | 4 | . | . | . | . | . | 1035 |
| 1.00-1.49 | . | . | 207 | 28 | 8 | 3 | . | . | . | . | 246 |
| 1.50-1.99 | . | . | 40 | 6 | 1 | 1 | . | . | . | . | 48 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 115 | 1187 | 638 | 84 | 14 | 4 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 1917.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 101 | 515 | 54 | 2 | . | . | . | . | . | . | 672 |
| 0.50-0.99 | . | 679 | 296 | 56 | 11 | . | . | . | . | . | 1042 |
| 1.00-1.49 | . | . | 237 | 18 | 18 | 6 | . | . | . | . | 279 |
| 1.50-1.99 | . | . | 56 | 6 | 1 | 3 | . | . | . | . | 66 |
| 2.00-2.49 | . | . | . | 1 | 1 | . | 1 | . | . | . | 3 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 101 | 1194 | 643 | 84 | 31 | 9 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 1935.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 145 | 547 | 108 | 5 | 1 | . | . | . | . | . | 806 |
| 0.50-0.99 | . | 1079 | 411 | 126 | 49 | 1 | . | . | . | . | 1666 |
| 1.00-1.49 | . | . | 381 | 25 | 42 | 18 | 1 | . | . | . | 467 |
| 1.50-1.99 | . | . | 188 | 21 | . | 4 | . | . | . | . | 213 |
| 2.00-2.49 | . | . | . | 18 | 1 | 2 | 1 | . | . | . | 22 |
| 2.50-2.99 | . | . | . | 3 | . | . | 1 | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 145 | 1626 | 1088 | 198 | 94 | 25 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.7 NO. OF CASES= 2979.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 113 | 559 | 334 | 52 | . | . | . | 1 | . | . | 1058 |
| 0.50-0.99 | . | 1279 | 813 | 673 | 172 | 5 | . | . | . | . | 2943 |
| 1.00-1.49 | . | . | 422 | 190 | 196 | 21 | . | . | . | . | 829 |
| 1.50-1.99 | . | . | 254 | 62 | 62 | 28 | . | . | . | . | 406 |
| 2.00-2.49 | . | . | 17 | 51 | 9 | 16 | . | 1 | . | . | 94 |
| 2.50-2.99 | . | . | . | 10 | 6 | 2 | 2 | . | . | . | 20 |
| 3.00-3.49 | . | . | . | . | . | 3 | 2 | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 113 | 1838 | 1840 | 1038 | 445 | 76 | 5 | 2 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.2 NO. OF CASES= 5019.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 190 | 792 | 451 | 10 | 1 | . | . | . | . | . | 1444 |
| 0.50-0.99 | . | 938 | 2490 | 625 | 14 | 2 | 1 | 1 | . | . | 4071 |
| 1.00-1.49 | . | . | 758 | 1002 | 165 | 10 | 2 | . | 1 | . | 1938 |
| 1.50-1.99 | . | . | 116 | 504 | 339 | 27 | 1 | . | . | . | 987 |
| 2.00-2.49 | . | . | 4 | 214 | 180 | 90 | 4 | . | . | . | 492 |
| 2.50-2.99 | . | . | . | 19 | 231 | 106 | 10 | . | . | . | 366 |
| 3.00-3.49 | . | . | . | 1 | 22 | 163 | 12 | 2 | . | . | 200 |
| 3.50-3.99 | . | . | . | . | 2 | 70 | 49 | 4 | . | . | 125 |
| 4.00-4.49 | . | . | . | . | . | 6 | 49 | 9 | . | . | 64 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 19 | . | . | 27 |
| 5.00-5.49 | . | . | . | . | . | . | . | 10 | . | . | 10 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 190 | 1730 | 3819 | 2375 | 954 | 474 | 136 | 46 | 5 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.8 NO. OF CASES= 9117.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 260 | 1099 | 536 | 42 | 8 | 3 | . | . | . | . | 1948 |
| 0.50-0.99 | . | 1178 | 3731 | 676 | 108 | 19 | 3 | 1 | 1 | . | 5717 |
| 1.00-1.49 | . | 1 | 1159 | 1255 | 270 | 44 | 2 | 2 | 3 | . | 2736 |
| 1.50-1.99 | . | . | 139 | 656 | 364 | 91 | 2 | 1 | 1 | 1 | 1255 |
| 2.00-2.49 | . | . | 1 | 378 | 213 | 161 | 5 | . | 2 | 1 | 761 |
| 2.50-2.99 | . | . | . | 28 | 359 | 90 | 32 | 6 | . | . | 515 |
| 3.00-3.49 | . | . | . | . | 60 | 276 | 24 | 10 | 1 | . | 371 |
| 3.50-3.99 | . | . | . | . | 1 | 191 | 63 | 11 | . | . | 266 |
| 4.00-4.49 | . | . | . | . | . | 37 | 112 | 19 | 1 | . | 169 |
| 4.50-4.99 | . | . | . | . | . | . | 56 | 64 | 4 | . | 124 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 54 | 3 | . | 58 |
| 5.50-5.99 | . | . | . | . | . | . | . | 19 | 17 | . | 36 |
| 6.00-6.49 | . | . | . | . | . | . | . | 4 | 19 | 1 | 24 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 10 | 1 | 11 |
| 7.00+ | . | . | . | . | . | . | . | . | 3 | 5 | 8 |
| TOTAL | 260 | 2278 | 5566 | 3035 | 1383 | 912 | 300 | 191 | 65 | 9 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.9 NO. OF CASES= 13115.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 162 | 902 | 335 | 38 | 1 | . | . | . | . | . | 1438 |
| 0.50-0.99 | . | 950 | 3982 | 719 | 88 | 9 | . | . | . | . | 5748 |
| 1.00-1.49 | . | . | 1656 | 1289 | 326 | 37 | 2 | . | . | . | 3310 |
| 1.50-1.99 | . | . | 131 | 1215 | 393 | 115 | 2 | . | . | . | 1856 |
| 2.00-2.49 | . | . | 2 | 544 | 329 | 206 | 9 | 1 | . | . | 1091 |
| 2.50-2.99 | . | . | . | 20 | 596 | 124 | 37 | 7 | . | . | 784 |
| 3.00-3.49 | . | . | . | 1 | 70 | 459 | 23 | 22 | 2 | . | 577 |
| 3.50-3.99 | . | . | . | . | 2 | 303 | 73 | 19 | 2 | . | 399 |
| 4.00-4.49 | . | . | . | . | . | 48 | 161 | 44 | 9 | . | 262 |
| 4.50-4.99 | . | . | . | . | . | 1 | 44 | 67 | 19 | . | 131 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 37 | 10 | . | 49 |
| 5.50-5.99 | . | . | . | . | . | . | . | 14 | 41 | 1 | 56 |
| 6.00-6.49 | . | . | . | . | . | . | . | 3 | 27 | 2 | 32 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 4 | 3 | 7 |
| 7.00+ | . | . | . | . | . | . | . | . | 2 | 8 | 10 |
| TOTAL | 162 | 1852 | 6106 | 3826 | 1805 | 1302 | 353 | 214 | 116 | 14 | |

MEAN HS(M) = 1.4 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 5.1 NO. OF CASES= 14754.

STATION S56 46.80N 85.37W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

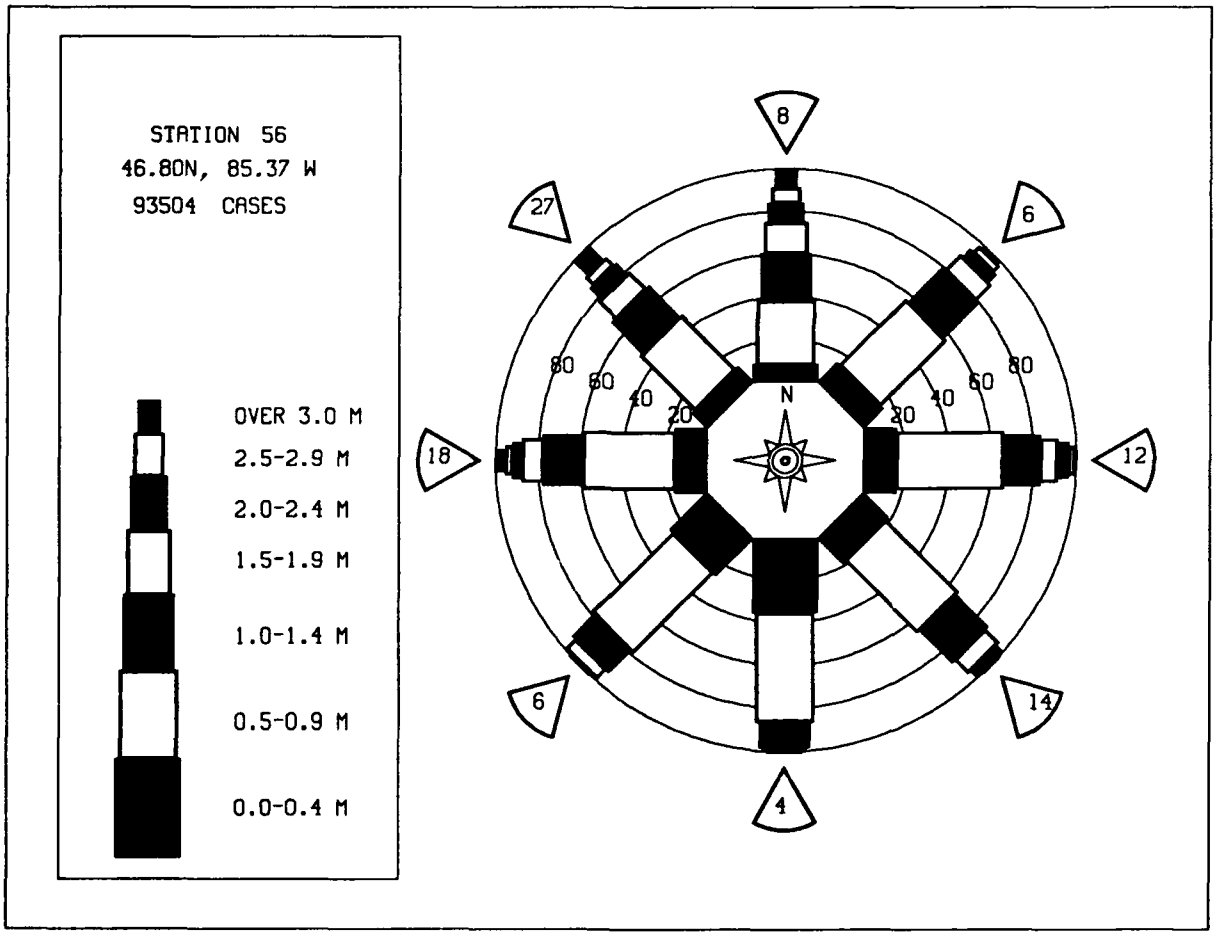
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 51 | 296 | 45 | . | . | . | . | . | . | . | 392 |
| 0.50-0.99 | . | 287 | 1311 | 118 | 5 | . | . | . | . | . | 1721 |
| 1.00-1.49 | . | . | 737 | 591 | 84 | 8 | . | . | . | . | 1420 |
| 1.50-1.99 | . | . | 52 | 681 | 223 | 50 | . | . | . | . | 1006 |
| 2.00-2.49 | . | . | . | 332 | 242 | 141 | 4 | . | . | . | 719 |
| 2.50-2.99 | . | . | . | 12 | 341 | 106 | 37 | 6 | . | . | 502 |
| 3.00-3.49 | . | . | . | . | 49 | 266 | 20 | 16 | . | . | 351 |
| 3.50-3.99 | . | . | . | . | . | 185 | 45 | 14 | . | . | 244 |
| 4.00-4.49 | . | . | . | . | . | 26 | 53 | 35 | 4 | . | 118 |
| 4.50-4.99 | . | . | . | . | . | 1 | 20 | 26 | 11 | 1 | 59 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 21 | 10 | . | 33 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 7 | 1 | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 6 | 2 | 8 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 51 | 583 | 2145 | 1734 | 944 | 783 | 181 | 119 | 38 | 6 | |

MEAN HS(M) = 1.6 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 5.4 NO. OF CASES= 6176.

STATION S56 46.80N 85.37W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 182 | 1027 | 239 | 18 | 1 | . | . | . | . | . | 1467 |
| 0.50-0.99 | . | 1270 | 2579 | 366 | 49 | 3 | . | . | . | . | 4267 |
| 1.00-1.49 | . | . | 1011 | 798 | 139 | 16 | . | . | . | . | 1964 |
| 1.50-1.99 | . | . | 123 | 597 | 207 | 42 | . | . | . | . | 969 |
| 2.00-2.49 | . | . | 3 | 242 | 195 | 82 | 4 | . | . | . | 526 |
| 2.50-2.99 | . | . | . | 11 | 244 | 58 | 14 | 2 | . | . | 329 |
| 3.00-3.49 | . | . | . | . | 30 | 147 | 9 | 5 | . | . | 191 |
| 3.50-3.99 | . | . | . | . | . | 92 | 24 | 5 | . | . | 121 |
| 4.00-4.49 | . | . | . | . | . | 13 | 42 | 11 | 1 | . | 67 |
| 4.50-4.99 | . | . | . | . | . | . | 14 | 18 | 3 | . | 35 |
| 5.00-5.49 | . | . | . | . | . | . | . | 12 | 2 | . | 14 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 6 | . | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 182 | 2297 | 3955 | 2032 | 865 | 453 | 107 | 56 | 18 | 1 | |

MEAN HS(M)= 1.1 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 4.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S56 (46.80N 85.37W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.0 | 1.3 | 1.2 | 1.3 | 1.0 | 0.8 | 0.7 | 0.7 | 0.9 | 1.2 | 1.4 | 1.4 | 1.1 |
| 1957 | 1.7 | 1.5 | 1.3 | 1.1 | 1.0 | 0.9 | 0.8 | 0.8 | 1.1 | 1.1 | 1.7 | 1.8 | 1.2 |
| 1958 | 1.4 | 2.1 | 1.1 | 1.2 | 1.1 | 0.9 | 0.7 | 0.8 | 1.0 | 1.2 | 2.0 | 1.5 | 1.2 |
| 1959 | 1.6 | 1.6 | 1.4 | 1.2 | 1.2 | 0.8 | 0.7 | 0.7 | 1.0 | 1.4 | 1.8 | 1.8 | 1.3 |
| 1960 | 1.5 | 1.6 | 1.1 | 1.1 | 0.9 | 0.7 | 0.6 | 0.7 | 0.8 | 1.2 | 1.6 | 1.4 | 1.1 |
| 1961 | 1.2 | 1.2 | 1.6 | 1.0 | 1.0 | 0.8 | 0.6 | 0.7 | 1.0 | 1.1 | 1.4 | 1.5 | 1.1 |
| 1962 | 1.7 | 1.3 | 0.9 | 1.1 | 0.7 | 0.6 | 0.6 | 0.6 | 1.0 | 1.0 | 1.1 | 1.6 | 1.0 |
| 1963 | 1.3 | 1.4 | 1.3 | 1.2 | 0.8 | 0.6 | 0.7 | 0.7 | 0.7 | 0.9 | 1.5 | 1.5 | 1.1 |
| 1964 | 1.8 | 1.5 | 1.7 | 1.2 | 1.1 | 0.8 | 0.7 | 0.9 | 1.1 | 1.2 | 1.5 | 1.4 | 1.2 |
| 1965 | 1.8 | 1.9 | 1.3 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.9 | 1.6 | 1.7 | 1.5 | 1.2 |
| 1966 | 1.9 | 1.6 | 1.9 | 1.3 | 1.3 | 0.8 | 0.9 | 0.8 | 1.3 | 1.6 | 1.8 | 1.7 | 1.4 |
| 1967 | 1.8 | 1.8 | 1.5 | 1.2 | 1.1 | 0.7 | 0.7 | 0.8 | 1.0 | 1.3 | 1.5 | 1.6 | 1.3 |
| 1968 | 1.5 | 2.6 | 1.6 | 1.2 | 1.0 | 0.7 | 0.8 | 0.8 | 0.9 | 1.2 | 1.8 | 1.8 | 1.3 |
| 1969 | 1.8 | 1.4 | 1.6 | 1.0 | 0.9 | 0.8 | 0.6 | 0.8 | 1.0 | 1.3 | 1.4 | 1.6 | 1.2 |
| 1970 | 1.5 | 1.6 | 1.4 | 1.1 | 1.0 | 0.7 | 0.7 | 0.8 | 1.2 | 1.2 | 1.6 | 1.5 | 1.2 |
| 1971 | 1.8 | 1.6 | 1.7 | 1.2 | 0.9 | 0.6 | 0.8 | 0.8 | 0.9 | 1.1 | 1.4 | 1.7 | 1.2 |
| 1972 | 1.9 | 1.5 | 1.6 | 1.0 | 0.7 | 0.8 | 0.7 | 0.7 | 1.2 | 1.6 | 1.2 | 1.6 | 1.2 |
| 1973 | 1.6 | 1.4 | 1.4 | 1.2 | 1.0 | 0.6 | 0.7 | 0.6 | 1.0 | 1.1 | 1.8 | 1.3 | 1.1 |
| 1974 | 1.3 | 1.2 | 1.5 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.9 | 1.2 | 1.2 | 1.2 | 1.0 |
| 1975 | 1.5 | 1.1 | 1.4 | 1.0 | 0.6 | 0.7 | 0.7 | 0.8 | 0.9 | 1.2 | 1.4 | 1.4 | 1.0 |
| 1976 | 1.7 | 1.6 | 1.8 | 1.1 | 1.0 | 0.7 | 0.7 | 0.7 | 1.0 | 1.1 | 1.7 | 1.6 | 1.2 |
| 1977 | 1.5 | 1.6 | 1.3 | 0.8 | 0.6 | 0.7 | 0.6 | 0.7 | 0.8 | 1.0 | 1.2 | 1.5 | 1.0 |
| 1978 | 1.6 | 1.0 | 1.1 | 1.0 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 | 1.2 | 1.4 | 1.5 | 1.0 |
| 1979 | 1.5 | 1.1 | 1.3 | 0.8 | 0.7 | 0.6 | 0.5 | 0.7 | 0.8 | 0.9 | 1.4 | 1.7 | 1.0 |
| 1980 | 1.5 | 1.0 | 1.4 | 0.9 | 0.7 | 0.6 | 0.5 | 0.6 | 1.0 | 1.3 | 1.1 | 1.4 | 1.0 |
| 1981 | 1.1 | 1.2 | 1.2 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.9 | 1.0 | 1.2 | 1.2 | 0.9 |
| 1982 | 1.8 | 1.1 | 1.5 | 1.2 | 0.6 | 0.6 | 0.6 | 0.6 | 0.9 | 1.0 | 1.2 | 1.3 | 1.0 |
| 1983 | 1.4 | 1.1 | 1.5 | 0.9 | 0.8 | 0.6 | 0.5 | 0.6 | 0.8 | 1.0 | 1.5 | 1.5 | 1.0 |
| 1984 | 1.2 | 1.3 | 1.4 | 1.0 | 0.8 | 0.6 | 0.5 | 0.4 | 0.8 | 0.9 | 1.5 | 1.6 | 1.0 |
| 1985 | 1.5 | 1.3 | 1.3 | 0.9 | 0.6 | 0.7 | 0.4 | 0.5 | 0.7 | 1.0 | 1.3 | 1.4 | 1.0 |
| 1986 | 1.4 | 1.0 | 1.3 | 1.1 | 0.7 | 0.7 | 0.5 | 0.6 | 0.9 | 0.8 | 1.3 | 1.3 | 1.0 |
| 1987 | 1.4 | 1.2 | 1.3 | 1.1 | 0.7 | 0.6 | 0.7 | 0.8 | 0.8 | 1.1 | 1.4 | 1.4 | 1.1 |
| MEAN | 1.5 | 1.4 | 1.4 | 1.1 | 0.9 | 0.7 | 0.6 | 0.7 | 0.9 | 1.2 | 1.5 | 1.5 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S56 (46.80N 85.37W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.6 | 4.9 | 3.9 | 4.5 | 3.1 | 2.8 | 2.3 | 2.5 | 3.8 | 5.4 | 4.4 | 4.6 |
| 1957 | 4.9 | 5.2 | 4.4 | 3.5 | 3.2 | 3.2 | 5.1 | 2.8 | 5.0 | 4.3 | 5.9 | 6.0 |
| 1958 | 5.5 | 5.8 | 4.4 | 5.0 | 3.2 | 3.3 | 2.2 | 2.7 | 3.9 | 3.7 | 5.8 | 4.8 |
| 1959 | 4.2 | 4.6 | 5.5 | 3.6 | 4.4 | 3.5 | 2.3 | 2.1 | 4.1 | 5.2 | 5.4 | 7.2 |
| 1960 | 4.8 | 4.9 | 3.4 | 3.2 | 3.2 | 2.2 | 2.7 | 2.1 | 3.9 | 5.6 | 5.3 | 4.1 |
| 1961 | 5.7 | 4.2 | 5.8 | 3.7 | 3.6 | 3.1 | 2.6 | 3.1 | 3.7 | 4.2 | 4.9 | 6.6 |
| 1962 | 5.0 | 4.1 | 4.3 | 3.6 | 3.0 | 1.5 | 2.3 | 1.8 | 3.5 | 4.8 | 4.4 | 5.7 |
| 1963 | 4.3 | 6.2 | 4.3 | 6.3 | 3.6 | 2.2 | 2.5 | 2.3 | 2.6 | 3.5 | 6.6 | 4.8 |
| 1964 | 6.4 | 5.2 | 5.7 | 3.5 | 3.9 | 3.6 | 2.4 | 3.7 | 5.5 | 4.1 | 6.8 | 4.5 |
| 1965 | 5.9 | 5.9 | 4.6 | 3.0 | 2.6 | 2.9 | 2.8 | 2.5 | 3.7 | 6.3 | 6.9 | 5.3 |
| 1966 | 7.2 | 5.4 | 5.8 | 3.8 | 5.0 | 2.9 | 2.9 | 3.5 | 5.5 | 6.6 | 5.1 | 5.8 |
| 1967 | 6.7 | 6.6 | 5.5 | 3.6 | 3.6 | 2.7 | 3.0 | 2.2 | 3.7 | 4.2 | 4.8 | 4.9 |
| 1968 | 4.5 | 7.7 | 4.8 | 4.8 | 2.7 | 2.1 | 3.7 | 3.1 | 2.4 | 4.2 | 6.0 | 5.3 |
| 1969 | 4.8 | 5.3 | 4.5 | 3.5 | 2.5 | 2.0 | 2.5 | 3.4 | 3.4 | 3.6 | 4.8 | 5.3 |
| 1970 | 4.6 | 5.3 | 4.2 | 4.8 | 3.5 | 2.4 | 2.1 | 2.7 | 4.3 | 4.4 | 7.0 | 5.8 |
| 1971 | 5.2 | 6.7 | 5.8 | 4.1 | 3.0 | 1.6 | 2.8 | 2.8 | 3.7 | 4.3 | 4.6 | 6.0 |
| 1972 | 7.8 | 6.2 | 4.5 | 3.7 | 2.8 | 2.2 | 2.4 | 3.0 | 4.6 | 8.2 | 4.4 | 6.8 |
| 1973 | 4.4 | 3.5 | 4.7 | 2.8 | 3.6 | 1.8 | 2.4 | 3.3 | 4.7 | 6.0 | 5.7 | 3.7 |
| 1974 | 6.3 | 6.1 | 4.7 | 3.2 | 2.9 | 2.3 | 1.6 | 1.8 | 3.2 | 3.9 | 3.8 | 4.0 |
| 1975 | 4.6 | 4.7 | 3.7 | 3.4 | 2.0 | 2.8 | 2.9 | 3.3 | 3.1 | 4.4 | 6.1 | 5.5 |
| 1976 | 6.8 | 6.0 | 5.9 | 3.1 | 4.7 | 1.6 | 2.8 | 3.4 | 4.4 | 5.1 | 5.8 | 6.3 |
| 1977 | 5.8 | 5.6 | 6.7 | 3.0 | 2.6 | 2.5 | 3.1 | 2.9 | 4.1 | 3.7 | 4.9 | 3.5 |
| 1978 | 6.0 | 3.4 | 5.9 | 4.0 | 2.1 | 2.0 | 1.7 | 3.0 | 2.5 | 3.6 | 4.6 | 4.9 |
| 1979 | 4.1 | 3.8 | 4.3 | 4.2 | 2.3 | 2.2 | 2.0 | 4.0 | 2.3 | 3.0 | 4.4 | 4.7 |
| 1980 | 5.8 | 3.1 | 6.4 | 3.1 | 2.7 | 1.9 | 1.2 | 1.5 | 4.1 | 5.6 | 6.3 | 5.1 |
| 1981 | 3.4 | 3.7 | 4.6 | 3.9 | 2.1 | 2.7 | 1.2 | 1.4 | 5.8 | 5.0 | 5.2 | 3.5 |
| 1982 | 7.5 | 4.0 | 7.1 | 6.0 | 1.5 | 2.2 | 2.1 | 2.4 | 4.6 | 4.8 | 4.8 | 3.7 |
| 1983 | 4.2 | 3.8 | 4.6 | 2.1 | 2.6 | 1.9 | 1.8 | 1.7 | 2.9 | 3.8 | 4.3 | 4.4 |
| 1984 | 5.8 | 4.3 | 6.0 | 3.4 | 3.4 | 1.7 | 1.7 | 1.4 | 2.9 | 4.0 | 6.5 | 5.9 |
| 1985 | 4.7 | 3.9 | 4.1 | 4.2 | 1.5 | 3.2 | 1.4 | 1.6 | 3.0 | 4.0 | 3.8 | 5.1 |
| 1986 | 4.9 | 3.4 | 4.8 | 3.3 | 3.4 | 2.5 | 1.4 | 2.4 | 3.7 | 4.2 | 3.7 | 4.3 |
| 1987 | 5.2 | 5.0 | 4.6 | 5.0 | 3.0 | 2.8 | 2.4 | 3.9 | 3.3 | 4.5 | 5.7 | 4.2 |

32 YR. STATISTICS FOR WIS STATION S56

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.1 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 8.2 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 309.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 72101703 |

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 27 | 244 | 23 | 1 | . | . | . | . | . | . | 295 |
| 0.50-0.99 | . | 252 | 840 | 55 | 6 | . | . | . | . | . | 1153 |
| 1.00-1.49 | . | . | 432 | 423 | 63 | 4 | . | . | . | . | 922 |
| 1.50-1.99 | . | . | 44 | 378 | 208 | 49 | . | . | . | . | 679 |
| 2.00-2.49 | . | . | 2 | 139 | 135 | 105 | 7 | . | . | . | 388 |
| 2.50-2.99 | . | . | . | 9 | 210 | 52 | 17 | 1 | . | . | 289 |
| 3.00-3.49 | . | . | . | . | 21 | 149 | 7 | 5 | . | . | 182 |
| 3.50-3.99 | . | . | . | . | . | 84 | 25 | 3 | 1 | . | 113 |
| 4.00-4.49 | . | . | . | . | . | 5 | 40 | 2 | . | . | 47 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 8 | . | . | 16 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 27 | 496 | 1341 | 1005 | 643 | 448 | 104 | 20 | 2 | 0 | |

MEAN HS(M) = 1.5 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 5.2 NO. OF CASES= 3837.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 41 | 293 | 36 | 2 | . | . | . | . | . | . | 372 |
| 0.50-0.99 | . | 311 | 854 | 78 | 7 | . | . | . | . | . | 1250 |
| 1.00-1.49 | . | . | 424 | 328 | 50 | 2 | . | . | . | . | 804 |
| 1.50-1.99 | . | . | 26 | 255 | 85 | 22 | 2 | . | . | . | 390 |
| 2.00-2.49 | . | . | . | 74 | 79 | 40 | 8 | . | . | . | 201 |
| 2.50-2.99 | . | . | . | 13 | 88 | 11 | 5 | 1 | . | . | 118 |
| 3.00-3.49 | . | . | . | . | 18 | 31 | . | . | . | . | 49 |
| 3.50-3.99 | . | . | . | . | . | 6 | 1 | . | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | . | 8 | . | 1 | . | 9 |
| 4.50-4.99 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 41 | 604 | 1340 | 750 | 327 | 112 | 24 | 4 | 1 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.6 NO. OF CASES= 3007.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 54 | 245 | 29 | 1 | . | . | . | . | . | . | 329 |
| 0.50-0.99 | . | 256 | 936 | 60 | 1 | . | . | . | . | . | 1253 |
| 1.00-1.49 | . | . | 591 | 182 | 38 | 3 | 1 | . | . | . | 815 |
| 1.50-1.99 | . | . | 42 | 251 | 38 | 16 | . | . | . | . | 347 |
| 2.00-2.49 | . | . | . | 136 | 51 | 14 | 3 | 1 | . | . | 205 |
| 2.50-2.99 | . | . | . | 32 | 23 | 10 | 2 | . | . | . | 67 |
| 3.00-3.49 | . | . | . | . | 2 | 3 | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 54 | 501 | 1598 | 662 | 153 | 47 | 6 | 1 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.4 NO. OF CASES= 2838.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 49 | 457 | 31 | 1 | . | . | . | . | . | . | 538 |
| 0.50-0.99 | . | 479 | 1500 | 84 | 2 | . | . | . | . | . | 2065 |
| 1.00-1.49 | . | . | 876 | 90 | 25 | 1 | . | . | . | . | 992 |
| 1.50-1.99 | . | . | 64 | 282 | 7 | 11 | 2 | . | . | . | 366 |
| 2.00-2.49 | . | . | . | 190 | 6 | 5 | . | . | . | . | 201 |
| 2.50-2.99 | . | . | . | 16 | 24 | 2 | . | 1 | . | . | 43 |
| 3.00-3.49 | . | . | . | . | 5 | . | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 49 | 936 | 2471 | 663 | 69 | 19 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 4.1 NO. OF CASES= 3945.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 86 | 1001 | 24 | 3 | . | . | . | . | . | . | 1114 |
| 0.50-0.99 | . | 900 | 2456 | 72 | 5 | . | . | . | . | . | 3433 |
| 1.00-1.49 | . | . | 1224 | 49 | 18 | 1 | . | . | . | . | 1292 |
| 1.50-1.99 | . | . | 39 | 366 | 8 | 7 | . | . | . | . | 420 |
| 2.00-2.49 | . | . | . | 309 | 1 | 3 | . | . | . | . | 313 |
| 2.50-2.99 | . | . | . | 20 | 43 | . | . | . | . | . | 63 |
| 3.00-3.49 | . | . | . | . | 5 | 1 | . | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 86 | 1901 | 3743 | 819 | 80 | 16 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.0 NO. OF CASES= 6222.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 99 | 927 | 22 | 2 | . | . | . | . | . | . | 1050 |
| 0.50-0.99 | . | 839 | 2969 | 59 | 6 | . | . | . | . | . | 3873 |
| 1.00-1.49 | . | . | 1732 | 225 | 20 | 3 | . | . | . | . | 1980 |
| 1.50-1.99 | . | . | 170 | 941 | 8 | 4 | . | . | . | . | 1123 |
| 2.00-2.49 | . | . | . | 494 | 193 | . | . | . | . | . | 687 |
| 2.50-2.99 | . | . | . | 26 | 260 | 7 | . | . | . | . | 293 |
| 3.00-3.49 | . | . | . | . | 11 | 56 | . | . | . | . | 67 |
| 3.50-3.99 | . | . | . | . | . | 9 | . | . | . | . | 9 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 99 | 1766 | 4893 | 1747 | 498 | 81 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 8505.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 90 | 641 | 32 | 1 | . | . | . | . | . | . | 764 |
| 0.50-0.99 | . | 768 | 2415 | 48 | 6 | . | . | . | . | . | 3237 |
| 1.00-1.49 | . | . | 1175 | 408 | 8 | 4 | . | . | . | . | 1595 |
| 1.50-1.99 | . | . | 74 | 740 | 6 | 1 | . | . | . | . | 821 |
| 2.00-2.49 | . | . | . | 228 | 247 | . | . | . | . | . | 475 |
| 2.50-2.99 | . | . | . | 1 | 252 | 8 | . | . | . | . | 261 |
| 3.00-3.49 | . | . | . | . | 2 | 59 | . | . | . | . | 61 |
| 3.50-3.99 | . | . | . | . | . | 14 | . | . | . | . | 14 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 90 | 1409 | 3696 | 1426 | 521 | 88 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.4 NO. OF CASES= 6771.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 81 | 610 | 59 | 2 | . | . | . | . | . | . | 752 |
| 0.50-0.99 | . | 917 | 1302 | 64 | 1 | . | . | . | . | . | 2284 |
| 1.00-1.49 | . | . | 644 | 214 | 6 | 1 | . | . | . | . | 865 |
| 1.50-1.99 | . | . | 108 | 255 | 6 | 1 | . | . | . | . | 370 |
| 2.00-2.49 | . | . | . | 111 | 63 | . | 1 | . | . | . | 175 |
| 2.50-2.99 | . | . | . | . | 62 | 2 | . | . | . | . | 64 |
| 3.00-3.49 | . | . | . | . | . | 18 | . | . | . | . | 18 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 81 | 1527 | 2113 | 646 | 138 | 23 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 4242.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 87 | 448 | 25 | 5 | . | . | . | . | . | . | 565 |
| 0.50-0.99 | . | 696 | 372 | 42 | 2 | . | . | . | . | . | 1112 |
| 1.00-1.49 | . | . | 275 | 39 | 5 | 2 | . | . | . | . | 321 |
| 1.50-1.99 | . | . | 60 | 16 | 3 | 1 | . | . | . | . | 80 |
| 2.00-2.49 | . | . | 4 | 4 | . | . | 1 | . | . | . | 9 |
| 2.50-2.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 87 | 1144 | 736 | 106 | 11 | 3 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 1959.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 70 | 351 | 23 | 1 | . | . | . | . | . | . | 445 |
| 0.50-0.99 | . | 670 | 297 | 44 | 10 | 1 | . | . | . | . | 1022 |
| 1.00-1.49 | . | . | 255 | 21 | 4 | 6 | . | . | . | . | 286 |
| 1.50-1.99 | . | . | 60 | 5 | . | 2 | . | . | . | . | 67 |
| 2.00-2.49 | . | . | . | 3 | . | 1 | . | . | . | . | 4 |
| 2.50-2.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 70 | 1021 | 635 | 74 | 15 | 10 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 1715.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 70 | 428 | 56 | 2 | . | . | . | . | . | . | 556 |
| 0.50-0.99 | . | 1027 | 436 | 67 | 39 | 1 | . | . | . | . | 1570 |
| 1.00-1.49 | . | . | 407 | 20 | 20 | 9 | 1 | . | . | . | 457 |
| 1.50-1.99 | . | . | 179 | 23 | . | 5 | . | . | . | . | 207 |
| 2.00-2.49 | . | . | . | 17 | . | 1 | 1 | . | . | . | 19 |
| 2.50-2.99 | . | . | . | 7 | . | . | . | . | . | . | 7 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 70 | 1455 | 1078 | 136 | 59 | 16 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 2641.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 79 | 459 | 194 | 44 | 1 | . | . | . | . | . | 777 |
| 0.50-0.99 | . | 1363 | 658 | 455 | 167 | 7 | . | 1 | . | . | 2651 |
| 1.00-1.49 | . | . | 529 | 106 | 110 | 20 | . | . | . | . | 765 |
| 1.50-1.99 | . | . | 295 | 83 | 33 | 20 | . | . | . | . | 431 |
| 2.00-2.49 | . | . | 10 | 67 | 8 | 8 | 2 | . | . | . | 95 |
| 2.50-2.99 | . | . | . | 8 | 13 | 4 | 3 | . | . | . | 28 |
| 3.00-3.49 | . | . | . | . | 3 | 4 | . | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 79 | 1822 | 1686 | 763 | 335 | 64 | 6 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 4460.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 128 | 624 | 305 | 7 | . | . | . | . | . | . | 1064 |
| 0.50-0.99 | . | 1071 | 2363 | 737 | 23 | 2 | 3 | . | . | . | 4199 |
| 1.00-1.49 | . | . | 818 | 931 | 223 | 4 | 1 | 1 | 1 | . | 1979 |
| 1.50-1.99 | . | . | 176 | 498 | 324 | 44 | 1 | . | . | . | 1043 |
| 2.00-2.49 | . | . | 5 | 270 | 172 | 115 | 3 | . | . | . | 565 |
| 2.50-2.99 | . | . | . | 32 | 240 | 93 | 18 | 1 | . | . | 384 |
| 3.00-3.49 | . | . | . | 2 | 40 | 185 | 20 | 6 | . | . | 253 |
| 3.50-3.99 | . | . | . | . | 1 | 84 | 45 | 4 | . | . | 134 |
| 4.00-4.49 | . | . | . | . | . | 7 | 68 | 11 | . | . | 86 |
| 4.50-4.99 | . | . | . | . | . | . | 16 | 31 | . | . | 47 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 16 | . | . | 17 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 2 | . | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 128 | 1695 | 3667 | 2477 | 1023 | 534 | 176 | 74 | 6 | 1 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 9162.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 161 | 886 | 365 | 26 | 5 | 2 | . | . | . | . | 1445 |
| 0.50-0.99 | . | 1283 | 3871 | 698 | 116 | 22 | 3 | 2 | 1 | . | 5996 |
| 1.00-1.49 | . | . | 1401 | 1283 | 282 | 65 | 3 | 3 | 4 | . | 3041 |
| 1.50-1.99 | . | . | 171 | 728 | 361 | 110 | 1 | 1 | 1 | 1 | 1374 |
| 2.00-2.49 | . | . | . | 402 | 206 | 156 | 7 | . | 2 | 1 | 774 |
| 2.50-2.99 | . | . | . | 39 | 436 | 98 | 29 | 8 | 1 | . | 611 |
| 3.00-3.49 | . | . | . | . | 82 | 311 | 24 | 10 | 1 | . | 428 |
| 3.50-3.99 | . | . | . | . | 3 | 239 | 47 | 11 | 1 | . | 301 |
| 4.00-4.49 | . | . | . | . | . | 40 | 139 | 25 | 1 | . | 205 |
| 4.50-4.99 | . | . | . | . | . | 3 | 65 | 70 | 2 | . | 140 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 72 | 11 | . | 86 |
| 5.50-5.99 | . | . | . | . | . | . | . | 26 | 14 | 1 | 41 |
| 6.00-6.49 | . | . | . | . | . | . | . | 3 | 23 | 1 | 27 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 13 | 4 | 17 |
| 7.00+ | | | | | | | | | 8 | 11 | 19 |
| TOTAL | 161 | 2169 | 5808 | 3176 | 1491 | 1046 | 321 | 231 | 83 | 19 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 8.0 MEAN TP(SEC)= 5.0 NO. OF CASES= 13587.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 93 | 623 | 196 | 12 | 1 | . | . | . | . | . | 925 |
| 0.50-0.99 | . | 864 | 3844 | 650 | 80 | 7 | . | . | . | . | 5445 |
| 1.00-1.49 | . | . | 2069 | 1361 | 288 | 36 | 1 | . | . | . | 3755 |
| 1.50-1.99 | . | . | 164 | 1574 | 373 | 115 | 3 | . | . | . | 2229 |
| 2.00-2.49 | . | . | 1 | 764 | 381 | 166 | 11 | . | . | . | 1323 |
| 2.50-2.99 | . | . | . | 28 | 778 | 125 | 33 | 10 | . | . | 974 |
| 3.00-3.49 | . | . | . | . | 83 | 528 | 19 | 21 | . | . | 651 |
| 3.50-3.99 | . | . | . | . | . | 376 | 65 | 14 | 6 | . | 461 |
| 4.00-4.49 | . | . | . | . | . | 42 | 168 | 26 | 9 | . | 245 |
| 4.50-4.99 | . | . | . | . | . | 3 | 65 | 89 | 12 | . | 169 |
| 5.00-5.49 | . | . | . | . | . | . | 4 | 57 | 14 | . | 75 |
| 5.50-5.99 | . | . | . | . | . | . | 1 | 13 | 31 | 1 | 46 |
| 6.00-6.49 | . | . | . | . | . | . | . | 4 | 33 | 3 | 40 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 9 | 2 | 11 |
| 7.00+ | | | | | | | | | | 12 | 12 |
| TOTAL | 93 | 1487 | 6274 | 4389 | 1984 | 1398 | 370 | 234 | 114 | 18 | |

MEAN HS(M) = 1.5 LARGEST HS(M)= 8.6 MEAN TP(SEC)= 5.2 NO. OF CASES= 15324.

STATION S57 46.80N 85.15W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

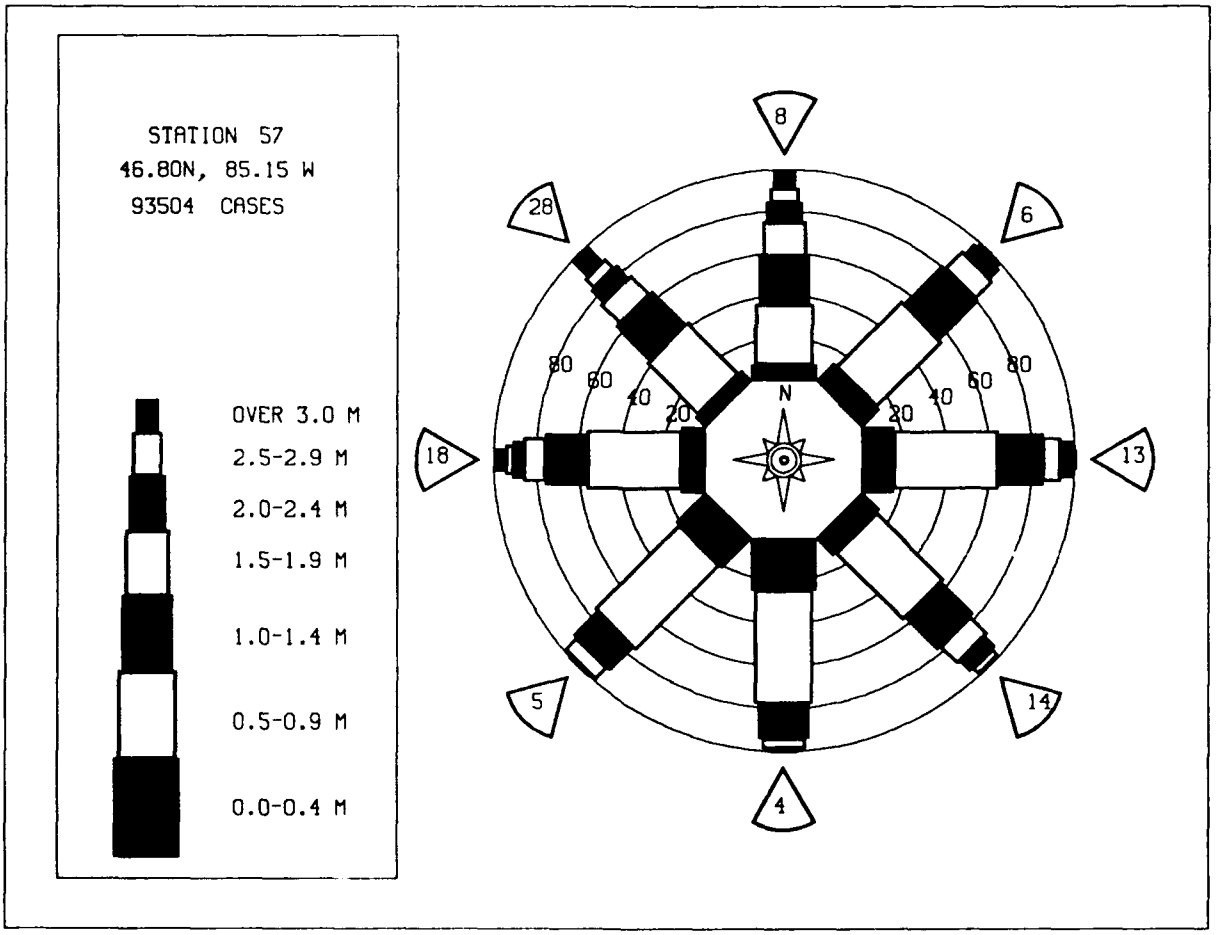
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 41 | 185 | 22 | 1 | . | . | . | . | . | . | 249 |
| 0.50-0.99 | . | 204 | 1001 | 82 | 4 | . | . | . | . | . | 1291 |
| 1.00-1.49 | . | . | 614 | 528 | 45 | 4 | . | . | . | . | 1191 |
| 1.50-1.99 | . | . | 71 | 601 | 218 | 39 | 1 | . | . | . | 930 |
| 2.00-2.49 | . | . | . | 315 | 224 | 120 | 3 | . | . | . | 662 |
| 2.50-2.99 | . | . | . | 12 | 357 | 89 | 22 | 3 | . | . | 483 |
| 3.00-3.49 | . | . | . | . | 39 | 272 | 22 | 13 | . | . | 346 |
| 3.50-3.99 | . | . | . | . | . | 187 | 38 | 13 | . | . | 238 |
| 4.00-4.49 | . | . | . | . | . | 24 | 86 | 19 | 6 | . | 135 |
| 4.50-4.99 | . | . | . | . | . | 2 | 23 | 27 | 8 | 1 | 61 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 22 | 8 | . | 31 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 6 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 7 | 1 | 8 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 41 | 389 | 1708 | 1539 | 887 | 737 | 196 | 98 | 36 | 4 | |

MEAN HS(M) = 1.8 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 5.5 NO. OF CASES= 5289.

STATION S57 46.80N 85.15W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 126 | 843 | 145 | 11 | . | . | . | . | . | . | 1125 |
| 0.50-0.99 | . | 1190 | 2612 | 330 | 48 | 4 | . | . | . | . | 4184 |
| 1.00-1.49 | . | . | 1347 | 621 | 121 | 16 | . | . | . | . | 2105 |
| 1.50-1.99 | . | . | 175 | 700 | 168 | 45 | 1 | . | . | . | 1089 |
| 2.00-2.49 | . | . | 2 | 352 | 177 | 74 | 5 | . | . | . | 610 |
| 2.50-2.99 | . | . | . | 24 | 279 | 50 | 13 | 2 | . | . | 368 |
| 3.00-3.49 | . | . | . | . | 31 | 162 | 9 | 5 | . | . | 207 |
| 3.50-3.99 | . | . | . | . | . | 100 | 22 | 4 | . | . | 126 |
| 4.00-4.49 | . | . | . | . | . | 12 | 51 | 8 | 1 | . | 72 |
| 4.50-4.99 | . | . | . | . | . | . | 17 | 23 | 2 | . | 42 |
| 5.00-5.49 | . | . | . | . | . | . | . | 17 | 3 | . | 20 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 5 | . | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 6 | . | 6 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 126 | 2033 | 4281 | 2038 | 824 | 463 | 118 | 63 | 19 | 2 | |

MEAN HS(M)= 1.2 LARGEST HS(M)= 8.6 MEAN TP(SEC)= 4.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S57 (46.80N 85.15W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.0 | 1.4 | 1.2 | 1.4 | 1.0 | 0.8 | 0.7 | 0.7 | 0.9 | 1.3 | 1.5 | 1.5 | 1.1 |
| 1957 | 1.7 | 1.5 | 1.4 | 1.1 | 1.1 | 1.0 | 0.9 | 0.8 | 1.1 | 1.1 | 1.8 | 1.9 | 1.3 |
| 1958 | 1.4 | 2.1 | 1.2 | 1.3 | 1.2 | 1.0 | 0.8 | 0.9 | 1.1 | 1.3 | 2.0 | 1.5 | 1.3 |
| 1959 | 1.7 | 1.6 | 1.4 | 1.3 | 1.3 | 0.9 | 0.8 | 0.8 | 1.1 | 1.4 | 1.8 | 1.8 | 1.3 |
| 1960 | 1.6 | 1.6 | 1.1 | 1.1 | 0.9 | 0.7 | 0.7 | 0.7 | 0.9 | 1.3 | 1.7 | 1.5 | 1.2 |
| 1961 | 1.2 | 1.3 | 1.7 | 1.1 | 1.1 | 0.8 | 0.7 | 0.7 | 1.1 | 1.2 | 1.5 | 1.6 | 1.2 |
| 1962 | 1.8 | 1.3 | 1.0 | 1.1 | 0.8 | 0.7 | 0.7 | 0.7 | 1.1 | 1.0 | 1.1 | 1.6 | 1.1 |
| 1963 | 1.3 | 1.5 | 1.4 | 1.3 | 0.9 | 0.7 | 0.8 | 0.8 | 0.8 | 0.9 | 1.6 | 1.6 | 1.1 |
| 1964 | 1.9 | 1.6 | 1.7 | 1.3 | 1.2 | 0.9 | 0.8 | 1.0 | 1.2 | 1.3 | 1.6 | 1.5 | 1.3 |
| 1965 | 1.9 | 2.0 | 1.3 | 1.0 | 1.0 | 0.9 | 0.9 | 0.8 | 1.0 | 1.7 | 1.8 | 1.5 | 1.3 |
| 1966 | 1.9 | 1.7 | 1.9 | 1.4 | 1.4 | 0.9 | 1.0 | 0.9 | 1.4 | 1.7 | 1.8 | 1.7 | 1.5 |
| 1967 | 1.9 | 1.9 | 1.6 | 1.3 | 1.2 | 0.8 | 0.8 | 0.8 | 1.0 | 1.4 | 1.6 | 1.7 | 1.3 |
| 1968 | 1.6 | 2.6 | 1.7 | 1.4 | 1.2 | 0.8 | 0.9 | 0.9 | 1.0 | 1.3 | 1.8 | 1.8 | 1.4 |
| 1969 | 1.9 | 1.5 | 1.6 | 1.1 | 1.0 | 0.9 | 0.7 | 0.9 | 1.1 | 1.3 | 1.5 | 1.6 | 1.3 |
| 1970 | 1.5 | 1.7 | 1.5 | 1.2 | 1.0 | 0.8 | 0.7 | 0.8 | 1.3 | 1.4 | 1.6 | 1.6 | 1.3 |
| 1971 | 1.9 | 1.6 | 1.8 | 1.2 | 1.0 | 0.7 | 0.8 | 0.8 | 0.9 | 1.2 | 1.5 | 1.7 | 1.3 |
| 1972 | 2.0 | 1.5 | 1.6 | 1.0 | 0.8 | 0.9 | 0.8 | 0.8 | 1.3 | 1.6 | 1.2 | 1.6 | 1.3 |
| 1973 | 1.6 | 1.4 | 1.5 | 1.3 | 1.1 | 0.7 | 0.7 | 0.7 | 1.1 | 1.2 | 1.9 | 1.3 | 1.2 |
| 1974 | 1.4 | 1.3 | 1.7 | 1.1 | 1.0 | 0.8 | 0.7 | 0.7 | 1.0 | 1.3 | 1.3 | 1.2 | 1.1 |
| 1975 | 1.6 | 1.2 | 1.5 | 1.1 | 0.7 | 0.8 | 0.8 | 0.8 | 0.9 | 1.3 | 1.5 | 1.4 | 1.1 |
| 1976 | 1.8 | 1.7 | 1.8 | 1.2 | 1.1 | 0.8 | 0.8 | 0.8 | 1.1 | 1.2 | 1.8 | 1.7 | 1.3 |
| 1977 | 1.5 | 1.7 | 1.4 | 0.9 | 0.7 | 0.7 | 0.7 | 0.8 | 0.9 | 1.1 | 1.3 | 1.5 | 1.1 |
| 1978 | 1.6 | 1.1 | 1.1 | 1.1 | 0.7 | 0.7 | 0.6 | 0.8 | 0.9 | 1.3 | 1.5 | 1.6 | 1.1 |
| 1979 | 1.5 | 1.2 | 1.4 | 0.9 | 0.7 | 0.7 | 0.6 | 0.7 | 0.9 | 1.0 | 1.4 | 1.8 | 1.1 |
| 1980 | 1.6 | 1.0 | 1.5 | 0.9 | 0.8 | 0.7 | 0.5 | 0.7 | 1.0 | 1.4 | 1.3 | 1.5 | 1.1 |
| 1981 | 1.1 | 1.3 | 1.3 | 1.1 | 0.7 | 0.6 | 0.5 | 0.5 | 1.0 | 1.1 | 1.3 | 1.2 | 1.0 |
| 1982 | 1.8 | 1.2 | 1.6 | 1.3 | 0.6 | 0.6 | 0.6 | 0.7 | 0.9 | 1.1 | 1.3 | 1.4 | 1.1 |
| 1983 | 1.5 | 1.1 | [illegible] | 1.0 | 0.9 | 0.6 | 0.6 | 0.6 | 0.8 | 1.1 | 1.5 | 1.5 | 1.1 |
| 1984 | 1.2 | 1.3 | [illegible] | 1.1 | 0.9 | 0.7 | 0.6 | 0.5 | 0.9 | 1.0 | 1.6 | 1.7 | 1.1 |
| 1985 | 1.5 | 1.4 | 1.4 | 1.0 | 0.6 | 0.8 | 0.5 | 0.6 | 0.7 | 1.1 | 1.3 | 1.4 | 1.0 |
| 1986 | 1.5 | [illegible] | 1.4 | 1.2 | 0.8 | 0.7 | 0.5 | 0.7 | 0.9 | 0.9 | 1.4 | 1.4 | 1.0 |
| 1987 | 1.[illegible] | [illegible] | 1.3 | 1.1 | 0.8 | 0.7 | 0.7 | 0.9 | 0.9 | 1.2 | 1.5 | 1.4 | 1.1 |
| MEAN | 1 | 1.5 | 1.5 | 1.1 | 0.9 | 0.8 | 0.7 | 0.8 | 1.0 | 1.2 | 1.5 | 1.6 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S57 (46.80N 85.15W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.8 | 5.2 | 3.9 | 4.6 | 3.2 | 3.1 | 2.2 | 2.6 | 3.9 | 5.5 | 4.6 | 4.9 |
| 1957 | 5.1 | 5.3 | 4.7 | 3.5 | 3.5 | 3.1 | 5.1 | 3.1 | 5.1 | 4.2 | 5.9 | 5.9 |
| 1958 | 5.7 | 5.9 | 4.6 | 5.1 | 3.5 | 3.5 | 2.5 | 2.6 | 4.0 | 4.0 | 6.0 | 4.9 |
| 1959 | 4.5 | 4.7 | 5.5 | 3.7 | 4.5 | 3.7 | 2.6 | 2.2 | 4.5 | 5.3 | 5.7 | 7.5 |
| 1960 | 5.3 | 5.0 | 3.6 | 3.5 | 2.7 | 2.0 | 2.9 | 2.1 | 4.2 | 5.7 | 5.5 | 4.2 |
| 1961 | 5.3 | 4.5 | 5.7 | 3.9 | 3.9 | 3.3 | 2.8 | 3.3 | 3.8 | 4.3 | 5.3 | 7.0 |
| 1962 | 5.2 | 4.2 | 4.7 | 3.9 | 2.9 | 2.6 | 2.6 | 1.9 | 3.8 | 4.9 | 4.6 | 6.2 |
| 1963 | 4.5 | 6.3 | 4.4 | 6.4 | 4.0 | 2.4 | 3.1 | 2.3 | 2.1 | 3.6 | 7.2 | 5.1 |
| 1964 | 6.7 | 5.2 | 6.2 | 3.6 | 4.3 | 3.5 | 2.8 | 4.1 | 5.4 | 4.3 | 7.0 | 4.9 |
| 1965 | 6.1 | 6.2 | 4.4 | 3.3 | 2.8 | 3.1 | 2.9 | 2.8 | 4.0 | 6.5 | 7.2 | 5.2 |
| 1966 | 7.5 | 5.4 | 5.8 | 4.0 | 5.0 | 3.0 | 3.2 | 3.8 | 6.0 | 7.2 | 4.9 | 6.1 |
| 1967 | 6.5 | 6.2 | 5.8 | 4.1 | 3.8 | 2.4 | 3.2 | 2.5 | 3.8 | 4.4 | 5.2 | 4.9 |
| 1968 | 5.0 | 7.9 | 4.9 | 5.3 | 3.0 | 2.6 | 3.7 | 3.6 | 2.9 | 4.3 | 6.0 | 4.9 |
| 1969 | 4.7 | 5.4 | 4.6 | 3.4 | 2.6 | 2.0 | 3.0 | 3.7 | 3.7 | 3.7 | 4.9 | 5.5 |
| 1970 | 4.9 | 5.4 | 4.5 | 5.2 | 3.5 | 2.3 | 2.6 | 2.9 | 4.5 | 4.4 | 6.8 | 5.8 |
| 1971 | 5.4 | 7.0 | 5.9 | 4.2 | 3.0 | 2.0 | 2.9 | 2.9 | 4.1 | 4.4 | 4.8 | 6.1 |
| 1972 | 8.0 | 6.4 | 4.7 | 3.9 | 2.9 | 2.4 | 2.6 | 3.0 | 4.7 | 8.6 | 4.5 | 7.0 |
| 1973 | 4.6 | 3.4 | 4.7 | 3.0 | 3.7 | 2.2 | 2.5 | 3.5 | 4.9 | 6.1 | 6.0 | 3.7 |
| 1974 | 6.7 | 6.6 | 5.0 | 3.3 | 3.3 | 2.4 | 2.1 | 2.4 | 3.6 | 4.2 | 4.2 | 4.3 |
| 1975 | 4.7 | 4.8 | 3.9 | 3.6 | 2.5 | 2.9 | 3.4 | 3.4 | 3.0 | 4.2 | 6.6 | 5.7 |
| 1976 | 7.1 | 6.2 | 5.9 | 3.3 | 5.1 | 2.0 | 3.0 | 3.8 | 4.6 | 5.5 | 6.2 | 6.8 |
| 1977 | 6.1 | 6.1 | 6.2 | 3.3 | 2.8 | 2.5 | 3.3 | 2.9 | 4.1 | 4.1 | 4.9 | 3.6 |
| 1978 | 5.9 | 3.7 | 6.4 | 4.1 | 2.4 | 2.4 | 2.3 | 3.0 | 2.4 | 3.9 | 4.9 | 5.0 |
| 1979 | 4.2 | 3.9 | 4.0 | 4.5 | 2.3 | 2.4 | 2.1 | 3.8 | 2.7 | 2.9 | 4.9 | 4.7 |
| 1980 | 6.3 | 3.5 | 6.2 | 3.2 | 3.0 | 2.2 | 1.4 | 2.0 | 4.4 | 6.0 | 6.7 | 5.3 |
| 1981 | 3.5 | 4.1 | 4.4 | 3.8 | 1.9 | 2.5 | 1.6 | 1.7 | 6.3 | 5.2 | 5.2 | 3.7 |
| 1982 | 7.7 | 4.2 | 7.7 | 6.5 | 1.6 | 2.3 | 2.1 | 2.6 | 4.8 | 4.9 | 4.6 | 4.0 |
| 1983 | 4.2 | 3.0 | 3.9 | 2.3 | 2.4 | 2.1 | 1.8 | 2.1 | 2.9 | 3.8 | 4.3 | 4.1 |
| 1984 | 6.1 | 4.2 | 6.3 | 3.2 | 3.5 | 1.8 | 2.1 | 1.7 | 3.2 | 4.1 | 6.5 | 6.2 |
| 1985 | 5.0 | 4.1 | 4.1 | 4.5 | 1.8 | 3.6 | 1.7 | 1.9 | 3.4 | 4.3 | 3.8 | 5.2 |
| 1986 | 4.8 | 3.5 | 5.2 | 3.7 | 3.8 | 2.7 | 1.5 | 2.6 | 4.0 | 4.5 | 4.1 | 4.6 |
| 1987 | 5.3 | 4.5 | 4.6 | 5.3 | 3.0 | 3.1 | 2.7 | 4.3 | 3.4 | 4.5 | 6.1 | 4.5 |

32 YR. STATISTICS FOR WIS STATION S57

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.2 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.9 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 8.6 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 307.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 72101703 |

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 29 | 194 | 16 | 3 | . | . | . | . | . | . | 242 |
| 0.50-0.99 | . | 314 | 810 | 57 | 4 | . | . | . | . | . | 1185 |
| 1.00-1.49 | . | . | 548 | 311 | 64 | 13 | . | . | . | . | 934 |
| 1.50-1.99 | . | . | 45 | 489 | 89 | 55 | 2 | . | . | . | 680 |
| 2.00-2.49 | . | . | . | 282 | 105 | 59 | 9 | . | . | . | 455 |
| 2.50-2.99 | . | . | . | 19 | 214 | 29 | 20 | 1 | . | . | 283 |
| 3.00-3.49 | . | . | . | . | 83 | 49 | 9 | 7 | . | . | 148 |
| 3.50-3.99 | . | . | . | . | 1 | 38 | 12 | 10 | . | . | 61 |
| 4.00-4.49 | . | . | . | . | . | 6 | 1 | . | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 4 | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 29 | 508 | 1417 | 1161 | 560 | 249 | 54 | 23 | 0 | 0 | |

MEAN HS(M) = 1.4 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 5.0 NO. OF CASES= 3759.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 36 | 227 | 23 | . | . | . | . | . | . | . | 286 |
| 0.50-0.99 | . | 347 | 828 | 66 | 6 | 1 | . | . | . | . | 1248 |
| 1.00-1.49 | . | . | 533 | 165 | 54 | 8 | . | . | . | . | 760 |
| 1.50-1.99 | . | . | 89 | 255 | 35 | 26 | . | . | . | . | 405 |
| 2.00-2.49 | . | . | . | 132 | 19 | 26 | 11 | 1 | . | . | 189 |
| 2.50-2.99 | . | . | . | 24 | 41 | 5 | 5 | 1 | . | . | 76 |
| 3.00-3.49 | . | . | . | 3 | 10 | 4 | 1 | 2 | . | . | 20 |
| 3.50-3.99 | . | . | . | . | 2 | 5 | 1 | 1 | 1 | . | 10 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 36 | 574 | 1473 | 645 | 167 | 75 | 18 | 5 | 1 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 2814.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 47 | 244 | 16 | . | . | . | . | . | . | . | 307 |
| 0.50-0.99 | . | 298 | 905 | 74 | 6 | 1 | . | . | . | . | 1284 |
| 1.00-1.49 | . | . | 685 | 84 | 32 | 8 | . | . | . | . | 809 |
| 1.50-1.99 | . | . | 66 | 209 | 24 | 14 | 3 | . | . | . | 316 |
| 2.00-2.49 | . | . | . | 149 | 3 | 11 | 3 | 1 | . | . | 167 |
| 2.50-2.99 | . | . | . | 13 | 8 | . | . | . | . | . | 21 |
| 3.00-3.49 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 47 | 542 | 1672 | 529 | 76 | 34 | 6 | 1 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 2729.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 56 | 351 | 21 | . | . | . | . | . | . | . | 428 |
| 0.50-0.99 | . | 1053 | 1207 | 93 | 4 | . | . | . | . | . | 2357 |
| 1.00-1.49 | . | . | 690 | 36 | 29 | 6 | 1 | . | . | . | 762 |
| 1.50-1.99 | . | . | 133 | 137 | 10 | 11 | 1 | . | . | . | 292 |
| 2.00-2.49 | . | . | . | 86 | 1 | 5 | . | 2 | . | . | 94 |
| 2.50-2.99 | . | . | . | 7 | 1 | . | . | . | . | . | 8 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 56 | 1404 | 2051 | 359 | 45 | 22 | 2 | 2 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 3695.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 122 | 501 | 26 | 4 | . | . | . | . | . | . | 653 |
| 0.50-0.99 | . | 2375 | 1910 | 81 | 7 | . | . | . | . | . | 4373 |
| 1.00-1.49 | . | . | 861 | 14 | 19 | 2 | . | . | . | . | 896 |
| 1.50-1.99 | . | . | 216 | 267 | 2 | 5 | 1 | . | . | . | 491 |
| 2.00-2.49 | . | . | . | 99 | . | 1 | . | 1 | . | . | 101 |
| 2.50-2.99 | . | . | . | 4 | 2 | . | . | . | . | . | 6 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 122 | 2876 | 3013 | 469 | 31 | 8 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 6105.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 88 | 503 | 14 | . | . | . | . | . | . | . | 605 |
| 0.50-0.99 | . | 2244 | 1691 | 53 | 10 | . | . | . | . | . | 3998 |
| 1.00-1.49 | . | . | 1457 | 20 | 13 | 2 | . | . | . | . | 1492 |
| 1.50-1.99 | . | . | 882 | 328 | 1 | 1 | . | . | . | . | 1212 |
| 2.00-2.49 | . | . | 24 | 220 | . | . | . | . | . | . | 244 |
| 2.50-2.99 | . | . | . | 16 | 4 | . | . | . | . | . | 20 |
| 3.00-3.49 | . | . | . | 1 | 4 | . | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 88 | 2747 | 4068 | 638 | 32 | 3 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 7093.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 51 | 448 | 9 | 2 | . | . | . | . | . | . | 510 |
| 0.50-0.99 | . | 2007 | 1242 | 31 | 3 | . | . | . | . | . | 3283 |
| 1.00-1.49 | . | . | 921 | 98 | 8 | 2 | . | . | . | . | 1029 |
| 1.50-1.99 | . | . | 391 | 234 | 3 | 2 | . | . | . | . | 630 |
| 2.00-2.49 | . | . | 44 | 43 | 8 | . | . | . | . | . | 95 |
| 2.50-2.99 | . | . | . | 7 | 1 | 1 | . | . | . | . | 9 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 51 | 2455 | 2607 | 415 | 23 | 5 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 5203.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 49 | 536 | 9 | . | . | . | . | . | . | . | 594 |
| 0.50-0.99 | . | 1473 | 2378 | 20 | . | . | . | . | . | . | 3871 |
| 1.00-1.49 | . | . | 1058 | 257 | 4 | 1 | . | . | . | . | 1320 |
| 1.50-1.99 | . | . | 96 | 441 | 1 | 1 | . | . | . | . | 539 |
| 2.00-2.49 | . | . | 7 | 113 | 21 | . | . | . | . | . | 141 |
| 2.50-2.99 | . | . | . | 3 | 12 | . | . | . | . | . | 15 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 49 | 2009 | 3548 | 834 | 38 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 6067.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 42 | 366 | 5 | 1 | . | . | . | . | . | . | 414 |
| 0.50-0.99 | . | 818 | 1202 | 16 | 2 | . | . | . | . | . | 2038 |
| 1.00-1.49 | . | . | 850 | 33 | 1 | 2 | . | . | . | . | 886 |
| 1.50-1.99 | . | . | 110 | 222 | . | . | 1 | . | . | . | 333 |
| 2.00-2.49 | . | . | . | 141 | . | . | . | . | . | . | 141 |
| 2.50-2.99 | . | . | . | 9 | 16 | . | . | . | . | . | 25 |
| 3.00-3.49 | . | . | . | . | 6 | . | . | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 42 | 1184 | 2167 | 422 | 25 | 2 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 3598.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 39 | 276 | 3 | . | . | . | . | . | . | . | 318 |
| 0.50-0.99 | . | 793 | 719 | 17 | 6 | . | . | . | . | . | 1535 |
| 1.00-1.49 | . | . | 656 | 22 | 5 | . | . | . | . | . | 683 |
| 1.50-1.99 | . | . | 129 | 139 | . | 2 | . | . | . | . | 270 |
| 2.00-2.49 | . | . | 2 | 98 | . | . | 1 | . | . | . | 101 |
| 2.50-2.99 | . | . | . | 4 | 10 | . | . | . | . | . | 14 |
| 3.00-3.49 | . | . | . | . | 5 | . | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 39 | 1069 | 1509 | 280 | 26 | 3 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 2744.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 41 | 360 | 13 | 1 | . | . | . | . | . | . | 415 |
| 0.50-0.99 | . | 1043 | 587 | 19 | 18 | 1 | . | . | . | . | 1668 |
| 1.00-1.49 | . | . | 571 | 6 | 10 | 4 | . | . | . | . | 591 |
| 1.50-1.99 | . | . | 264 | 38 | 1 | 3 | . | . | . | . | 306 |
| 2.00-2.49 | . | . | 1 | 41 | . | 1 | 1 | . | . | . | 44 |
| 2.50-2.99 | . | . | . | 9 | . | . | . | . | . | . | 9 |
| 3.00-3.49 | . | . | . | 1 | 1 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 41 | 1403 | 1436 | 115 | 30 | 9 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 2845.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 36 | 359 | 62 | 21 | 1 | . | . | . | . | . | 479 |
| 0.50-0.99 | . | 1175 | 733 | 252 | 112 | 5 | . | 1 | . | . | 2278 |
| 1.00-1.49 | . | . | 580 | 93 | 75 | 13 | . | . | . | . | 761 |
| 1.50-1.99 | . | . | 279 | 109 | 35 | 13 | . | . | . | . | 436 |
| 2.00-2.49 | . | . | 11 | 77 | 21 | 16 | 3 | . | . | . | 128 |
| 2.50-2.99 | . | . | . | 9 | 18 | 6 | 1 | . | . | . | 34 |
| 3.00-3.49 | . | . | . | . | 2 | 7 | . | . | . | . | 9 |
| 3.50-3.99 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 36 | 1534 | 1665 | 561 | 264 | 64 | 5 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.1 NO. OF CASES= 3872.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 66 | 473 | 152 | 5 | | | | | | | 696 |
| 0.50-0.99 | . | 1063 | 2223 | 648 | 34 | 4 | 1 | 1 | . | . | 3974 |
| 1.00-1.49 | . | . | 886 | 886 | 242 | 5 | . | 1 | . | . | 2020 |
| 1.50-1.99 | . | . | 167 | 475 | 302 | 55 | 1 | . | . | . | 1000 |
| 2.00-2.49 | . | . | 2 | 275 | 168 | 115 | 5 | . | . | . | 565 |
| 2.50-2.99 | . | . | . | 27 | 253 | 88 | 22 | 2 | . | . | 392 |
| 3.00-3.49 | . | . | . | . | 43 | 192 | 33 | 2 | . | . | 270 |
| 3.50-3.99 | . | . | . | . | 3 | 122 | 49 | 10 | 1 | . | 185 |
| 4.00-4.49 | . | . | . | . | . | 8 | 68 | 27 | . | . | 103 |
| 4.50-4.99 | . | . | . | . | . | . | 12 | 35 | . | . | 47 |
| 5.00-5.49 | . | . | . | . | . | . | . | 24 | 1 | . | 25 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 6 | . | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 5 | 1 | 6 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 66 | 1536 | 3430 | 2316 | 1045 | 589 | 191 | 105 | 13 | 1 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.9 NO. OF CASES= 8710.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 79 | 727 | 181 | 12 | 3 | | | . | . | . | 1002 |
| 0.50-0.99 | . | 1158 | 4014 | 700 | 133 | 25 | 3 | . | . | . | 6033 |
| 1.00-1.49 | . | . | 1579 | 1337 | 311 | 64 | 7 | 3 | 6 | 1 | 3308 |
| 1.50-1.99 | . | . | 224 | 868 | 337 | 113 | 3 | 1 | . | 1 | 1547 |
| 2.00-2.49 | . | . | . | 474 | 238 | 147 | 8 | . | 2 | 1 | 870 |
| 2.50-2.99 | . | . | . | 50 | 514 | 114 | 26 | 10 | 1 | . | 715 |
| 3.00-3.49 | . | . | . | . | 97 | 350 | 13 | 12 | 1 | . | 473 |
| 3.50-3.99 | . | . | . | . | 2 | 259 | 53 | 12 | 2 | . | 328 |
| 4.00-4.49 | . | . | . | . | . | 50 | 141 | 20 | . | . | 211 |
| 4.50-4.99 | . | . | . | . | . | 6 | 75 | 75 | 5 | . | 161 |
| 5.00-5.49 | . | . | . | . | . | . | 7 | 69 | 11 | . | 87 |
| 5.50-5.99 | . | . | . | . | . | . | . | 26 | 28 | . | 54 |
| 6.00-6.49 | . | . | . | . | . | . | . | 2 | 26 | . | 28 |
| 6.50-6.99 | . | . | . | . | . | . | . | 1 | 10 | 3 | 14 |
| 7.00+ | . | . | . | . | . | . | . | . | 5 | 18 | 23 |
| TOTAL | 79 | 1885 | 5998 | 3441 | 1635 | 1128 | 336 | 231 | 97 | 24 | |

MEAN HS(M) = 1.4 LARGEST HS(M)= 8.1 MEAN TP(SEC)= 5.1 NO. OF CASES= 13918.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 59 | 456 | 124 | 5 | . | . | . | . | . | . | 644 |
| 0.50-0.99 | . | 737 | 3567 | 672 | 64 | 3 | . | . | . | . | 5043 |
| 1.00-1.49 | . | . | 2077 | 1411 | 318 | 36 | . | . | . | . | 3842 |
| 1.50-1.99 | . | . | 175 | 1951 | 284 | 118 | 3 | . | 1 | . | 2532 |
| 2.00-2.49 | . | . | 1 | 1118 | 423 | 140 | 11 | 1 | . | . | 1694 |
| 2.50-2.99 | . | . | . | 36 | 926 | 150 | 26 | 16 | . | . | 1154 |
| 3.00-3.49 | . | . | . | . | 175 | 549 | 21 | 16 | . | . | 761 |
| 3.50-3.99 | . | . | . | . | 3 | 375 | 59 | 11 | . | . | 448 |
| 4.00-4.49 | . | . | . | . | . | 63 | 163 | 36 | 6 | . | 268 |
| 4.50-4.99 | . | . | . | . | . | 3 | 53 | 77 | 12 | . | 145 |
| 5.00-5.49 | . | . | . | . | . | . | 7 | 42 | 12 | . | 61 |
| 5.50-5.99 | . | . | . | . | . | . | . | 16 | 31 | . | 47 |
| 6.00-6.49 | . | . | . | . | . | . | . | 6 | 17 | 1 | 24 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 5 | 3 | 8 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 5 | 6 |
| TOTAL | 59 | 1193 | 5944 | 5193 | 2193 | 1437 | 343 | 221 | 85 | 9 | |

MEAN HS(M) = 1.6 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 5.3 NO. OF CASES= 15617.

STATION S58 46.80N 84.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

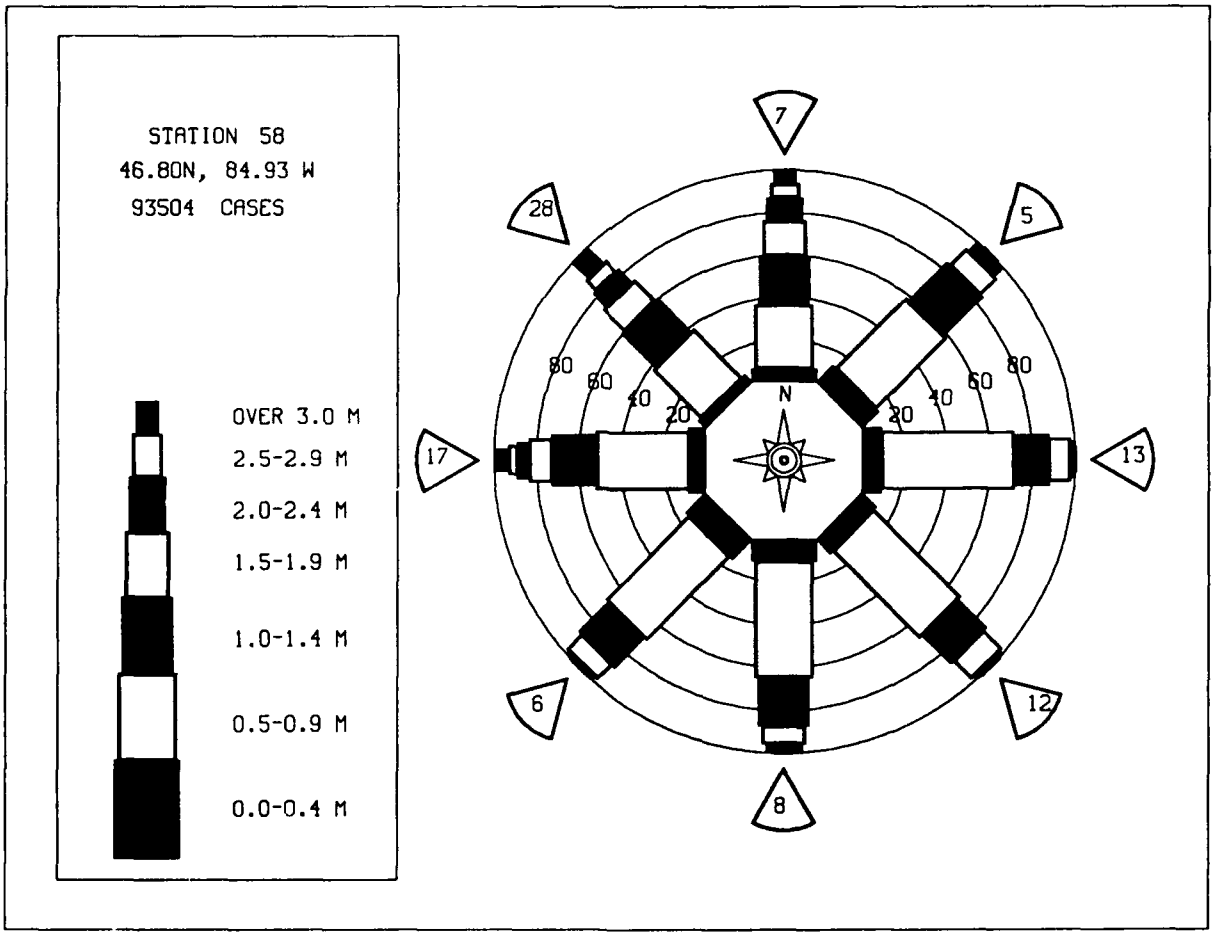
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 33 | 160 | 8 | . | . | . | . | . | . | . | 201 |
| 0.50-0.99 | . | 211 | 869 | 48 | 3 | . | . | . | . | . | 1131 |
| 1.00-1.49 | . | . | 610 | 365 | 49 | 4 | 1 | . | . | . | 1029 |
| 1.50-1.99 | . | . | 88 | 623 | 126 | 38 | 2 | . | . | . | 877 |
| 2.00-2.49 | . | . | 1 | 344 | 163 | 80 | 4 | . | . | . | 592 |
| 2.50-2.99 | . | . | . | 18 | 335 | 74 | 22 | 4 | . | . | 453 |
| 3.00-3.49 | . | . | . | . | 102 | 187 | 16 | 18 | 1 | . | 324 |
| 3.50-3.99 | . | . | . | . | 5 | 175 | 29 | 11 | 2 | . | 222 |
| 4.00-4.49 | . | . | . | . | . | 26 | 58 | 25 | 2 | . | 111 |
| 4.50-4.99 | . | . | . | . | . | 5 | 16 | 27 | 9 | 1 | 58 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 16 | 7 | . | 26 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 8 | . | 10 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 8 | . | 8 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 33 | 371 | 1576 | 1398 | 783 | 589 | 151 | 103 | 37 | 2 | |

MEAN HS(M) = 1.8 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 5.5 NO. OF CASES= 4735.

STATION S58 46.80N 84.93W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 88 | 619 | 68 | 5 | . | . | . | . | . | . | 780 |
| 0.50-0.99 | . | 1711 | 2489 | 285 | 41 | 4 | . | . | . | . | 4530 |
| 1.00-1.49 | . | . | 1457 | 514 | 124 | 17 | . | . | . | . | 2112 |
| 1.50-1.99 | . | . | 336 | 679 | 125 | 46 | 1 | . | . | . | 1187 |
| 2.00-2.49 | . | . | 9 | 370 | 117 | 60 | 5 | . | . | . | 561 |
| 2.50-2.99 | . | . | . | 26 | 236 | 47 | 12 | 3 | . | . | 324 |
| 3.00-3.49 | . | . | . | . | 53 | 134 | 9 | 5 | . | . | 201 |
| 3.50-3.99 | . | . | . | . | 1 | 98 | 20 | 5 | . | . | 124 |
| 4.00-4.49 | . | . | . | . | . | 15 | 43 | 11 | . | . | 69 |
| 4.50-4.99 | . | . | . | . | . | 1 | 15 | 22 | 2 | . | 40 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 15 | 3 | . | 19 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 7 | . | 11 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 88 | 2330 | 4359 | 1879 | 697 | 422 | 106 | 65 | 18 | 2 | |

MEAN HS(M)= 1.2 LARGEST HS(M)= 8.1 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S58 (46.80N 84.93W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.0 | 1.4 | 1.2 | 1.3 | 1.1 | 0.8 | 0.8 | 0.7 | 1.0 | 1.2 | 1.4 | 1.4 | 1.1 |
| 1957 | 1.7 | 1.5 | 1.4 | 1.1 | 1.1 | 1.0 | 1.0 | 0.9 | 1.2 | 1.1 | 1.8 | 1.9 | 1.3 |
| 1958 | 1.4 | 2.1 | 1.2 | 1.2 | 1.3 | 1.0 | 0.8 | 0.9 | 1.1 | 1.3 | 2.0 | 1.5 | 1.3 |
| 1959 | 1.7 | 1.6 | 1.4 | 1.3 | 1.2 | 1.0 | 0.8 | 0.8 | 1.1 | 1.4 | 1.8 | 1.7 | 1.3 |
| 1960 | 1.6 | 1.6 | 1.2 | 1.1 | 0.9 | 0.8 | 0.8 | 0.8 | 1.0 | 1.3 | 1.7 | 1.5 | 1.2 |
| 1961 | 1.2 | 1.2 | 1.6 | 1.1 | 1.1 | 0.9 | 0.7 | 0.8 | 1.2 | 1.2 | 1.5 | 1.6 | 1.2 |
| 1962 | 1.8 | 1.3 | 0.9 | 1.1 | 0.8 | 0.7 | 0.7 | 0.7 | 1.1 | 1.0 | 1.2 | 1.6 | 1.1 |
| 1963 | 1.4 | 1.5 | 1.3 | 1.3 | 1.0 | 0.7 | 0.8 | 0.8 | 0.8 | 1.0 | 1.6 | 1.5 | 1.1 |
| 1964 | 1.9 | 1.6 | 1.7 | 1.3 | 1.2 | 1.0 | 0.8 | 1.0 | 1.3 | 1.3 | 1.6 | 1.5 | 1.3 |
| 1965 | 1.9 | 2.0 | 1.3 | 1.0 | 1.0 | 1.0 | 1.0 | 0.9 | 1.0 | 1.6 | 1.8 | 1.5 | 1.3 |
| 1966 | 1.9 | 1.7 | 1.8 | 1.4 | 1.4 | 0.9 | 1.0 | 1.0 | 1.4 | 1.7 | 1.7 | 1.7 | 1.5 |
| 1967 | 1.8 | 1.9 | 1.5 | 1.3 | 1.2 | 0.8 | 0.8 | 0.8 | 1.0 | 1.4 | 1.6 | 1.6 | 1.3 |
| 1968 | 1.5 | 2.6 | 1.7 | 1.3 | 1.1 | 0.8 | 1.0 | 0.9 | 1.0 | 1.3 | 1.8 | 1.7 | 1.4 |
| 1969 | 1.7 | 1.5 | 1.6 | 1.0 | 1.0 | 0.9 | 0.7 | 1.0 | 1.1 | 1.3 | 1.5 | 1.6 | 1.2 |
| 1970 | 1.5 | 1.7 | 1.5 | 1.2 | 1.0 | 0.8 | 0.8 | 0.9 | 1.3 | 1.3 | 1.6 | 1.5 | 1.2 |
| 1971 | 1.8 | 1.6 | 1.7 | 1.2 | 1.0 | 0.7 | 0.9 | 0.8 | 1.0 | 1.1 | 1.4 | 1.6 | 1.2 |
| 1972 | 2.0 | 1.5 | 1.5 | 1.0 | 0.8 | 0.9 | 0.8 | 0.8 | 1.3 | 1.6 | 1.2 | 1.5 | 1.2 |
| 1973 | 1.6 | 1.3 | 1.4 | 1.3 | 1.1 | 0.8 | 0.8 | 0.7 | 1.1 | 1.2 | 1.8 | 1.3 | 1.2 |
| 1974 | 1.4 | 1.3 | 1.6 | 1.0 | 1.0 | 0.8 | 0.8 | 0.7 | 1.1 | 1.3 | 1.3 | 1.2 | 1.1 |
| 1975 | 1.6 | 1.3 | 1.4 | 1.2 | 0.7 | 0.8 | 0.8 | 0.9 | 1.0 | 1.3 | 1.4 | 1.4 | 1.1 |
| 1976 | 1.8 | 1.6 | 1.7 | 1.2 | 1.1 | 0.8 | 0.9 | 0.9 | 1.2 | 1.2 | 1.8 | 1.6 | 1.3 |
| 1977 | 1.6 | 1.7 | 1.4 | 1.0 | 0.8 | 0.8 | 0.7 | 0.8 | 0.9 | 1.1 | 1.3 | 1.4 | 1.1 |
| 1978 | 1.6 | 1.1 | 1.2 | 1.1 | 0.7 | 0.7 | 0.7 | 0.8 | 0.9 | 1.3 | 1.4 | 1.6 | 1.1 |
| 1979 | 1.5 | 1.2 | 1.3 | 0.9 | 0.8 | 0.7 | 0.6 | 0.8 | 0.9 | 1.0 | 1.4 | 1.7 | 1.1 |
| 1980 | 1.6 | 1.1 | 1.5 | 1.0 | 0.8 | 0.8 | 0.6 | 0.7 | 1.1 | 1.4 | 1.3 | 1.5 | 1.1 |
| 1981 | 1.1 | 1.3 | 1.3 | 1.1 | 0.8 | 0.7 | 0.6 | 0.5 | 1.0 | 1.1 | 1.3 | 1.2 | 1.0 |
| 1982 | 1.8 | 1.2 | 1.6 | 1.3 | 0.6 | 0.7 | 0.7 | 0.7 | 0.9 | 1.1 | 1.3 | 1.4 | 1.1 |
| 1983 | 1.5 | 1.1 | 1.3 | 1.0 | 0.9 | 0.7 | 0.6 | 0.7 | 0.9 | 1.1 | 1.5 | 1.5 | 1.1 |
| 1984 | 1.2 | 1.3 | 1.4 | 1.0 | 1.0 | 0.7 | 0.6 | 0.5 | 0.9 | 1.0 | 1.6 | 1.7 | 1.1 |
| 1985 | 1.5 | 1.4 | 1.4 | 1.0 | 0.7 | 0.8 | 0.6 | 0.6 | 0.8 | 1.1 | 1.3 | 1.4 | 1.0 |
| 1986 | 1.4 | 1.1 | 1.4 | 1.2 | 0.8 | 0.8 | 0.6 | 0.7 | 1.0 | 0.9 | 1.5 | 1.4 | 1.1 |
| 1987 | 1.5 | 1.3 | 1.3 | 1.1 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 | 1.2 | 1.4 | 1.4 | 1.1 |
| MEAN | 1.6 | 1.5 | 1.4 | 1.1 | 1.0 | 0.8 | 0.8 | 0.8 | 1.0 | 1.2 | 1.5 | 1.5 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S58 (46.80N 84.93W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.1 | 4.9 | 4.0 | 4.5 | 3.1 | 2.9 | 2.3 | 2.6 | 3.8 | 5.4 | 4.9 | 5.0 |
| 1957 | 4.8 | 5.3 | 4.7 | 3.7 | 3.2 | 3.3 | 5.0 | 2.9 | 5.2 | 4.1 | 5.6 | 5.9 |
| 1958 | 5.3 | 5.7 | 4.6 | 5.3 | 3.5 | 3.4 | 2.5 | 2.6 | 3.8 | 4.0 | 6.3 | 4.9 |
| 1959 | 4.6 | 4.8 | 5.5 | 3.8 | 4.4 | 3.6 | 2.6 | 2.2 | 4.2 | 5.1 | 6.0 | 8.1 |
| 1960 | 5.5 | 4.7 | 3.4 | 3.6 | 2.9 | 2.1 | 2.9 | 2.3 | 4.1 | 5.4 | 5.3 | 4.2 |
| 1961 | 5.2 | 4.7 | 5.6 | 3.9 | 3.7 | 3.2 | 2.9 | 3.2 | 3.9 | 4.4 | 5.6 | 7.1 |
| 1962 | 5.4 | 4.3 | 4.8 | 3.9 | 2.8 | 2.0 | 2.5 | 2.0 | 3.7 | 5.0 | 4.6 | 5.5 |
| 1963 | 4.8 | 5.8 | 3.9 | 6.0 | 3.8 | 2.5 | 3.0 | 2.2 | 2.0 | 3.7 | 6.7 | 4.9 |
| 1964 | 6.5 | 5.2 | 6.0 | 4.5 | 4.3 | 3.4 | 2.8 | 3.9 | 5.4 | 3.8 | 6.7 | 5.1 |
| 1965 | 6.1 | 6.1 | 4.4 | 3.7 | 3.1 | 3.1 | 3.0 | 2.9 | 3.9 | 6.3 | 6.9 | 4.8 |
| 1966 | 7.6 | 5.7 | 5.6 | 3.9 | 4.9 | 2.6 | 3.0 | 3.7 | 5.6 | 7.0 | 4.7 | 5.9 |
| 1967 | 6.2 | 6.0 | 5.5 | 4.1 | 3.8 | 2.1 | 3.1 | 2.7 | 3.9 | 4.3 | 5.4 | 5.0 |
| 1968 | 5.3 | 7.7 | 5.1 | 5.1 | 3.1 | 2.5 | 3.7 | 3.5 | 3.0 | 4.3 | 6.0 | 4.8 |
| 1969 | 4.5 | 5.4 | 4.8 | 3.4 | 2.8 | 2.1 | 2.9 | 3.7 | 3.6 | 3.9 | 4.9 | 5.7 |
| 1970 | 4.7 | 5.3 | 4.4 | 5.0 | 3.2 | 2.4 | 2.4 | 2.9 | 4.4 | 4.4 | 6.7 | 5.9 |
| 1971 | 5.3 | 7.2 | 6.5 | 4.2 | 2.8 | 2.0 | 2.9 | 3.0 | 4.2 | 4.3 | 4.9 | 6.3 |
| 1972 | 7.7 | 6.2 | 4.4 | 3.8 | 3.0 | 2.3 | 2.6 | 3.0 | 4.8 | 7.8 | 4.7 | 6.7 |
| 1973 | 4.7 | 3.7 | 4.6 | 3.1 | 3.8 | 2.2 | 2.5 | 3.4 | 4.7 | 5.9 | 5.7 | 3.7 |
| 1974 | 6.4 | 6.5 | 4.4 | 2.8 | 3.4 | 2.4 | 2.0 | 2.5 | 3.6 | 4.1 | 4.2 | 3.6 |
| 1975 | 4.9 | 4.8 | 3.9 | 3.6 | 2.4 | 2.8 | 3.3 | 3.2 | 3.1 | 4.1 | 7.1 | 5.5 |
| 1976 | 7.0 | 5.6 | 5.6 | 3.2 | 4.6 | 1.9 | 3.1 | 3.7 | 4.4 | 5.3 | 5.9 | 7.2 |
| 1977 | 5.9 | 6.6 | 6.1 | 3.3 | 2.6 | 2.6 | 3.5 | 3.2 | 3.9 | 4.3 | 5.0 | 3.9 |
| 1978 | 5.6 | 3.4 | 6.1 | 3.9 | 2.7 | 2.7 | 2.2 | 3.0 | 2.3 | 3.6 | 4.6 | 4.6 |
| 1979 | 4.5 | 3.6 | 3.9 | 4.3 | 2.5 | 2.2 | 2.2 | 3.6 | 2.8 | 2.7 | 4.5 | 5.0 |
| 1980 | 6.4 | 3.7 | 6.1 | 3.1 | 3.3 | 2.2 | 1.5 | 1.5 | 4.2 | 5.3 | 6.1 | 4.7 |
| 1981 | 3.3 | 4.3 | 4.1 | 3.7 | 2.1 | 2.3 | 1.8 | 1.9 | 5.7 | 5.1 | 5.8 | 3.8 |
| 1982 | 6.8 | 4.6 | 7.5 | 6.4 | 1.7 | 2.5 | 2.2 | 2.6 | 4.4 | 4.5 | 4.6 | 4.3 |
| 1983 | 4.0 | 3.0 | 3.6 | 2.5 | 2.5 | 2.3 | 2.4 | 2.3 | 3.2 | 3.8 | 4.3 | 4.4 |
| 1984 | 6.0 | 3.6 | 5.7 | 3.0 | 3.4 | 2.3 | 2.0 | 1.7 | 3.0 | 4.0 | 6.3 | 6.5 |
| 1985 | 5.1 | 3.9 | 4.3 | 4.3 | 2.0 | 4.0 | 2.0 | 1.8 | 3.5 | 4.0 | 3.8 | 4.8 |
| 1986 | 4.8 | 3.8 | 4.8 | 3.5 | 3.7 | 2.9 | 1.9 | 2.6 | 3.7 | 4.2 | 4.4 | 4.3 |
| 1987 | 5.3 | 4.7 | 4.5 | 5.2 | 3.0 | 3.1 | 2.8 | 4.2 | 3.4 | 4.0 | 5.8 | 4.1 |

32 YR. STATISTICS FOR WIS STATION S58

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.2 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.5 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 8.1 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 291.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 59121000 |

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 140 | 592 | | | | | | | | | 732 |
| 0.50-0.99 | . | 1555 | 337 | 62 | 1 | . | . | . | . | . | 1955 |
| 1.00-1.49 | . | . | 786 | 10 | . | . | . | . | . | . | 796 |
| 1.50-1.99 | . | . | 191 | 11 | . | . | . | . | . | . | 202 |
| 2.00-2.49 | . | . | 5 | 4 | . | . | . | . | . | . | 9 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 140 | 2147 | 1319 | 87 | 1 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 3458.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 209 | 787 | 1 | | | | | | | | 997 |
| 0.50-0.99 | . | 1048 | 476 | 33 | 1 | . | . | . | . | . | 1558 |
| 1.00-1.49 | . | . | 559 | 36 | 1 | . | . | . | . | . | 596 |
| 1.50-1.99 | . | . | 66 | 121 | . | . | . | . | . | . | 187 |
| 2.00-2.49 | . | . | 1 | 69 | 2 | . | . | . | . | . | 72 |
| 2.50-2.99 | . | . | . | 6 | 12 | . | . | . | . | . | 18 |
| 3.00-3.49 | . | . | . | . | 6 | . | . | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 209 | 1835 | 1103 | 265 | 22 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 3218.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 205 | 662 | | | | | | | | | 867 |
| 0.50-0.99 | . | 861 | 678 | 1 | . | . | . | . | . | . | 1540 |
| 1.00-1.49 | . | . | 757 | 9 | . | . | . | . | . | . | 766 |
| 1.50-1.99 | . | . | 53 | 231 | . | . | . | . | . | . | 284 |
| 2.00-2.49 | . | . | . | 121 | . | . | . | . | . | . | 121 |
| 2.50-2.99 | . | . | . | 10 | 10 | . | . | . | . | . | 20 |
| 3.00-3.49 | . | . | . | . | 3 | . | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 205 | 1523 | 1488 | 372 | 13 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 3372.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 209 | 464 | | | | | | | | | 673 |
| 0.50-0.99 | . | 1480 | 1164 | . | . | . | . | . | . | . | 2644 |
| 1.00-1.49 | . | . | 699 | 1 | . | . | . | . | . | . | 700 |
| 1.50-1.99 | . | . | 119 | 145 | . | . | . | . | . | . | 264 |
| 2.00-2.49 | . | . | . | 84 | . | . | . | . | . | . | 84 |
| 2.50-2.99 | . | . | . | 6 | 2 | . | . | . | . | . | 8 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 209 | 1944 | 1982 | 236 | 2 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 4093.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 287 | 527 | . | . | . | . | . | . | . | . | 814 |
| 0.50-0.99 | . | 3164 | 2148 | . | . | . | . | . | . | . | 5312 |
| 1.00-1.49 | . | . | 961 | 1 | . | . | . | . | . | . | 962 |
| 1.50-1.99 | . | . | 225 | 259 | . | . | . | . | . | . | 484 |
| 2.00-2.49 | . | . | . | 101 | . | . | . | . | . | . | 101 |
| 2.50-2.99 | . | . | . | 4 | 2 | . | . | . | . | . | 6 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 287 | 3691 | 3334 | 365 | 3 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 7186.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 205 | 710 | . | . | . | . | . | . | . | . | 915 |
| 0.50-0.99 | . | 2122 | 3026 | . | . | . | . | . | . | . | 5148 |
| 1.00-1.49 | . | . | 2364 | 6 | . | . | . | . | . | . | 2370 |
| 1.50-1.99 | . | . | 370 | 921 | . | . | . | . | . | . | 1291 |
| 2.00-2.49 | . | . | . | 726 | . | . | . | . | . | . | 726 |
| 2.50-2.99 | . | . | . | 75 | 77 | . | . | . | . | . | 152 |
| 3.00-3.49 | . | . | . | . | 16 | . | . | . | . | . | 16 |
| 3.50-3.99 | . | . | . | . | 1 | 3 | . | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 205 | 2832 | 5760 | 1728 | 94 | 4 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 9938.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 172 | 781 | . | . | . | . | . | . | . | . | 953 |
| 0.50-0.99 | . | 1141 | 2699 | . | . | . | . | . | . | . | 3840 |
| 1.00-1.49 | . | . | 2381 | 7 | . | . | . | . | . | . | 2388 |
| 1.50-1.99 | . | . | 144 | 766 | . | . | . | . | . | . | 910 |
| 2.00-2.49 | . | . | . | 517 | . | . | . | . | . | . | 517 |
| 2.50-2.99 | . | . | . | 39 | 50 | . | . | . | . | . | 89 |
| 3.00-3.49 | . | . | . | . | 11 | . | . | . | . | . | 11 |
| 3.50-3.99 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 172 | 1922 | 5224 | 1329 | 63 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 8150.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 152 | 546 | . | . | . | . | . | . | . | . | 698 |
| 0.50-0.99 | . | 1268 | 1876 | . | . | . | . | . | . | . | 3144 |
| 1.00-1.49 | . | . | 1285 | 3 | . | . | . | . | . | . | 1288 |
| 1.50-1.99 | . | . | 126 | 315 | . | . | . | . | . | . | 441 |
| 2.00-2.49 | . | . | . | 187 | . | . | . | . | . | . | 187 |
| 2.50-2.99 | . | . | . | 9 | 12 | . | . | . | . | . | 21 |
| 3.00-3.49 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 152 | 1814 | 3287 | 514 | 14 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 5411.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 168 | 390 | 2 | . | . | . | . | . | . | . | 560 |
| 0.50-0.99 | . | 1415 | 1219 | . | . | . | . | . | . | . | 2634 |
| 1.00-1.49 | . | . | 650 | . | . | . | . | . | . | . | 650 |
| 1.50-1.99 | . | . | 159 | 135 | . | . | . | . | . | . | 294 |
| 2.00-2.49 | . | . | . | 42 | . | . | . | . | . | . | 42 |
| 2.50-2.99 | . | . | . | 8 | . | . | . | . | . | . | 8 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 168 | 1805 | 2030 | 185 | 1 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 3922.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 133 | 545 | 2 | . | . | . | . | . | . | . | 680 |
| 0.50-0.99 | . | 1702 | 688 | . | . | . | . | . | . | . | 2390 |
| 1.00-1.49 | . | . | 539 | . | . | . | . | . | . | . | 539 |
| 1.50-1.99 | . | . | 264 | 80 | . | . | . | . | . | . | 344 |
| 2.00-2.49 | . | . | 1 | 50 | . | . | . | . | . | . | 51 |
| 2.50-2.99 | . | . | . | 7 | . | . | . | . | . | . | 7 |
| 3.00-3.49 | . | . | . | 1 | 1 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 133 | 2247 | 1494 | 138 | 2 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 3757.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 129 | 648 | 1 | . | . | . | . | . | . | . | 778 |
| 0.50-0.99 | . | 2250 | 698 | . | . | . | . | . | . | . | 2948 |
| 1.00-1.49 | . | . | 736 | . | . | . | . | . | . | . | 736 |
| 1.50-1.99 | . | . | 418 | 57 | . | . | . | . | . | . | 475 |
| 2.00-2.49 | . | . | . | 50 | . | . | . | . | . | . | 50 |
| 2.50-2.99 | . | . | . | 9 | . | . | . | . | . | . | 9 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 129 | 2898 | 1853 | 116 | 1 | 0 | | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.5 MEAN TP(SEC)= NO. OF CASES= 4676.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 192 | 884 | . | . | . | . | . | . | . | . | 1076 |
| 0.50-0.99 | . | 2022 | 301 | . | . | . | . | . | . | . | 2323 |
| 1.00-1.49 | . | . | 914 | . | . | . | . | . | . | . | 914 |
| 1.50-1.99 | . | . | 294 | 33 | . | . | . | . | . | . | 327 |
| 2.00-2.49 | . | . | 5 | 24 | . | . | . | . | . | . | 29 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 192 | 2906 | 1514 | 58 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 4370.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 332 | 1259 | . | . | . | . | . | . | . | . | 1591 |
| 0.50-0.99 | . | 2102 | 213 | . | . | . | . | . | . | . | 2315 |
| 1.00-1.49 | . | . | 886 | . | . | . | . | . | . | . | 886 |
| 1.50-1.99 | . | . | 227 | . | . | . | . | . | . | . | 227 |
| 2.00-2.49 | . | . | 9 | 22 | . | . | . | . | . | . | 31 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 332 | 3361 | 1335 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 4732.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 303 | 1796 | . | . | . | . | . | . | . | . | 2099 |
| 0.50-0.99 | . | 4315 | 830 | . | . | . | . | . | . | . | 5145 |
| 1.00-1.49 | . | . | 1546 | . | . | . | . | . | . | . | 1546 |
| 1.50-1.99 | . | . | 836 | 105 | . | . | . | . | . | . | 941 |
| 2.00-2.49 | . | . | 27 | 173 | . | . | . | . | . | . | 200 |
| 2.50-2.99 | . | . | . | 36 | . | . | . | . | . | . | 36 |
| 3.00-3.49 | . | . | . | 5 | 2 | . | . | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 303 | 6111 | 3239 | 319 | 2 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 9332.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 163 | 843 | 1 | . | . | . | . | . | . | . | 1007 |
| 0.50-0.99 | . | 4940 | 2516 | . | . | . | . | . | . | . | 7456 |
| 1.00-1.49 | . | . | 2325 | . | . | . | . | . | . | . | 2325 |
| 1.50-1.99 | . | . | 2045 | 424 | . | . | . | . | . | . | 2469 |
| 2.00-2.49 | . | . | . | 380 | . | . | . | . | . | . | 380 |
| 2.50-2.99 | . | . | . | 75 | . | . | . | . | . | . | 75 |
| 3.00-3.49 | . | . | . | 5 | 11 | . | . | . | . | . | 16 |
| 3.50-3.99 | . | . | . | . | 3 | . | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 163 | 5783 | 6887 | 884 | 14 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 12846.

STATION S59 46.63N 84.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

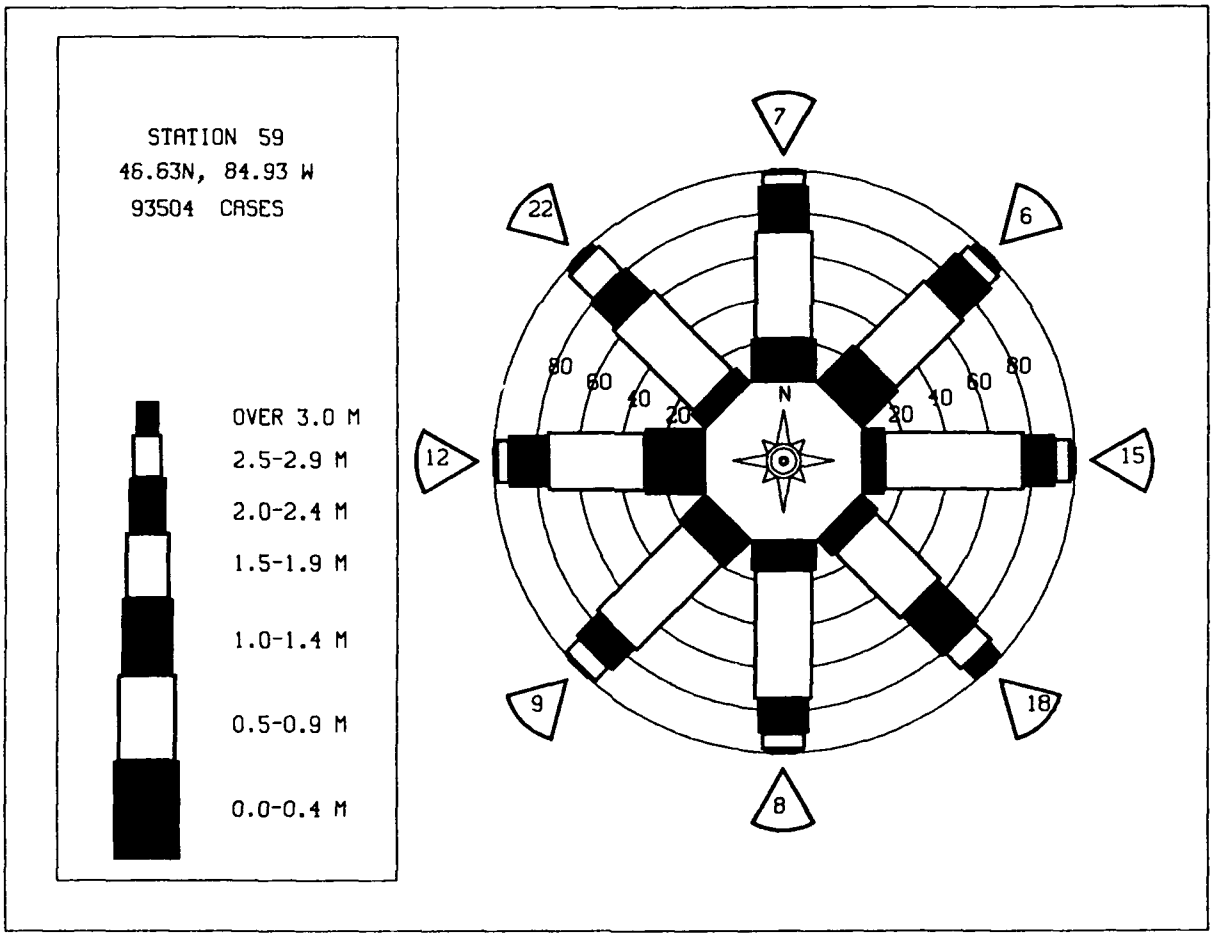
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 130 | 497 | 3 | . | . | . | . | . | . | . | 630 |
| 0.50-0.99 | . | 1984 | 694 | 5 | . | . | . | . | . | . | 2683 |
| 1.00-1.49 | . | . | 1143 | 5 | . | . | . | . | . | . | 1148 |
| 1.50-1.99 | . | . | 706 | 109 | . | . | . | . | . | . | 815 |
| 2.00-2.49 | . | . | 3 | 87 | . | . | . | . | . | . | 90 |
| 2.50-2.99 | . | . | . | 20 | . | . | . | . | . | . | 20 |
| 3.00-3.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 130 | 2481 | 2549 | 228 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 5043.

STATION S59 46.63N 84.93W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 313 | 1193 | 1 | . | . | . | . | . | . | . | 1507 |
| 0.50-0.99 | . | 3337 | 1957 | 10 | . | . | . | . | . | . | 5304 |
| 1.00-1.49 | . | . | 1853 | 8 | . | . | . | . | . | . | 1861 |
| 1.50-1.99 | . | . | 625 | 372 | . | . | . | . | . | . | 997 |
| 2.00-2.49 | . | . | 5 | 264 | . | . | . | . | . | . | 269 |
| 2.50-2.99 | . | . | . | 31 | 16 | . | . | . | . | . | 47 |
| 3.00-3.49 | . | . | . | 1 | 5 | . | . | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 313 | 4530 | 4441 | 686 | 21 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S59 (46.63N 84.93W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.8 | 0.9 | 0.9 | 0.9 | 0.8 | 0.6 | 0.6 | 0.5 | 0.7 | 1.0 | 1.1 | 1.1 | 0.8 |
| 1957 | 1.1 | 1.0 | 1.0 | 0.8 | 0.9 | 0.8 | 0.7 | 0.6 | 0.8 | 0.8 | 1.2 | 1.2 | 0.9 |
| 1958 | 1.0 | 1.2 | 0.8 | 0.9 | 0.8 | 0.8 | 0.6 | 0.7 | 0.9 | 0.9 | 1.2 | 1.0 | 0.9 |
| 1959 | 1.1 | 1.1 | 1.1 | 0.9 | 0.9 | 0.7 | 0.6 | 0.6 | 0.9 | 1.0 | 1.2 | 1.2 | 0.9 |
| 1960 | 1.1 | 1.1 | 0.9 | 0.8 | 0.8 | 0.6 | 0.6 | 0.6 | 0.8 | 0.9 | 1.1 | 1.0 | 0.9 |
| 1961 | 0.9 | 1.0 | 1.2 | 0.8 | 0.8 | 0.6 | 0.6 | 0.6 | 0.9 | 0.9 | 1.1 | 1.1 | 0.9 |
| 1962 | 1.1 | 1.0 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 0.8 | 0.9 | 1.0 | 0.8 |
| 1963 | 0.9 | 0.9 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 1.0 | 1.1 | 0.8 |
| 1964 | 1.3 | 1.0 | 1.2 | 1.1 | 0.9 | 0.7 | 0.6 | 0.8 | 0.9 | 0.9 | 1.1 | 1.1 | 1.0 |
| 1965 | 1.3 | 1.2 | 1.0 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.8 | 1.0 | 1.2 | 1.1 | 0.9 |
| 1966 | 1.2 | 1.1 | 1.4 | 1.0 | 1.0 | 0.7 | 0.7 | 0.7 | 0.9 | 1.1 | 1.2 | 1.1 | 1.0 |
| 1967 | 1.2 | 1.2 | 1.2 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 1.0 | 0.9 | 1.1 | 0.9 |
| 1968 | 1.2 | 1.3 | 1.1 | 1.0 | 0.9 | 0.7 | 0.7 | 0.7 | 0.8 | 0.9 | 1.2 | 1.2 | 1.0 |
| 1969 | 1.2 | 0.9 | 1.1 | 0.8 | 0.8 | 0.7 | 0.6 | 0.7 | 0.8 | 0.9 | 0.9 | 1.1 | 0.9 |
| 1970 | 1.0 | 1.0 | 1.0 | 0.9 | 0.8 | 0.6 | 0.6 | 0.6 | 0.9 | 1.1 | 1.1 | 1.1 | 0.9 |
| 1971 | 1.2 | 1.2 | 1.1 | 0.8 | 0.8 | 0.6 | 0.6 | 0.6 | 0.7 | 0.9 | 1.0 | 1.1 | 0.9 |
| 1972 | 1.3 | 1.0 | 1.1 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.9 | 1.0 | 0.9 | 1.1 | 0.9 |
| 1973 | 1.1 | 1.1 | 1.1 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 0.9 | 1.1 | 1.1 | 0.9 |
| 1974 | 1.1 | 1.0 | 1.2 | 0.8 | 0.8 | 0.7 | 0.6 | 0.6 | 0.8 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1975 | 1.2 | 0.9 | 1.1 | 0.8 | 0.6 | 0.7 | 0.6 | 0.7 | 0.7 | 0.9 | 1.1 | 1.0 | 0.9 |
| 1976 | 1.2 | 1.0 | 1.3 | 0.8 | 0.8 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 | 1.0 | 1.1 | 0.9 |
| 1977 | 1.0 | 1.2 | 1.1 | 0.8 | 0.7 | 0.6 | 0.6 | 0.7 | 0.7 | 0.9 | 1.0 | 1.1 | 0.9 |
| 1978 | 1.1 | 0.8 | 0.9 | 0.9 | 0.6 | 0.6 | 0.6 | 0.6 | 0.8 | 0.9 | 1.0 | 1.0 | 0.8 |
| 1979 | 1.0 | 1.0 | 1.1 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.1 | 0.8 |
| 1980 | 1.1 | 0.8 | 1.1 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 0.9 | 0.9 | 1.1 | 0.8 |
| 1981 | 0.9 | 1.1 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 0.9 | 0.9 | 0.8 |
| 1982 | 1.1 | 0.9 | 1.2 | 0.9 | 0.6 | 0.6 | 0.6 | 0.5 | 0.7 | 0.9 | 1.0 | 1.1 | 0.8 |
| 1983 | 1.1 | 1.0 | 1.1 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 1.2 | 1.0 | 0.8 |
| 1984 | 1.0 | 1.1 | 1.0 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.8 | 1.1 | 1.2 | 0.8 |
| 1985 | 0.9 | 0.9 | 1.1 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.7 | 0.8 | 1.0 | 0.9 | 0.8 |
| 1986 | 1.0 | 0.9 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.8 | 0.7 | 1.1 | 1.0 | 0.8 |
| 1987 | 1.0 | 1.0 | 0.9 | 0.9 | 0.7 | 0.6 | 0.6 | 0.7 | 0.7 | 0.8 | 1.1 | 1.0 | 0.8 |
| MEAN | 1.1 | 1.0 | 1.1 | 0.9 | 0.8 | 0.6 | 0.6 | 0.6 | 0.8 | 0.9 | 1.1 | 1.1 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S59 (46.63N 84.93W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.0 | 2.2 | 3.1 | 2.0 | 2.0 | 2.0 | 1.7 | 1.5 | 1.7 | 2.7 | 2.6 | 2.4 |
| 1957 | 2.4 | 2.4 | 2.4 | 2.6 | 2.1 | 1.9 | 2.1 | 1.6 | 2.3 | 1.8 | 3.0 | 2.5 |
| 1958 | 2.6 | 2.9 | 2.1 | 2.4 | 2.0 | 1.8 | 1.7 | 1.6 | 2.0 | 2.1 | 2.9 | 2.3 |
| 1959 | 2.5 | 2.6 | 3.0 | 1.9 | 2.1 | 1.5 | 1.6 | 1.6 | 2.2 | 2.4 | 2.5 | 2.8 |
| 1960 | 2.8 | 2.4 | 2.2 | 2.1 | 2.3 | 2.0 | 1.5 | 1.8 | 2.0 | 2.4 | 2.9 | 2.1 |
| 1961 | 2.6 | 2.5 | 2.7 | 2.0 | 2.4 | 1.6 | 1.5 | 1.7 | 1.8 | 2.3 | 2.6 | 2.3 |
| 1962 | 2.2 | 2.5 | 2.2 | 2.0 | 1.8 | 1.7 | 1.5 | 1.4 | 1.9 | 1.8 | 2.0 | 2.6 |
| 1963 | 2.2 | 2.8 | 2.5 | 2.7 | 1.9 | 1.8 | 1.7 | 1.7 | 1.9 | 1.8 | 3.0 | 3.0 |
| 1964 | 3.3 | 2.4 | 3.1 | 3.8 | 2.0 | 2.1 | 1.7 | 2.0 | 2.2 | 2.0 | 2.9 | 2.4 |
| 1965 | 3.9 | 2.9 | 3.8 | 2.4 | 2.0 | 1.8 | 1.6 | 1.8 | 2.3 | 3.0 | 4.0 | 2.4 |
| 1966 | 3.1 | 2.9 | 2.6 | 3.5 | 2.5 | 1.8 | 1.9 | 2.0 | 2.7 | 2.7 | 3.7 | 3.4 |
| 1967 | 2.8 | 2.5 | 2.6 | 2.4 | 2.5 | 1.8 | 1.5 | 1.5 | 2.2 | 2.9 | 2.4 | 2.2 |
| 1968 | 2.5 | 3.7 | 2.6 | 2.4 | 2.5 | 1.9 | 1.6 | 1.7 | 2.3 | 2.1 | 2.4 | 2.7 |
| 1969 | 3.2 | 2.3 | 3.0 | 2.0 | 2.2 | 1.8 | 1.7 | 1.6 | 1.9 | 1.9 | 2.2 | 2.6 |
| 1970 | 2.4 | 2.6 | 3.4 | 3.1 | 2.0 | 1.6 | 1.7 | 1.7 | 2.2 | 2.7 | 3.6 | 2.7 |
| 1971 | 2.6 | 3.0 | 2.8 | 2.4 | 2.1 | 1.7 | 1.9 | 1.6 | 2.0 | 2.5 | 3.2 | 3.1 |
| 1972 | 3.4 | 2.9 | 2.8 | 2.2 | 1.8 | 1.6 | 1.6 | 1.5 | 2.5 | 3.2 | 2.0 | 3.0 |
| 1973 | 2.9 | 2.8 | 2.9 | 2.2 | 2.0 | 2.1 | 1.5 | 1.6 | 2.2 | 2.4 | 2.9 | 2.4 |
| 1974 | 3.5 | 2.6 | 2.6 | 2.0 | 2.1 | 1.8 | 1.4 | 1.6 | 1.9 | 2.1 | 2.5 | 2.7 |
| 1975 | 3.2 | 2.4 | 2.7 | 2.0 | 1.4 | 1.9 | 1.9 | 1.7 | 2.1 | 2.2 | 3.3 | 2.5 |
| 1976 | 2.7 | 2.8 | 2.9 | 1.9 | 1.7 | 1.9 | 1.6 | 1.8 | 2.1 | 2.2 | 2.1 | 3.4 |
| 1977 | 2.3 | 3.3 | 2.9 | 2.2 | 1.9 | 1.6 | 1.6 | 2.1 | 2.7 | 2.2 | 2.9 | 2.9 |
| 1978 | 3.1 | 2.1 | 2.6 | 2.5 | 1.6 | 1.5 | 1.5 | 2.0 | 2.1 | 1.8 | 2.3 | 2.5 |
| 1979 | 2.4 | 3.5 | 2.9 | 2.6 | 2.0 | 2.0 | 1.6 | 1.8 | 1.8 | 2.0 | 2.3 | 2.7 |
| 1980 | 3.5 | 2.1 | 2.8 | 2.1 | 1.7 | 1.6 | 1.4 | 1.8 | 2.2 | 2.5 | 2.3 | 2.7 |
| 1981 | 2.2 | 2.2 | 2.1 | 2.3 | 1.5 | 1.5 | 1.3 | 1.6 | 2.6 | 2.7 | 2.8 | 2.4 |
| 1982 | 3.4 | 2.4 | 3.5 | 2.5 | 1.7 | 1.7 | 1.8 | 1.7 | 2.2 | 2.4 | 2.2 | 2.6 |
| 1983 | 2.4 | 2.6 | 2.4 | 1.9 | 2.1 | 1.6 | 1.5 | 1.4 | 1.6 | 2.5 | 3.8 | 2.5 |
| 1984 | 2.6 | 2.5 | 3.0 | 2.1 | 1.8 | 1.6 | 1.4 | 1.4 | 1.9 | 2.1 | 2.7 | 3.4 |
| 1985 | 2.5 | 2.1 | 3.2 | 2.5 | 1.6 | 1.7 | 1.2 | 1.8 | 1.9 | 2.1 | 2.7 | 2.6 |
| 1986 | 2.6 | 2.3 | 2.6 | 2.3 | 2.2 | 1.6 | 1.5 | 1.5 | 1.9 | 2.2 | 2.6 | 2.5 |
| 1987 | 2.3 | 3.3 | 2.2 | 2.4 | 2.1 | 1.5 | 1.7 | 1.6 | 1.6 | 2.0 | 2.2 | 2.4 |

32 YR. STATISTICS FOR WIS STATION S59

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.7 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 0.8 |
| LARGEST WAVE HS | (METERS) | 4.0 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 7.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 122.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 65112706 |

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 96 | 436 | 5 | 1 | 1 | | | | | | 539 |
| 0.50-0.99 | . | 835 | 873 | 36 | 2 | 1 | 1 | . | . | . | 1748 |
| 1.00-1.49 | . | . | 952 | 125 | 14 | 3 | | . | . | . | 1094 |
| 1.50-1.99 | . | . | 102 | 571 | 40 | 20 | 1 | . | . | . | 734 |
| 2.00-2.49 | . | . | . | 423 | 89 | 39 | 1 | 3 | . | . | 555 |
| 2.50-2.99 | . | . | . | 21 | 196 | 16 | 6 | 4 | . | . | 243 |
| 3.00-3.49 | . | . | . | 2 | 44 | 10 | 2 | 1 | . | . | 59 |
| 3.50-3.99 | . | . | . | . | . | 9 | | . | . | . | 9 |
| 4.00-4.49 | . | . | . | . | . | 2 | 1 | . | 1 | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 96 | 1271 | 1932 | 1179 | 386 | 100 | 12 | 10 | 3 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.4 NO. OF CASES= 4678.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 84 | 454 | 11 | | 1 | | | | | | 550 |
| 0.50-0.99 | . | 912 | 876 | 24 | 5 | 2 | 1 | . | . | . | 1820 |
| 1.00-1.49 | . | . | 630 | 52 | 7 | | | . | . | . | 689 |
| 1.50-1.99 | . | . | 102 | 199 | 14 | 7 | | . | . | . | 322 |
| 2.00-2.49 | . | . | . | 79 | 16 | 5 | 1 | . | . | . | 101 |
| 2.50-2.99 | . | . | . | 4 | 36 | 1 | . | 1 | . | . | 42 |
| 3.00-3.49 | . | . | . | . | 9 | . | . | . | . | . | 9 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 84 | 1366 | 1619 | 358 | 88 | 15 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 3314.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 79 | 399 | 5 | | | | | | | | 483 |
| 0.50-0.99 | . | 1141 | 587 | 31 | 3 | 1 | . | . | . | . | 1763 |
| 1.00-1.49 | . | . | 387 | 29 | 8 | 2 | . | . | . | . | 426 |
| 1.50-1.99 | . | . | 120 | 31 | . | 2 | . | . | . | . | 153 |
| 2.00-2.49 | . | . | . | 9 | . | . | . | . | . | . | 9 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 79 | 1540 | 1099 | 100 | 11 | 5 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 2655.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 190 | 1227 | 32 | 4 | . | | | | | | 1453 |
| 0.50-0.99 | . | 2015 | 333 | 29 | 4 | 1 | 1 | . | . | . | 2383 |
| 1.00-1.49 | . | . | 382 | 16 | 6 | . | . | . | . | . | 404 |
| 1.50-1.99 | . | . | 91 | 8 | 1 | . | . | . | . | . | 100 |
| 2.00-2.49 | . | . | . | 3 | . | . | . | . | . | . | 3 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 190 | 3242 | 838 | 60 | 11 | 1 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 4068.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 359 | 2881 | 52 | 4 | 2 | 1 | . | . | . | . | 3299 |
| 0.50-0.99 | . | 3575 | 235 | 20 | 5 | 3 | . | . | . | . | 3838 |
| 1.00-1.49 | . | . | 706 | 12 | 5 | 3 | . | . | . | . | 726 |
| 1.50-1.99 | . | . | 117 | . | 1 | 1 | . | . | . | . | 119 |
| 2.00-2.49 | . | . | 1 | 3 | . | . | . | . | . | . | 4 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 359 | 6456 | 1111 | 40 | 13 | 8 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 7474.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 252 | 1706 | 19 | 2 | . | . | . | . | . | . | 1979 |
| 0.50-0.99 | . | 4924 | 936 | 8 | 1 | . | . | . | . | . | 5869 |
| 1.00-1.49 | . | . | 1810 | 4 | 2 | . | . | . | . | . | 1816 |
| 1.50-1.99 | . | . | 599 | 57 | . | . | 1 | . | . | . | 657 |
| 2.00-2.49 | . | . | 1 | 60 | . | . | . | . | . | . | 61 |
| 2.50-2.99 | . | . | . | 3 | . | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 252 | 6630 | 3365 | 134 | 3 | 0 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 9718.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 159 | 790 | 13 | 6 | 3 | 1 | 1 | . | . | . | 973 |
| 0.50-0.99 | . | 4370 | 1267 | 4 | 2 | 2 | . | . | . | . | 5645 |
| 1.00-1.49 | . | . | 1090 | . | 1 | . | . | . | . | . | 1091 |
| 1.50-1.99 | . | . | 576 | 74 | . | . | . | . | . | . | 650 |
| 2.00-2.49 | . | . | . | 43 | . | . | . | . | . | . | 43 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 159 | 5160 | 2946 | 131 | 6 | 3 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 7867.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 128 | 883 | 14 | 6 | 2 | . | . | . | . | . | 1033 |
| 0.50-0.99 | . | 2349 | 438 | 3 | 3 | 1 | . | . | . | . | 2794 |
| 1.00-1.49 | . | . | 467 | . | 1 | . | . | . | . | . | 468 |
| 1.50-1.99 | . | . | 172 | 14 | . | . | . | . | . | . | 186 |
| 2.00-2.49 | . | . | 1 | 7 | . | . | . | . | . | . | 8 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 128 | 3232 | 1092 | 30 | 6 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 4203.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 142 | 889 | 13 | 4 | . | 2 | . | . | . | . | 1050 |
| 0.50-0.99 | . | 1586 | 133 | 8 | 3 | 2 | . | . | . | . | 1732 |
| 1.00-1.49 | . | . | 372 | . | 1 | . | . | . | . | . | 373 |
| 1.50-1.99 | . | . | 54 | . | . | . | . | . | . | . | 54 |
| 2.00-2.49 | . | . | 1 | 2 | . | . | . | . | . | . | 3 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 142 | 2475 | 573 | 14 | 4 | 4 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 3008.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 97 | 690 | 7 | 6 | 1 | . | . | . | . | . | 801 |
| 0.50-0.99 | . | 1417 | 273 | 9 | 3 | 1 | 1 | . | . | . | 1704 |
| 1.00-1.49 | . | . | 379 | 1 | 2 | . | . | 1 | . | . | 383 |
| 1.50-1.99 | . | . | 96 | 14 | . | . | 1 | . | . | . | 111 |
| 2.00-2.49 | . | . | 1 | 6 | . | . | . | . | . | . | 7 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 97 | 2107 | 756 | 36 | 7 | 1 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 2818.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 78 | 574 | 7 | . | 2 | . | . | . | . | . | 661 |
| 0.50-0.99 | . | 1960 | 644 | 22 | 5 | 2 | . | . | . | . | 2633 |
| 1.00-1.49 | . | . | 623 | 3 | 5 | . | . | . | . | . | 631 |
| 1.50-1.99 | . | . | 340 | 44 | . | 2 | . | . | . | . | 386 |
| 2.00-2.49 | . | . | . | 36 | . | . | . | . | . | . | 36 |
| 2.50-2.99 | . | . | . | 12 | . | . | . | . | . | . | 12 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 78 | 2534 | 1614 | 117 | 13 | 4 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 4083.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 65 | 459 | 6 | 2 | . | . | . | . | . | . | 532 |
| 0.50-0.99 | . | 1849 | 911 | 28 | 6 | 2 | . | . | . | . | 2796 |
| 1.00-1.49 | . | . | 982 | 6 | 4 | 1 | . | . | . | . | 993 |
| 1.50-1.99 | . | . | 489 | 308 | 1 | 2 | . | . | . | . | 800 |
| 2.00-2.49 | . | . | . | 179 | . | . | . | . | . | . | 179 |
| 2.50-2.99 | . | . | . | 16 | 4 | . | . | . | . | . | 20 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 65 | 2308 | 2388 | 539 | 17 | 5 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 4983.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 109 | 325 | 16 | 3 | 1 | . | . | . | . | . | 454 |
| 0.50-0.99 | . | 1606 | 1271 | 50 | 19 | 4 | . | . | . | . | 2950 |
| 1.00-1.49 | . | . | 956 | 9 | 16 | 13 | 1 | . | . | . | 995 |
| 1.50-1.99 | . | . | 378 | 424 | 1 | 8 | 2 | 1 | . | . | 814 |
| 2.00-2.49 | . | . | 1 | 206 | . | . | 1 | . | . | . | 208 |
| 2.50-2.99 | . | . | . | 42 | 8 | . | . | . | . | . | 50 |
| 3.00-3.49 | . | . | . | . | 8 | . | . | . | . | . | 8 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 109 | 1931 | 2622 | 734 | 54 | 26 | 4 | 1 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 5133.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 121 | 614 | 8 | 3 | . | . | . | . | . | . | 746 |
| 0.50-0.99 | . | 1897 | 2598 | 93 | 17 | 1 | . | . | . | . | 4606 |
| 1.00-1.49 | . | . | 1841 | 20 | 36 | 19 | 2 | . | . | . | 1918 |
| 1.50-1.99 | . | . | 472 | 636 | 10 | 34 | 2 | . | . | . | 1154 |
| 2.00-2.49 | . | . | . | 687 | . | 1 | 2 | 1 | . | . | 691 |
| 2.50-2.99 | . | . | . | 142 | 119 | 1 | 1 | 1 | 1 | . | 265 |
| 3.00-3.49 | . | . | . | 1 | 106 | . | . | . | . | . | 107 |
| 3.50-3.99 | . | . | . | . | 14 | 18 | . | . | . | . | 32 |
| 4.00-4.49 | . | . | . | . | . | 6 | . | . | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 121 | 2511 | 4919 | 1582 | 302 | 84 | 7 | 2 | 1 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 8922.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 102 | 660 | 1 | 1 | 1 | . | . | . | . | . | 765 |
| 0.50-0.99 | . | 1220 | 3269 | 95 | 16 | 1 | . | . | . | . | 4601 |
| 1.00-1.49 | . | . | 4149 | 85 | 84 | 24 | 1 | . | . | . | 4343 |
| 1.50-1.99 | . | . | 773 | 1589 | 187 | 165 | 18 | . | . | . | 2732 |
| 2.00-2.49 | . | . | . | 2176 | 5 | 74 | 26 | 6 | . | . | 2287 |
| 2.50-2.99 | . | . | . | 590 | 329 | 14 | 38 | 22 | 4 | . | 997 |
| 3.00-3.49 | . | . | . | 4 | 314 | . | 5 | 8 | 2 | 1 | 334 |
| 3.50-3.99 | . | . | . | . | 57 | 32 | . | 1 | 1 | . | 91 |
| 4.00-4.49 | . | . | . | . | 2 | 29 | . | . | 2 | . | 33 |
| 4.50-4.99 | . | . | . | . | . | 8 | . | . | . | . | 8 |
| 5.00-5.49 | . | . | . | . | . | 2 | 1 | . | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 102 | 1880 | 8192 | 4540 | 995 | 349 | 90 | 37 | 9 | 1 | |

MEAN HS(M) = 1.4 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.7 NO. OF CASES= 15159.

STATION S60 46.48N 84.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

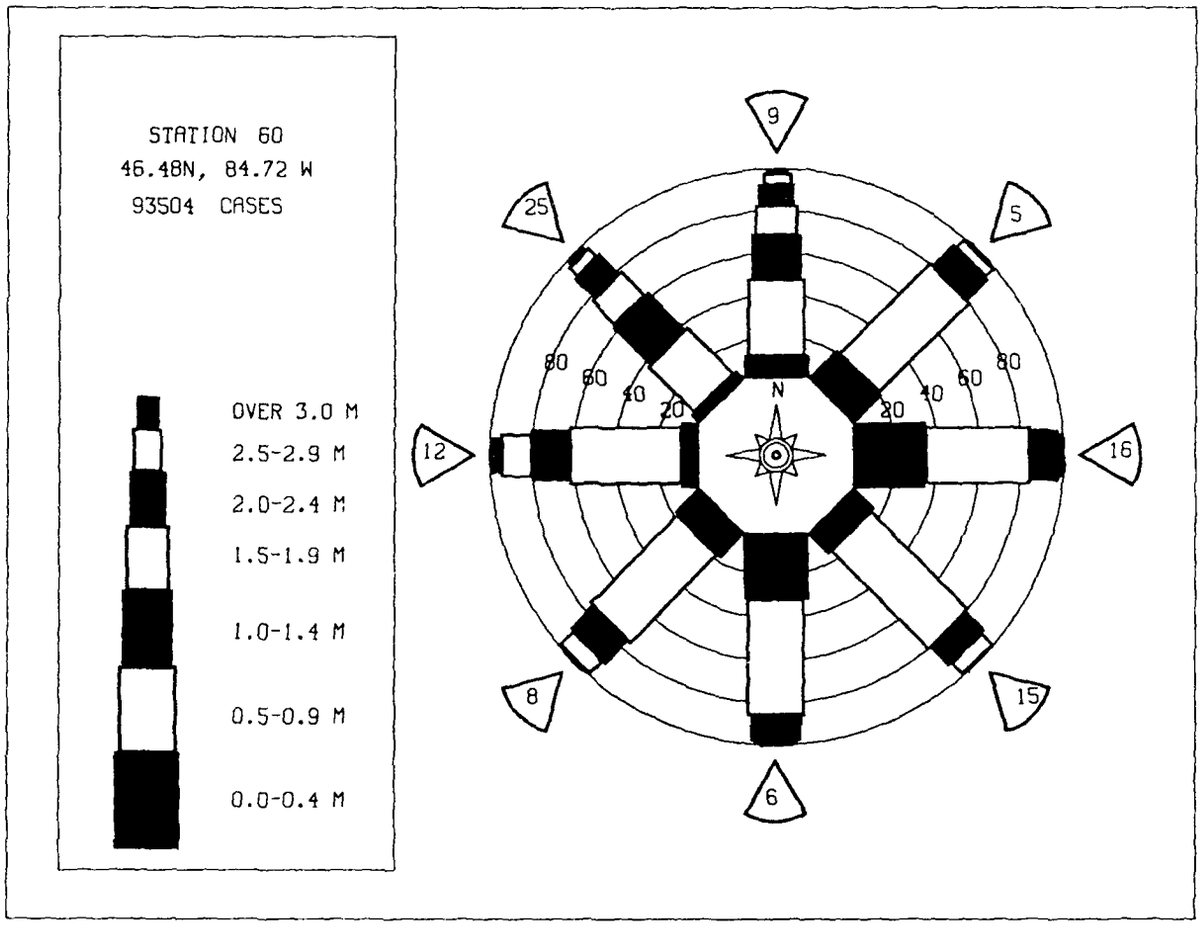
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 59 | 244 | 8 | 2 | 1 | . | . | . | . | . | 314 |
| 0.50-0.99 | . | 573 | 945 | 43 | 7 | . | . | . | . | . | 1568 |
| 1.00-1.49 | . | . | 1177 | 69 | 34 | 1 | . | . | . | . | 1281 |
| 1.50-1.99 | . | . | 219 | 617 | 104 | 69 | 5 | . | . | . | 1014 |
| 2.00-2.49 | . | . | . | 642 | 66 | 85 | 18 | . | . | . | 811 |
| 2.50-2.99 | . | . | . | 178 | 234 | 45 | 50 | 22 | 3 | . | 532 |
| 3.00-3.49 | . | . | . | 4 | 96 | 22 | 18 | 21 | 11 | . | 172 |
| 3.50-3.99 | . | . | . | . | 5 | 28 | 2 | 5 | 10 | 2 | 52 |
| 4.00-4.49 | . | . | . | . | 4 | 16 | 5 | 3 | 2 | . | 30 |
| 4.50-4.99 | . | . | . | . | . | 1 | 1 | 1 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 59 | 817 | 2349 | 1555 | 551 | 267 | 99 | 53 | 27 | 2 | |

MEAN HS(M) = 1.5 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.9 NO. OF CASES= 5421.

STATION S60 46.48N 84.72W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 212 | 1324 | 22 | 4 | 1 | . | . | . | . | . | 1563 |
| 0.50-0.99 | . | 3223 | 1559 | 51 | 10 | 2 | . | . | . | . | 4845 |
| 1.00-1.49 | . | . | 1691 | 43 | 23 | 6 | . | . | . | . | 1763 |
| 1.50-1.99 | . | . | 470 | 459 | 36 | 31 | 3 | . | . | . | 999 |
| 2.00-2.49 | . | . | . | 456 | 17 | 20 | 5 | 1 | . | . | 499 |
| 2.50-2.99 | . | . | . | 101 | 92 | 7 | 9 | 5 | . | . | 214 |
| 3.00-3.49 | . | . | . | 1 | 58 | 3 | 2 | 3 | 1 | . | 68 |
| 3.50-3.99 | . | . | . | . | 8 | 8 | . | . | 1 | . | 17 |
| 4.00-4.49 | . | . | . | . | . | 5 | . | . | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 212 | 4547 | 3742 | 1115 | 245 | 83 | 19 | 9 | 2 | 0 | |

MEAN HS(M)= 1.0 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S60 (46.48N 84.72W)

| | MONTH | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| YEAR | | | | | | | | | | | | | MEAN |
| 1956 | 0.8 | 1.1 | 1.0 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 0.9 | 1.1 | 1.1 | 0.9 |
| 1957 | 1.2 | 1.1 | 1.1 | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 | 0.9 | 0.9 | 1.3 | 1.4 | 1.0 |
| 1958 | 1.1 | 1.5 | 1.0 | 1.0 | 1.0 | 0.9 | 0.7 | 0.8 | 0.9 | 1.0 | 1.4 | 1.1 | 1.0 |
| 1959 | 1.4 | 1.2 | 1.1 | 1.1 | 1.0 | 0.8 | 0.7 | 0.7 | 0.9 | 1.0 | 1.3 | 1.2 | 1.0 |
| 1960 | 1.2 | 1.3 | 1.0 | 0.9 | 0.8 | 0.7 | 0.7 | 0.7 | 0.8 | 1.0 | 1.2 | 1.2 | 1.0 |
| 1961 | 1.0 | 1.0 | 1.2 | 0.9 | 1.0 | 0.7 | 0.7 | 0.7 | 0.9 | 1.0 | 1.2 | 1.1 | 1.0 |
| 1962 | 1.3 | 1.0 | 0.8 | 0.9 | 0.7 | 0.6 | 0.7 | 0.6 | 0.9 | 0.8 | 0.8 | 1.2 | 0.9 |
| 1963 | 0.9 | 1.1 | 1.1 | 1.0 | 0.8 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 1.2 | 1.1 | 0.9 |
| 1964 | 1.4 | 1.2 | 1.4 | 1.0 | 1.0 | 0.8 | 0.7 | 0.9 | 1.0 | 1.1 | 1.2 | 1.1 | 1.1 |
| 1965 | 1.4 | 1.5 | 1.0 | 0.8 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 1.3 | 1.3 | 1.1 | 1.1 |
| 1966 | 1.4 | 1.3 | 1.4 | 1.1 | 1.2 | 0.8 | 0.9 | 0.8 | 1.1 | 1.2 | 1.3 | 1.2 | 1.2 |
| 1967 | 1.4 | 1.4 | 1.2 | 1.1 | 1.0 | 0.7 | 0.7 | 0.7 | 0.9 | 1.0 | 1.2 | 1.1 | 1.0 |
| 1968 | 1.2 | 1.7 | 1.3 | 1.1 | 1.0 | 0.7 | 0.8 | 0.8 | 0.8 | 1.0 | 1.3 | 1.3 | 1.1 |
| 1969 | 1.3 | 1.2 | 1.3 | 0.8 | 0.9 | 0.8 | 0.6 | 0.8 | 0.9 | 0.9 | 1.1 | 1.2 | 1.0 |
| 1970 | 1.0 | 1.2 | 1.2 | 0.9 | 0.8 | 0.7 | 0.6 | 0.7 | 1.1 | 1.0 | 1.2 | 1.1 | 1.0 |
| 1971 | 1.4 | 1.1 | 1.3 | 1.0 | 0.8 | 0.6 | 0.7 | 0.7 | 0.8 | 0.9 | 1.1 | 1.2 | 1.0 |
| 1972 | 1.4 | 1.1 | 1.2 | 0.8 | 0.7 | 0.8 | 0.7 | 0.6 | 1.0 | 1.1 | 0.9 | 1.1 | 1.0 |
| 1973 | 1.3 | 1.1 | 1.2 | 1.1 | 1.0 | 0.7 | 0.6 | 0.6 | 0.9 | 0.9 | 1.3 | 1.0 | 1.0 |
| 1974 | 1.1 | 1.1 | 1.3 | 0.9 | 0.9 | 0.7 | 0.7 | 0.6 | 0.9 | 1.1 | 1.0 | 1.0 | 0.9 |
| 1975 | 1.2 | 1.0 | 1.2 | 1.0 | 0.6 | 0.6 | 0.7 | 0.8 | 0.8 | 1.0 | 1.1 | 1.0 | 0.9 |
| 1976 | 1.3 | 1.2 | 1.3 | 0.9 | 0.9 | 0.6 | 0.8 | 0.7 | 1.0 | 1.0 | 1.3 | 1.3 | 1.0 |
| 1977 | 1.2 | 1.4 | 1.2 | 0.9 | 0.8 | 0.8 | 0.7 | 0.8 | 0.8 | 1.0 | 1.0 | 1.1 | 1.0 |
| 1978 | 1.3 | 0.9 | 1.0 | 1.0 | 0.7 | 0.7 | 0.6 | 0.7 | 0.8 | 1.0 | 1.0 | 1.1 | 0.9 |
| 1979 | 1.2 | 1.0 | 1.1 | 0.9 | 0.8 | 0.7 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 | 1.3 | 0.9 |
| 1980 | 1.3 | 0.9 | 1.3 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.9 | 1.1 | 1.2 | 1.3 | 1.0 |
| 1981 | 1.0 | 1.1 | 1.2 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.9 | 0.9 | 1.1 | 1.1 | 0.9 |
| 1982 | 1.3 | 1.0 | 1.3 | 1.0 | 0.6 | 0.7 | 0.6 | 0.7 | 0.8 | 0.9 | 1.1 | 1.1 | 0.9 |
| 1983 | 1.2 | 1.0 | 1.1 | 0.9 | 0.9 | 0.6 | 0.6 | 0.6 | 0.8 | 0.9 | 1.2 | 1.0 | 0.9 |
| 1984 | 1.0 | 1.1 | 1.1 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.8 | 0.8 | 1.1 | 1.3 | 0.9 |
| 1985 | 1.1 | 1.1 | 1.1 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.7 | 0.9 | 1.0 | 1.0 | 0.9 |
| 1986 | 1.2 | 1.0 | 1.1 | 1.0 | 0.7 | 0.7 | 0.6 | 0.7 | 0.8 | 0.8 | 1.2 | 1.1 | 0.9 |
| 1987 | 1.1 | 1.0 | 1.0 | 0.9 | 0.7 | 0.7 | 0.6 | 0.7 | 0.7 | 0.9 | 1.1 | 1.0 | 0.9 |
| MEAN | 1.2 | 1.2 | 1.2 | 1.0 | 0.8 | 0.7 | 0.7 | 0.7 | 0.9 | 1.0 | 1.2 | 1.1 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S60 (46.48N 84.72W)

| | MONTH | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| YEAR | | | | | | | | | | | | |
| 1956 | 2.5 | 3.4 | 3.7 | 2.8 | 2.4 | 2.3 | 2.0 | 2.1 | 2.6 | 3.3 | 3.7 | 3.3 |
| 1957 | 3.6 | 3.4 | 2.8 | 2.8 | 2.7 | 2.9 | 2.8 | 2.3 | 3.6 | 2.6 | 4.0 | 4.1 |
| 1958 | 3.7 | 4.3 | 2.4 | 2.5 | 2.9 | 2.6 | 2.3 | 2.2 | 2.9 | 3.1 | 4.6 | 3.0 |
| 1959 | 3.4 | 2.7 | 3.6 | 2.6 | 2.8 | 2.4 | 2.1 | 2.0 | 3.0 | 3.1 | 3.4 | 4.3 |
| 1960 | 3.9 | 3.2 | 2.8 | 2.9 | 2.3 | 1.8 | 2.3 | 2.2 | 3.1 | 4.2 | 3.7 | 3.4 |
| 1961 | 3.7 | 2.4 | 3.2 | 2.8 | 2.7 | 2.3 | 2.4 | 2.6 | 2.3 | 3.1 | 3.2 | 3.8 |
| 1962 | 3.9 | 2.6 | 2.4 | 2.6 | 2.4 | 1.9 | 2.2 | 1.7 | 2.7 | 2.5 | 2.6 | 3.6 |
| 1963 | 2.8 | 3.6 | 2.9 | 3.4 | 2.6 | 1.7 | 2.3 | 2.1 | 2.0 | 2.8 | 4.5 | 3.9 |
| 1964 | 4.0 | 2.7 | 4.4 | 3.4 | 3.0 | 2.3 | 2.5 | 2.6 | 3.0 | 3.2 | 4.0 | 2.9 |
| 1965 | 5.5 | 6.0 | 3.0 | 2.5 | 2.5 | 2.4 | 2.1 | 2.2 | 2.9 | 4.1 | 4.3 | 3.3 |
| 1966 | 4.8 | 3.9 | 3.3 | 2.7 | 3.5 | 2.3 | 2.3 | 3.0 | 3.7 | 3.8 | 3.8 | 3.9 |
| 1967 | 3.9 | 3.8 | 3.7 | 2.6 | 2.7 | 1.8 | 2.2 | 2.2 | 3.0 | 2.9 | 3.3 | 2.9 |
| 1968 | 3.5 | 5.4 | 3.7 | 3.6 | 2.5 | 2.2 | 2.4 | 2.4 | 2.0 | 2.5 | 4.7 | 3.4 |
| 1969 | 3.0 | 3.6 | 3.2 | 2.5 | 2.2 | 2.0 | 2.1 | 2.1 | 2.6 | 2.6 | 3.0 | 4.2 |
| 1970 | 3.2 | 3.3 | 2.8 | 2.7 | 2.2 | 2.2 | 1.9 | 2.4 | 2.8 | 3.0 | 5.4 | 3.6 |
| 1971 | 6.0 | 3.6 | 4.2 | 2.6 | 2.1 | 1.9 | 2.1 | 2.3 | 2.7 | 2.8 | 3.1 | 4.2 |
| 1972 | 4.7 | 3.5 | 3.0 | 2.1 | 2.4 | 2.1 | 2.1 | 2.3 | 2.9 | 4.7 | 2.6 | 4.3 |
| 1973 | 3.0 | 2.6 | 3.4 | 2.5 | 2.7 | 1.8 | 2.0 | 2.4 | 3.0 | 3.3 | 3.5 | 2.8 |
| 1974 | 4.5 | 3.8 | 3.1 | 2.5 | 2.7 | 2.1 | 1.9 | 1.8 | 3.0 | 3.0 | 3.0 | 3.0 |
| 1975 | 3.5 | 3.4 | 2.8 | 2.8 | 1.9 | 2.4 | 2.6 | 2.2 | 2.5 | 2.7 | 4.5 | 3.5 |
| 1976 | 3.7 | 4.1 | 3.5 | 2.4 | 2.6 | 1.9 | 2.5 | 2.5 | 2.8 | 3.2 | 3.3 | 4.5 |
| 1977 | 3.1 | 3.4 | 4.0 | 2.6 | 2.6 | 2.2 | 2.2 | 3.0 | 2.5 | 2.7 | 3.3 | 2.7 |
| 1978 | 4.3 | 3.0 | 3.8 | 3.6 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.7 | 3.1 | 2.6 |
| 1979 | 2.8 | 2.7 | 3.3 | 3.7 | 2.2 | 1.9 | 1.9 | 2.5 | 2.5 | 2.6 | 2.8 | 3.3 |
| 1980 | 3.5 | 3.1 | 4.3 | 2.6 | 2.3 | 2.2 | 1.6 | 1.6 | 3.1 | 3.0 | 3.3 | 3.8 |
| 1981 | 2.8 | 3.1 | 3.0 | 3.1 | 2.2 | 1.9 | 1.7 | 1.8 | 3.7 | 4.0 | 3.7 | 2.6 |
| 1982 | 4.8 | 2.8 | 4.0 | 3.3 | 1.8 | 2.1 | 1.9 | 2.3 | 3.1 | 3.4 | 3.2 | 3.1 |
| 1983 | 3.1 | 2.7 | 2.5 | 2.3 | 2.2 | 2.2 | 1.8 | 1.9 | 2.4 | 2.8 | 2.8 | 2.5 |
| 1984 | 3.6 | 3.3 | 4.3 | 2.4 | 2.5 | 2.2 | 2.0 | 1.7 | 2.6 | 2.7 | 3.8 | 3.5 |
| 1985 | 3.5 | 2.9 | 3.2 | 3.2 | 2.1 | 2.6 | 1.6 | 2.0 | 2.4 | 2.9 | 2.5 | 4.1 |
| 1986 | 3.5 | 3.4 | 4.1 | 2.6 | 3.0 | 2.2 | 1.7 | 2.4 | 2.9 | 3.0 | 3.2 | 3.7 |
| 1987 | 3.8 | 3.4 | 3.0 | 3.3 | 2.0 | 2.3 | 2.3 | 2.8 | 2.2 | 3.5 | 4.0 | 3.2 |

32 YR. STATISTICS FOR WIS STATION S60

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.0 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.8 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.1 |
| LARGEST WAVE HS | (METERS) | 6.0 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 343.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 65022609 |

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 84 | 290 | 13 | 6 | . | . | . | . | . | . | 393 |
| 0.50-0.99 | . | 775 | 706 | 25 | 8 | 5 | . | . | . | . | 1519 |
| 1.00-1.49 | . | . | 978 | 93 | 16 | 1 | 2 | . | . | . | 1090 |
| 1.50-1.99 | . | . | 125 | 473 | 54 | 23 | . | . | . | . | 675 |
| 2.00-2.49 | . | . | . | 372 | 34 | 27 | 4 | 1 | . | . | 438 |
| 2.50-2.99 | . | . | . | 29 | 52 | 34 | 1 | 2 | . | . | 118 |
| 3.00-3.49 | . | . | . | . | 10 | 9 | 5 | 1 | 1 | . | 26 |
| 3.50-3.99 | . | . | . | . | . | 2 | 2 | 1 | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 84 | 1065 | 1822 | 998 | 174 | 101 | 15 | 7 | 3 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.4 NO. OF CASES= 4005.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 105 | 421 | 10 | 5 | 2 | . | . | . | . | . | 543 |
| 0.50-0.99 | . | 1112 | 721 | 29 | 11 | 16 | . | . | . | . | 1889 |
| 1.00-1.49 | . | . | 676 | 49 | 5 | 2 | 1 | . | . | . | 733 |
| 1.50-1.99 | . | . | 125 | 148 | 22 | 7 | 1 | . | . | . | 303 |
| 2.00-2.49 | . | . | . | 79 | 8 | 5 | 1 | . | . | . | 93 |
| 2.50-2.99 | . | . | . | 2 | 16 | 5 | 1 | . | . | . | 24 |
| 3.00-3.49 | . | . | . | . | 1 | 1 | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 105 | 1533 | 1532 | 312 | 65 | 36 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 3364.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 101 | 469 | 9 | 5 | . | . | . | . | . | . | 584 |
| 0.50-0.99 | . | 1288 | 487 | 35 | 17 | 13 | . | . | . | . | 1840 |
| 1.00-1.49 | . | . | 374 | 25 | 3 | 6 | . | . | . | . | 408 |
| 1.50-1.99 | . | . | 128 | 22 | 2 | 1 | . | . | . | . | 153 |
| 2.00-2.49 | . | . | . | 6 | . | . | . | . | . | . | 6 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 101 | 1757 | 998 | 93 | 22 | 20 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 2804.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 221 | 1285 | 32 | 16 | 5 | 1 | . | . | . | . | 1560 |
| 0.50-0.99 | . | 1934 | 289 | 25 | 22 | 12 | 1 | . | . | . | 2283 |
| 1.00-1.49 | . | . | 339 | 10 | 2 | 2 | 1 | . | . | . | 354 |
| 1.50-1.99 | . | . | 81 | 3 | 1 | . | . | . | . | . | 85 |
| 2.00-2.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 221 | 3219 | 741 | 56 | 30 | 15 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 4012.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 391 | 2814 | 38 | 38 | 7 | 2 | . | . | . | . | 3290 |
| 0.50-0.99 | . | 3242 | 175 | 16 | 19 | 16 | . | . | . | . | 3468 |
| 1.00-1.49 | . | . | 651 | 5 | 4 | 3 | 1 | . | . | . | 664 |
| 1.50-1.99 | . | . | 106 | 1 | . | . | . | . | . | . | 107 |
| 2.00-2.49 | . | . | 2 | 1 | . | . | . | . | . | . | 3 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 391 | 6056 | 972 | 62 | 30 | 21 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.1 NO. OF CASES= 7050.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 280 | 1792 | 18 | 28 | 7 | . | . | . | . | . | 2125 |
| 0.50-0.99 | . | 4332 | 1070 | 12 | 16 | 12 | . | . | . | . | 5442 |
| 1.00-1.49 | . | . | 1404 | . | 4 | 2 | . | . | . | . | 1410 |
| 1.50-1.99 | . | . | 739 | 112 | . | . | . | . | . | . | 851 |
| 2.00-2.49 | . | . | 2 | 62 | . | . | . | . | . | . | 64 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 280 | 6124 | 3233 | 218 | 27 | 14 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 9259.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 147 | 789 | 12 | 10 | 1 | . | . | . | . | . | 959 |
| 0.50-0.99 | . | 3801 | 1002 | 6 | 11 | 9 | . | . | . | . | 4829 |
| 1.00-1.49 | . | . | 903 | . | 1 | . | . | . | . | . | 904 |
| 1.50-1.99 | . | . | 454 | 48 | . | . | . | . | . | . | 502 |
| 2.00-2.49 | . | . | . | 32 | . | . | . | . | . | . | 32 |
| 2.50-2.99 | . | . | . | 3 | . | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 147 | 4590 | 2371 | 99 | 13 | 9 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 6766.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 103 | 797 | 6 | 8 | . | . | . | . | . | . | 914 |
| 0.50-0.99 | . | 2767 | 955 | 4 | 4 | 3 | . | . | . | . | 3733 |
| 1.00-1.49 | . | . | 696 | 2 | 1 | . | . | . | . | . | 699 |
| 1.50-1.99 | . | . | 248 | 78 | . | . | . | . | . | . | 326 |
| 2.00-2.49 | . | . | 1 | 31 | . | . | . | . | . | . | 32 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 103 | 3564 | 1906 | 124 | 5 | 3 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 5339.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 88 | 396 | 7 | 3 | 2 | . | . | . | . | . | 496 |
| 0.50-0.99 | . | 1434 | 1106 | 4 | 2 | 6 | . | . | . | . | 2552 |
| 1.00-1.49 | . | . | 643 | 1 | . | . | . | . | . | . | 644 |
| 1.50-1.99 | . | . | 144 | 121 | . | . | . | . | . | . | 265 |
| 2.00-2.49 | . | . | . | 44 | . | . | . | . | . | . | 44 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 88 | 1830 | 1900 | 177 | 5 | 6 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 3753.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 96 | 356 | 6 | 4 | 1 | . | . | . | . | . | 463 |
| 0.50-0.99 | . | 876 | 1165 | 7 | 5 | 2 | 1 | . | . | . | 2056 |
| 1.00-1.49 | . | . | 964 | 1 | 1 | . | . | 1 | . | . | 967 |
| 1.50-1.99 | . | . | 118 | 213 | . | . | . | . | . | . | 331 |
| 2.00-2.49 | . | . | . | 144 | . | . | . | . | . | . | 144 |
| 2.50-2.99 | . | . | . | 18 | 6 | . | . | . | . | . | 24 |
| 3.00-3.49 | . | . | . | . | 4 | . | . | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 96 | 1232 | 2253 | 387 | 17 | 4 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 3739.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 82 | 394 | 4 | 4 | 1 | . | . | . | . | . | 485 |
| 0.50-0.99 | . | 656 | 1358 | 22 | 9 | 4 | . | . | . | . | 2049 |
| 1.00-1.49 | . | . | 1383 | . | 6 | . | . | . | . | . | 1389 |
| 1.50-1.99 | . | . | 132 | 396 | . | . | . | . | . | . | 528 |
| 2.00-2.49 | . | . | . | 364 | . | . | . | . | . | . | 364 |
| 2.50-2.99 | . | . | . | 28 | 54 | . | . | . | . | . | 82 |
| 3.00-3.49 | . | . | . | . | 21 | . | . | . | . | . | 21 |
| 3.50-3.99 | . | . | . | . | 1 | 4 | . | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 82 | 1050 | 2877 | 814 | 92 | 9 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.1 NO. OF CASES= 4613.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 68 | 339 | 6 | 3 | . | . | . | . | . | . | 416 |
| 0.50-0.99 | . | 887 | 1209 | 28 | 9 | 1 | 1 | . | . | . | 2135 |
| 1.00-1.49 | . | . | 1165 | 6 | 5 | 5 | . | . | . | . | 1181 |
| 1.50-1.99 | . | . | 308 | 543 | 1 | . | . | . | . | . | 852 |
| 2.00-2.49 | . | . | . | 322 | . | . | . | . | . | . | 322 |
| 2.50-2.99 | . | . | . | 41 | 21 | . | . | . | . | . | 62 |
| 3.00-3.49 | . | . | . | . | 10 | . | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 68 | 1226 | 2688 | 943 | 46 | 7 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.1 NO. OF CASES= 4664.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 119 | 314 | 13 | 5 | 1 | . | . | . | . | . | 452 |
| 0.50-0.99 | . | 1427 | 1238 | 84 | 32 | 7 | . | . | . | . | 2788 |
| 1.00-1.49 | . | . | 780 | 17 | 29 | 12 | . | . | . | . | 838 |
| 1.50-1.99 | . | . | 358 | 378 | 2 | 7 | 3 | . | . | . | 748 |
| 2.00-2.49 | . | . | . | 209 | . | 1 | 2 | . | . | . | 212 |
| 2.50-2.99 | . | . | . | 37 | 5 | . | . | . | . | . | 42 |
| 3.00-3.49 | . | . | . | . | 7 | . | . | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 119 | 1741 | 2389 | 730 | 78 | 28 | 5 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 4770.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 168 | 786 | 22 | 8 | 3 | 2 | . | . | . | . | 989 |
| 0.50-0.99 | . | 3009 | 1968 | 293 | 19 | 9 | 2 | . | . | . | 5300 |
| 1.00-1.49 | . | . | 1176 | 325 | 140 | 27 | 1 | . | . | . | 1669 |
| 1.50-1.99 | . | . | 550 | 376 | 166 | 87 | 5 | 1 | . | . | 1185 |
| 2.00-2.49 | . | . | 1 | 383 | 20 | 114 | 32 | 18 | 2 | . | 570 |
| 2.50-2.99 | . | . | . | 112 | 13 | 11 | 16 | 20 | 5 | . | 177 |
| 3.00-3.49 | . | . | . | 7 | 32 | . | . | 5 | 2 | . | 46 |
| 3.50-3.99 | . | . | . | . | 13 | . | 1 | . | . | 1 | 15 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 168 | 3795 | 3717 | 1504 | 406 | 251 | 57 | 44 | 9 | 1 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 9321.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 118 | 848 | 26 | 27 | 9 | 2 | 1 | . | . | . | 1031 |
| 0.50-0.99 | . | 3453 | 2451 | 373 | 40 | 28 | . | . | . | . | 6345 |
| 1.00-1.49 | . | . | 1800 | 1295 | 255 | 34 | 5 | . | . | . | 3389 |
| 1.50-1.99 | . | . | 945 | 783 | 730 | 203 | 16 | . | 1 | . | 2678 |
| 2.00-2.49 | . | . | 79 | 311 | 514 | 740 | 103 | 24 | 8 | . | 1779 |
| 2.50-2.99 | . | . | . | 95 | 21 | 326 | 243 | 69 | 36 | 1 | 791 |
| 3.00-3.49 | . | . | . | 28 | 3 | 26 | 86 | 83 | 33 | 4 | 263 |
| 3.50-3.99 | . | . | . | 1 | 4 | 2 | 4 | 17 | 19 | 6 | 53 |
| 4.00-4.49 | . | . | . | . | 3 | . | 1 | 6 | 9 | 4 | 23 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | 2 | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 118 | 4301 | 5301 | 2913 | 1579 | 1361 | 459 | 199 | 106 | 17 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.8 NO. OF CASES= 15312.

STATION S61 46.63N 84.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

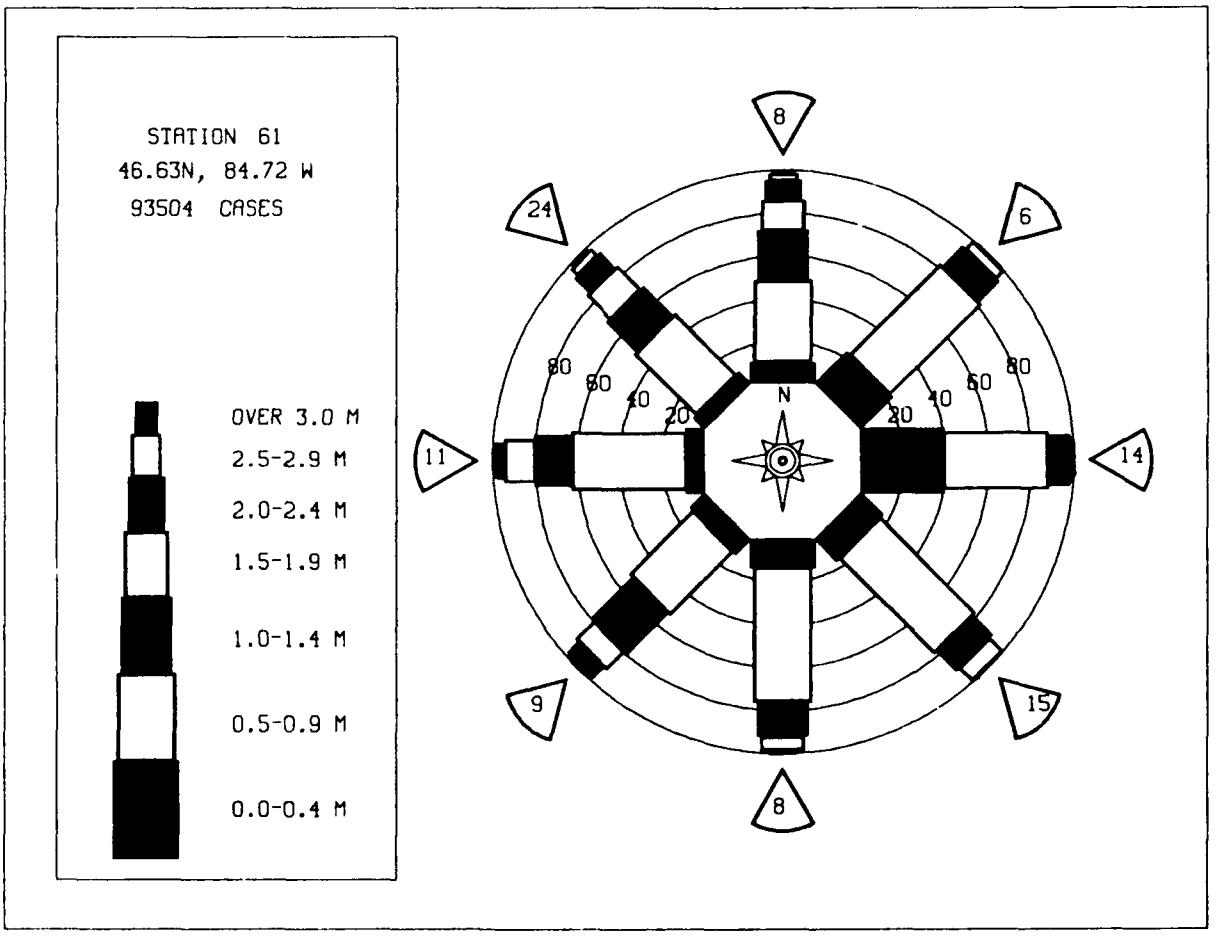
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 83 | 239 | 7 | 5 | 1 | . | . | . | . | . | 335 |
| 0.50-0.99 | . | 899 | 770 | 58 | 8 | 3 | . | . | . | . | 1738 |
| 1.00-1.49 | . | . | 745 | 275 | 53 | 5 | 3 | . | . | . | 1081 |
| 1.50-1.99 | . | . | 164 | 445 | 150 | 44 | 1 | 1 | . | . | 805 |
| 2.00-2.49 | . | . | 6 | 280 | 157 | 105 | 11 | 2 | . | . | 561 |
| 2.50-2.99 | . | . | . | 42 | 77 | 156 | 36 | 11 | 3 | . | 325 |
| 3.00-3.49 | . | . | . | 1 | 21 | 34 | 54 | 20 | 8 | . | 138 |
| 3.50-3.99 | . | . | . | . | 1 | 8 | 7 | 11 | 10 | . | 37 |
| 4.00-4.49 | . | . | . | . | . | 3 | 3 | 3 | 7 | 1 | 17 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | 1 | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 83 | 1138 | 1692 | 1106 | 468 | 358 | 116 | 49 | 30 | 1 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.8 NO. OF CASES= 4733.

STATION S61 46.63N 84.72W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 226 | 1233 | 23 | 18 | 4 | . | . | . | . | . | 1504 |
| 0.50-0.99 | . | 3190 | 1667 | 102 | 23 | 15 | . | . | . | . | 4997 |
| 1.00-1.49 | . | . | 1468 | 210 | 52 | 10 | 1 | . | . | . | 1741 |
| 1.50-1.99 | . | . | 473 | 414 | 113 | 37 | 2 | . | . | . | 1039 |
| 2.00-2.49 | . | . | 9 | 264 | 73 | 99 | 15 | 4 | 1 | . | 465 |
| 2.50-2.99 | . | . | . | 42 | 26 | 53 | 29 | 10 | 4 | . | 164 |
| 3.00-3.49 | . | . | . | 3 | 11 | 7 | 14 | 11 | 4 | . | 50 |
| 3.50-3.99 | . | . | . | . | 2 | 1 | 1 | 2 | 2 | . | 8 |
| 4.00-4.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 226 | 4423 | 3640 | 1053 | 304 | 222 | 62 | 28 | 12 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S61 (46.63N 84.72W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.8 | 1.1 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.8 | 0.9 | 1.2 | 1.1 | 0.9 |
| 1957 | 1.3 | 1.1 | 1.1 | 0.9 | 0.9 | 0.9 | 0.7 | 0.7 | 0.9 | 0.9 | 1.4 | 1.3 | 1.0 |
| 1958 | 1.1 | 1.5 | 0.9 | 1.0 | 1.0 | 0.9 | 0.7 | 0.8 | 1.0 | 1.0 | 1.4 | 1.1 | 1.0 |
| 1959 | 1.4 | 1.2 | 1.1 | 1.0 | 1.0 | 0.8 | 0.7 | 0.7 | 0.9 | 1.0 | 1.3 | 1.2 | 1.0 |
| 1960 | 1.2 | 1.3 | 1.0 | 0.9 | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 | 1.0 | 1.2 | 1.2 | 0.9 |
| 1961 | 1.0 | 1.0 | 1.2 | 0.9 | 0.9 | 0.7 | 0.6 | 0.7 | 1.0 | 1.0 | 1.2 | 1.1 | 0.9 |
| 1962 | 1.3 | 1.0 | 0.8 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.9 | 0.8 | 0.9 | 1.2 | 0.9 |
| 1963 | 1.0 | 1.1 | 1.0 | 1.0 | 0.8 | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 | 1.2 | 1.1 | 0.9 |
| 1964 | 1.4 | 1.2 | 1.3 | 1.0 | 1.0 | 0.8 | 0.7 | 0.9 | 1.0 | 1.1 | 1.2 | 1.1 | 1.1 |
| 1965 | 1.4 | 1.5 | 1.0 | 0.8 | 0.9 | 0.8 | 0.8 | 0.8 | 0.9 | 1.3 | 1.3 | 1.2 | 1.0 |
| 1966 | 1.4 | 1.3 | 1.4 | 1.1 | 1.2 | 0.8 | 0.9 | 0.8 | 1.1 | 1.3 | 1.3 | 1.2 | 1.1 |
| 1967 | 1.4 | 1.4 | 1.2 | 1.0 | 1.0 | 0.7 | 0.7 | 0.7 | 0.9 | 1.0 | 1.2 | 1.1 | 1.0 |
| 1968 | 1.1 | 1.6 | 1.2 | 1.1 | 0.9 | 0.7 | 0.8 | 0.8 | 0.8 | 1.0 | 1.3 | 1.3 | 1.0 |
| 1969 | 1.3 | 1.1 | 1.3 | 0.8 | 0.8 | 0.8 | 0.6 | 0.8 | 0.9 | 1.0 | 1.1 | 1.2 | 1.0 |
| 1970 | 1.1 | 1.2 | 1.2 | 0.9 | 0.8 | 0.7 | 0.6 | 0.7 | 1.0 | 1.0 | 1.2 | 1.1 | 1.0 |
| 1971 | 1.4 | 1.2 | 1.3 | 1.0 | 0.8 | 0.6 | 0.7 | 0.7 | 0.8 | 0.9 | 1.1 | 1.2 | 1.0 |
| 1972 | 1.4 | 1.1 | 1.2 | 0.8 | 0.6 | 0.7 | 0.7 | 0.6 | 1.0 | 1.2 | 0.9 | 1.1 | 1.0 |
| 1973 | 1.3 | 1.1 | 1.1 | 1.1 | 0.9 | 0.7 | 0.6 | 0.6 | 0.9 | 0.9 | 1.3 | 1.0 | 1.0 |
| 1974 | 1.1 | 1.0 | 1.3 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.9 | 1.1 | 1.0 | 1.0 | 0.9 |
| 1975 | 1.2 | 1.0 | 1.1 | 1.0 | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 | 1.0 | 1.1 | 1.1 | 0.9 |
| 1976 | 1.3 | 1.2 | 1.3 | 0.9 | 0.9 | 0.7 | 0.8 | 0.7 | 1.0 | 0.9 | 1.3 | 1.2 | 1.0 |
| 1977 | 1.2 | 1.3 | 1.1 | 0.8 | 0.8 | 0.7 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 | 1.1 | 0.9 |
| 1978 | 1.2 | 0.9 | 1.0 | 0.9 | 0.7 | 0.7 | 0.6 | 0.7 | 0.8 | 1.1 | 1.1 | 1.2 | 0.9 |
| 1979 | 1.2 | 1.0 | 1.1 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 0.8 | 0.8 | 1.1 | 1.2 | 0.9 |
| 1980 | 1.2 | 0.9 | 1.2 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.9 | 1.1 | 1.1 | 1.2 | 0.9 |
| 1981 | 0.9 | 1.1 | 1.1 | 0.9 | 0.7 | 0.6 | 0.6 | 0.5 | 0.8 | 0.9 | 1.0 | 1.0 | 0.9 |
| 1982 | 1.2 | 1.0 | 1.2 | 1.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.8 | 0.9 | 1.1 | 1.1 | 0.9 |
| 1983 | 1.2 | 1.0 | 1.1 | 0.8 | 0.8 | 0.6 | 0.6 | 0.6 | 0.8 | 0.9 | 1.2 | 1.1 | 0.9 |
| 1984 | 1.0 | 1.0 | 1.1 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.8 | 0.8 | 1.1 | 1.3 | 0.9 |
| 1985 | 1.1 | 1.0 | 1.1 | 0.8 | 0.6 | 0.7 | 0.5 | 0.5 | 0.7 | 0.9 | 1.0 | 1.0 | 0.8 |
| 1986 | 1.1 | 0.9 | 1.1 | 1.0 | 0.7 | 0.7 | 0.6 | 0.7 | 0.8 | 0.8 | 1.2 | 1.2 | 0.9 |
| 1987 | 1.1 | 1.0 | 1.0 | 0.9 | 0.7 | 0.6 | 0.7 | 0.7 | 0.7 | 0.9 | 1.1 | 1.1 | 0.9 |
| MEAN | 1.2 | 1.1 | 1.1 | 0.9 | 0.8 | 0.7 | 0.7 | 0.7 | 0.9 | 1.0 | 1.2 | 1.1 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S61 (46.63N 84.72W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.6 | 3.0 | 3.2 | 2.6 | 2.4 | 2.3 | 1.7 | 1.9 | 2.6 | 3.2 | 3.5 | 2.6 |
| 1957 | 3.5 | 3.5 | 2.8 | 2.4 | 2.6 | 2.9 | 2.5 | 2.3 | 3.1 | 2.6 | 3.4 | 3.7 |
| 1958 | 3.1 | 4.0 | 2.1 | 3.3 | 2.8 | 2.4 | 2.1 | 2.0 | 2.8 | 2.7 | 3.7 | 2.7 |
| 1959 | 3.3 | 3.3 | 3.4 | 2.7 | 2.8 | 2.3 | 2.0 | 2.1 | 2.6 | 2.9 | 3.4 | 3.8 |
| 1960 | 3.2 | 3.2 | 2.5 | 2.6 | 2.3 | 1.7 | 2.2 | 2.4 | 2.8 | 4.4 | 3.3 | 3.4 |
| 1961 | 3.4 | 2.2 | 2.9 | 2.8 | 2.5 | 2.3 | 2.4 | 2.5 | 2.4 | 3.3 | 3.2 | 3.3 |
| 1962 | 3.8 | 2.6 | 2.2 | 2.2 | 2.4 | 1.8 | 2.2 | 1.9 | 2.7 | 2.3 | 2.5 | 3.5 |
| 1963 | 2.7 | 3.4 | 3.0 | 3.4 | 2.4 | 1.7 | 1.9 | 2.1 | 1.9 | 2.8 | 4.4 | 3.5 |
| 1964 | 3.6 | 3.3 | 3.5 | 3.9 | 3.3 | 2.7 | 2.4 | 2.5 | 3.1 | 3.0 | 3.5 | 3.1 |
| 1965 | 4.3 | 5.8 | 2.8 | 2.8 | 2.4 | 2.3 | 2.2 | 2.4 | 3.2 | 4.3 | 4.2 | 3.4 |
| 1966 | 4.2 | 3.8 | 3.4 | 2.7 | 3.5 | 2.4 | 2.3 | 3.1 | 3.5 | 3.3 | 3.3 | 3.5 |
| 1967 | 4.2 | 3.7 | 3.5 | 3.3 | 2.6 | 1.8 | 2.1 | 2.0 | 2.7 | 3.0 | 2.9 | 2.9 |
| 1968 | 3.0 | 4.6 | 3.1 | 3.5 | 2.1 | 2.2 | 2.4 | 2.4 | 1.8 | 2.5 | 4.2 | 3.5 |
| 1969 | 2.6 | 3.7 | 3.2 | 2.5 | 2.2 | 2.1 | 1.7 | 2.0 | 2.5 | 2.5 | 2.8 | 4.7 |
| 1970 | 2.9 | 3.2 | 2.8 | 2.6 | 2.3 | 2.0 | 1.7 | 2.1 | 2.6 | 3.1 | 5.4 | 3.6 |
| 1971 | 5.8 | 3.8 | 4.3 | 2.7 | 2.0 | 1.6 | 2.1 | 2.3 | 2.4 | 2.8 | 2.7 | 4.2 |
| 1972 | 4.1 | 3.6 | 2.9 | 2.0 | 2.1 | 2.0 | 2.1 | 2.3 | 2.9 | 4.3 | 2.7 | 3.8 |
| 1973 | 3.3 | 2.7 | 3.4 | 2.6 | 2.8 | 1.6 | 1.7 | 2.4 | 3.0 | 3.3 | 3.3 | 2.6 |
| 1974 | 4.3 | 3.4 | 3.1 | 2.5 | 2.6 | 2.0 | 1.7 | 1.9 | 2.7 | 3.0 | 2.5 | 2.6 |
| 1975 | 4.1 | 3.1 | 2.9 | 2.8 | 1.8 | 2.3 | 2.4 | 2.3 | 2.5 | 2.6 | 4.4 | 3.6 |
| 1976 | 3.2 | 4.1 | 3.5 | 2.4 | 2.6 | 2.0 | 2.6 | 2.5 | 2.8 | 3.0 | 3.3 | 3.5 |
| 1977 | 3.0 | 2.7 | 3.3 | 2.5 | 2.4 | 1.9 | 2.2 | 2.4 | 2.8 | 2.5 | 3.1 | 2.4 |
| 1978 | 4.1 | 2.7 | 3.5 | 2.9 | 2.2 | 2.1 | 2.0 | 2.2 | 2.2 | 2.5 | 2.9 | 2.8 |
| 1979 | 2.6 | 2.7 | 2.9 | 3.0 | 1.9 | 1.8 | 1.6 | 2.3 | 2.4 | 2.4 | 2.5 | 3.5 |
| 1980 | 3.2 | 2.8 | 4.3 | 2.4 | 2.0 | 1.9 | 1.6 | 1.6 | 3.0 | 2.9 | 3.0 | 3.7 |
| 1981 | 2.7 | 3.1 | 2.7 | 2.7 | 1.9 | 1.7 | 1.5 | 1.6 | 3.2 | 3.9 | 3.4 | 2.2 |
| 1982 | 4.0 | 2.7 | 3.4 | 3.2 | 1.6 | 2.0 | 1.9 | 2.1 | 2.9 | 3.4 | 2.9 | 2.7 |
| 1983 | 2.8 | 2.8 | 2.4 | 2.0 | 2.0 | 1.9 | 2.0 | 1.7 | 2.1 | 2.4 | 2.8 | 2.6 |
| 1984 | 2.9 | 2.9 | 3.7 | 2.6 | 2.5 | 2.2 | 1.9 | 1.8 | 2.1 | 2.8 | 2.9 | 3.3 |
| 1985 | 3.1 | 2.7 | 3.3 | 2.8 | 1.8 | 2.0 | 1.6 | 1.5 | 2.4 | 2.8 | 2.5 | 3.8 |
| 1986 | 3.2 | 3.1 | 3.8 | 2.7 | 2.8 | 2.3 | 1.6 | 2.4 | 3.1 | 2.8 | 3.3 | 3.0 |
| 1987 | 4.2 | 3.4 | 2.9 | 3.5 | 1.9 | 2.4 | 2.5 | 3.0 | 2.3 | 3.1 | 4.2 | 3.1 |

32 YR. STATISTICS FOR WIS STATION S61

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 3.9 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 315.0 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.2 |
| LARGEST WAVE HS . . . . . | (METERS) | 5.8 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 341.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 65022609 |

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 22 | 180 | 23 | 4 | . | . | . | . | . | . | 229 |
| 0.50-0.99 | . | 612 | 627 | 94 | 17 | 2 | . | . | . | . | 1352 |
| 1.00-1.49 | . | . | 412 | 164 | 101 | 35 | . | . | . | . | 712 |
| 1.50-1.99 | . | . | 219 | 121 | 101 | 78 | 8 | . | . | . | 527 |
| 2.00-2.49 | . | . | 9 | 121 | 45 | 94 | 17 | 2 | . | . | 288 |
| 2.50-2.99 | . | . | . | 21 | 10 | 50 | 44 | 12 | 1 | . | 138 |
| 3.00-3.49 | . | . | . | 1 | 1 | 13 | 10 | 10 | 2 | . | 37 |
| 3.50-3.99 | . | . | . | . | . | . | 2 | 5 | 2 | . | 9 |
| 4.00-4.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 22 | 792 | 1290 | 526 | 275 | 272 | 81 | 30 | 6 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.7 NO. OF CASES= 3097.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 42 | 203 | 18 | . | . | . | . | . | . | . | 263 |
| 0.50-0.99 | . | 776 | 676 | 122 | 34 | 4 | . | . | . | . | 1612 |
| 1.00-1.49 | . | . | 413 | 99 | 104 | 29 | 2 | . | . | . | 647 |
| 1.50-1.99 | . | . | 165 | 50 | 43 | 64 | 13 | 1 | . | . | 336 |
| 2.00-2.49 | . | . | 7 | 53 | 12 | 19 | 21 | . | . | . | 112 |
| 2.50-2.99 | . | . | . | 9 | . | 7 | 7 | 7 | 1 | . | 31 |
| 3.00-3.49 | . | . | . | 1 | . | 3 | 1 | 4 | 1 | . | 10 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 42 | 979 | 1279 | 334 | 193 | 126 | 44 | 12 | 2 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 2830.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 44 | 272 | 26 | 1 | . | . | . | . | . | . | 343 |
| 0.50-0.99 | . | 1070 | 427 | 124 | 23 | 5 | . | . | . | . | 1649 |
| 1.00-1.49 | . | . | 289 | 44 | 57 | 37 | 4 | . | . | . | 431 |
| 1.50-1.99 | . | . | 155 | 19 | 4 | 33 | 6 | 1 | . | . | 218 |
| 2.00-2.49 | . | . | . | 9 | 1 | . | . | . | . | . | 10 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 44 | 1342 | 897 | 198 | 85 | 75 | 10 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 2489.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 122 | 949 | 77 | 7 | . | . | . | . | . | . | 1155 |
| 0.50-0.99 | . | 1726 | 288 | 82 | 25 | 1 | 1 | . | . | . | 2123 |
| 1.00-1.49 | . | . | 339 | 19 | 27 | 10 | 2 | . | . | . | 397 |
| 1.50-1.99 | . | . | 98 | 2 | 3 | 5 | 1 | 2 | . | . | 111 |
| 2.00-2.49 | . | . | . | 3 | . | . | . | . | . | . | 3 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 122 | 2675 | 802 | 113 | 55 | 16 | 4 | 2 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 3550.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 225 | 2083 | 118 | 7 | . | . | . | . | . | . | 2433 |
| 0.50-0.99 | . | 2865 | 212 | 94 | 9 | 1 | . | . | . | . | 3181 |
| 1.00-1.49 | . | . | 675 | 7 | 9 | 5 | . | 1 | . | . | 697 |
| 1.50-1.99 | . | . | 111 | . | 1 | 2 | . | . | . | . | 114 |
| 2.00-2.49 | . | . | 2 | 1 | . | 1 | . | . | . | . | 4 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 225 | 4948 | 1118 | 110 | 19 | 9 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 6019.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 137 | 1116 | 36 | 4 | 2 | . | . | . | . | . | 1295 |
| 0.50-0.99 | . | 3640 | 864 | 43 | 11 | . | . | . | . | . | 4558 |
| 1.00-1.49 | . | . | 1574 | 1 | 7 | 4 | 1 | . | . | . | 1587 |
| 1.50-1.99 | . | . | 624 | 75 | . | 1 | 1 | 1 | . | . | 702 |
| 2.00-2.49 | . | . | 1 | 52 | . | 1 | . | . | . | . | 54 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 137 | 4756 | 3099 | 179 | 20 | 6 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 7675.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 52 | 426 | 11 | 3 | . | . | . | . | . | . | 492 |
| 0.50-0.99 | . | 2655 | 822 | 20 | 5 | 1 | . | . | . | . | 3503 |
| 1.00-1.49 | . | . | 853 | 2 | 2 | 1 | . | . | . | . | 858 |
| 1.50-1.99 | . | . | 444 | 54 | . | 1 | . | . | . | . | 499 |
| 2.00-2.49 | . | . | . | 34 | . | . | . | . | . | . | 34 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 52 | 3081 | 2130 | 115 | 7 | 3 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 5044.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 54 | 555 | 9 | 2 | . | . | . | . | . | . | 620 |
| 0.50-0.99 | . | 2169 | 660 | 18 | 3 | . | . | . | . | . | 2850 |
| 1.00-1.49 | . | . | 520 | . | 2 | 2 | . | . | . | . | 524 |
| 1.50-1.99 | . | . | 229 | 21 | . | . | . | . | . | . | 250 |
| 2.00-2.49 | . | . | 1 | 9 | . | . | . | . | . | . | 10 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 54 | 2724 | 1419 | 51 | 5 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 3985.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 47 | 558 | 7 | . | . | . | . | . | . | . | 612 |
| 0.50-0.99 | . | 1371 | 284 | 5 | . | . | . | . | . | . | 1660 |
| 1.00-1.49 | . | . | 406 | 1 | 1 | . | . | . | . | . | 408 |
| 1.50-1.99 | . | . | 83 | 4 | . | . | 1 | . | . | . | 88 |
| 2.00-2.49 | . | . | 2 | . | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 47 | 1929 | 782 | 10 | 1 | 0 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 2593.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 58 | 499 | 3 | . | . | . | . | . | . | . | 560 |
| 0.50-0.99 | . | 1179 | 427 | 7 | 4 | . | . | . | . | . | 1617 |
| 1.00-1.49 | . | . | 574 | 32 | . | 1 | . | . | . | . | 607 |
| 1.50-1.99 | . | . | 137 | 84 | . | . | . | . | . | . | 221 |
| 2.00-2.49 | . | . | 11 | 43 | 1 | . | . | . | . | . | 55 |
| 2.50-2.99 | . | . | . | 4 | 6 | . | . | . | . | . | 10 |
| 3.00-3.49 | . | . | . | . | 3 | . | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 58 | 1678 | 1152 | 170 | 14 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.6 NO. OF CASES= 2882.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 47 | 502 | 9 | 1 | . | . | . | . | . | . | 559 |
| 0.50-0.99 | . | 1178 | 797 | 10 | 11 | 3 | . | . | . | . | 1999 |
| 1.00-1.49 | . | . | 972 | 25 | 8 | 3 | . | . | . | . | 1008 |
| 1.50-1.99 | . | . | 158 | 268 | . | 2 | . | . | . | . | 428 |
| 2.00-2.49 | . | . | . | 189 | 1 | . | . | . | . | . | 190 |
| 2.50-2.99 | . | . | . | 31 | 25 | . | . | . | . | . | 56 |
| 3.00-3.49 | . | . | . | . | 18 | . | . | . | . | . | 18 |
| 3.50-3.99 | . | . | . | . | 2 | 1 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 47 | 1680 | 1936 | 524 | 65 | 9 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 3992.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 48 | 453 | 103 | 59 | 6 | . | . | . | . | . | 669 |
| 0.50-0.99 | . | 1007 | 1098 | 188 | 155 | 22 | . | . | . | . | 2470 |
| 1.00-1.49 | . | . | 915 | 80 | 47 | 14 | . | . | . | . | 1056 |
| 1.50-1.99 | . | . | 158 | 298 | 42 | 13 | . | . | . | . | 511 |
| 2.00-2.49 | . | . | . | 251 | 20 | 7 | . | . | . | . | 278 |
| 2.50-2.99 | . | . | . | 28 | 45 | 5 | . | . | . | . | 78 |
| 3.00-3.49 | . | . | . | . | 16 | 11 | 2 | . | . | . | 29 |
| 3.50-3.99 | . | . | . | . | . | 7 | 1 | . | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 48 | 1460 | 2274 | 904 | 331 | 80 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 4782.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 48 | 537 | 241 | 20 | 2 | . | . | . | . | . | 848 |
| 0.50-0.99 | . | 899 | 2388 | 762 | 70 | 7 | 1 | 1 | . | . | 4128 |
| 1.00-1.49 | . | . | 1039 | 817 | 241 | 19 | 1 | 1 | 1 | . | 2119 |
| 1.50-1.99 | . | . | 166 | 507 | 293 | 55 | . | . | . | . | 1021 |
| 2.00-2.49 | . | . | 2 | 287 | 136 | 128 | 5 | . | . | . | 558 |
| 2.50-2.99 | . | . | . | 12 | 280 | 103 | 32 | 4 | . | . | 431 |
| 3.00-3.49 | . | . | . | . | 43 | 229 | 26 | 7 | 1 | . | 306 |
| 3.50-3.99 | . | . | . | . | 4 | 143 | 59 | 13 | 2 | . | 221 |
| 4.00-4.49 | . | . | . | . | . | 11 | 66 | 36 | . | . | 133 |
| 4.50-4.99 | . | . | . | . | . | . | 14 | 43 | 1 | . | 58 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 27 | 2 | . | 30 |
| 5.50-5.99 | . | . | . | . | . | . | . | 6 | 11 | 1 | 18 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 10 | 1 | 11 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 48 | 1436 | 3836 | 2405 | 1069 | 695 | 225 | 138 | 30 | 2 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 5.0 NO. OF CASES= 9266.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 52 | 713 | 272 | 25 | 6 | 2 | . | . | . | . | 1070 |
| 0.50-0.99 | . | 1145 | 4424 | 926 | 157 | 26 | 2 | 1 | . | . | 6681 |
| 1.00-1.49 | . | . | 1776 | 1597 | 419 | 86 | 4 | 2 | 4 | 1 | 3889 |
| 1.50-1.99 | . | . | 234 | 1013 | 401 | 157 | 6 | 4 | 2 | . | 1817 |
| 2.00-2.49 | . | . | . | 542 | 228 | 175 | 22 | 3 | 2 | 1 | 973 |
| 2.50-2.99 | . | . | . | 40 | 533 | 105 | 25 | 24 | 1 | 1 | 729 |
| 3.00-3.49 | . | . | . | 1 | 102 | 424 | 13 | 14 | 1 | . | 555 |
| 3.50-3.99 | . | . | . | . | 4 | 311 | 56 | 17 | 1 | . | 389 |
| 4.00-4.49 | . | . | . | . | . | 65 | 146 | 22 | 1 | . | 234 |
| 4.50-4.99 | . | . | . | . | . | 9 | 91 | 94 | 6 | 2 | 202 |
| 5.00-5.49 | . | . | . | . | . | . | 14 | 68 | 11 | . | 93 |
| 5.50-5.99 | . | . | . | . | . | . | 1 | 32 | 36 | . | 69 |
| 6.00-6.49 | . | . | . | . | . | . | . | 7 | 26 | . | 33 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 17 | 5 | 22 |
| 7.00+ | . | . | . | . | . | . | . | . | 7 | 20 | 27 |
| TOTAL | 52 | 1858 | 6706 | 4144 | 1850 | 1360 | 380 | 288 | 115 | 30 | |

MEAN HS(M) = 1.4 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 5.2 NO. OF CASES= 15720.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 43 | 376 | 143 | 10 | . | . | . | . | . | . | 572 |
| 0.50-0.99 | . | 768 | 3185 | 864 | 73 | 2 | 1 | . | . | . | 4893 |
| 1.00-1.49 | . | . | 1718 | 1436 | 382 | 67 | . | . | . | . | 3603 |
| 1.50-1.99 | . | . | 258 | 1644 | 482 | 142 | 12 | 1 | . | . | 2539 |
| 2.00-2.49 | . | . | 2 | 858 | 467 | 203 | 25 | 4 | . | . | 1559 |
| 2.50-2.99 | . | . | . | 26 | 951 | 132 | 29 | 16 | . | . | 1154 |
| 3.00-3.49 | . | . | . | 1 | 126 | 727 | 17 | 18 | 2 | . | 891 |
| 3.50-3.99 | . | . | . | . | 1 | 496 | 73 | 7 | 2 | . | 579 |
| 4.00-4.49 | . | . | . | . | . | 66 | 242 | 24 | 9 | . | 341 |
| 4.50-4.99 | . | . | . | . | . | 2 | 95 | 84 | 13 | . | 194 |
| 5.00-5.49 | . | . | . | . | . | . | 13 | 77 | 20 | . | 110 |
| 5.50-5.99 | . | . | . | . | . | . | 1 | 27 | 23 | . | 51 |
| 6.00-6.49 | . | . | . | . | . | . | . | 5 | 21 | 1 | 27 |
| 6.50-6.99 | . | . | . | . | . | . | . | 2 | 14 | 5 | 21 |
| 7.00+ | . | . | . | . | . | . | . | . | 4 | 9 | 13 |
| TOTAL | 43 | 1144 | 5306 | 4839 | 2482 | 1837 | 508 | 265 | 108 | 15 | |

MEAN HS(M) = 1.7 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 5.5 NO. OF CASES= 15499.

STATION S62 46.80N 84.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

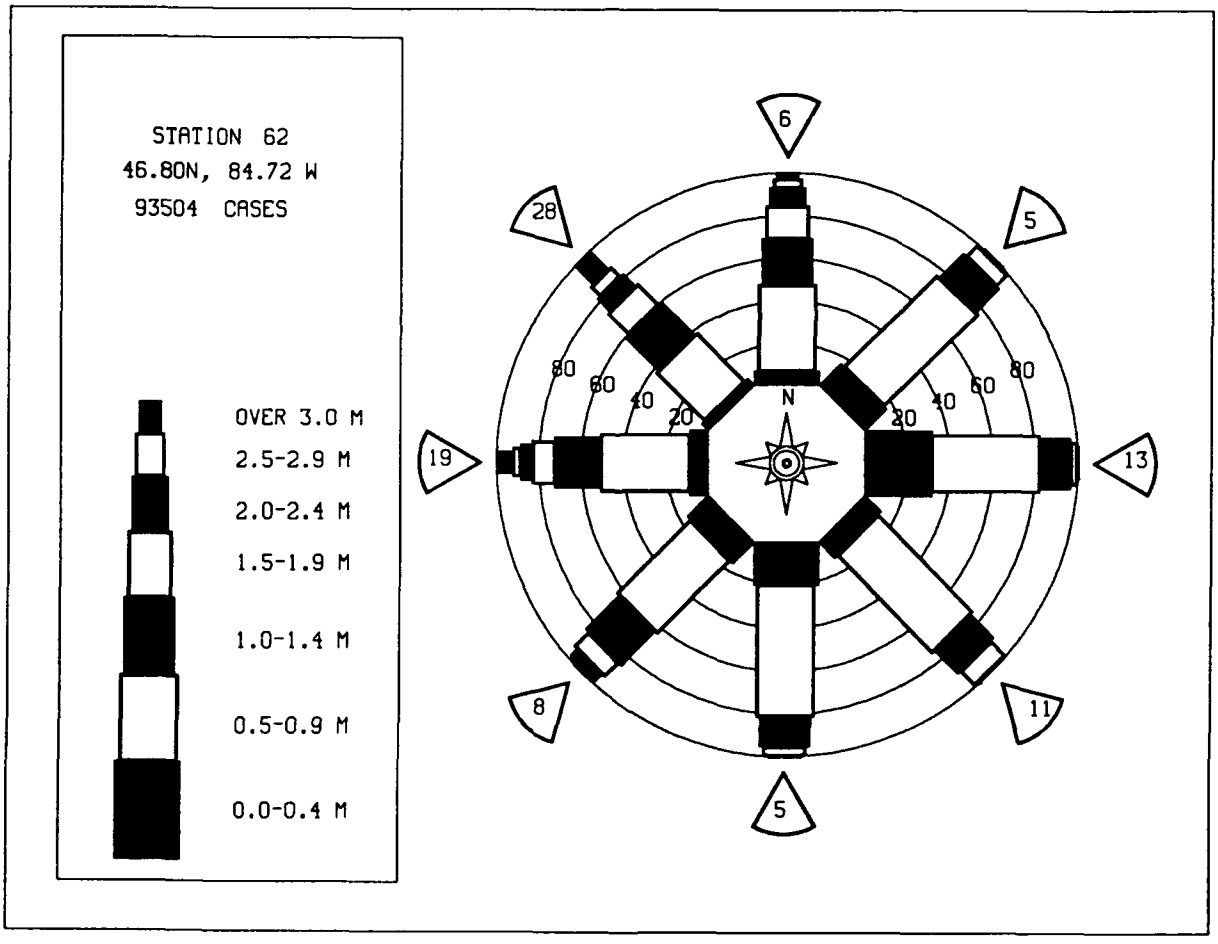
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 29 | 136 | 10 | . | . | . | . | . | . | . | 175 |
| 0.50-0.99 | . | 483 | 753 | 68 | 8 | . | . | . | . | . | 1312 |
| 1.00-1.49 | . | . | 535 | 250 | 63 | 17 | 1 | . | . | . | 866 |
| 1.50-1.99 | . | . | 220 | 290 | 154 | 50 | 2 | . | . | . | 716 |
| 2.00-2.49 | . | . | 6 | 192 | 121 | 126 | 11 | 1 | . | . | 457 |
| 2.50-2.99 | . | . | . | 27 | 162 | 95 | 28 | 7 | . | . | 319 |
| 3.00-3.49 | . | . | . | 2 | 27 | 135 | 35 | 16 | . | . | 215 |
| 3.50-3.99 | . | . | . | . | 1 | 98 | 24 | 7 | 2 | . | 132 |
| 4.00-4.49 | . | . | . | . | . | 11 | 58 | 7 | 7 | 1 | 84 |
| 4.50-4.99 | . | . | . | . | . | . | 12 | 22 | 3 | . | 37 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 9 | 2 | . | 13 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 5 | . | 8 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | 3 | 5 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 29 | 619 | 1524 | 829 | 536 | 532 | 173 | 72 | 23 | 4 | |

MEAN HS(M) = 1.6 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 5.2 NO. OF CASES= 4081.

STATION S62 46.80N 84.72W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 107 | 956 | 111 | 14 | 1 | . | . | . | . | . | 1189 |
| 0.50-0.99 | . | 2355 | 1794 | 343 | 61 | 7 | . | . | . | . | 4560 |
| 1.00-1.49 | . | . | 1301 | 457 | 147 | 33 | 1 | . | . | . | 1939 |
| 1.50-1.99 | . | . | 346 | 445 | 152 | 60 | 5 | 1 | . | . | 1009 |
| 2.00-2.49 | . | . | 4 | 265 | 103 | 75 | 10 | 1 | . | . | 458 |
| 2.50-2.99 | . | . | . | 21 | 201 | 50 | 16 | 7 | . | . | 295 |
| 3.00-3.49 | . | . | . | . | 33 | 154 | 10 | 7 | . | . | 204 |
| 3.50-3.99 | . | . | . | . | 1 | 105 | 21 | 5 | . | . | 132 |
| 4.00-4.49 | . | . | . | . | . | 15 | 53 | 9 | 1 | . | 78 |
| 4.50-4.99 | . | . | . | . | . | 1 | 21 | 24 | 2 | . | 48 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 18 | 3 | . | 24 |
| 5.50-5.99 | . | . | . | . | . | . | . | 6 | 7 | . | 13 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 6 | . | 7 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| TOTAL | 107 | 3311 | 3556 | 1545 | 699 | 500 | 140 | 79 | 23 | 3 | |

MEAN HS(M)= 1.1 LARGEST HS(M)= 8.9 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S62 (46.80N 84.72W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.9 | 1.3 | 1.2 | 1.3 | 1.0 | 0.8 | 0.7 | 0.7 | 0.9 | 1.1 | 1.3 | 1.3 | 1.1 |
| 1957 | 1.7 | 1.5 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 0.9 | 1.2 | 1.1 | 1.8 | 1.8 | 1.3 |
| 1958 | 1.3 | 2.0 | 1.2 | 1.2 | 1.3 | 1.0 | 0.8 | 1.0 | 1.1 | 1.3 | 1.9 | 1.4 | 1.3 |
| 1959 | 1.7 | 1.5 | 1.3 | 1.3 | 1.2 | 1.0 | 0.8 | 0.7 | 1.1 | 1.3 | 1.8 | 1.6 | 1.3 |
| 1960 | 1.6 | 1.6 | 1.1 | 1.0 | 0.8 | 0.8 | 0.8 | 0.7 | 0.9 | 1.3 | 1.7 | 1.5 | 1.2 |
| 1961 | 1.2 | 1.1 | 1.5 | 1.1 | 1.1 | 0.9 | 0.7 | 0.8 | 1.1 | 1.2 | 1.5 | 1.5 | 1.1 |
| 1962 | 1.8 | 1.1 | 0.9 | 1.1 | 0.8 | 0.7 | 0.8 | 0.7 | 1.1 | 1.0 | 1.0 | 1.5 | 1.0 |
| 1963 | 1.3 | 1.5 | 1.2 | 1.3 | 1.0 | 0.7 | 0.9 | 0.8 | 0.7 | 0.9 | 1.5 | 1.4 | 1.1 |
| 1964 | 1.8 | 1.5 | 1.6 | 1.2 | 1.2 | 1.0 | 0.8 | 1.0 | 1.2 | 1.3 | 1.5 | 1.3 | 1.3 |
| 1965 | 1.8 | 1.9 | 1.2 | 1.0 | 1.0 | 0.9 | 0.9 | 0.9 | 1.0 | 1.6 | 1.7 | 1.4 | 1.3 |
| 1966 | 1.8 | 1.6 | 1.7 | 1.3 | 1.5 | 0.9 | 1.0 | 1.0 | 1.4 | 1.7 | 1.5 | 1.6 | 1.4 |
| 1967 | 1.8 | 1.8 | 1.5 | 1.3 | 1.2 | 0.7 | 0.8 | 0.8 | 1.0 | 1.3 | 1.5 | 1.6 | 1.3 |
| 1968 | 1.4 | 2.5 | 1.6 | 1.3 | 1.1 | 0.8 | 1.0 | 0.9 | 0.9 | 1.2 | 1.6 | 1.5 | 1.3 |
| 1969 | 1.6 | 1.4 | 1.6 | 0.9 | 1.0 | 0.9 | 0.7 | 1.0 | 1.1 | 1.3 | 1.4 | 1.4 | 1.2 |
| 1970 | 1.3 | 1.6 | 1.5 | 1.1 | 0.9 | 0.8 | 0.7 | 0.9 | 1.3 | 1.2 | 1.4 | 1.3 | 1.2 |
| 1971 | 1.7 | 1.4 | 1.6 | 1.2 | 1.0 | 0.6 | 0.8 | 0.8 | 0.9 | 1.0 | 1.3 | 1.5 | 1.2 |
| 1972 | 2.0 | 1.4 | 1.4 | 0.9 | 0.7 | 0.8 | 0.8 | 0.7 | 1.2 | 1.6 | 1.1 | 1.4 | 1.2 |
| 1973 | 1.6 | 1.2 | 1.3 | 1.2 | 1.1 | 0.7 | 0.7 | 0.7 | 1.1 | 1.2 | 1.8 | 1.1 | 1.1 |
| 1974 | 1.3 | 1.2 | 1.6 | 1.0 | 1.0 | 0.8 | 0.7 | 0.7 | 1.1 | 1.3 | 1.2 | 1.1 | 1.1 |
| 1975 | 1.5 | 1.3 | 1.3 | 1.1 | 0.7 | 0.7 | 0.8 | 0.8 | 1.0 | 1.2 | 1.3 | 1.3 | 1.1 |
| 1976 | 1.6 | 1.6 | 1.7 | 1.1 | 1.1 | 0.7 | 0.9 | 0.8 | 1.2 | 1.1 | 1.8 | 1.5 | 1.3 |
| 1977 | 1.6 | 1.7 | 1.4 | 0.9 | 0.8 | 0.8 | 0.7 | 0.9 | 0.9 | 1.1 | 1.2 | 1.3 | 1.1 |
| 1978 | 1.5 | 1.1 | 1.2 | 1.1 | 0.7 | 0.7 | 0.7 | 0.8 | 0.9 | 1.3 | 1.3 | 1.5 | 1.1 |
| 1979 | 1.4 | 1.1 | 1.2 | 0.9 | 0.8 | 0.8 | 0.6 | 0.8 | 0.9 | 0.9 | 1.3 | 1.6 | 1.0 |
| 1980 | 1.5 | 1.0 | 1.5 | 0.9 | 0.8 | 0.8 | 0.6 | 0.7 | 1.0 | 1.3 | 1.3 | 1.5 | 1.1 |
| 1981 | 1.1 | 1.2 | 1.4 | 1.1 | 0.8 | 0.7 | 0.6 | 0.5 | 1.0 | 1.0 | 1.2 | 1.2 | 1.0 |
| 1982 | 1.7 | 1.2 | 1.5 | 1.3 | 0.6 | 0.7 | 0.7 | 0.7 | 0.9 | 1.1 | 1.3 | 1.4 | 1.1 |
| 1983 | 1.4 | 1.1 | 1.1 | 0.9 | 0.9 | 0.7 | 0.7 | 0.7 | 0.9 | 1.1 | 1.3 | 1.4 | 1.0 |
| 1984 | 1.2 | 1.2 | 1.3 | 0.9 | 1.0 | 0.7 | 0.7 | 0.5 | 0.9 | 0.9 | 1.5 | 1.7 | 1.0 |
| 1985 | 1.4 | 1.3 | 1.3 | 0.9 | 0.7 | 0.8 | 0.6 | 0.6 | 0.8 | 1.1 | 1.1 | 1.3 | 1.0 |
| 1986 | 1.3 | 1.0 | 1.3 | 1.1 | 0.8 | 0.8 | 0.6 | 0.7 | 0.9 | 0.9 | 1.5 | 1.4 | 1.0 |
| 1987 | 1.3 | 1.2 | 1.2 | 1.0 | 0.8 | 0.7 | 0.7 | 0.8 | 0.8 | 1.1 | 1.4 | 1.2 | 1.0 |
| MEAN | 1.5 | 1.4 | 1.4 | 1.1 | 1.0 | 0.8 | 0.8 | 0.8 | 1.0 | 1.2 | 1.4 | 1.4 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S62 (46.80N 84.72W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.2 | 5.3 | 4.4 | 4.9 | 3.6 | 3.3 | 2.6 | 2.6 | 4.1 | 5.5 | 5.2 | 5.3 |
| 1957 | 5.1 | 5.7 | 4.7 | 3.7 | 3.4 | 3.9 | 5.4 | 3.1 | 5.2 | 4.3 | 5.4 | 5.6 |
| 1958 | 5.8 | 6.0 | 4.7 | 5.4 | 3.8 | 3.7 | 3.0 | 2.8 | 4.0 | 4.3 | 6.7 | 4.9 |
| 1959 | 4.9 | 5.0 | 5.9 | 4.1 | 4.8 | 3.8 | 3.0 | 2.7 | 4.6 | 5.1 | 6.3 | 8.9 |
| 1960 | 5.8 | 5.2 | 3.7 | 4.1 | 3.2 | 2.3 | 3.2 | 2.5 | 4.2 | 5.7 | 6.1 | 4.4 |
| 1961 | 5.1 | 4.9 | 5.6 | 4.2 | 3.7 | 3.5 | 3.3 | 3.4 | 4.3 | 4.5 | 5.7 | 7.5 |
| 1962 | 5.6 | 4.4 | 4.9 | 3.9 | 3.1 | 2.5 | 3.0 | 2.0 | 4.1 | 5.2 | 5.1 | 5.9 |
| 1963 | 5.1 | 6.2 | 4.3 | 6.1 | 3.8 | 2.8 | 3.1 | 2.6 | 2.4 | 4.2 | 7.5 | 5.3 |
| 1964 | 6.8 | 5.2 | 6.5 | 4.0 | 4.8 | 3.3 | 3.3 | 4.0 | 5.2 | 4.1 | 7.0 | 5.4 |
| 1965 | 6.7 | 6.4 | 4.6 | 3.7 | 3.4 | 3.4 | 3.0 | 3.4 | 4.4 | 6.7 | 7.3 | 4.7 |
| 1966 | 8.0 | 6.2 | 5.5 | 4.4 | 5.3 | 2.9 | 3.2 | 4.2 | 5.9 | 7.2 | 5.0 | 6.1 |
| 1967 | 7.0 | 6.6 | 6.3 | 4.4 | 4.2 | 2.2 | 3.2 | 3.1 | 4.1 | 4.6 | 5.7 | 5.2 |
| 1968 | 5.5 | 8.6 | 4.9 | 5.7 | 3.2 | 3.1 | 3.9 | 3.7 | 3.4 | 4.4 | 6.0 | 5.3 |
| 1969 | 4.1 | 5.7 | 4.9 | 3.7 | 2.9 | 2.4 | 2.9 | 3.7 | 3.8 | 4.0 | 4.9 | 6.5 |
| 1970 | 5.4 | 5.5 | 4.6 | 5.0 | 3.1 | 3.0 | 2.2 | 3.2 | 4.2 | 4.7 | 7.6 | 6.2 |
| 1971 | 5.8 | 7.4 | 6.6 | 4.5 | 3.1 | 2.0 | 3.2 | 3.3 | 4.3 | 4.6 | 4.9 | 6.5 |
| 1972 | 8.2 | 6.6 | 4.7 | 3.8 | 3.0 | 2.7 | 2.9 | 3.1 | 4.6 | 8.2 | 4.8 | 6.4 |
| 1973 | 4.8 | 3.6 | 5.0 | 3.2 | 4.0 | 2.2 | 2.5 | 3.7 | 5.3 | 6.2 | 6.2 | 3.9 |
| 1974 | 7.1 | 7.0 | 4.7 | 3.6 | 4.0 | 2.8 | 2.5 | 2.6 | 3.9 | 4.8 | 4.7 | 3.1 |
| 1975 | 4.9 | 4.8 | 4.2 | 3.8 | 2.8 | 3.3 | 3.7 | 3.1 | 3.6 | 4.0 | 7.4 | 5.9 |
| 1976 | 6.7 | 5.7 | 6.1 | 3.4 | 5.1 | 2.3 | 3.5 | 3.9 | 4.3 | 5.7 | 6.2 | 7.4 |
| 1977 | 6.0 | 6.9 | 5.9 | 3.5 | 2.9 | 2.7 | 3.8 | 3.2 | 3.8 | 4.7 | 5.1 | 4.0 |
| 1978 | 6.5 | 4.0 | 5.9 | 4.3 | 2.9 | 2.8 | 2.5 | 3.1 | 2.4 | 3.6 | 4.9 | 4.6 |
| 1979 | 4.9 | 3.8 | 4.7 | 4.3 | 2.6 | 2.5 | 2.2 | 3.7 | 3.1 | 2.5 | 4.2 | 4.9 |
| 1980 | 6.5 | 3.8 | 6.7 | 3.5 | 3.2 | 2.5 | 1.6 | 1.7 | 4.5 | 5.4 | 5.9 | 4.9 |
| 1981 | 3.4 | 4.2 | 4.0 | 3.8 | 2.2 | 2.3 | 2.0 | 1.8 | 5.5 | 5.7 | 6.2 | 4.1 |
| 1982 | 6.6 | 4.8 | 7.8 | 6.6 | 1.8 | 2.6 | 2.5 | 2.8 | 4.4 | 4.9 | 4.5 | 4.6 |
| 1983 | 4.4 | 3.3 | 3.5 | 2.8 | 2.8 | 2.6 | 2.4 | 2.4 | 3.5 | 3.8 | 4.3 | 4.7 |
| 1984 | 5.7 | 3.7 | 5.7 | 2.7 | 3.6 | 2.4 | 2.5 | 2.1 | 3.2 | 4.3 | 6.1 | 6.9 |
| 1985 | 5.2 | 3.9 | 4.4 | 4.6 | 2.2 | 4.1 | 2.1 | 1.9 | 3.7 | 4.0 | 3.9 | 5.0 |
| 1986 | 4.8 | 4.0 | 4.9 | 3.7 | 4.0 | 3.3 | 1.9 | 3.2 | 4.2 | 4.5 | 4.6 | 4.5 |
| 1987 | 6.0 | 5.1 | 5.0 | 5.4 | 2.9 | 3.4 | 3.3 | 4.4 | 3.6 | 3.8 | 6.5 | 4.0 |

32 YR. STATISTICS FOR WIS STATION S62

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 1.1 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 4.4 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.9 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.5 |
| LARGEST WAVE HS . . . . . | (METERS) | 8.9 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 289.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 59120918 |

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 57 | 326 | 53 | 6 | . | . | . | . | . | . | 442 |
| 0.50-0.99 | . | 763 | 273 | 158 | 49 | 14 | . | . | . | . | 1257 |
| 1.00-1.49 | . | . | 295 | 130 | 118 | 87 | 5 | 1 | . | . | 636 |
| 1.50-1.99 | . | . | 122 | 33 | 56 | 85 | 22 | 4 | . | . | 322 |
| 2.00-2.49 | . | . | 7 | 4 | 8 | 42 | 29 | 4 | 2 | . | 96 |
| 2.50-2.99 | . | . | . | . | . | 8 | 4 | 4 | 1 | . | 17 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 57 | 1089 | 750 | 331 | 231 | 236 | 60 | 15 | 3 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 2606.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 70 | 279 | 60 | 5 | . | . | . | . | . | . | 414 |
| 0.50-0.99 | . | 912 | 344 | 143 | 59 | 11 | . | . | . | . | 1469 |
| 1.00-1.49 | . | . | 283 | 52 | 63 | 56 | 9 | 1 | . | . | 464 |
| 1.50-1.99 | . | . | 137 | 16 | 9 | 36 | 10 | 3 | . | . | 211 |
| 2.00-2.49 | . | . | 7 | 8 | 1 | 2 | 4 | 4 | 1 | . | 27 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 70 | 1191 | 831 | 225 | 132 | 105 | 23 | 8 | 1 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 2429.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 66 | 379 | 44 | 2 | . | . | . | . | . | . | 491 |
| 0.50-0.99 | . | 1195 | 437 | 74 | 29 | 19 | . | . | . | . | 1754 |
| 1.00-1.49 | . | . | 293 | 11 | 17 | 23 | 4 | 1 | . | . | 349 |
| 1.50-1.99 | . | . | 147 | 16 | 1 | 2 | . | . | . | . | 166 |
| 2.00-2.49 | . | . | . | 5 | . | . | 1 | . | . | . | 6 |
| 2.50-2.99 | . | . | . | 1 | . | 1 | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 66 | 1574 | 921 | 109 | 47 | 45 | 5 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 2596.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 145 | 989 | 73 | 4 | . | . | . | . | . | . | 1211 |
| 0.50-0.99 | . | 1639 | 208 | 35 | 12 | 5 | 1 | . | . | . | 1900 |
| 1.00-1.49 | . | . | 341 | 3 | 4 | 1 | 1 | . | . | . | 350 |
| 1.50-1.99 | . | . | 93 | 3 | . | . | . | . | . | . | 96 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 145 | 2628 | 715 | 45 | 16 | 6 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.2 NO. OF CASES= 3331.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 301 | 1884 | 74 | 7 | | | | | | | 2266 |
| 0.50-0.99 | . | 2575 | 134 | 27 | 5 | 3 | . | . | . | . | 2744 |
| 1.00-1.49 | . | . | 627 | 1 | 3 | 1 | 2 | . | . | . | 634 |
| 1.50-1.99 | . | . | 98 | | 1 | . | . | . | . | . | 99 |
| 2.00-2.49 | . | . | 2 | 1 | . | . | . | . | . | . | 3 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 301 | 4459 | 935 | 37 | 9 | 4 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 5380.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 171 | 1053 | 24 | 6 | 1 | | . | . | . | . | 1255 |
| 0.50-0.99 | . | 3026 | 734 | 7 | 4 | 1 | . | . | . | . | 3772 |
| 1.00-1.49 | . | . | 1177 | | 1 | 1 | . | . | . | . | 1179 |
| 1.50-1.99 | . | . | 628 | 95 | . | . | . | . | . | . | 723 |
| 2.00-2.49 | . | . | 1 | 37 | . | 1 | . | . | . | . | 39 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 171 | 4079 | 2564 | 147 | 6 | 3 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 6523.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 67 | 510 | 7 | 1 | | | . | . | . | . | 585 |
| 0.50-0.99 | . | 2391 | 707 | 3 | 2 | 1 | . | . | . | . | 3104 |
| 1.00-1.49 | . | . | 790 | 1 | . | . | . | . | . | . | 791 |
| 1.50-1.99 | . | . | 394 | 41 | . | . | . | . | . | . | 435 |
| 2.00-2.49 | . | . | . | 32 | . | . | . | . | . | . | 32 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 67 | 2901 | 1898 | 80 | 2 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 4632.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 73 | 750 | 10 | 2 | . | . | . | . | . | . | 835 |
| 0.50-0.99 | . | 2508 | 758 | | | 1 | . | . | . | . | 3267 |
| 1.00-1.49 | . | . | 625 | 1 | 1 | . | . | . | . | . | 627 |
| 1.50-1.99 | . | . | 253 | 41 | . | . | 1 | . | . | . | 295 |
| 2.00-2.49 | . | . | 1 | 28 | . | . | . | . | . | . | 29 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 73 | 3258 | 1647 | 72 | 1 | 1 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 4731.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 64 | 517 | 17 | . | . | . | . | . | . | . | 598 |
| 0.50-0.99 | . | 1640 | 893 | 1 | . | . | . | . | . | . | 2534 |
| 1.00-1.49 | . | . | 527 | 2 | . | . | . | . | . | . | 529 |
| 1.50-1.99 | . | . | 150 | 108 | . | . | . | . | . | . | 258 |
| 2.00-2.49 | . | . | . | 43 | . | . | . | . | . | . | 43 |
| 2.50-2.99 | . | . | . | 3 | . | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 64 | 2157 | 1587 | 157 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 3711.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 71 | 411 | 14 | 1 | 1 | . | . | . | . | . | 498 |
| 0.50-0.99 | . | 1059 | 1011 | 2 | 1 | . | . | . | . | . | 2073 |
| 1.00-1.49 | . | . | 643 | 42 | 4 | 1 | . | . | . | . | 690 |
| 1.50-1.99 | . | . | 148 | 178 | . | . | . | . | . | . | 326 |
| 2.00-2.49 | . | . | . | 100 | 1 | . | . | . | . | . | 101 |
| 2.50-2.99 | . | . | . | 18 | 6 | . | . | . | . | . | 24 |
| 3.00-3.49 | . | . | . | . | 4 | . | . | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 71 | 1470 | 1816 | 341 | 17 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 3484.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 69 | 568 | 58 | 24 | . | . | . | . | . | . | 719 |
| 0.50-0.99 | . | 972 | 1348 | 67 | 87 | 2 | . | . | . | . | 2476 |
| 1.00-1.49 | . | . | 1076 | 27 | 16 | 18 | . | . | . | . | 1137 |
| 1.50-1.99 | . | . | 173 | 403 | 9 | 2 | . | . | . | . | 587 |
| 2.00-2.49 | . | . | . | 254 | 1 | 5 | . | . | . | . | 260 |
| 2.50-2.99 | . | . | . | 37 | 28 | . | . | . | . | . | 65 |
| 3.00-3.49 | . | . | . | . | 18 | . | . | . | . | . | 18 |
| 3.50-3.99 | . | . | . | . | 1 | 2 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 69 | 1540 | 2655 | 812 | 160 | 31 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 4935.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 55 | 473 | 197 | 81 | . | . | . | . | . | . | 806 |
| 0.50-0.99 | . | 788 | 1696 | 478 | 180 | 7 | . | . | . | . | 3149 |
| 1.00-1.49 | . | . | 1059 | 352 | 158 | 40 | 1 | . | . | . | 1610 |
| 1.50-1.99 | . | . | 148 | 517 | 128 | 40 | . | . | . | . | 833 |
| 2.00-2.49 | . | . | 1 | 329 | 82 | 47 | . | . | . | . | 459 |
| 2.50-2.99 | . | . | . | 40 | 147 | 40 | 7 | . | . | . | 234 |
| 3.00-3.49 | . | . | . | 1 | 24 | 73 | 7 | . | . | . | 105 |
| 3.50-3.99 | . | . | . | . | 2 | 52 | 12 | 5 | . | . | 71 |
| 4.00-4.49 | . | . | . | . | . | 3 | 14 | 7 | 1 | . | 25 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 9 | . | . | 12 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 1 | 1 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 55 | 1261 | 3101 | 1798 | 721 | 302 | 45 | 22 | 3 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.7 NO. OF CASES= 6851.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 81 | 648 | 269 | 1 | 1 | . | . | . | . | . | 1000 |
| 0.50-0.99 | . | 868 | 2983 | 701 | 14 | 4 | 2 | 2 | . | . | 4574 |
| 1.00-1.49 | . | 2 | 1018 | 976 | 211 | 6 | 1 | . | . | . | 2214 |
| 1.50-1.99 | . | . | 152 | 579 | 372 | 84 | . | . | . | . | 1187 |
| 2.00-2.49 | . | . | . | 275 | 170 | 170 | 16 | . | 1 | . | 632 |
| 2.50-2.99 | . | . | . | 11 | 294 | 96 | 37 | 14 | . | . | 452 |
| 3.00-3.49 | . | . | . | . | 51 | 257 | 18 | 12 | 1 | . | 339 |
| 3.50-3.99 | . | . | . | . | . | 158 | 79 | 13 | 1 | . | 251 |
| 4.00-4.49 | . | . | . | . | . | 23 | 85 | 42 | 6 | . | 156 |
| 4.50-4.99 | . | . | . | . | . | . | 24 | 44 | 9 | . | 77 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 35 | 10 | . | 47 |
| 5.50-5.99 | . | . | . | . | . | . | 1 | 10 | 17 | 1 | 29 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 9 | 1 | 10 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 7 | 2 | 9 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 81 | 1518 | 4422 | 2543 | 1113 | 798 | 265 | 172 | 61 | 5 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 5.0 NO. OF CASES= 10287.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 103 | 926 | 448 | 32 | 3 | . | . | . | . | . | 1512 |
| 0.50-0.99 | . | 1281 | 4604 | 1166 | 179 | 18 | . | . | . | . | 7248 |
| 1.00-1.49 | . | . | 1916 | 1392 | 475 | 127 | 9 | 2 | . | . | 3921 |
| 1.50-1.99 | . | . | 194 | 1144 | 294 | 177 | 25 | 7 | 2 | . | 1843 |
| 2.00-2.49 | . | . | 1 | 576 | 265 | 119 | 24 | 14 | . | 1 | 1000 |
| 2.50-2.99 | . | . | . | 35 | 648 | 68 | 10 | 20 | 2 | . | 783 |
| 3.00-3.49 | . | . | . | . | 112 | 466 | 11 | 8 | 3 | . | 600 |
| 3.50-3.99 | . | . | . | . | 4 | 315 | 44 | 6 | 1 | . | 370 |
| 4.00-4.49 | . | . | . | . | . | 78 | 163 | 24 | . | . | 265 |
| 4.50-4.99 | . | . | . | . | . | 2 | 101 | 78 | 8 | . | 189 |
| 5.00-5.49 | . | . | . | . | . | . | 17 | 64 | 19 | . | 100 |
| 5.50-5.99 | . | . | . | . | . | . | 3 | 28 | 29 | 1 | 61 |
| 6.00-6.49 | . | . | . | . | . | . | . | 9 | 20 | 2 | 31 |
| 6.50-6.99 | . | . | . | . | . | . | . | 2 | 17 | 1 | 20 |
| 7.00+ | . | . | . | . | . | . | . | . | 6 | 20 | 26 |
| TOTAL | 103 | 2207 | 7163 | 4345 | 1980 | 1370 | 407 | 262 | 107 | 25 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 8.7 MEAN TP(SEC)= 5.1 NO. OF CASES= 16826.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 82 | 426 | 220 | 18 | 4 | . | . | . | . | . | 750 |
| 0.50-0.99 | . | 1006 | 2235 | 671 | 131 | 11 | 1 | . | . | . | 4055 |
| 1.00-1.49 | . | . | 1392 | 887 | 250 | 137 | 9 | 1 | . | . | 2676 |
| 1.50-1.99 | . | . | 193 | 1261 | 251 | 89 | 33 | 10 | 1 | . | 1838 |
| 2.00-2.49 | . | . | 5 | 636 | 352 | 101 | 31 | 24 | 2 | . | 1151 |
| 2.50-2.99 | . | . | . | 47 | 647 | 106 | 11 | 14 | 2 | 1 | 828 |
| 3.00-3.49 | . | . | . | . | 65 | 505 | 18 | 8 | 3 | . | 599 |
| 3.50-3.99 | . | . | . | . | 2 | 286 | 95 | 9 | 2 | . | 394 |
| 4.00-4.49 | . | . | . | . | . | 28 | 119 | 29 | 9 | . | 185 |
| 4.50-4.99 | . | . | . | . | . | . | 47 | 59 | 17 | . | 123 |
| 5.00-5.49 | . | . | . | . | . | . | 4 | 26 | 18 | 1 | 49 |
| 5.50-5.99 | . | . | . | . | . | . | 1 | 9 | 17 | . | 27 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 12 | 6 | 18 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | 2 | 5 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 3 | 3 |
| TOTAL | 82 | 1432 | 4045 | 3520 | 1702 | 1263 | 369 | 189 | 86 | 13 | |

MEAN HS(M) = 1.5 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 5.3 NO. OF CASES= 11903.

STATION S63 46.95N 84.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

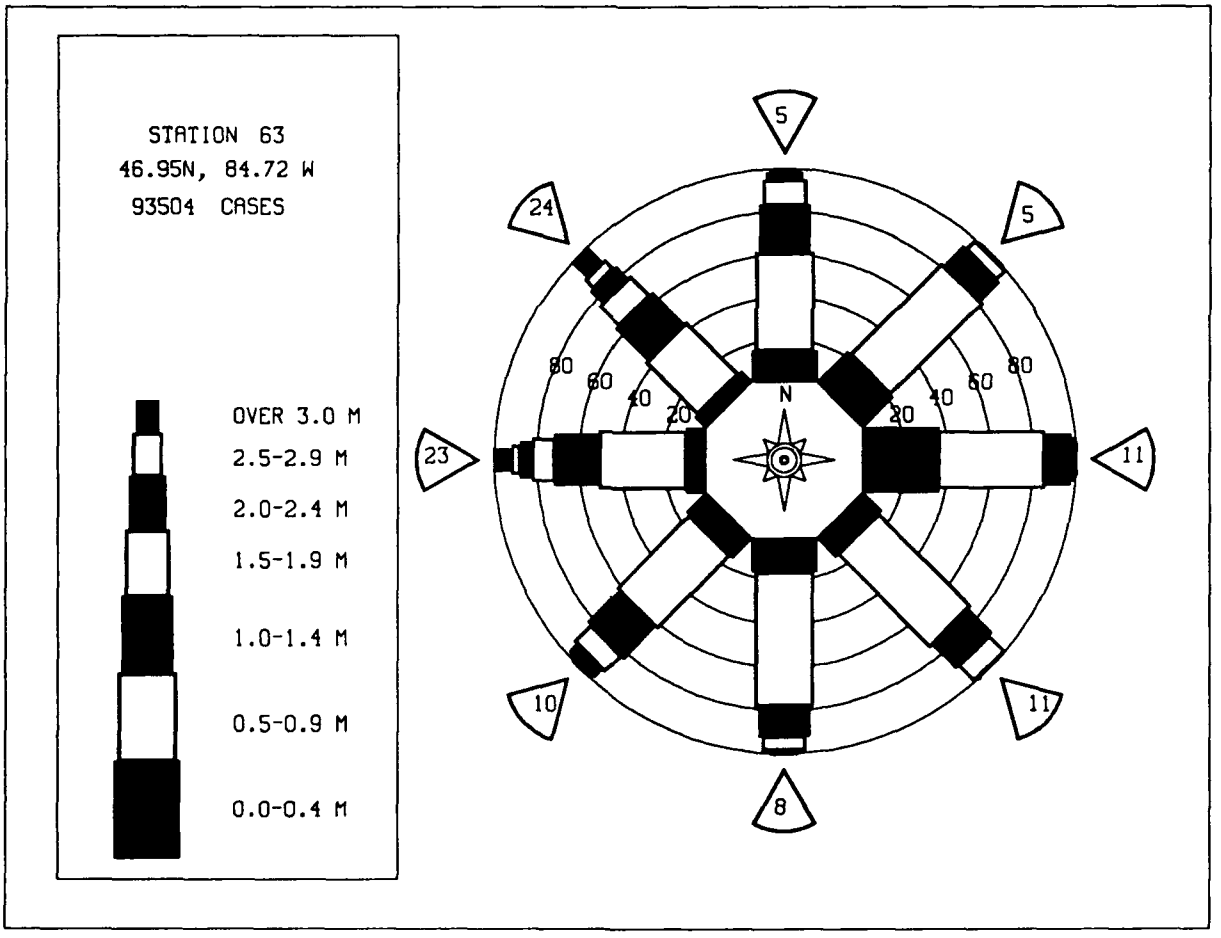
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 51 | 318 | 34 | 5 | 1 | . | . | . | . | . | 409 |
| 0.50-0.99 | . | 663 | 428 | 66 | 22 | 2 | . | . | . | . | 1181 |
| 1.00-1.49 | . | . | 410 | 221 | 86 | 39 | 2 | . | . | . | 758 |
| 1.50-1.99 | . | . | 110 | 193 | 115 | 82 | 12 | . | . | . | 512 |
| 2.00-2.49 | . | . | 8 | 103 | 48 | 59 | 26 | 11 | . | . | 255 |
| 2.50-2.99 | . | . | . | 18 | 83 | 24 | 6 | 6 | . | . | 137 |
| 3.00-3.49 | . | . | . | . | 16 | 71 | 4 | 6 | 1 | . | 98 |
| 3.50-3.99 | . | . | . | . | . | 43 | 23 | 3 | 3 | . | 72 |
| 4.00-4.49 | . | . | . | . | . | 4 | 18 | 11 | 1 | . | 34 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 5 | 4 | 1 | 12 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 4 | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 4 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 3 | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 51 | 981 | 990 | 606 | 371 | 324 | 93 | 48 | 18 | 4 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.8 NO. OF CASES= 3279.

STATION S63 46.95N 84.72W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 153 | 1046 | 161 | 19 | 1 | . | . | . | . | . | 1380 |
| 0.50-0.99 | . | 2329 | 1880 | 360 | 78 | 10 | . | . | . | . | 4657 |
| 1.00-1.49 | . | . | 1247 | 410 | 141 | 54 | 4 | . | . | . | 1856 |
| 1.50-1.99 | . | . | 314 | 463 | 123 | 60 | 10 | 2 | . | . | 972 |
| 2.00-2.49 | . | . | 3 | 243 | 93 | 54 | 13 | 5 | . | . | 411 |
| 2.50-2.99 | . | . | . | 21 | 185 | 34 | 7 | 6 | . | . | 253 |
| 3.00-3.49 | . | . | . | . | 29 | 137 | 5 | 3 | . | . | 174 |
| 3.50-3.99 | . | . | . | . | . | 85 | 25 | 3 | . | . | 113 |
| 4.00-4.49 | . | . | . | . | . | 14 | 40 | 11 | 1 | . | 66 |
| 4.50-4.99 | . | . | . | . | . | . | 17 | 19 | 3 | . | 39 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 13 | 5 | . | 20 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | 6 | . | 11 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 4 | 1 | 5 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 153 | 3375 | 3605 | 1516 | 650 | 448 | 123 | 67 | 21 | 3 | |

MEAN HS(M)= 1.1 LARGEST HS(M)= 8.7 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S63 (46.95N 84.72W)

| | MONTH | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| YEAR | | | | | | | | | | | | | MEAN |
| 1956 | 0.9 | 1.3 | 1.1 | 1.3 | 1.0 | 0.8 | 0.7 | 0.7 | 0.9 | 1.1 | 1.3 | 1.3 | 1.0 |
| 1957 | 1.6 | 1.4 | 1.3 | 1.1 | 1.0 | 1.0 | 0.9 | 0.8 | 1.1 | 1.0 | 1.8 | 1.7 | 1.2 |
| 1958 | 1.2 | 1.8 | 1.1 | 1.2 | 1.2 | 1.0 | 0.8 | 0.9 | 1.1 | 1.2 | 1.9 | 1.3 | 1.2 |
| 1959 | 1.6 | 1.5 | 1.3 | 1.3 | 1.2 | 0.9 | 0.8 | 0.7 | 1.1 | 1.2 | 1.7 | 1.5 | 1.2 |
| 1960 | 1.5 | 1.4 | 1.0 | 1.0 | 0.8 | 0.8 | 0.7 | 0.7 | 0.9 | 1.2 | 1.7 | 1.5 | 1.1 |
| 1961 | 1.1 | 1.1 | 1.4 | 1.0 | 1.1 | 0.8 | 0.7 | 0.8 | 1.1 | 1.1 | 1.4 | 1.5 | 1.1 |
| 1962 | 1.7 | 1.1 | 0.9 | 1.0 | 0.8 | 0.7 | 0.7 | 0.7 | 1.1 | 0.9 | 1.0 | 1.4 | 1.0 |
| 1963 | 1.3 | 1.4 | 1.2 | 1.2 | 0.9 | 0.7 | 0.8 | 0.7 | 0.7 | 0.9 | 1.4 | 1.3 | 1.1 |
| 1964 | 1.8 | 1.4 | 1.5 | 1.1 | 1.2 | 0.9 | 0.8 | 1.0 | 1.2 | 1.2 | 1.5 | 1.3 | 1.3 |
| 1965 | 1.8 | 1.8 | 1.1 | 0.9 | 1.0 | 0.9 | 0.9 | 0.8 | 1.0 | 1.5 | 1.7 | 1.4 | 1.2 |
| 1966 | 1.7 | 1.5 | 1.6 | 1.3 | 1.4 | 0.9 | 1.0 | 0.9 | 1.4 | 1.7 | 1.4 | 1.4 | 1.4 |
| 1967 | 1.7 | 1.7 | 1.4 | 1.2 | 1.2 | 0.7 | 0.8 | 0.8 | 0.9 | 1.2 | 1.4 | 1.6 | 1.2 |
| 1968 | 1.3 | 2.3 | 1.5 | 1.3 | 1.0 | 0.8 | 1.0 | 0.9 | 0.9 | 1.2 | 1.5 | 1.4 | 1.2 |
| 1969 | 1.5 | 1.3 | 1.5 | 0.9 | 0.9 | 0.9 | 0.7 | 1.0 | 1.1 | 1.2 | 1.3 | 1.3 | 1.1 |
| 1970 | 1.2 | 1.5 | 1.4 | 1.1 | 0.9 | 0.8 | 0.7 | 0.8 | 1.2 | 1.2 | 1.4 | 1.3 | 1.1 |
| 1971 | 1.7 | 1.4 | 1.5 | 1.1 | 0.9 | 0.7 | 0.8 | 0.8 | 0.9 | 1.0 | 1.3 | 1.5 | 1.1 |
| 1972 | 2.0 | 1.4 | 1.3 | 0.9 | 0.7 | 0.8 | 0.8 | 0.7 | 1.2 | 1.5 | 1.1 | 1.3 | 1.1 |
| 1973 | 1.6 | 1.2 | 1.2 | 1.1 | 1.0 | 0.7 | 0.7 | 0.7 | 1.1 | 1.1 | 1.8 | 1.1 | 1.1 |
| 1974 | 1.3 | 1.2 | 1.5 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 1.0 | 1.2 | 1.1 | 1.1 | 1.0 |
| 1975 | 1.4 | 1.2 | 1.2 | 1.0 | 0.7 | 0.7 | 0.8 | 0.8 | 0.9 | 1.2 | 1.2 | 1.2 | 1.0 |
| 1976 | 1.5 | 1.5 | 1.6 | 1.1 | 1.1 | 0.7 | 0.9 | 0.8 | 1.1 | 1.1 | 1.7 | 1.4 | 1.2 |
| 1977 | 1.4 | 1.6 | 1.2 | 0.8 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 1.0 | 1.1 | 1.2 | 1.0 |
| 1978 | 1.3 | 0.9 | 1.1 | 0.9 | 0.6 | 0.7 | 0.7 | 0.8 | 0.8 | 1.2 | 1.3 | 1.5 | 1.0 |
| 1979 | 1.3 | 0.9 | 1.1 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 0.9 | 0.8 | 1.3 | 1.6 | 0.9 |
| 1980 | 1.4 | 0.9 | 1.4 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 1.0 | 1.2 | 1.1 | 1.3 | 1.0 |
| 1981 | 1.0 | 1.1 | 1.2 | 1.0 | 0.7 | 0.7 | 0.6 | 0.5 | 0.9 | 1.0 | 1.1 | 1.0 | 0.9 |
| 1982 | 1.5 | 1.1 | 1.4 | 1.2 | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 | 1.0 | 1.2 | 1.3 | 1.0 |
| 1983 | 1.3 | 1.0 | 1.0 | 0.8 | 0.8 | 0.6 | 0.6 | 0.6 | 0.9 | 1.0 | 1.2 | 1.3 | 0.9 |
| 1984 | 1.1 | 1.0 | 1.1 | 0.8 | 0.9 | 0.7 | 0.6 | 0.5 | 0.8 | 0.9 | 1.4 | 1.6 | 1.0 |
| 1985 | 1.2 | 1.2 | 1.2 | 0.8 | 0.6 | 0.8 | 0.5 | 0.6 | 0.7 | 1.1 | 1.1 | 1.3 | 0.9 |
| 1986 | 1.2 | 0.9 | 1.2 | 1.0 | 0.7 | 0.7 | 0.6 | 0.7 | 0.9 | 0.8 | 1.4 | 1.3 | 1.0 |
| 1987 | 1.3 | 1.1 | 1.1 | 1.0 | 0.8 | 0.7 | 0.7 | 0.8 | 0.8 | 1.1 | 1.3 | 1.2 | 1.0 |
| MEAN | 1.4 | 1.3 | 1.3 | 1.0 | 0.9 | 0.8 | 0.7 | 0.8 | 1.0 | 1.1 | 1.4 | 1.4 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S63 (46.95N 84.72W)

| | MONTH | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| YEAR | | | | | | | | | | | | |
| 1956 | 2.7 | 5.0 | 4.2 | 4.6 | 3.4 | 3.0 | 2.4 | 2.6 | 4.2 | 5.5 | 4.9 | 5.1 |
| 1957 | 4.8 | 5.2 | 4.9 | 3.6 | 3.2 | 3.7 | 4.5 | 3.1 | 5.1 | 4.1 | 5.3 | 5.4 |
| 1958 | 5.2 | 5.6 | 4.5 | 5.3 | 3.6 | 3.4 | 2.8 | 2.8 | 3.7 | 4.3 | 6.8 | 5.0 |
| 1959 | 4.6 | 5.2 | 5.8 | 4.1 | 4.4 | 3.7 | 2.6 | 2.5 | 4.3 | 4.9 | 6.6 | 8.7 |
| 1960 | 5.8 | 4.6 | 3.4 | 3.7 | 3.1 | 2.2 | 3.0 | 2.5 | 4.4 | 5.5 | 5.6 | 4.2 |
| 1961 | 4.6 | 5.0 | 5.7 | 3.9 | 3.5 | 3.3 | 3.2 | 3.4 | 4.3 | 4.6 | 5.6 | 7.2 |
| 1962 | 5.7 | 4.3 | 4.9 | 3.9 | 2.9 | 2.3 | 2.8 | 2.0 | 4.1 | 5.4 | 5.0 | 5.7 |
| 1963 | 5.3 | 6.1 | 4.3 | 6.1 | 3.5 | 2.4 | 3.1 | 2.5 | 2.2 | 4.1 | 7.1 | 5.1 |
| 1964 | 6.5 | 5.5 | 6.4 | 4.1 | 4.7 | 3.3 | 3.2 | 4.0 | 5.0 | 3.8 | 7.0 | 5.2 |
| 1965 | 6.3 | 6.2 | 4.4 | 3.3 | 3.3 | 3.3 | 3.0 | 3.1 | 3.9 | 6.4 | 7.3 | 4.7 |
| 1966 | 7.8 | 5.8 | 5.4 | 4.4 | 5.2 | 2.8 | 3.1 | 4.2 | 6.0 | 7.0 | 4.7 | 5.9 |
| 1967 | 6.5 | 6.2 | 5.9 | 4.1 | 4.1 | 2.1 | 3.2 | 3.0 | 4.3 | 4.5 | 5.6 | 5.4 |
| 1968 | 5.7 | 8.1 | 4.8 | 5.5 | 3.1 | 2.9 | 3.7 | 3.8 | 3.1 | 4.3 | 5.8 | 5.1 |
| 1969 | 4.1 | 6.2 | 4.5 | 3.5 | 2.9 | 2.4 | 2.9 | 3.7 | 3.9 | 3.8 | 4.9 | 6.3 |
| 1970 | 5.2 | 5.4 | 4.7 | 5.1 | 3.0 | 2.8 | 2.1 | 3.1 | 4.3 | 4.6 | 7.1 | 6.3 |
| 1971 | 5.5 | 7.2 | 6.5 | 4.2 | 2.9 | 1.9 | 3.1 | 3.1 | 4.2 | 4.5 | 4.9 | 6.2 |
| 1972 | 8.2 | 6.3 | 4.4 | 3.7 | 3.1 | 2.6 | 2.5 | 3.0 | 4.6 | 8.0 | 4.8 | 6.8 |
| 1973 | 5.0 | 3.3 | 4.4 | 3.0 | 3.9 | 2.2 | 2.6 | 3.6 | 5.3 | 5.9 | 5.7 | 3.9 |
| 1974 | 6.6 | 6.7 | 4.6 | 3.2 | 3.8 | 2.7 | 2.3 | 2.6 | 3.9 | 4.5 | 4.7 | 3.0 |
| 1975 | 5.0 | 4.8 | 3.9 | 3.7 | 2.5 | 3.1 | 3.5 | 3.2 | 3.6 | 3.8 | 7.5 | 6.0 |
| 1976 | 6.0 | 5.9 | 6.1 | 3.5 | 5.0 | 2.4 | 3.5 | 3.9 | 4.5 | 5.5 | 6.2 | 7.2 |
| 1977 | 5.5 | 6.4 | 5.1 | 2.9 | 2.6 | 2.5 | 3.4 | 2.9 | 3.9 | 4.5 | 4.9 | 3.8 |
| 1978 | 5.8 | 3.6 | 5.4 | 3.7 | 2.3 | 2.6 | 2.3 | 3.2 | 2.5 | 3.6 | 4.9 | 4.6 |
| 1979 | 4.5 | 3.7 | 3.9 | 3.9 | 2.3 | 2.2 | 1.9 | 3.1 | 2.6 | 2.2 | 4.2 | 5.0 |
| 1980 | 6.8 | 3.4 | 6.6 | 2.9 | 3.1 | 2.0 | 1.6 | 1.7 | 4.3 | 4.8 | 5.2 | 4.6 |
| 1981 | 3.2 | 3.8 | 3.5 | 3.6 | 1.9 | 2.4 | 1.7 | 1.6 | 5.2 | 5.5 | 5.9 | 3.9 |
| 1982 | 5.7 | 5.0 | 7.8 | 6.6 | 1.7 | 2.5 | 2.1 | 2.4 | 4.2 | 4.5 | 4.3 | 4.3 |
| 1983 | 3.9 | 2.9 | 3.0 | 2.4 | 2.4 | 2.3 | 2.0 | 2.1 | 3.4 | 3.6 | 4.4 | 4.3 |
| 1984 | 5.4 | 2.7 | 4.9 | 2.9 | 3.6 | 2.2 | 2.2 | 1.7 | 2.9 | 4.3 | 5.4 | 6.5 |
| 1985 | 5.2 | 3.6 | 4.0 | 4.1 | 1.9 | 3.7 | 2.0 | 1.8 | 3.5 | 3.8 | 3.8 | 4.8 |
| 1986 | 4.8 | 3.6 | 5.0 | 3.5 | 3.7 | 3.4 | 1.7 | 2.8 | 3.9 | 4.0 | 4.3 | 4.6 |
| 1987 | 5.9 | 5.0 | 4.8 | 5.4 | 3.1 | 3.2 | 3.1 | 4.4 | 3.5 | 3.8 | 6.3 | 4.2 |

32 YR. STATISTICS FOR WIS STATION S63

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.1 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.4 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.5 |
| LARGEST WAVE HS | (METERS) | 8.7 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 283.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 59120918 |

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 39 | 263 | 28 | 2 | . | . | . | . | . | . | 332 |
| 0.50-0.99 | . | 309 | 802 | 50 | 5 | 1 | . | . | . | . | 1167 |
| 1.00-1.49 | . | . | 883 | 95 | 79 | 18 | . | . | . | . | 1075 |
| 1.50-1.99 | . | . | 188 | 272 | 72 | 57 | . | . | . | . | 589 |
| 2.00-2.49 | . | . | . | 247 | 26 | 49 | 7 | . | . | . | 329 |
| 2.50-2.99 | . | . | . | 68 | 33 | 47 | 7 | 3 | . | . | 158 |
| 3.00-3.49 | . | . | . | 2 | 17 | 14 | 5 | 5 | . | . | 43 |
| 3.50-3.99 | . | . | . | . | 1 | . | 1 | 2 | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 39 | 572 | 1901 | 736 | 233 | 186 | 20 | 12 | 0 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.6 NO. OF CASES= 3469.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 39 | 258 | 37 | . | . | . | . | . | . | . | 334 |
| 0.50-0.99 | . | 302 | 799 | 63 | 8 | . | . | . | . | . | 1172 |
| 1.00-1.49 | . | . | 750 | 55 | 41 | 7 | . | . | . | . | 853 |
| 1.50-1.99 | . | . | 101 | 255 | 11 | 22 | 1 | . | . | . | 390 |
| 2.00-2.49 | . | . | . | 187 | 7 | 11 | 1 | . | . | . | 206 |
| 2.50-2.99 | . | . | . | 25 | 26 | 3 | 1 | . | . | . | 55 |
| 3.00-3.49 | . | . | . | . | 11 | 2 | 1 | . | . | . | 14 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 39 | 560 | 1687 | 585 | 105 | 45 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 2841.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 84 | 363 | 40 | 1 | . | . | . | . | . | . | 488 |
| 0.50-0.99 | . | 407 | 884 | 50 | 5 | . | . | . | . | . | 1346 |
| 1.00-1.49 | . | . | 729 | 20 | 13 | 9 | . | . | . | . | 771 |
| 1.50-1.99 | . | . | 74 | 203 | 4 | 10 | 1 | . | . | . | 292 |
| 2.00-2.49 | . | . | . | 127 | 2 | 2 | . | . | . | . | 131 |
| 2.50-2.99 | . | . | . | 8 | 5 | . | . | . | . | . | 13 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 84 | 770 | 1727 | 409 | 31 | 21 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 2854.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 108 | 710 | 74 | 1 | . | . | . | . | . | . | 893 |
| 0.50-0.99 | . | 853 | 729 | 50 | 1 | . | . | . | . | . | 1633 |
| 1.00-1.49 | . | . | 427 | 19 | 8 | 4 | . | . | . | . | 458 |
| 1.50-1.99 | . | . | 69 | 55 | 2 | 2 | . | . | . | . | 128 |
| 2.00-2.49 | . | . | . | 27 | . | . | . | . | . | . | 27 |
| 2.50-2.99 | . | . | . | 1 | 2 | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 108 | 1563 | 1299 | 153 | 13 | 6 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 2944.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 176 | 1373 | 118 | 3 | 1 | . | . | . | . | . | 1671 |
| 0.50-0.99 | . | 1553 | 423 | 47 | 7 | 1 | . | . | . | . | 2031 |
| 1.00-1.49 | . | . | 458 | 28 | 5 | . | . | . | . | . | 491 |
| 1.50-1.99 | . | . | 115 | 17 | 1 | 1 | . | . | . | . | 134 |
| 2.00-2.49 | . | . | 4 | 1 | . | . | . | . | . | . | 5 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 176 | 2926 | 1118 | 97 | 14 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 4058.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 101 | 782 | 38 | 2 | . | . | . | . | . | . | 923 |
| 0.50-0.99 | . | 1243 | 558 | 19 | 4 | 1 | . | . | . | . | 1825 |
| 1.00-1.49 | . | . | 576 | 16 | 2 | 2 | . | . | . | . | 596 |
| 1.50-1.99 | . | . | 140 | 196 | . | . | . | . | . | . | 336 |
| 2.00-2.49 | . | . | 2 | 197 | 1 | . | . | . | . | . | 200 |
| 2.50-2.99 | . | . | . | 14 | 25 | . | . | . | . | . | 39 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 101 | 2025 | 1314 | 444 | 32 | 4 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 3673.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 65 | 464 | 65 | 1 | . | . | . | . | . | . | 595 |
| 0.50-0.99 | . | 920 | 1179 | 29 | 1 | . | . | . | . | . | 2129 |
| 1.00-1.49 | . | . | 1124 | 87 | . | 1 | . | . | . | . | 1212 |
| 1.50-1.99 | . | . | 91 | 521 | 7 | . | . | . | . | . | 619 |
| 2.00-2.49 | . | . | . | 401 | . | . | 1 | . | . | . | 402 |
| 2.50-2.99 | . | . | . | 26 | 39 | . | . | . | . | . | 65 |
| 3.00-3.49 | . | . | . | . | 6 | . | . | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 65 | 1384 | 2459 | 1065 | 53 | 2 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 4710.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 87 | 662 | 243 | 10 | . | . | . | . | . | . | 1002 |
| 0.50-0.99 | . | 700 | 2659 | 83 | . | . | . | . | . | . | 3442 |
| 1.00-1.49 | . | . | 1664 | 206 | 3 | 1 | . | . | . | . | 1874 |
| 1.50-1.99 | . | . | 129 | 494 | 10 | . | . | . | . | . | 633 |
| 2.00-2.49 | . | . | . | 217 | 10 | . | . | . | . | . | 227 |
| 2.50-2.99 | . | . | . | 8 | 28 | . | . | . | . | . | 36 |
| 3.00-3.49 | . | . | . | . | 8 | 1 | . | . | . | . | 9 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 87 | 1362 | 4695 | 1018 | 59 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 6762.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 102 | 728 | 249 | 4 | . | . | . | . | . | . | 1083 |
| 0.50-0.99 | . | 581 | 2081 | 79 | 1 | . | . | . | . | . | 2742 |
| 1.00-1.49 | . | . | 792 | 236 | 1 | . | . | . | . | . | 1029 |
| 1.50-1.99 | . | . | 71 | 367 | 17 | . | . | . | . | . | 455 |
| 2.00-2.49 | . | . | . | 155 | 48 | . | . | . | . | . | 203 |
| 2.50-2.99 | . | . | . | 4 | 115 | 1 | . | . | . | . | 120 |
| 3.00-3.49 | . | . | . | . | 10 | 25 | . | . | . | . | 35 |
| 3.50-3.99 | . | . | . | . | . | 7 | . | . | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 102 | 1309 | 3193 | 845 | 192 | 33 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 5313.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 100 | 526 | 159 | 5 | . | . | . | . | . | . | 790 |
| 0.50-0.99 | . | 517 | 1454 | 47 | 3 | . | . | . | . | . | 2021 |
| 1.00-1.49 | . | . | 658 | 147 | 21 | 1 | . | . | . | . | 827 |
| 1.50-1.99 | . | . | 69 | 321 | 10 | 6 | . | . | . | . | 406 |
| 2.00-2.49 | . | . | . | 115 | 29 | . | . | . | . | . | 144 |
| 2.50-2.99 | . | . | . | 3 | 65 | . | . | . | . | . | 68 |
| 3.00-3.49 | . | . | . | . | 10 | 12 | . | . | . | . | 22 |
| 3.50-3.99 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 100 | 1043 | 2340 | 638 | 138 | 26 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 4017.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 90 | 558 | 290 | 49 | . | . | . | . | . | . | 987 |
| 0.50-0.99 | . | 544 | 1646 | 375 | 73 | 1 | . | . | . | . | 2639 |
| 1.00-1.49 | . | . | 730 | 208 | 143 | 31 | . | . | . | . | 1112 |
| 1.50-1.99 | . | . | 94 | 391 | 24 | 24 | . | . | . | . | 533 |
| 2.00-2.49 | . | . | . | 226 | 34 | 7 | . | . | . | . | 267 |
| 2.50-2.99 | . | . | . | 8 | 126 | . | . | . | . | . | 134 |
| 3.00-3.49 | . | . | . | . | 29 | 6 | . | . | . | . | 35 |
| 3.50-3.99 | . | . | . | . | . | 11 | . | . | . | . | 11 |
| 4.00-4.49 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 90 | 1102 | 2760 | 1257 | 429 | 83 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.5 NO. OF CASES= 5362.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 89 | 577 | 276 | 6 | . | 1 | . | . | . | . | 949 |
| 0.50-0.99 | . | 516 | 1914 | 466 | 27 | . | . | 1 | . | . | 2924 |
| 1.00-1.49 | . | 1 | 688 | 620 | 161 | 6 | . | . | . | . | 1476 |
| 1.50-1.99 | . | . | 56 | 503 | 203 | 39 | . | . | . | . | 801 |
| 2.00-2.49 | . | . | . | 250 | 132 | 67 | . | . | . | . | 449 |
| 2.50-2.99 | . | . | . | 18 | 258 | 44 | 6 | . | . | . | 326 |
| 3.00-3.49 | . | . | . | . | 41 | 126 | 11 | 1 | . | . | 179 |
| 3.50-3.99 | . | . | . | . | 1 | 49 | 19 | 5 | . | . | 74 |
| 4.00-4.49 | . | . | . | . | . | 8 | 21 | 10 | 1 | . | 40 |
| 4.50-4.99 | . | . | . | . | . | 1 | 1 | 8 | 1 | . | 11 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 2 | 1 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 89 | 1094 | 2934 | 1863 | 823 | 341 | 59 | 27 | 3 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.8 NO. OF CASES= 6780.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 152 | 838 | 283 | | 1 | | | | | | 1274 |
| 0.50-0.99 | . | 658 | 2950 | 468 | 13 | 9 | 1 | . | . | . | 4099 |
| 1.00-1.49 | . | . | 712 | 990 | 128 | 6 | 2 | 2 | . | . | 1840 |
| 1.50-1.99 | . | . | 90 | 530 | 320 | 41 | 2 | . | . | . | 983 |
| 2.00-2.49 | . | . | . | 211 | 175 | 158 | 3 | . | 1 | . | 548 |
| 2.50-2.99 | . | . | . | 6 | 245 | 109 | 39 | 1 | . | . | 400 |
| 3.00-3.49 | . | . | . | . | 47 | 209 | 19 | 23 | . | . | 298 |
| 3.50-3.99 | . | . | . | . | 1 | 104 | 55 | 11 | 1 | . | 172 |
| 4.00-4.49 | . | . | . | . | . | 11 | 60 | 19 | 6 | . | 96 |
| 4.50-4.99 | . | . | . | . | . | 1 | 20 | 42 | 8 | . | 71 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 35 | 7 | . | 45 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 11 | . | 15 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 8 | 1 | 9 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 152 | 1496 | 4035 | 2205 | 930 | 648 | 204 | 137 | 42 | 2 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.9 NO. OF CASES= 9234.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 157 | 1124 | 443 | 12 | 2 | | . | . | . | . | 1738 |
| 0.50-0.99 | . | 957 | 4381 | 935 | 62 | 9 | . | . | . | . | 6344 |
| 1.00-1.49 | . | . | 1264 | 1488 | 405 | 44 | 2 | . | . | . | 3203 |
| 1.50-1.99 | . | . | 120 | 720 | 388 | 137 | 5 | 2 | . | . | 1372 |
| 2.00-2.49 | . | . | . | 434 | 196 | 173 | 19 | 2 | . | . | 824 |
| 2.50-2.99 | . | . | . | 31 | 408 | 85 | 28 | 5 | . | . | 557 |
| 3.00-3.49 | . | . | . | . | 86 | 266 | 22 | 13 | 1 | . | 388 |
| 3.50-3.99 | . | . | . | . | 2 | 208 | 38 | 7 | 3 | . | 258 |
| 4.00-4.49 | . | . | . | . | . | 54 | 102 | 18 | 4 | . | 178 |
| 4.50-4.99 | . | . | . | . | . | 3 | 51 | 52 | 4 | . | 110 |
| 5.00-5.49 | . | . | . | . | . | . | 5 | 53 | 7 | 1 | 66 |
| 5.50-5.99 | . | . | . | . | . | . | 1 | 17 | 18 | . | 36 |
| 6.00-6.49 | . | . | . | . | . | . | . | 4 | 16 | . | 20 |
| 6.50-6.99 | . | . | . | . | . | . | . | 1 | 8 | 1 | 10 |
| 7.00+ | . | . | . | . | . | . | . | . | 4 | 5 | 9 |
| TOTAL | 157 | 2081 | 6208 | 3620 | 1549 | 979 | 273 | 174 | 65 | 7 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 8.0 MEAN TP(SEC)= 5.0 NO. OF CASES= 14154.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 78 | 577 | 256 | 11 | | . | . | . | . | . | 922 |
| 0.50-0.99 | . | 647 | 3193 | 684 | 34 | . | . | . | . | . | 4558 |
| 1.00-1.49 | . | . | 1546 | 1101 | 313 | 25 | . | . | . | . | 2985 |
| 1.50-1.99 | . | . | 145 | 1346 | 273 | 121 | 5 | . | . | . | 1890 |
| 2.00-2.49 | . | . | . | 671 | 324 | 144 | 17 | 3 | . | . | 1159 |
| 2.50-2.99 | . | . | . | 25 | 727 | 56 | 36 | 6 | . | . | 850 |
| 3.00-3.49 | . | . | . | . | 86 | 433 | 19 | 12 | . | . | 550 |
| 3.50-3.99 | . | . | . | . | 1 | 280 | 37 | 10 | . | . | 328 |
| 4.00-4.49 | . | . | . | . | . | 49 | 128 | 20 | 4 | . | 201 |
| 4.50-4.99 | . | . | . | . | . | . | 42 | 47 | 4 | . | 93 |
| 5.00-5.49 | . | . | . | . | . | . | 7 | 38 | 4 | . | 49 |
| 5.50-5.99 | . | . | . | . | . | . | 1 | 11 | 13 | . | 25 |
| 6.00-6.49 | . | . | . | . | . | . | . | 5 | 9 | 1 | 15 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 78 | 1224 | 5140 | 3838 | 1758 | 1108 | 292 | 152 | 38 | 3 | |

MEAN HS(M) = 1.5 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 5.2 NO. OF CASES= 12766.

STATION S64 47.08N 84.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

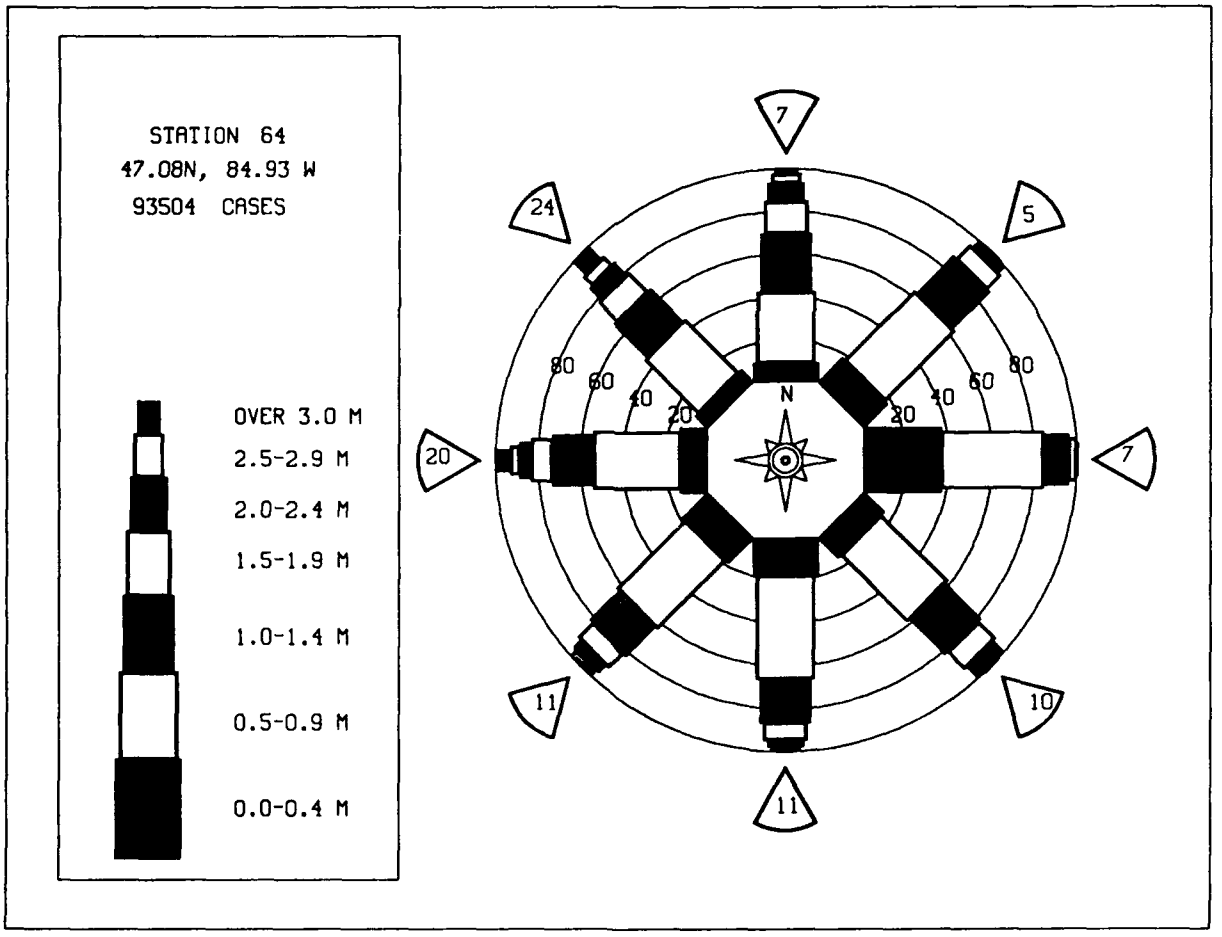
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 50 | 271 | 17 | 2 | | . | . | . | . | . | 340 |
| 0.50-0.99 | . | 348 | 1018 | 64 | 8 | . | . | . | . | . | 1438 |
| 1.00-1.49 | . | . | 812 | 267 | 43 | 14 | . | . | . | . | 1136 |
| 1.50-1.99 | . | . | 140 | 469 | 108 | 37 | . | . | . | . | 754 |
| 2.00-2.49 | . | . | 2 | 281 | 114 | 62 | 6 | . | . | . | 465 |
| 2.50-2.99 | . | . | . | 57 | 186 | 60 | 19 | 6 | . | . | 328 |
| 3.00-3.49 | . | . | . | 2 | 32 | 172 | 11 | 9 | . | . | 226 |
| 3.50-3.99 | . | . | . | . | 4 | 72 | 17 | 3 | . | . | 96 |
| 4.00-4.49 | . | . | . | . | . | 11 | 24 | 8 | 3 | . | 46 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 13 | 2 | . | 22 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | 1 | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 5 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 50 | 619 | 1989 | 1142 | 495 | 428 | 84 | 45 | 14 | 0 | |

MEAN HS(M) = 1.5 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 5.0 NO. OF CASES= 4567.

STATION S64 47.08N 84.93W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 152 | 1007 | 262 | 11 | . | . | . | . | . | . | 1432 |
| 0.50-0.99 | . | 1106 | 2667 | 351 | 25 | 2 | . | . | . | . | 4151 |
| 1.00-1.49 | . | . | 1382 | 559 | 137 | 17 | . | . | . | . | 2095 |
| 1.50-1.99 | . | . | 170 | 666 | 145 | 50 | 1 | . | . | . | 1032 |
| 2.00-2.49 | . | . | . | 375 | 110 | 67 | 5 | . | . | . | 557 |
| 2.50-2.99 | . | . | . | 31 | 229 | 40 | 13 | 2 | . | . | 315 |
| 3.00-3.49 | . | . | . | . | 39 | 127 | 9 | 6 | . | . | 181 |
| 3.50-3.99 | . | . | . | . | 1 | 74 | 16 | 4 | . | . | 95 |
| 4.00-4.49 | . | . | . | . | . | 14 | 33 | 7 | 1 | . | 55 |
| 4.50-4.99 | . | . | . | . | . | . | 12 | 16 | 2 | . | 30 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 13 | 2 | . | 16 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 4 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 152 | 2113 | 4481 | 1993 | 686 | 391 | 90 | 51 | 13 | 0 | |

MEAN HS(M)= 1.1 LARGEST HS(M)= 8.0 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S64 (47.08N 84.93W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.9 | 1.3 | 1.2 | 1.2 | 1.0 | 0.8 | 0.7 | 0.7 | 0.9 | 1.2 | 1.4 | 1.3 | 1.0 |
| 1957 | 1.6 | 1.4 | 1.3 | 1.1 | 1.0 | 1.0 | 0.9 | 0.8 | 1.1 | 1.0 | 1.7 | 1.7 | 1.2 |
| 1958 | 1.2 | 1.8 | 1.0 | 1.2 | 1.2 | 1.0 | 0.7 | 0.9 | 1.1 | 1.2 | 1.9 | 1.4 | 1.2 |
| 1959 | 1.6 | 1.5 | 1.3 | 1.3 | 1.2 | 0.9 | 0.8 | 0.7 | 1.1 | 1.3 | 1.8 | 1.5 | 1.3 |
| 1960 | 1.5 | 1.4 | 1.0 | 1.0 | 0.8 | 0.7 | 0.7 | 0.7 | 0.9 | 1.2 | 1.7 | 1.5 | 1.1 |
| 1961 | 1.1 | 1.2 | 1.5 | 1.0 | 1.0 | 0.8 | 0.6 | 0.7 | 1.1 | 1.2 | 1.5 | 1.5 | 1.1 |
| 1962 | 1.7 | 1.1 | 0.8 | 1.0 | 0.8 | 0.6 | 0.7 | 0.6 | 1.1 | 1.0 | 1.1 | 1.5 | 1.0 |
| 1963 | 1.4 | 1.4 | 1.2 | 1.2 | 0.9 | 0.7 | 0.8 | 0.7 | 0.8 | 0.9 | 1.5 | 1.4 | 1.1 |
| 1964 | 1.9 | 1.5 | 1.6 | 1.3 | 1.2 | 0.9 | 0.7 | 1.0 | 1.2 | 1.3 | 1.5 | 1.4 | 1.3 |
| 1965 | 1.9 | 1.9 | 1.2 | 1.0 | 1.0 | 0.9 | 0.9 | 0.8 | 1.0 | 1.6 | 1.8 | 1.5 | 1.3 |
| 1966 | 1.8 | 1.7 | 1.8 | 1.3 | 1.4 | 0.9 | 1.0 | 0.9 | 1.3 | 1.8 | 1.6 | 1.6 | 1.4 |
| 1967 | 1.8 | 1.8 | 1.5 | 1.3 | 1.2 | 0.8 | 0.8 | 0.8 | 1.0 | 1.4 | 1.6 | 1.7 | 1.3 |
| 1968 | 1.5 | 2.4 | 1.6 | 1.3 | 1.1 | 0.8 | 1.0 | 0.9 | 1.0 | 1.3 | 1.6 | 1.6 | 1.3 |
| 1969 | 1.7 | 1.4 | 1.5 | 1.0 | 0.9 | 0.9 | 0.7 | 0.9 | 1.1 | 1.3 | 1.4 | 1.5 | 1.2 |
| 1970 | 1.4 | 1.6 | 1.4 | 1.1 | 0.9 | 0.7 | 0.7 | 0.8 | 1.2 | 1.3 | 1.5 | 1.4 | 1.2 |
| 1971 | 1.8 | 1.6 | 1.6 | 1.2 | 0.9 | 0.7 | 0.8 | 0.8 | 1.0 | 1.1 | 1.4 | 1.6 | 1.2 |
| 1972 | 2.1 | 1.5 | 1.4 | 1.0 | 0.7 | 0.8 | 0.8 | 0.7 | 1.2 | 1.6 | 1.2 | 1.4 | 1.2 |
| 1973 | 1.6 | 1.3 | 1.3 | 1.2 | 1.0 | 0.7 | 0.7 | 0.7 | 1.1 | 1.2 | 1.8 | 1.2 | 1.2 |
| 1974 | 1.4 | 1.2 | 1.6 | 1.0 | 0.9 | 0.8 | 0.7 | 0.7 | 1.0 | 1.3 | 1.2 | 1.2 | 1.1 |
| 1975 | 1.5 | 1.2 | 1.3 | 1.0 | 0.6 | 0.8 | 0.8 | 0.8 | 1.0 | 1.3 | 1.4 | 1.3 | 1.1 |
| 1976 | 1.8 | 1.7 | 1.8 | 1.1 | 1.1 | 0.8 | 0.8 | 0.8 | 1.2 | 1.2 | 1.8 | 1.6 | 1.3 |
| 1977 | 1.3 | 1.4 | 1.1 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 1.0 | 1.1 | 1.2 | 0.9 |
| 1978 | 1.3 | 0.9 | 1.0 | 0.9 | 0.6 | 0.6 | 0.6 | 0.9 | 0.8 | 1.4 | 1.5 | 1.6 | 1.0 |
| 1979 | 1.2 | 0.9 | 1.1 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.9 | 0.8 | 1.5 | 1.7 | 0.9 |
| 1980 | 1.3 | 0.9 | 1.4 | 0.7 | 0.6 | 0.6 | 0.5 | 0.6 | 1.0 | 1.2 | 1.1 | 1.3 | 0.9 |
| 1981 | 0.9 | 1.1 | 1.0 | 0.9 | 0.6 | 0.6 | 0.5 | 0.4 | 0.9 | 1.0 | 1.2 | 1.1 | 0.9 |
| 1982 | 1.6 | 1.2 | 1.5 | 1.1 | 0.5 | 0.6 | 0.6 | 0.6 | 0.9 | 1.1 | 1.2 | 1.3 | 1.0 |
| 1983 | 1.3 | 1.0 | 1.2 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.9 | 1.0 | 1.4 | 1.4 | 0.9 |
| 1984 | 1.2 | 1.1 | 1.2 | 0.9 | 0.8 | 0.6 | 0.5 | 0.5 | 0.8 | 1.0 | 1.5 | 1.5 | 1.0 |
| 1985 | 1.3 | 1.2 | 1.2 | 0.9 | 0.6 | 0.7 | 0.5 | 0.6 | 0.8 | 1.1 | 1.1 | 1.3 | 0.9 |
| 1986 | 1.4 | 0.8 | 1.3 | 1.0 | 0.7 | 0.7 | 0.5 | 0.6 | 0.9 | 0.9 | 1.4 | 1.4 | 1.0 |
| 1987 | 1.5 | 1.2 | 1.2 | 1.1 | 0.8 | 0.7 | 0.7 | 0.9 | 0.8 | 1.2 | 1.5 | 1.4 | 1.1 |
| MEAN | 1.5 | 1.4 | 1.3 | 1.0 | 0.9 | 0.7 | 0.7 | 0.7 | 1.0 | 1.2 | 1.5 | 1.4 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S64 (47.08N 84.93W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.4 | 4.9 | 3.7 | 4.3 | 3.0 | 2.6 | 2.3 | 2.5 | 3.8 | 5.4 | 4.2 | 4.2 |
| 1957 | 4.7 | 4.8 | 4.5 | 3.3 | 3.0 | 3.2 | 4.2 | 3.0 | 4.4 | 3.7 | 4.7 | 5.5 |
| 1958 | 4.6 | 4.9 | 3.2 | 5.2 | 3.3 | 2.9 | 2.3 | 2.8 | 3.4 | 3.6 | 6.3 | 4.7 |
| 1959 | 4.0 | 5.2 | 4.8 | 4.0 | 4.1 | 3.4 | 2.3 | 2.0 | 3.7 | 4.6 | 6.3 | 8.0 |
| 1960 | 5.2 | 4.5 | 3.6 | 3.8 | 2.7 | 2.0 | 2.9 | 2.5 | 3.9 | 5.2 | 5.4 | 4.2 |
| 1961 | 4.9 | 4.7 | 5.4 | 3.5 | 3.0 | 2.8 | 2.8 | 3.1 | 4.0 | 4.4 | 5.1 | 6.9 |
| 1962 | 5.4 | 4.1 | 4.3 | 3.7 | 2.8 | 1.9 | 2.6 | 1.8 | 3.6 | 5.0 | 4.5 | 5.2 |
| 1963 | 5.0 | 5.6 | 3.8 | 5.6 | 3.3 | 2.0 | 2.9 | 2.0 | 1.9 | 3.7 | 6.5 | 4.8 |
| 1964 | 5.9 | 5.4 | 5.6 | 4.7 | 4.3 | 3.5 | 2.8 | 3.8 | 5.5 | 3.8 | 6.5 | 4.8 |
| 1965 | 5.6 | 6.0 | 4.6 | 3.2 | 3.1 | 3.0 | 3.0 | 2.9 | 3.7 | 6.0 | 6.9 | 4.5 |
| 1966 | 6.2 | 5.6 | 5.2 | 3.6 | 4.8 | 2.6 | 3.2 | 3.8 | 5.6 | 6.6 | 4.3 | 5.5 |
| 1967 | 6.3 | 5.7 | 5.3 | 3.9 | 3.7 | 2.0 | 3.0 | 2.7 | 3.9 | 4.3 | 5.3 | 5.4 |
| 1968 | 5.5 | 7.4 | 4.7 | 5.1 | 2.5 | 2.6 | 3.3 | 3.4 | 3.0 | 4.1 | 6.5 | 4.7 |
| 1969 | 4.0 | 5.4 | 4.0 | 3.4 | 2.7 | 2.2 | 2.6 | 3.5 | 3.7 | 3.8 | 4.6 | 5.9 |
| 1970 | 4.8 | 5.0 | 4.3 | 4.7 | 2.7 | 2.3 | 2.1 | 2.8 | 4.0 | 4.3 | 6.4 | 6.1 |
| 1971 | 5.5 | 6.2 | 5.7 | 4.2 | 2.6 | 1.6 | 2.8 | 2.8 | 3.7 | 4.1 | 4.8 | 6.1 |
| 1972 | 7.1 | 5.9 | 4.1 | 3.5 | 3.0 | 2.2 | 2.3 | 2.7 | 4.3 | 7.4 | 4.2 | 6.2 |
| 1973 | 4.6 | 3.0 | 4.8 | 2.9 | 3.6 | 1.8 | 2.5 | 3.2 | 4.8 | 5.7 | 5.2 | 3.4 |
| 1974 | 6.0 | 6.1 | 4.3 | 2.9 | 3.2 | 2.3 | 1.7 | 2.3 | 3.4 | 4.3 | 4.1 | 2.9 |
| 1975 | 4.8 | 4.6 | 3.6 | 3.3 | 2.2 | 2.7 | 3.3 | 3.0 | 3.1 | 4.1 | 6.8 | 5.7 |
| 1976 | 6.1 | 5.7 | 6.1 | 3.2 | 4.9 | 2.3 | 3.1 | 3.8 | 4.2 | 5.2 | 6.0 | 6.7 |
| 1977 | 4.6 | 4.9 | 4.9 | 2.6 | 2.4 | 2.0 | 2.8 | 2.4 | 4.6 | 3.7 | 5.7 | 3.6 |
| 1978 | 5.0 | 3.0 | 4.7 | 3.0 | 1.8 | 2.1 | 1.7 | 3.2 | 2.8 | 3.8 | 4.9 | 4.3 |
| 1979 | 3.3 | 3.5 | 3.4 | 3.5 | 1.9 | 1.9 | 2.0 | 2.8 | 2.8 | 2.2 | 4.1 | 5.0 |
| 1980 | 6.6 | 2.8 | 6.3 | 2.4 | 2.9 | 1.5 | 1.4 | 1.6 | 3.8 | 4.9 | 5.0 | 4.1 |
| 1981 | 2.5 | 3.2 | 3.3 | 3.2 | 1.3 | 2.5 | 1.6 | 1.3 | 5.4 | 4.7 | 4.7 | 3.5 |
| 1982 | 5.3 | 4.9 | 7.1 | 6.1 | 1.4 | 1.8 | 1.8 | 1.9 | 3.6 | 4.1 | 4.4 | 4.0 |
| 1983 | 3.2 | 3.5 | 3.1 | 2.0 | 1.9 | 1.8 | 2.1 | 1.8 | 3.0 | 3.4 | 4.7 | 3.8 |
| 1984 | 5.5 | 2.8 | 4.5 | 3.1 | 3.2 | 2.6 | 1.7 | 1.5 | 2.6 | 4.4 | 5.1 | 4.9 |
| 1985 | 5.2 | 3.1 | 4.1 | 3.9 | 1.6 | 3.0 | 1.6 | 1.7 | 3.1 | 3.4 | 3.9 | 4.1 |
| 1986 | 4.4 | 2.9 | 4.9 | 3.0 | 3.3 | 3.0 | 1.4 | 2.5 | 3.7 | 3.6 | 4.1 | 4.5 |
| 1987 | 5.5 | 4.6 | 4.6 | 5.3 | 3.1 | 3.3 | 2.8 | 4.3 | 3.4 | 3.5 | 5.8 | 4.5 |

32 YR. STATISTICS FOR WIS STATION S64

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.1 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.5 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 8.0 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 287.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 59120918 |

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 119 | 376 | 37 | 5 | 1 | . | . | . | . | . | 538 |
| 0.50-0.99 | . | 909 | 829 | 62 | 21 | 5 | . | . | . | . | 1826 |
| 1.00-1.49 | . | . | 660 | 39 | 44 | 28 | . | . | . | . | 771 |
| 1.50-1.99 | . | . | 257 | 131 | 28 | 23 | 3 | . | . | . | 442 |
| 2.00-2.49 | . | . | 2 | 120 | 19 | 27 | 5 | 2 | . | . | 175 |
| 2.50-2.99 | . | . | . | 17 | 5 | 4 | 7 | 5 | . | . | 38 |
| 3.00-3.49 | . | . | . | . | . | . | 3 | 5 | . | . | 8 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 119 | 1285 | 1785 | 374 | 118 | 87 | 19 | 13 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 3567.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 124 | 366 | 29 | 5 | . | . | . | . | . | . | 524 |
| 0.50-0.99 | . | 992 | 628 | 53 | 28 | 2 | . | . | . | . | 1703 |
| 1.00-1.49 | . | . | 517 | 28 | 20 | 14 | 1 | . | . | . | 580 |
| 1.50-1.99 | . | . | 176 | 82 | 7 | 16 | . | . | . | . | 281 |
| 2.00-2.49 | . | . | . | 63 | 1 | 5 | 1 | . | . | . | 70 |
| 2.50-2.99 | . | . | . | 2 | . | 1 | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 124 | 1358 | 1350 | 233 | 56 | 38 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 2965.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 172 | 464 | 42 | 5 | 1 | . | . | . | . | . | 684 |
| 0.50-0.99 | . | 1565 | 407 | 38 | 7 | 3 | . | . | . | . | 2020 |
| 1.00-1.49 | . | . | 329 | 2 | 11 | 9 | . | . | . | . | 351 |
| 1.50-1.99 | . | . | 147 | 8 | . | 2 | . | . | . | . | 157 |
| 2.00-2.49 | . | . | . | 8 | . | . | . | . | . | . | 8 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 172 | 2029 | 925 | 62 | 19 | 14 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 3019.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 262 | 951 | 54 | 1 | . | . | . | . | . | . | 1268 |
| 0.50-0.99 | . | 1563 | 229 | 20 | 4 | 2 | . | . | . | . | 1818 |
| 1.00-1.49 | . | . | 285 | 3 | . | 2 | . | . | . | . | 290 |
| 1.50-1.99 | . | . | 67 | 2 | . | . | . | . | . | . | 69 |
| 2.00-2.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 262 | 2514 | 635 | 28 | 4 | 4 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.2 NO. OF CASES= 3228.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 409 | 1673 | 72 | 6 | 2 | . | . | . | . | . | 2162 |
| 0.50-0.99 | . | 1927 | 100 | 8 | 4 | 2 | . | . | . | . | 2041 |
| 1.00-1.49 | . | . | 465 | 1 | 1 | . | . | . | . | . | 467 |
| 1.50-1.99 | . | . | 80 | . | . | . | . | . | . | . | 80 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 409 | 3600 | 717 | 16 | 7 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 4447.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 231 | 996 | 29 | 1 | . | . | . | . | . | . | 1257 |
| 0.50-0.99 | . | 2590 | 521 | 2 | 1 | 1 | . | . | . | . | 3115 |
| 1.00-1.49 | . | . | 870 | . | . | . | . | . | . | . | 870 |
| 1.50-1.99 | . | . | 326 | 33 | . | . | . | . | . | . | 359 |
| 2.00-2.49 | . | . | . | 7 | . | . | . | . | . | . | 7 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 231 | 3586 | 1746 | 44 | 1 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 5249.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 140 | 436 | 18 | . | . | . | . | . | . | . | 594 |
| 0.50-0.99 | . | 2037 | 534 | . | . | . | . | . | . | . | 2571 |
| 1.00-1.49 | . | . | 470 | . | . | . | . | . | . | . | 470 |
| 1.50-1.99 | . | . | 235 | 27 | . | . | . | . | . | . | 262 |
| 2.00-2.49 | . | . | . | 13 | . | . | . | . | . | . | 13 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 140 | 2473 | 1257 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 3660.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 154 | 516 | 8 | 2 | . | . | . | . | . | . | 680 |
| 0.50-0.99 | . | 1633 | 318 | . | . | . | . | . | . | . | 1951 |
| 1.00-1.49 | . | . | 297 | . | . | . | . | . | . | . | 297 |
| 1.50-1.99 | . | . | 85 | 7 | . | . | . | . | . | . | 92 |
| 2.00-2.49 | . | . | . | 6 | . | . | . | . | . | . | 6 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 154 | 2149 | 708 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 2833.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 309 | 663 | 22 | . | . | . | . | . | . | . | 994 |
| 0.50-0.99 | . | 1265 | 196 | . | . | . | . | . | . | . | 1461 |
| 1.00-1.49 | . | . | 207 | . | . | . | . | . | . | . | 207 |
| 1.50-1.99 | . | . | 45 | . | . | . | . | . | . | . | 45 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 309 | 1928 | 470 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.1 NO. OF CASES= 2534.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 386 | 882 | 135 | 4 | . | . | . | . | . | . | 1407 |
| 0.50-0.99 | . | 1364 | 290 | 54 | 31 | 1 | . | . | . | . | 1740 |
| 1.00-1.49 | . | . | 321 | 44 | 21 | 2 | . | . | . | . | 388 |
| 1.50-1.99 | . | . | 94 | 27 | 12 | 11 | . | . | . | . | 144 |
| 2.00-2.49 | . | . | 5 | 8 | 5 | . | . | . | . | . | 18 |
| 2.50-2.99 | . | . | . | 1 | 6 | 1 | . | . | . | . | 8 |
| 3.00-3.49 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 386 | 2246 | 845 | 138 | 77 | 16 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.3 NO. OF CASES= 3477.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 359 | 861 | 916 | 351 | 7 | . | . | . | . | . | 2494 |
| 0.50-0.99 | . | 1319 | 1137 | 666 | 343 | 18 | . | . | . | . | 3483 |
| 1.00-1.49 | . | . | 617 | 371 | 183 | 112 | 1 | . | . | . | 1284 |
| 1.50-1.99 | . | . | 127 | 288 | 67 | 47 | 10 | . | . | . | 539 |
| 2.00-2.49 | . | . | 3 | 143 | 55 | 10 | 2 | . | . | . | 213 |
| 2.50-2.99 | . | . | . | 11 | 83 | 6 | . | . | . | . | 100 |
| 3.00-3.49 | . | . | . | 1 | 20 | 28 | . | . | . | . | 49 |
| 3.50-3.99 | . | . | . | . | 2 | 12 | . | . | . | . | 14 |
| 4.00-4.49 | . | . | . | . | . | 2 | 1 | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 359 | 2180 | 2800 | 1831 | 760 | 235 | 16 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.4 NO. OF CASES= 7664.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 294 | 914 | 820 | 71 | 1 | 1 | . | . | . | . | 2101 |
| 0.50-0.99 | . | 799 | 1927 | 852 | 120 | 4 | . | . | . | . | 3702 |
| 1.00-1.49 | . | 1 | 603 | 620 | 242 | 48 | 1 | . | . | . | 1515 |
| 1.50-1.99 | . | . | 82 | 456 | 198 | 77 | 5 | . | . | . | 818 |
| 2.00-2.49 | . | . | . | 196 | 129 | 58 | 7 | . | . | . | 390 |
| 2.50-2.99 | . | . | . | 17 | 224 | 43 | 8 | 1 | . | . | 293 |
| 3.00-3.49 | . | . | . | 1 | 38 | 152 | 3 | . | . | . | 194 |
| 3.50-3.99 | . | . | . | . | . | 85 | 19 | 7 | . | . | 111 |
| 4.00-4.49 | . | . | . | . | . | 10 | 20 | 5 | 1 | . | 36 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 7 | . | . | 11 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 2 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 294 | 1714 | 3432 | 2213 | 952 | 478 | 69 | 22 | 1 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.7 NO. OF CASES= 8596.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 312 | 1303 | 583 | 12 | 1 | . | . | . | . | . | 2211 |
| 0.50-0.99 | . | 966 | 3188 | 717 | 27 | 5 | 2 | 1 | . | . | 4906 |
| 1.00-1.49 | . | 1 | 736 | 1063 | 195 | 9 | 2 | . | . | . | 2006 |
| 1.50-1.99 | . | . | 88 | 482 | 347 | 86 | 1 | 1 | . | . | 1005 |
| 2.00-2.49 | . | . | . | 216 | 170 | 174 | 13 | . | 1 | . | 574 |
| 2.50-2.99 | . | . | . | 12 | 245 | 73 | 37 | 13 | . | . | 380 |
| 3.00-3.49 | . | . | . | . | 31 | 218 | 23 | 17 | . | . | 289 |
| 3.50-3.99 | . | . | . | . | . | 106 | 51 | 9 | 2 | . | 168 |
| 4.00-4.49 | . | . | . | . | . | 16 | 75 | 25 | 6 | . | 122 |
| 4.50-4.99 | . | . | . | . | . | 2 | 11 | 44 | 5 | 1 | 63 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 31 | 11 | . | 44 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 19 | . | 21 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 8 | . | 8 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| TOTAL | 312 | 2270 | 4595 | 2502 | 1016 | 689 | 217 | 143 | 54 | 4 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.8 NO. OF CASES= 11059.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 195 | 1353 | 986 | 64 | . | . | . | . | . | . | 2598 |
| 0.50-0.99 | . | 1128 | 4680 | 1742 | 132 | 6 | 1 | . | . | . | 7689 |
| 1.00-1.49 | . | . | 1408 | 1327 | 649 | 118 | 1 | . | . | . | 3503 |
| 1.50-1.99 | . | . | 159 | 882 | 316 | 223 | 16 | 1 | . | . | 1597 |
| 2.00-2.49 | . | . | . | 539 | 216 | 151 | 42 | 4 | . | . | 952 |
| 2.50-2.99 | . | . | . | 27 | 482 | 56 | 25 | 8 | . | . | 598 |
| 3.00-3.49 | . | . | . | . | 113 | 279 | 21 | 8 | . | . | 421 |
| 3.50-3.99 | . | . | . | . | 3 | 227 | 45 | 11 | 2 | . | 288 |
| 4.00-4.49 | . | . | . | . | . | 67 | 71 | 38 | 1 | . | 177 |
| 4.50-4.99 | . | . | . | . | . | 4 | 35 | 42 | 4 | . | 85 |
| 5.00-5.49 | . | . | . | . | . | . | 11 | 21 | 5 | 1 | 38 |
| 5.50-5.99 | . | . | . | . | . | . | 3 | 14 | 13 | . | 30 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 5 | 1 | 7 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 10 | 2 | 12 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 195 | 2481 | 7233 | 4581 | 1911 | 1131 | 271 | 148 | 40 | 6 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 16851.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 117 | 574 | 344 | 32 | 2 | . | . | . | . | . | 1069 |
| 0.50-0.99 | . | 796 | 2426 | 622 | 114 | 10 | . | . | . | . | 3968 |
| 1.00-1.49 | . | 1 | 1380 | 741 | 237 | 104 | 4 | . | . | . | 2517 |
| 1.50-1.99 | . | . | 155 | 1151 | 121 | 110 | 23 | 1 | . | . | 1561 |
| 2.00-2.49 | . | . | 1 | 681 | 229 | 54 | 36 | 8 | . | . | 1009 |
| 2.50-2.99 | . | . | . | 25 | 618 | 35 | 19 | 12 | . | . | 709 |
| 3.00-3.49 | . | . | . | 1 | 122 | 294 | 9 | 8 | . | . | 434 |
| 3.50-3.99 | . | . | . | . | . | 155 | 37 | 16 | 4 | . | 212 |
| 4.00-4.49 | . | . | . | . | . | 40 | 19 | 23 | 3 | . | 85 |
| 4.50-4.99 | . | . | . | . | . | 1 | 16 | 17 | 5 | . | 39 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 5 | 9 | . | 16 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 117 | 1371 | 4306 | 3253 | 1493 | 803 | 165 | 92 | 24 | 0 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 5.0 NO. OF CASES= 10889.

STATION S65 47.23N 84.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

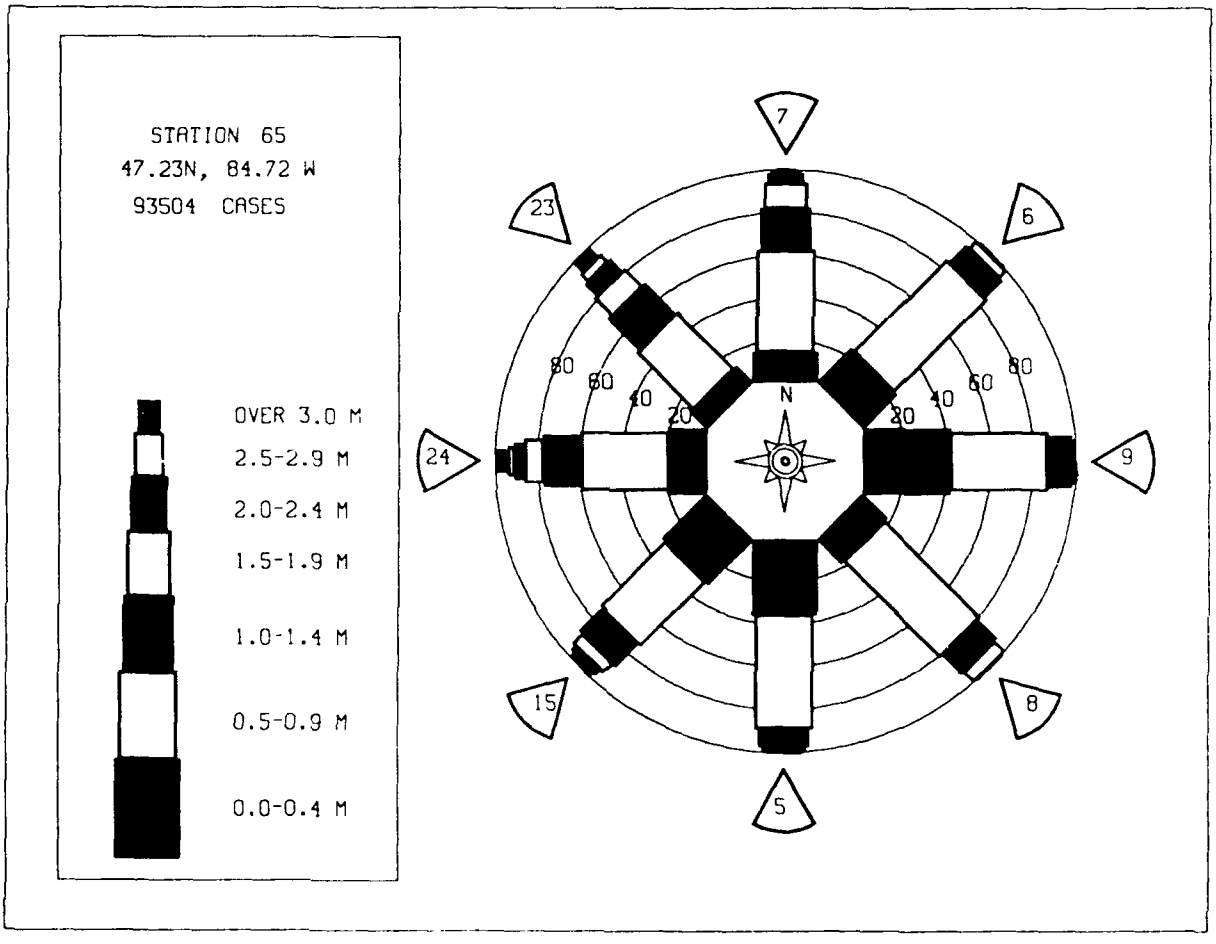
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 109 | 283 | 33 | 3 | . | . | . | . | . | . | 428 |
| 0.50-0.99 | . | 664 | 734 | 36 | 12 | 4 | . | . | . | . | 1450 |
| 1.00-1.49 | . | . | 550 | 127 | 19 | 7 | . | . | . | . | 703 |
| 1.50-1.99 | . | . | 208 | 267 | 44 | 16 | 2 | . | . | . | 537 |
| 2.00-2.49 | . | . | 4 | 216 | 49 | 17 | 9 | 1 | . | . | 296 |
| 2.50-2.99 | . | . | . | 21 | 94 | 17 | 7 | 3 | . | . | 142 |
| 3.00-3.49 | . | . | . | . | 28 | 50 | 5 | 1 | . | . | 84 |
| 3.50-3.99 | . | . | . | . | . | 25 | 3 | 4 | . | . | 32 |
| 4.00-4.49 | . | . | . | . | . | 6 | 2 | 5 | . | . | 13 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 3 | 1 | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 109 | 947 | 1529 | 670 | 246 | 142 | 31 | 17 | 2 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 3466.

STATION S65 47.23N 84.72W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 369 | 1261 | 413 | 56 | 1 | . | . | . | . | . | 2100 |
| 0.50-0.99 | . | 2152 | 1815 | 487 | 85 | 6 | . | . | . | . | 4545 |
| 1.00-1.49 | . | . | 972 | 436 | 167 | 45 | 1 | . | . | . | 1621 |
| 1.50-1.99 | . | . | 233 | 385 | 114 | 61 | 6 | . | . | . | 799 |
| 2.00-2.49 | . | . | 1 | 222 | 87 | 50 | 11 | 1 | . | . | 372 |
| 2.50-2.99 | . | . | . | 14 | 176 | 23 | 10 | 4 | . | . | 227 |
| 3.00-3.49 | . | . | . | . | 35 | 102 | 6 | 4 | . | . | 147 |
| 3.50-3.99 | . | . | . | . | . | 61 | 15 | 5 | . | . | 81 |
| 4.00-4.49 | . | . | . | . | . | 14 | 19 | 9 | 1 | . | 43 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 11 | 1 | . | 19 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 5 | 2 | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 369 | 3413 | 3434 | 1600 | 665 | 362 | 76 | 40 | 9 | 0 | |

MEAN HS(M)= 1.0 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.3 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S65 (47.23N 84.72W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.8 | 1.2 | 1.0 | 1.1 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 1.0 | 1.1 | 1.1 | 0.9 |
| 1957 | 1.4 | 1.3 | 1.2 | 1.0 | 0.9 | 0.9 | 0.8 | 0.8 | 1.0 | 0.9 | 1.6 | 1.5 | 1.1 |
| 1958 | 1.1 | 1.6 | 0.9 | 1.0 | 1.1 | 0.9 | 0.7 | 0.8 | 1.0 | 1.1 | 1.7 | 1.2 | 1.1 |
| 1959 | 1.5 | 1.4 | 1.1 | 1.2 | 1.0 | 0.8 | 0.7 | 0.6 | 1.0 | 1.1 | 1.6 | 1.4 | 1.1 |
| 1960 | 1.3 | 1.2 | 0.9 | 0.9 | 0.7 | 0.7 | 0.6 | 0.7 | 0.8 | 1.1 | 1.5 | 1.4 | 1.0 |
| 1961 | 1.0 | 1.0 | 1.3 | 0.9 | 0.9 | 0.7 | 0.6 | 0.7 | 1.0 | 1.0 | 1.3 | 1.3 | 1.0 |
| 1962 | 1.6 | 1.0 | 0.8 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.9 | 0.8 | 0.9 | 1.3 | 0.9 |
| 1963 | 1.2 | 1.3 | 1.1 | 1.1 | 0.8 | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 | 1.3 | 1.2 | 1.0 |
| 1964 | 1.6 | 1.4 | 1.4 | 1.0 | 1.1 | 0.8 | 0.7 | 0.9 | 1.1 | 1.2 | 1.3 | 1.2 | 1.1 |
| 1965 | 1.7 | 1.7 | 1.0 | 0.9 | 0.9 | 0.8 | 0.9 | 0.7 | 0.9 | 1.4 | 1.6 | 1.3 | 1.1 |
| 1966 | 1.6 | 1.4 | 1.5 | 1.2 | 1.3 | 0.8 | 0.9 | 0.8 | 1.2 | 1.6 | 1.4 | 1.4 | 1.3 |
| 1967 | 1.5 | 1.5 | 1.3 | 1.1 | 1.0 | 0.7 | 0.7 | 0.7 | 0.9 | 1.1 | 1.3 | 1.5 | 1.1 |
| 1968 | 1.2 | 2.1 | 1.4 | 1.2 | 0.9 | 0.7 | 0.9 | 0.8 | 0.8 | 1.1 | 1.4 | 1.3 | 1.2 |
| 1969 | 1.5 | 1.2 | 1.4 | 0.8 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 1.2 | 1.2 | 1.2 | 1.0 |
| 1970 | 1.1 | 1.4 | 1.3 | 1.0 | 0.8 | 0.7 | 0.6 | 0.7 | 1.1 | 1.1 | 1.2 | 1.2 | 1.0 |
| 1971 | 1.6 | 1.3 | 1.4 | 1.0 | 0.8 | 0.6 | 0.8 | 0.7 | 0.8 | 1.0 | 1.2 | 1.4 | 1.0 |
| 1972 | 1.8 | 1.3 | 1.2 | 0.9 | 0.6 | 0.7 | 0.7 | 0.6 | 1.1 | 1.4 | 1.0 | 1.2 | 1.0 |
| 1973 | 1.5 | 1.1 | 1.1 | 1.1 | 0.9 | 0.6 | 0.7 | 0.6 | 1.0 | 1.0 | 1.6 | 1.0 | 1.0 |
| 1974 | 1.2 | 1.0 | 1.4 | 0.8 | 0.8 | 0.7 | 0.6 | 0.6 | 0.9 | 1.1 | 1.0 | 1.0 | 0.9 |
| 1975 | 1.3 | 1.1 | 1.1 | 0.9 | 0.6 | 0.6 | 0.7 | 0.7 | 0.8 | 1.1 | 1.2 | 1.1 | 0.9 |
| 1976 | 1.5 | 1.5 | 1.6 | 1.0 | 1.0 | 0.7 | 0.8 | 0.8 | 1.1 | 1.1 | 1.7 | 1.4 | 1.2 |
| 1977 | 1.0 | 1.1 | 0.8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 0.9 | 0.9 | 0.7 |
| 1978 | 1.0 | 0.8 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.9 | 0.7 | 1.2 | 1.3 | 1.5 | 0.9 |
| 1979 | 0.9 | 0.7 | 0.8 | 0.5 | 0.4 | 0.5 | 0.5 | 0.6 | 0.8 | 0.6 | 1.3 | 1.6 | 0.8 |
| 1980 | 1.0 | 0.7 | 1.1 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.8 | 1.0 | 0.9 | 1.0 | 0.8 |
| 1981 | 0.8 | 0.9 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.3 | 0.7 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1982 | 1.3 | 1.0 | 1.2 | 0.9 | 0.4 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 1.0 | 1.1 | 0.8 |
| 1983 | 1.0 | 0.8 | 0.9 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.8 | 0.9 | 1.2 | 1.2 | 0.8 |
| 1984 | 1.1 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.7 | 0.9 | 1.3 | 1.3 | 0.8 |
| 1985 | 1.1 | 1.0 | 1.0 | 0.7 | 0.5 | 0.6 | 0.4 | 0.5 | 0.8 | 1.0 | 0.9 | 1.2 | 0.8 |
| 1986 | 1.2 | 0.6 | 1.1 | 0.8 | 0.5 | 0.6 | 0.4 | 0.6 | 0.8 | 0.8 | 1.3 | 1.2 | 0.8 |
| 1987 | 1.3 | 1.1 | 1.1 | 0.9 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 1.0 | 1.3 | 1.2 | 1.0 |
| MEAN | 1.3 | 1.2 | 1.1 | 0.9 | 0.8 | 0.6 | 0.6 | 0.7 | 0.9 | 1.0 | 1.3 | 1.2 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S65 (47.23N 84.72W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.2 | 4.4 | 3.4 | 3.8 | 2.8 | 2.5 | 2.3 | 2.5 | 3.3 | 4.4 | 4.0 | 3.7 |
| 1957 | 4.5 | 4.1 | 4.3 | 3.1 | 3.0 | 3.0 | 4.1 | 2.5 | 4.3 | 3.4 | 4.4 | 4.8 |
| 1958 | 4.3 | 4.6 | 3.1 | 5.2 | 3.8 | 2.8 | 2.2 | 2.8 | 3.5 | 3.7 | 6.1 | 4.4 |
| 1959 | 3.7 | 5.1 | 4.1 | 3.9 | 4.2 | 3.2 | 2.2 | 2.0 | 3.4 | 4.6 | 6.1 | 7.8 |
| 1960 | 5.1 | 3.9 | 3.0 | 3.5 | 2.5 | 2.0 | 2.9 | 2.7 | 3.7 | 4.4 | 5.4 | 4.0 |
| 1961 | 4.2 | 4.6 | 5.1 | 3.0 | 3.1 | 2.7 | 2.4 | 3.1 | 3.8 | 4.3 | 5.1 | 6.9 |
| 1962 | 5.5 | 3.9 | 4.2 | 3.7 | 2.7 | 1.8 | 2.4 | 1.9 | 3.5 | 4.7 | 4.5 | 4.9 |
| 1963 | 4.9 | 5.0 | 3.3 | 4.9 | 3.0 | 2.2 | 2.8 | 1.9 | 1.9 | 3.2 | 5.7 | 4.6 |
| 1964 | 5.5 | 5.6 | 5.1 | 4.8 | 3.8 | 3.3 | 2.4 | 3.8 | 6.1 | 3.6 | 6.9 | 4.4 |
| 1965 | 5.5 | 5.9 | 4.1 | 3.5 | 3.1 | 2.6 | 2.7 | 2.6 | 3.7 | 5.8 | 6.2 | 4.2 |
| 1966 | 6.8 | 5.3 | 5.2 | 3.6 | 4.1 | 2.6 | 3.1 | 3.5 | 4.9 | 6.1 | 4.2 | 4.8 |
| 1967 | 5.2 | 5.0 | 4.8 | 3.8 | 3.3 | 1.9 | 2.7 | 2.3 | 3.4 | 4.1 | 5.3 | 5.4 |
| 1968 | 5.5 | 6.7 | 4.7 | 4.4 | 2.2 | 2.5 | 3.2 | 3.2 | 3.0 | 4.2 | 5.3 | 4.2 |
| 1969 | 3.8 | 5.3 | 4.0 | 3.0 | 2.4 | 1.9 | 2.5 | 3.1 | 3.4 | 4.1 | 4.3 | 4.5 |
| 1970 | 4.3 | 4.4 | 3.9 | 4.4 | 2.4 | 2.1 | 1.7 | 2.8 | 3.9 | 3.8 | 5.8 | 6.0 |
| 1971 | 4.5 | 6.1 | 5.1 | 3.5 | 2.5 | 1.5 | 2.6 | 2.5 | 3.7 | 3.3 | 4.8 | 5.4 |
| 1972 | 6.7 | 5.5 | 3.5 | 3.2 | 2.7 | 2.2 | 2.0 | 2.4 | 4.5 | 6.6 | 4.2 | 5.9 |
| 1973 | 4.6 | 2.8 | 4.2 | 3.3 | 3.1 | 2.0 | 2.4 | 2.8 | 4.1 | 4.9 | 4.5 | 3.0 |
| 1974 | 5.6 | 5.7 | 4.4 | 2.5 | 2.9 | 2.3 | 1.7 | 2.6 | 3.2 | 3.7 | 4.1 | 3.1 |
| 1975 | 5.3 | 4.6 | 3.4 | 3.2 | 2.0 | 2.5 | 3.1 | 2.8 | 2.8 | 4.4 | 6.6 | 5.0 |
| 1976 | 5.8 | 5.3 | 5.1 | 3.2 | 4.2 | 2.0 | 2.7 | 3.4 | 4.2 | 4.7 | 5.3 | 6.8 |
| 1977 | 3.8 | 3.7 | 4.1 | 1.8 | 1.7 | 1.4 | 2.3 | 2.1 | 4.5 | 3.4 | 5.9 | 3.1 |
| 1978 | 3.9 | 2.8 | 3.9 | 2.5 | 1.3 | 1.4 | 1.4 | 3.3 | 2.5 | 3.7 | 4.7 | 4.0 |
| 1979 | 2.7 | 3.0 | 2.6 | 3.0 | 1.6 | 1.5 | 1.9 | 2.3 | 2.9 | 1.8 | 3.9 | 4.6 |
| 1980 | 6.4 | 3.1 | 5.6 | 2.0 | 2.6 | 1.5 | 1.1 | 1.5 | 3.2 | 4.6 | 4.2 | 3.5 |
| 1981 | 2.3 | 2.9 | 2.8 | 2.7 | 1.2 | 2.6 | 1.5 | 1.1 | 5.2 | 3.8 | 4.2 | 3.0 |
| 1982 | 4.3 | 4.4 | 5.7 | 5.7 | 1.2 | 1.6 | 1.6 | 1.7 | 3.0 | 3.3 | 3.9 | 3.8 |
| 1983 | 3.1 | 3.9 | 2.3 | 1.9 | 1.6 | 1.6 | 2.1 | 1.6 | 2.7 | 2.9 | 4.8 | 3.5 |
| 1984 | 5.0 | 2.4 | 3.7 | 3.2 | 2.8 | 2.2 | 1.4 | 1.9 | 2.3 | 4.1 | 4.3 | 4.6 |
| 1985 | 5.3 | 3.2 | 4.3 | 3.4 | 1.6 | 2.9 | 1.5 | 1.6 | 3.4 | 3.1 | 3.4 | 3.7 |
| 1986 | 4.0 | 2.4 | 3.9 | 2.4 | 2.5 | 2.6 | 1.0 | 2.1 | 3.3 | 3.3 | 4.3 | 4.5 |
| 1987 | 4.6 | 4.4 | 4.0 | 4.8 | 3.1 | 2.9 | 2.5 | 3.7 | 3.2 | 3.5 | 5.0 | 4.5 |

32 YR. STATISTICS FOR WIS STATION S65

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.0 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.3 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 7.8 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 281.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 59120918 |

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 182 | 570 | 116 | 32 | . | . | . | . | . | . | 900 |
| 0.50-0.99 | . | 1025 | 216 | 204 | 64 | 16 | . | . | . | . | 1525 |
| 1.00-1.49 | . | . | 252 | 130 | 66 | 33 | 3 | . | . | . | 484 |
| 1.50-1.99 | . | . | 100 | 16 | 48 | 45 | 12 | 2 | . | . | 223 |
| 2.00-2.49 | . | . | 7 | 3 | 7 | 8 | 5 | . | . | . | 30 |
| 2.50-2.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 182 | 1595 | 691 | 385 | 185 | 102 | 22 | 4 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 2969.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 217 | 574 | 100 | 20 | 1 | . | . | . | . | . | 912 |
| 0.50-0.99 | . | 1378 | 314 | 74 | 50 | 7 | . | . | . | . | 1823 |
| 1.00-1.49 | . | . | 355 | 26 | 31 | 23 | 1 | . | . | . | 436 |
| 1.50-1.99 | . | . | 176 | 5 | 3 | 20 | 1 | 1 | . | . | 206 |
| 2.00-2.49 | . | . | 4 | 12 | . | . | . | . | . | . | 16 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 217 | 1952 | 949 | 138 | 85 | 50 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 3181.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 240 | 636 | 83 | 11 | . | . | . | . | . | . | 970 |
| 0.50-0.99 | . | 1828 | 460 | 34 | 13 | 9 | . | . | . | . | 2344 |
| 1.00-1.49 | . | . | 375 | 1 | 3 | 8 | . | . | . | . | 387 |
| 1.50-1.99 | . | . | 167 | 17 | . | . | . | . | . | . | 184 |
| 2.00-2.49 | . | . | . | 6 | . | . | . | . | . | . | 6 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 240 | 2464 | 1085 | 70 | 16 | 17 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 3647.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 178 | 444 | 59 | 6 | . | . | . | . | . | . | 687 |
| 0.50-0.99 | . | 1326 | 543 | 4 | 5 | . | . | . | . | . | 1878 |
| 1.00-1.49 | . | . | 368 | 2 | . | . | . | . | . | . | 370 |
| 1.50-1.99 | . | . | 100 | 48 | . | . | . | . | . | . | 148 |
| 2.00-2.49 | . | . | . | 16 | . | . | . | . | . | . | 16 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 178 | 1770 | 1070 | 76 | 5 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 2903.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 178 | 387 | 39 | 2 | . | . | . | . | . | . | 606 |
| 0.50-0.99 | . | 1153 | 913 | . | 2 | 1 | . | . | . | . | 2069 |
| 1.00-1.49 | . | . | 375 | . | . | . | . | . | . | . | 375 |
| 1.50-1.99 | . | . | 122 | 124 | . | . | . | . | . | . | 246 |
| 2.00-2.49 | . | . | . | 49 | . | . | . | . | . | . | 49 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 178 | 1540 | 1449 | 175 | 3 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 3133.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 127 | 379 | 8 | 2 | . | . | . | . | . | . | 516 |
| 0.50-0.99 | . | 819 | 810 | . | . | . | . | . | . | . | 1629 |
| 1.00-1.49 | . | . | 545 | 3 | . | . | . | . | . | . | 548 |
| 1.50-1.99 | . | . | 146 | 268 | . | . | . | . | . | . | 414 |
| 2.00-2.49 | . | . | . | 166 | . | . | . | . | . | . | 166 |
| 2.50-2.99 | . | . | . | 14 | 6 | . | . | . | . | . | 20 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 127 | 1198 | 1509 | 453 | 7 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 3087.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 80 | 371 | 16 | 1 | . | . | . | . | . | . | 468 |
| 0.50-0.99 | . | 572 | 865 | . | . | . | . | . | . | . | 1437 |
| 1.00-1.49 | . | . | 702 | 10 | . | . | . | . | . | . | 712 |
| 1.50-1.99 | . | . | 49 | 269 | 1 | . | . | . | . | . | 319 |
| 2.00-2.49 | . | . | . | 199 | . | . | . | . | . | . | 199 |
| 2.50-2.99 | . | . | . | 13 | 8 | . | . | . | . | . | 21 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 80 | 943 | 1632 | 492 | 10 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 2957.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 120 | 475 | 177 | 13 | . | . | . | . | . | . | 785 |
| 0.50-0.99 | . | 745 | 1857 | 220 | 4 | . | . | . | . | . | 2826 |
| 1.00-1.49 | . | . | 1191 | 205 | 20 | . | . | . | . | . | 1416 |
| 1.50-1.99 | . | . | 114 | 328 | 11 | . | . | . | . | . | 453 |
| 2.00-2.49 | . | . | . | 137 | 3 | 1 | . | . | . | . | 141 |
| 2.50-2.99 | . | . | . | 8 | 7 | . | . | . | . | . | 15 |
| 3.00-3.49 | . | . | . | . | 4 | 1 | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 120 | 1220 | 3339 | 911 | 49 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 5284.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 122 | 627 | 719 | 34 | . | . | . | . | . | . | 1502 |
| 0.50-0.99 | . | 614 | 2547 | 516 | 4 | 1 | . | . | . | . | 3682 |
| 1.00-1.49 | . | . | 821 | 582 | 17 | . | . | . | . | . | 1420 |
| 1.50-1.99 | . | . | 89 | 326 | 69 | 2 | . | . | . | . | 486 |
| 2.00-2.49 | . | . | . | 112 | 65 | 18 | . | . | . | . | 195 |
| 2.50-2.99 | . | . | . | 1 | 63 | 12 | . | . | . | . | 76 |
| 3.00-3.49 | . | . | . | . | 10 | 32 | . | . | . | . | 42 |
| 3.50-3.99 | . | . | . | . | . | 17 | . | . | . | . | 17 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 122 | 1241 | 4176 | 1571 | 228 | 82 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 6948.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 183 | 776 | 490 | 12 | . | . | . | . | . | . | 1461 |
| 0.50-0.99 | . | 681 | 2158 | 296 | 18 | . | . | . | . | . | 3153 |
| 1.00-1.49 | . | . | 707 | 460 | 55 | 3 | . | . | . | . | 1225 |
| 1.50-1.99 | . | . | 90 | 340 | 114 | 14 | . | . | . | . | 558 |
| 2.00-2.49 | . | . | . | 151 | 74 | 24 | 2 | . | . | . | 251 |
| 2.50-2.99 | . | . | . | 3 | 96 | 11 | . | . | . | . | 110 |
| 3.00-3.49 | . | . | . | . | 7 | 35 | . | . | . | . | 42 |
| 3.50-3.99 | . | . | . | . | . | 10 | . | . | . | . | 10 |
| 4.00-4.49 | . | . | . | . | . | 2 | 2 | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 183 | 1457 | 3445 | 1262 | 364 | 99 | 8 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 6390.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 276 | 894 | 563 | 17 | . | . | . | . | . | . | 1750 |
| 0.50-0.99 | . | 766 | 2744 | 791 | 50 | . | . | . | . | . | 4351 |
| 1.00-1.49 | . | . | 730 | 740 | 317 | 13 | . | . | . | . | 1800 |
| 1.50-1.99 | . | . | 72 | 424 | 181 | 94 | . | . | . | . | 771 |
| 2.00-2.49 | . | . | . | 178 | 113 | 55 | 4 | . | . | . | 350 |
| 2.50-2.99 | . | . | . | 7 | 162 | 41 | 5 | . | . | . | 215 |
| 3.00-3.49 | . | . | . | . | 18 | 111 | 2 | . | . | . | 131 |
| 3.50-3.99 | . | . | . | . | . | 62 | 1 | . | . | . | 63 |
| 4.00-4.49 | . | . | . | . | . | 8 | 9 | . | . | . | 17 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | . | . | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 276 | 1660 | 4109 | 2157 | 841 | 384 | 29 | 1 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.6 NO. OF CASES= 8856.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 237 | 917 | 301 | 9 | 1 | 1 | . | . | . | . | 1466 |
| 0.50-0.99 | . | 699 | 2674 | 343 | 7 | 1 | 1 | . | . | . | 3725 |
| 1.00-1.49 | . | 1 | 775 | 783 | 127 | 5 | 2 | . | . | . | 1693 |
| 1.50-1.99 | . | . | 93 | 487 | 310 | 51 | . | . | . | . | 941 |
| 2.00-2.49 | . | . | . | 225 | 160 | 132 | 3 | . | . | . | 520 |
| 2.50-2.99 | . | . | . | 26 | 131 | 142 | 19 | . | . | . | 318 |
| 3.00-3.49 | . | . | . | . | 19 | 131 | 29 | 3 | . | . | 182 |
| 3.50-3.99 | . | . | . | . | . | 68 | 39 | 19 | . | . | 126 |
| 4.00-4.49 | . | . | . | . | . | 9 | 19 | 8 | 1 | . | 37 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 4 | 2 | . | 12 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 5 | 1 | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 237 | 1617 | 3843 | 1873 | 755 | 540 | 121 | 39 | 6 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.7 NO. OF CASES= 8461.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 251 | 1217 | 320 | 9 | | | | | | | 1797 |
| 0.50-0.99 | . | 856 | 2977 | 436 | 23 | 2 | . | . | . | . | 4294 |
| 1.00-1.49 | . | 1 | 971 | 737 | 193 | 17 | . | . | . | . | 1919 |
| 1.50-1.99 | . | . | 161 | 417 | 258 | 91 | 1 | 2 | . | . | 930 |
| 2.00-2.49 | . | . | . | 275 | 106 | 139 | 11 | 1 | . | . | 532 |
| 2.50-2.99 | . | . | . | 57 | 125 | 114 | 26 | 9 | . | . | 331 |
| 3.00-3.49 | . | . | . | . | 41 | 70 | 43 | 25 | 1 | . | 180 |
| 3.50-3.99 | . | . | . | . | 6 | 9 | 23 | 33 | 4 | . | 75 |
| 4.00-4.49 | . | . | . | . | . | 6 | 1 | 16 | 5 | . | 28 |
| 4.50-4.99 | . | . | . | . | . | 2 | 1 | 2 | 1 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 4 | 2 | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 251 | 2074 | 4429 | 1931 | 752 | 450 | 106 | 88 | 15 | 2 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.6 NO. OF CASES= 9461.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 252 | 1163 | 943 | 51 | 3 | 1 | . | . | . | . | 2413 |
| 0.50-0.99 | . | 1019 | 3953 | 1851 | 173 | 7 | . | . | . | . | 7003 |
| 1.00-1.49 | . | 3 | 1132 | 792 | 671 | 168 | 3 | . | . | . | 2769 |
| 1.50-1.99 | . | . | 119 | 757 | 166 | 228 | 39 | 4 | . | . | 1313 |
| 2.00-2.49 | . | . | . | 476 | 102 | 86 | 37 | 4 | . | . | 705 |
| 2.50-2.99 | . | . | . | 47 | 306 | 48 | 22 | 8 | 2 | . | 433 |
| 3.00-3.49 | . | . | . | . | 105 | 141 | 27 | 10 | 2 | . | 285 |
| 3.50-3.99 | . | . | . | . | 4 | 91 | 51 | 27 | 1 | . | 174 |
| 4.00-4.49 | . | . | . | . | . | 24 | 33 | 13 | 2 | . | 72 |
| 4.50-4.99 | . | . | . | . | . | 7 | 10 | 14 | 3 | . | 34 |
| 5.00-5.49 | . | . | . | . | . | . | 4 | 8 | 2 | . | 14 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 4 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 3 | 1 | 5 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 252 | 2185 | 6147 | 3974 | 1530 | 801 | 226 | 92 | 19 | 1 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.9 NO. OF CASES= 14263.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 164 | 619 | 423 | 45 | 4 | | . | . | . | . | 1255 |
| 0.50-0.99 | . | 868 | 1953 | 632 | 202 | 20 | . | . | . | . | 3675 |
| 1.00-1.49 | . | 1 | 1068 | 437 | 192 | 126 | 8 | . | . | . | 1832 |
| 1.50-1.99 | . | . | 108 | 894 | 62 | 69 | 31 | 4 | . | . | 1168 |
| 2.00-2.49 | . | . | 2 | 568 | 104 | 32 | 21 | 16 | . | . | 743 |
| 2.50-2.99 | . | . | . | 23 | 349 | 27 | 8 | 8 | . | . | 415 |
| 3.00-3.49 | . | . | . | . | 105 | 66 | 13 | 7 | 3 | . | 194 |
| 3.50-3.99 | . | . | . | . | 1 | 49 | 18 | 17 | . | . | 85 |
| 4.00-4.49 | . | . | . | . | . | 11 | 3 | 21 | . | . | 35 |
| 4.50-4.99 | . | . | . | . | . | 1 | 2 | 1 | 4 | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | . | 2 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 164 | 1488 | 3554 | 2599 | 1019 | 401 | 106 | 74 | 9 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.8 NO. OF CASES= 8820.

STATION S66 47.38N 84.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

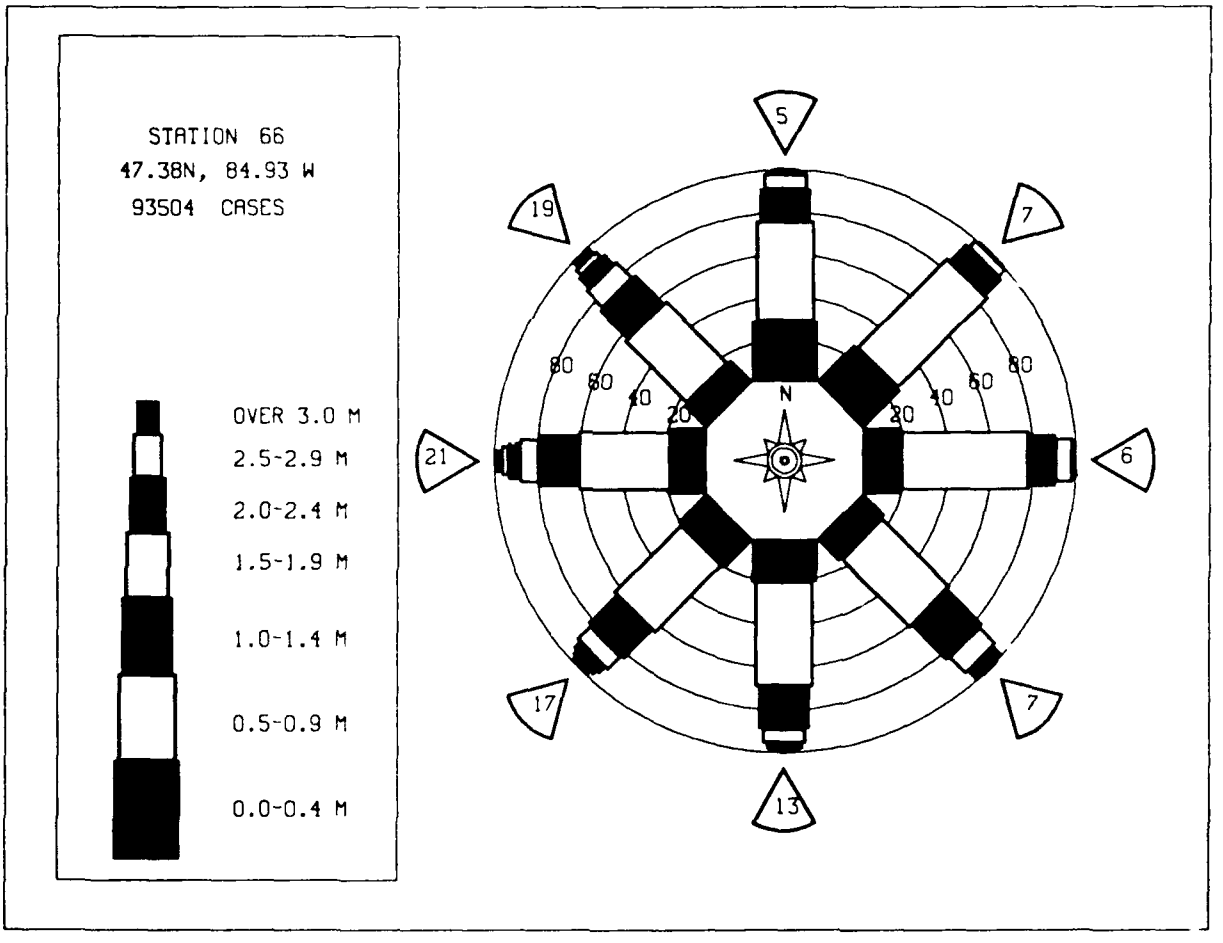
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 145 | 425 | 70 | 3 | | | . | . | . | . | 643 |
| 0.50-0.99 | . | 675 | 502 | 64 | 11 | 5 | . | . | . | . | 1257 |
| 1.00-1.49 | . | . | 392 | 195 | 22 | 16 | . | . | . | . | 625 |
| 1.50-1.99 | . | . | 96 | 226 | 81 | 13 | 2 | . | . | . | 418 |
| 2.00-2.49 | . | . | 4 | 155 | 35 | 9 | 6 | 2 | . | . | 211 |
| 2.50-2.99 | . | . | . | 10 | 97 | 3 | 4 | 1 | . | . | 115 |
| 3.00-3.49 | . | . | . | . | 28 | 17 | 5 | 3 | . | . | 53 |
| 3.50-3.99 | . | . | . | . | 1 | 12 | . | 4 | . | . | 17 |
| 4.00-4.49 | . | . | . | . | . | 4 | . | 3 | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 145 | 1100 | 1064 | 653 | 275 | 80 | 17 | 13 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 3144.

STATION S66 47.38N 84.93W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 296 | 1048 | 443 | 27 | . | . | . | . | . | . | 1814 |
| 0.50-0.99 | . | 1503 | 2549 | 546 | 63 | 7 | . | . | . | . | 4668 |
| 1.00-1.49 | . | . | 1076 | 511 | 171 | 41 | 1 | . | . | . | 1800 |
| 1.50-1.99 | . | . | 181 | 495 | 130 | 63 | 8 | 1 | . | . | 878 |
| 2.00-2.49 | . | . | 1 | 273 | 77 | 50 | 9 | 2 | . | . | 412 |
| 2.50-2.99 | . | . | . | 21 | 135 | 40 | 8 | 2 | . | . | 206 |
| 3.00-3.49 | . | . | . | . | 34 | 60 | 12 | 5 | . | . | 111 |
| 3.50-3.99 | . | . | . | . | 1 | 32 | 13 | 10 | . | . | 56 |
| 4.00-4.49 | . | . | . | . | . | 6 | 6 | 6 | . | . | 18 |
| 4.50-4.99 | . | . | . | . | . | 1 | 3 | 2 | 1 | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 296 | 2551 | 4250 | 1873 | 611 | 300 | 61 | 29 | 1 | 0 | |

MEAN HS(M)= 1.0 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S66 (47.38N 84.93W)

| | MONTH | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| YEAR | | | | | | | | | | | | | MEAN |
| 1956 | 0.7 | 1.1 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.7 | 1.0 | 1.1 | 1.1 | 0.9 |
| 1957 | 1.3 | 1.2 | 1.1 | 0.9 | 0.9 | 0.9 | 0.7 | 0.7 | 0.9 | 0.8 | 1.4 | 1.4 | 1.0 |
| 1958 | 1.0 | 1.4 | 0.8 | 1.0 | 0.9 | 0.8 | 0.6 | 0.7 | 0.9 | 1.0 | 1.6 | 1.1 | 1.0 |
| 1959 | 1.3 | 1.2 | 1.1 | 1.0 | 1.0 | 0.7 | 0.7 | 0.6 | 0.9 | 1.0 | 1.4 | 1.3 | 1.0 |
| 1960 | 1.2 | 1.1 | 0.8 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.8 | 1.1 | 1.4 | 1.2 | 0.9 |
| 1961 | 0.9 | 0.9 | 1.2 | 0.8 | 0.8 | 0.7 | 0.5 | 0.6 | 1.0 | 1.0 | 1.3 | 1.2 | 0.9 |
| 1962 | 1.4 | 0.9 | 0.7 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.9 | 0.8 | 1.0 | 1.2 | 0.8 |
| 1963 | 1.2 | 1.2 | 1.0 | 1.0 | 0.8 | 0.6 | 0.7 | 0.6 | 0.7 | 0.9 | 1.2 | 1.2 | 0.9 |
| 1964 | 1.6 | 1.3 | 1.3 | 1.1 | 1.0 | 0.8 | 0.6 | 0.9 | 1.1 | 1.2 | 1.3 | 1.2 | .1 |
| 1965 | 1.6 | 1.6 | 1.0 | 0.8 | 0.9 | 0.8 | 0.8 | 0.7 | 0.9 | 1.3 | 1.5 | 1.3 | 1.1 |
| 1966 | 1.4 | 1.4 | 1.5 | 1.1 | 1.1 | 0.8 | 0.8 | 0.8 | 1.1 | 1.5 | 1.3 | 1.3 | 1.2 |
| 1967 | 1.5 | 1.5 | 1.3 | 1.1 | 1.0 | 0.7 | 0.7 | 0.7 | 0.9 | 1.2 | 1.3 | 1.5 | 1.1 |
| 1968 | 1.3 | 1.9 | 1.3 | 1.2 | 0.9 | 0.7 | 0.8 | 0.8 | 0.9 | 1.2 | 1.4 | 1.4 | 1.1 |
| 1969 | 1.5 | 1.1 | 1.2 | 0.8 | 0.8 | 0.8 | 0.6 | 0.8 | 0.9 | 1.2 | 1.3 | 1.2 | 1.0 |
| 1970 | 1.1 | 1.4 | 1.2 | 1.0 | 0.8 | 0.7 | 0.6 | 0.7 | 1.1 | 1.3 | 1.3 | 1.2 | 1.0 |
| 1971 | 1.4 | 1.4 | 1.3 | 1.0 | 0.7 | 0.6 | 0.7 | 0.7 | 0.8 | 1.0 | 1.2 | 1.4 | 1.0 |
| 1972 | 1.8 | 1.3 | 1.2 | 0.8 | 0.6 | 0.6 | 0.7 | 0.6 | 1.0 | 1.3 | 1.0 | 1.2 | 1.0 |
| 1973 | 1.4 | 1.1 | 1.1 | 1.0 | 0.8 | 0.6 | 0.6 | 0.6 | 0.9 | 1.0 | 1.5 | 1.0 | 1.0 |
| 1974 | 1.2 | 1.0 | 1.4 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.9 | 1.1 | 1.0 | 1.1 | 0.9 |
| 1975 | 1.3 | 0.9 | 1.0 | 0.7 | 0.5 | 0.7 | 0.7 | 0.7 | 0.8 | 1.2 | 1.2 | 1.2 | 0.9 |
| 1976 | 1.6 | 1.5 | 1.7 | 1.0 | 0.9 | 0.7 | 0.7 | 0.7 | 1.0 | 1.0 | 1.5 | 1.4 | 1.1 |
| 1977 | 1.0 | 1.1 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 0.8 | 1.0 | 1.0 | 0.8 |
| 1978 | 1.0 | 0.8 | 0.9 | 0.7 | 0.5 | 0.5 | 0.5 | 1.1 | 0.8 | 1.3 | 1.4 | 1.6 | 0.9 |
| 1979 | 0.9 | 0.7 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.9 | 0.6 | 1.4 | 1.6 | 0.8 |
| 1980 | 1.0 | 0.8 | 1.2 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 0.9 | 1.0 | 0.9 | 1.1 | 0.8 |
| 1981 | 0.8 | 1.0 | 0.8 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.7 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1982 | 1.3 | 1.1 | 1.3 | 0.9 | 0.5 | 0.5 | 0.6 | 0.5 | 0.8 | 1.0 | 1.1 | 1.2 | 0.9 |
| 1983 | 1.1 | 0.9 | 0.9 | 0.7 | 0.6 | 0.6 | 0.5 | 0.6 | 0.9 | 1.0 | 1.3 | 1.2 | 0.9 |
| 1984 | 1.2 | 1.0 | 1.0 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.8 | 1.1 | 1.4 | 1.4 | 0.9 |
| 1985 | 1.1 | 1.0 | 1.1 | 0.7 | 0.5 | 0.7 | 0.5 | 0.6 | 1.0 | 1.1 | 0.9 | 1.2 | 0.9 |
| 1986 | 1.2 | 0.6 | 1.2 | 0.9 | 0.6 | 0.6 | 0.5 | 0.6 | 0.9 | 0.9 | 1.4 | 1.4 | 0.9 |
| 1987 | 1.3 | 1.1 | 1.1 | 0.9 | 0.8 | 0.6 | 0.7 | 0.8 | 0.8 | 1.1 | 1.3 | 1.2 | 1.0 |
| MEAN | 1.2 | 1.1 | 1.1 | 0.9 | 0.7 | 0.6 | 0.6 | 0.7 | 0.9 | 1.1 | 1.3 | 1.2 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S66 (47.38N 84.93W)

| | MONTH | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| YEAR | | | | | | | | | | | | |
| 1956 | 1.8 | 3.9 | 3.0 | 3.3 | 2.4 | 2.0 | 1.9 | 2.0 | 2.8 | 3.6 | 3.3 | 3.1 |
| 1957 | 3.7 | 3.6 | 3.7 | 2.8 | 2.5 | 3.2 | 3.4 | 2.2 | 3.5 | 2.9 | 3.6 | 4.3 |
| 1958 | 3.4 | 3.7 | 2.5 | 3.6 | 3.5 | 2.3 | 1.7 | 2.3 | 2.8 | 3.1 | 5.2 | 3.5 |
| 1959 | 3.2 | 4.2 | 3.4 | 2.6 | 4.1 | 2.4 | 1.9 | 1.7 | 3.2 | 3.5 | 4.1 | 4.6 |
| 1960 | 3.9 | 3.4 | 2.9 | 2.9 | 2.2 | 1.6 | 2.1 | 2.4 | 3.2 | 3.9 | 4.1 | 3.9 |
| 1961 | 3.7 | 3.0 | 3.9 | 2.6 | 2.6 | 2.1 | 1.9 | 2.6 | 2.7 | 3.0 | 3.9 | 4.2 |
| 1962 | 4.1 | 2.7 | 2.7 | 2.7 | 2.3 | 1.5 | 1.7 | 1.6 | 2.8 | 3.8 | 3.9 | 4.5 |
| 1963 | 3.5 | 4.3 | 2.6 | 4.3 | 2.8 | 2.0 | 2.4 | 1.5 | 1.7 | 2.9 | 4.8 | 3.9 |
| 1964 | 4.6 | 4.3 | 4.3 | 5.6 | 3.6 | 3.4 | 2.1 | 3.1 | 4.2 | 3.5 | 6.3 | 3.3 |
| 1965 | 4.5 | 4.2 | 3.5 | 3.0 | 2.6 | 2.4 | 2.3 | 2.4 | 3.8 | 5.2 | 5.3 | 3.8 |
| 1966 | 6.2 | 4.2 | 4.5 | 3.1 | 3.3 | 2.4 | 2.4 | 2.8 | 4.1 | 5.8 | 3.8 | 4.0 |
| 1967 | 4.6 | 4.3 | 4.1 | 3.7 | 2.7 | 1.7 | 2.4 | 1.8 | 3.1 | 3.1 | 3.5 | 3.9 |
| 1968 | 3.5 | 5.8 | 3.7 | 3.7 | 2.2 | 2.0 | 3.0 | 2.8 | 2.2 | 4.0 | 4.6 | 3.7 |
| 1969 | 3.6 | 4.9 | 3.6 | 2.6 | 1.9 | 2.3 | 2.2 | 2.6 | 2.9 | 3.9 | 3.9 | 4.0 |
| 1970 | 3.8 | 3.8 | 3.8 | 4.3 | 2.0 | 1.9 | 1.6 | 2.4 | 3.5 | 3.7 | 4.7 | 4.1 |
| 1971 | 3.8 | 4.7 | 4.2 | 3.1 | 2.0 | 1.4 | 2.2 | 2.1 | 2.7 | 3.6 | 4.5 | 4.4 |
| 1972 | 6.1 | 4.8 | 3.1 | 2.7 | 2.2 | 1.9 | 1.6 | 1.9 | 4.3 | 5.8 | 3.6 | 5.2 |
| 1973 | 3.3 | 2.6 | 3.8 | 3.4 | 2.6 | 1.7 | 1.9 | 2.3 | 3.6 | 4.3 | 3.9 | 3.7 |
| 1974 | 4.6 | 5.1 | 3.4 | 2.0 | 2.3 | 1.8 | 1.4 | 2.4 | 2.8 | 3.3 | 2.9 | 3.3 |
| 1975 | 5.2 | 4.0 | 2.8 | 2.4 | 1.6 | 2.0 | 2.5 | 2.5 | 2.5 | 4.2 | 5.5 | 4.4 |
| 1976 | 5.3 | 4.8 | 4.4 | 2.8 | 3.8 | 2.1 | 2.4 | 3.1 | 3.4 | 4.1 | 4.7 | 4.4 |
| 1977 | 3.3 | 3.1 | 3.6 | 1.5 | 1.7 | 1.2 | 2.1 | 2.2 | 5.2 | 3.7 | 6.3 | 2.9 |
| 1978 | 3.2 | 2.3 | 3.7 | 2.0 | 1.4 | 1.5 | 2.0 | 3.1 | 2.6 | 3.4 | 4.0 | 4.2 |
| 1979 | 2.9 | 3.0 | 2.0 | 2.4 | 1.9 | 1.8 | 1.5 | 1.8 | 3.0 | 1.6 | 3.9 | 4.2 |
| 1980 | 5.2 | 3.8 | 5.1 | 1.6 | 2.1 | 1.6 | 1.2 | 1.7 | 3.6 | 3.5 | 3.7 | 3.3 |
| 1981 | 2.6 | 3.1 | 2.9 | 2.5 | 1.2 | 2.7 | 1.7 | 1.3 | 3.8 | 3.3 | 3.7 | 3.4 |
| 1982 | 3.8 | 3.6 | 5.2 | 4.0 | 1.2 | 1.5 | 1.6 | 1.6 | 2.8 | 4.0 | 3.8 | 4.2 |
| 1983 | 3.5 | 4.8 | 2.1 | 2.1 | 1.5 | 1.7 | 2.1 | 1.9 | 3.2 | 3.2 | 4.5 | 3.4 |
| 1984 | 4.8 | 2.8 | 3.5 | 3.4 | 2.5 | 2.8 | 1.2 | 2.0 | 2.5 | 4.3 | 3.8 | 5.0 |
| 1985 | 4.9 | 3.8 | 4.5 | 3.1 | 1.7 | 2.9 | 1.5 | 1.8 | 4.1 | 2.9 | 3.1 | 4.4 |
| 1986 | 4.5 | 2.1 | 4.1 | 2.4 | 2.4 | 2.9 | 1.0 | 2.4 | 2.9 | 3.4 | 4.9 | 4.5 |
| 1987 | 4.0 | 3.8 | 3.8 | 4.1 | 3.0 | 2.4 | 2.2 | 3.3 | 2.8 | 3.1 | 4.5 | 4.0 |

32 YR. STATISTICS FOR WIS STATION S66

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.0 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.4 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 292.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 6.3 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 293.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 64111806 |

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 129 | 522 | 53 | 1 | 1 | . | . | . | . | . | 706 |
| 0.50-0.99 | . | 397 | 1224 | 39 | 10 | . | . | . | . | . | 1670 |
| 1.00-1.49 | . | . | 937 | 78 | 27 | 5 | . | . | . | . | 1047 |
| 1.50-1.99 | . | . | 51 | 457 | 7 | 25 | . | . | . | . | 540 |
| 2.00-2.49 | . | . | . | 258 | 22 | 12 | 5 | . | . | . | 297 |
| 2.50-2.99 | . | . | . | 9 | 140 | 3 | 3 | 2 | . | . | 157 |
| 3.00-3.49 | . | . | . | . | 29 | 4 | 1 | . | . | . | 34 |
| 3.50-3.99 | . | . | . | . | . | 3 | . | 1 | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | 1 | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 129 | 919 | 2265 | 842 | 236 | 54 | 9 | 4 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 4182.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 142 | 494 | 59 | 7 | . | . | . | . | . | . | 702 |
| 0.50-0.99 | . | 760 | 1164 | 25 | 12 | 3 | . | . | . | . | 1964 |
| 1.00-1.49 | . | . | 518 | 191 | 17 | 8 | . | . | . | . | 734 |
| 1.50-1.99 | . | . | 144 | 224 | 5 | 8 | . | . | . | . | 381 |
| 2.00-2.49 | . | . | 13 | 116 | 23 | 1 | . | . | . | . | 153 |
| 2.50-2.99 | . | . | . | 5 | 51 | . | . | . | . | . | 56 |
| 3.00-3.49 | . | . | . | . | 9 | 6 | 1 | . | . | . | 16 |
| 3.50-3.99 | . | . | . | . | 1 | 2 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 142 | 1254 | 1898 | 568 | 118 | 28 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 3760.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 190 | 611 | 79 | 2 | . | . | . | . | . | . | 882 |
| 0.50-0.99 | . | 1409 | 825 | 43 | 7 | . | . | . | . | . | 2284 |
| 1.00-1.49 | . | . | 311 | 152 | 4 | 1 | . | . | . | . | 468 |
| 1.50-1.99 | . | . | 151 | 48 | 4 | 1 | . | . | . | . | 204 |
| 2.00-2.49 | . | . | 1 | 10 | 4 | 1 | . | . | . | . | 16 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 190 | 2020 | 1367 | 255 | 19 | 3 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 3611.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 181 | 552 | 89 | 3 | . | . | . | . | . | . | 825 |
| 0.50-0.99 | . | 961 | 262 | 39 | 4 | . | . | . | . | . | 1266 |
| 1.00-1.49 | . | . | 168 | 32 | . | . | . | . | . | . | 200 |
| 1.50-1.99 | . | . | 41 | 4 | 1 | . | . | . | . | . | 46 |
| 2.00-2.49 | . | . | 1 | . | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 181 | 1513 | 561 | 78 | 5 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 2192.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 214 | 623 | 119 | 2 | . | . | . | . | . | . | 958 |
| 0.50-0.99 | . | 674 | 137 | 50 | 1 | . | . | . | . | . | 862 |
| 1.00-1.49 | . | . | 120 | 43 | . | . | . | . | . | . | 163 |
| 1.50-1.99 | . | . | 51 | 6 | 11 | . | . | . | . | . | 68 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 214 | 1297 | 427 | 101 | 12 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 1925.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 167 | 448 | 60 | 1 | . | . | . | . | . | . | 676 |
| 0.50-0.99 | . | 414 | 235 | 14 | . | . | . | . | . | . | 663 |
| 1.00-1.49 | . | . | 78 | 28 | . | . | . | . | . | . | 106 |
| 1.50-1.99 | . | . | 24 | 57 | 4 | . | . | . | . | . | 85 |
| 2.00-2.49 | . | . | 2 | 27 | 8 | . | . | . | . | . | 37 |
| 2.50-2.99 | . | . | . | . | 8 | 1 | . | . | . | . | 9 |
| 3.00-3.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 167 | 862 | 399 | 127 | 20 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 1483.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 126 | 351 | 122 | 3 | . | . | . | . | . | . | 602 |
| 0.50-0.99 | . | 507 | 829 | 59 | 3 | . | . | . | . | . | 1398 |
| 1.00-1.49 | . | . | 305 | 228 | 11 | . | . | . | . | . | 544 |
| 1.50-1.99 | . | . | 27 | 182 | 23 | 4 | . | . | . | . | 236 |
| 2.00-2.49 | . | . | . | 72 | 42 | 4 | . | . | . | . | 118 |
| 2.50-2.99 | . | . | . | . | 70 | 1 | . | . | . | . | 71 |
| 3.00-3.49 | . | . | . | . | 2 | 3 | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 126 | 858 | 1283 | 544 | 151 | 12 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 4.1 NO. OF CASES= 2793.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 127 | 604 | 504 | 42 | 3 | . | . | . | . | . | 1280 |
| 0.50-0.99 | . | 534 | 1720 | 491 | 125 | 6 | . | . | . | . | 2876 |
| 1.00-1.49 | . | . | 659 | 363 | 201 | 12 | . | . | . | . | 1235 |
| 1.50-1.99 | . | . | 35 | 332 | 124 | 16 | 1 | . | . | . | 508 |
| 2.00-2.49 | . | . | . | 150 | 58 | 7 | . | . | . | . | 215 |
| 2.50-2.99 | . | . | . | 2 | 102 | . | . | . | . | . | 104 |
| 3.00-3.49 | . | . | . | . | 6 | 6 | . | . | . | . | 12 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 127 | 1138 | 2918 | 1380 | 619 | 48 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 4.5 NO. OF CASES= 5838.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 124 | 682 | 579 | 23 | 4 | . | . | . | . | . | 1412 |
| 0.50-0.99 | . | 487 | 1933 | 442 | 81 | 1 | . | . | . | . | 2944 |
| 1.00-1.49 | . | . | 553 | 505 | 182 | 5 | . | . | . | . | 1245 |
| 1.50-1.99 | . | . | 42 | 321 | 120 | 4 | . | . | . | . | 487 |
| 2.00-2.49 | . | . | . | 130 | 71 | 13 | . | . | . | . | 214 |
| 2.50-2.99 | . | . | . | 4 | 69 | 9 | . | . | . | . | 82 |
| 3.00-3.49 | . | . | . | . | 4 | 51 | . | . | . | . | 55 |
| 3.50-3.99 | . | . | . | . | . | 5 | . | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 124 | 1169 | 3107 | 1425 | 531 | 88 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.5 NO. OF CASES= 6041.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 147 | 776 | 478 | 16 | . | . | . | . | . | . | 1417 |
| 0.50-0.99 | . | 586 | 2092 | 494 | 49 | . | . | . | . | . | 3221 |
| 1.00-1.49 | . | . | 587 | 513 | 146 | 5 | . | . | . | . | 1251 |
| 1.50-1.99 | . | . | 63 | 366 | 152 | 38 | . | . | . | . | 619 |
| 2.00-2.49 | . | . | . | 157 | 115 | 32 | . | . | . | . | 304 |
| 2.50-2.99 | . | . | . | 10 | 116 | 21 | 4 | . | . | . | 151 |
| 3.00-3.49 | . | . | . | . | 19 | 51 | 1 | . | . | . | 71 |
| 3.50-3.99 | . | . | . | . | . | 21 | 1 | 1 | . | . | 23 |
| 4.00-4.49 | . | . | . | . | . | 1 | 6 | . | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | . | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 147 | 1362 | 3220 | 1556 | 597 | 169 | 16 | 4 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 6622.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 210 | 919 | 533 | 12 | . | . | . | . | . | . | 1674 |
| 0.50-0.99 | . | 660 | 2912 | 869 | 23 | . | . | . | . | . | 4464 |
| 1.00-1.49 | . | 1 | 660 | 871 | 348 | 6 | . | . | . | . | 1886 |
| 1.50-1.99 | . | . | 64 | 321 | 317 | 80 | . | . | . | . | 782 |
| 2.00-2.49 | . | . | 1 | 149 | 106 | 121 | 2 | . | . | . | 379 |
| 2.50-2.99 | . | . | . | 3 | 144 | 49 | 11 | . | . | . | 207 |
| 3.00-3.49 | . | . | . | . | 11 | 102 | 9 | 2 | . | . | 124 |
| 3.50-3.99 | . | . | . | . | . | 62 | 17 | 3 | . | . | 82 |
| 4.00-4.49 | . | . | . | . | . | 7 | 48 | 1 | . | . | 56 |
| 4.50-4.99 | . | . | . | . | . | . | 11 | 14 | . | . | 25 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 7 | . | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 2 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 210 | 1580 | 4170 | 2225 | 949 | 427 | 99 | 30 | 2 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 9081.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 188 | 913 | 285 | 1 | . | . | . | . | . | . | 1387 |
| 0.50-0.99 | . | 675 | 2496 | 310 | 9 | 1 | . | . | . | . | 3491 |
| 1.00-1.49 | . | . | 657 | 804 | 117 | 16 | 1 | . | . | . | 1595 |
| 1.50-1.99 | . | . | 64 | 345 | 252 | 51 | 4 | . | . | . | 716 |
| 2.00-2.49 | . | . | . | 141 | 142 | 132 | 2 | . | . | . | 417 |
| 2.50-2.99 | . | . | . | 2 | 95 | 103 | 13 | 1 | . | . | 214 |
| 3.00-3.49 | . | . | . | . | 9 | 93 | 23 | 6 | 2 | . | 133 |
| 3.50-3.99 | . | . | . | . | . | 41 | 40 | 14 | . | . | 95 |
| 4.00-4.49 | . | . | . | . | . | 1 | 28 | 11 | . | . | 40 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 12 | 1 | 1 | 18 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | 3 | . | 7 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 188 | 1588 | 3502 | 1603 | 624 | 438 | 115 | 48 | 12 | 1 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 7606.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 195 | 1078 | 797 | 28 | 1 | . | . | . | . | . | 2099 |
| 0.50-0.99 | . | 675 | 4007 | 2281 | 67 | 4 | . | . | . | . | 7034 |
| 1.00-1.49 | . | 2 | 660 | 1567 | 1078 | 130 | 1 | . | . | . | 3438 |
| 1.50-1.99 | . | . | 69 | 402 | 542 | 588 | 42 | . | . | . | 1643 |
| 2.00-2.49 | . | . | . | 124 | 166 | 383 | 173 | 51 | . | . | 897 |
| 2.50-2.99 | . | . | . | 11 | 151 | 167 | 133 | 85 | 21 | 1 | 569 |
| 3.00-3.49 | . | . | . | . | 24 | 135 | 57 | 73 | 36 | 1 | 326 |
| 3.50-3.99 | . | . | . | . | 1 | 54 | 36 | 47 | 33 | 7 | 178 |
| 4.00-4.49 | . | . | . | . | . | 5 | 17 | 27 | 20 | 7 | 76 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 25 | 22 | 3 | 55 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 14 | 5 | 24 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 5 | 2 | 8 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 2 | 3 | 6 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 195 | 1755 | 5533 | 4413 | 2030 | 1466 | 464 | 315 | 154 | 31 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 5.3 NO. OF CASES= 15319.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 181 | 1054 | 613 | 45 | . | . | . | . | . | . | 1893 |
| 0.50-0.99 | . | 659 | 3452 | 1402 | 101 | 1 | . | . | . | . | 5615 |
| 1.00-1.49 | . | . | 989 | 1081 | 749 | 60 | 1 | . | . | . | 2880 |
| 1.50-1.99 | . | . | 108 | 478 | 409 | 291 | 17 | 1 | . | . | 1304 |
| 2.00-2.49 | . | . | 2 | 260 | 137 | 260 | 57 | 7 | . | . | 723 |
| 2.50-2.99 | . | . | . | 26 | 180 | 109 | 49 | 37 | 2 | . | 403 |
| 3.00-3.49 | . | . | . | . | 41 | 156 | 41 | 35 | 11 | . | 284 |
| 3.50-3.99 | . | . | . | . | . | 81 | 60 | 22 | 8 | 1 | 172 |
| 4.00-4.49 | . | . | . | . | . | 11 | 33 | 22 | 18 | 1 | 85 |
| 4.50-4.99 | . | . | . | . | . | . | 10 | 22 | 8 | 3 | 43 |
| 5.00-5.49 | . | . | . | . | . | . | . | 8 | 7 | 3 | 18 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 7 | 1 | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 181 | 1713 | 5164 | 3292 | 1617 | 969 | 268 | 155 | 62 | 13 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 5.1 NO. OF CASES= 12586.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 142 | 662 | 226 | 10 | . | . | . | . | . | . | 1040 |
| 0.50-0.99 | . | 515 | 1722 | 312 | 58 | 1 | . | . | . | . | 2608 |
| 1.00-1.49 | . | . | 999 | 188 | 157 | 45 | 2 | . | . | . | 1391 |
| 1.50-1.99 | . | . | 122 | 423 | 95 | 99 | 6 | . | . | . | 745 |
| 2.00-2.49 | . | . | . | 270 | 74 | 75 | 19 | . | . | . | 438 |
| 2.50-2.99 | . | . | . | 20 | 99 | 70 | 17 | 7 | . | . | 213 |
| 3.00-3.49 | . | . | . | . | 26 | 68 | 26 | 7 | . | . | 127 |
| 3.50-3.99 | . | . | . | . | 1 | 10 | 34 | 10 | 1 | . | 56 |
| 4.00-4.49 | . | . | . | . | . | 2 | 11 | 21 | . | . | 34 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | 3 | 1 | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 142 | 1177 | 3069 | 1223 | 510 | 371 | 115 | 49 | 4 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.7 NO. OF CASES= 6246.

STATION S67 47.53N 85.15W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

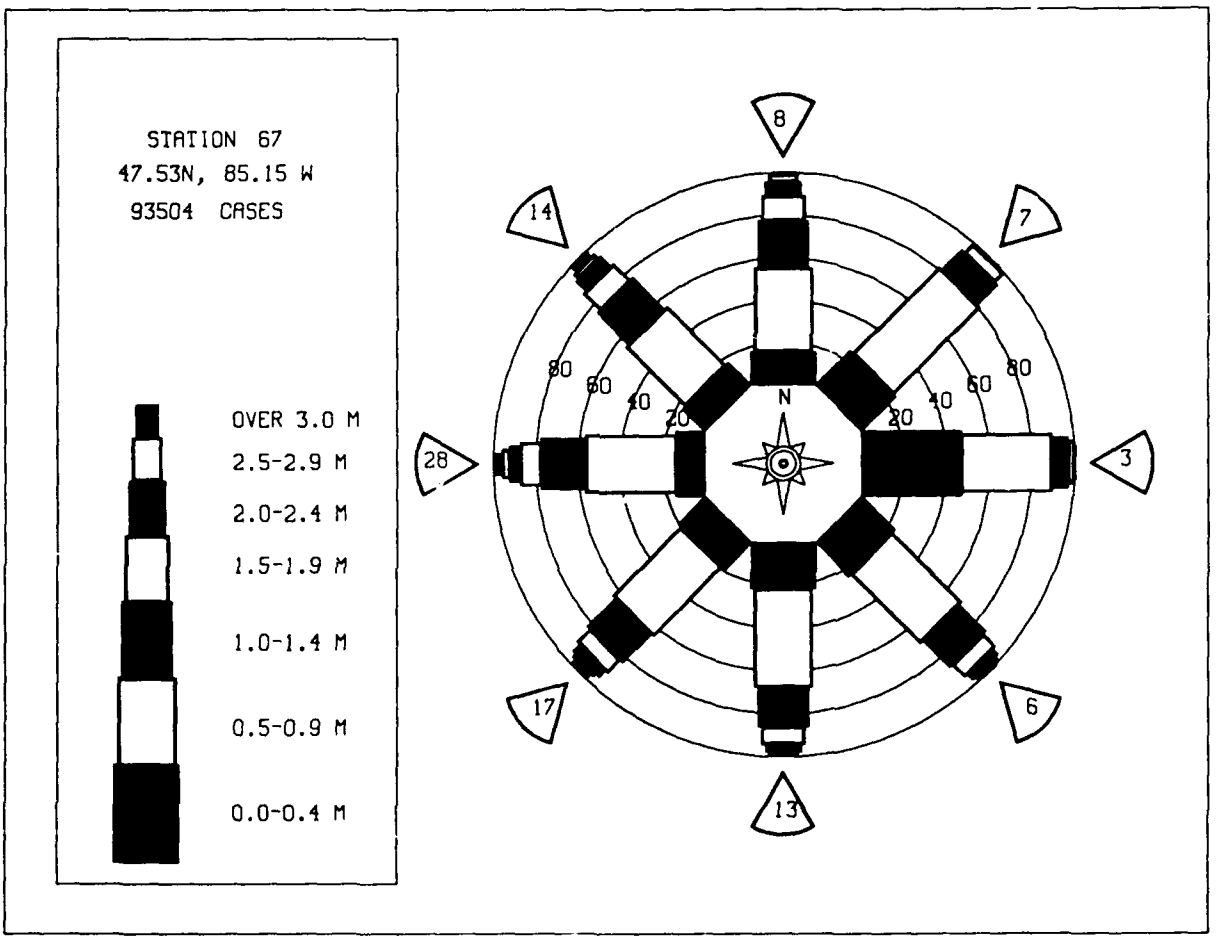
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 171 | 476 | 26 | 2 | 1 | . | . | . | . | . | 676 |
| 0.50-0.99 | . | 383 | 1228 | 23 | 6 | 1 | . | . | . | . | 1641 |
| 1.00-1.49 | . | . | 951 | 58 | 24 | 10 | . | . | . | . | 1043 |
| 1.50-1.99 | . | . | 74 | 462 | 27 | 18 | . | . | . | . | 581 |
| 2.00-2.49 | . | . | . | 271 | 26 | 17 | 8 | . | . | . | 322 |
| 2.50-2.99 | . | . | . | 28 | 115 | 12 | 10 | 1 | . | . | 166 |
| 3.00-3.49 | . | . | . | . | 21 | 16 | 7 | 2 | . | . | 46 |
| 3.50-3.99 | . | . | . | . | 2 | . | 8 | 4 | . | . | 14 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | 3 | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 171 | 859 | 2279 | 844 | 222 | 74 | 34 | 10 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 4217.

STATION S67 47.53N 85.15W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 264 | 1077 | 463 | 20 | 1 | . | . | . | . | . | 1825 |
| 0.50-0.99 | . | 1030 | 2624 | 690 | 56 | 1 | . | . | . | . | 4401 |
| 1.00-1.49 | . | . | 916 | 671 | 306 | 30 | . | . | . | . | 1923 |
| 1.50-1.99 | . | . | 113 | 443 | 210 | 122 | 7 | . | . | . | 895 |
| 2.00-2.49 | . | . | 2 | 214 | 100 | 106 | 26 | 5 | . | . | 453 |
| 2.50-2.99 | . | . | . | 12 | 134 | 54 | 24 | 13 | 2 | . | 239 |
| 3.00-3.49 | . | . | . | . | 20 | 69 | 17 | 12 | 5 | . | 123 |
| 3.50-3.99 | . | . | . | . | . | 28 | 19 | 10 | 4 | . | 61 |
| 4.00-4.49 | . | . | . | . | . | 3 | 14 | 8 | 3 | . | 28 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 7 | 3 | . | 13 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 2 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 264 | 2107 | 4118 | 2050 | 827 | 413 | 110 | 57 | 21 | 0 | |

MEAN HS(M)= 1.0 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.6 TOTAL CASES= 93504.



## MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S67 (47.53N 85.15W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 1.1 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 1.0 | 1.0 | 1.0 | 0.8 |
| 1957 | 1.3 | 1.2 | 1.0 | 0.9 | 0.8 | 0.8 | 0.6 | 0.6 | 0.9 | 0.8 | 1.3 | 1.3 | 1.0 |
| 1958 | 0.9 | 1.2 | 0.6 | 0.9 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 0.9 | 1.6 | 1.1 | 0.9 |
| 1959 | 1.1 | 1.1 | 1.0 | 0.9 | 0.9 | 0.6 | 0.6 | 0.5 | 0.9 | 0.9 | 1.3 | 1.2 | 0.9 |
| 1960 | 1.1 | 1.0 | 0.8 | 0.9 | 0.6 | 0.6 | 0.5 | 0.6 | 0.7 | 1.0 | 1.4 | 1.2 | 0.9 |
| 1961 | 0.9 | 0.9 | 1.1 | 0.7 | 0.7 | 0.6 | 0.4 | 0.5 | 0.9 | 0.9 | 1.2 | 1.1 | 0.8 |
| 1962 | 1.4 | 0.8 | 0.6 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.8 | 0.8 | 1.0 | 1.2 | 0.8 |
| 1963 | 1.2 | 1.2 | 1.1 | 0.9 | 0.7 | 0.6 | 0.7 | 0.6 | 0.7 | 0.9 | 1.2 | 1.2 | 0.9 |
| 1964 | 1.5 | 1.4 | 1.3 | 1.1 | 1.0 | 0.8 | 0.6 | 0.9 | 1.1 | 1.2 | 1.2 | 1.2 | 1.1 |
| 1965 | 1.7 | 1.7 | 1.0 | 0.9 | 0.8 | 0.8 | 0.8 | 0.6 | 0.9 | 1.3 | 1.6 | 1.4 | 1.1 |
| 1966 | 1.5 | 1.5 | 1.6 | 1.1 | 1.1 | 0.8 | 0.8 | 0.7 | 1.1 | 1.6 | 1.5 | 1.5 | 1.2 |
| 1967 | 1.5 | 1.5 | 1.4 | 1.1 | 1.0 | 0.7 | 0.7 | 0.7 | 1.0 | 1.3 | 1.4 | 1.7 | 1.2 |
| 1968 | 1.4 | 2.0 | 1.5 | 1.1 | 0.9 | 0.7 | 0.9 | 0.8 | 0.9 | 1.3 | 1.4 | 1.5 | 1.2 |
| 1969 | 1.6 | 1.1 | 1.3 | 0.9 | 0.8 | 0.7 | 0.6 | 0.9 | 0.9 | 1.3 | 1.3 | 1.2 | 1.1 |
| 1970 | 1.2 | 1.5 | 1.2 | 1.0 | 0.8 | 0.6 | 0.6 | 0.7 | 1.1 | 1.3 | 1.3 | 1.2 | 1.0 |
| 1971 | 1.5 | 1.4 | 1.3 | 1.0 | 0.7 | 0.5 | 0.7 | 0.7 | 0.9 | 1.1 | 1.3 | 1.3 | 1.0 |
| 1972 | 1.8 | 1.3 | 1.2 | 0.8 | 0.5 | 0.6 | 0.6 | 0.6 | 1.0 | 1.3 | 1.0 | 1.2 | 1.0 |
| 1973 | 1.4 | 1.1 | 1.2 | 1.0 | 0.7 | 0.6 | 0.6 | 0.6 | 1.0 | 1.1 | 1.5 | 1.0 | 1.0 |
| 1974 | 1.2 | 0.9 | 1.3 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 0.9 | 1.2 | 1.2 | 1.1 | 0.9 |
| 1975 | 1.3 | 1.0 | 1.0 | 0.7 | 0.5 | 0.6 | 0.7 | 0.7 | 0.8 | 1.3 | 1.3 | 1.2 | 0.9 |
| 1976 | 1.7 | 1.5 | 1.7 | 1.0 | 0.9 | 0.7 | 0.6 | 0.7 | 1.0 | 1.0 | 1.5 | 1.4 | 1.2 |
| 1977 | 1.3 | 1.2 | 1.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 0.9 | 1.1 | 1.1 | 0.9 |
| 1978 | 1.2 | 1.0 | 1.0 | 0.8 | 0.6 | 0.6 | 0.6 | 1.2 | 0.9 | 1.4 | 1.5 | 1.7 | 1.0 |
| 1979 | 1.1 | 0.8 | 1.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 1.0 | 0.8 | 1.6 | 1.8 | 0.9 |
| 1980 | 1.2 | 0.9 | 1.3 | 0.7 | 0.6 | 0.6 | 0.5 | 0.6 | 1.0 | 1.2 | 1.1 | 1.3 | 0.9 |
| 1981 | 1.0 | 1.2 | 0.9 | 0.9 | 0.7 | 0.6 | 0.6 | 0.5 | 0.8 | 1.1 | 1.2 | 1.1 | 0.9 |
| 1982 | 1.6 | 1.3 | 1.6 | 1.1 | 0.6 | 0.6 | 0.6 | 0.6 | 0.9 | 1.1 | 1.3 | 1.4 | 1.1 |
| 1983 | 1.3 | 1.1 | 1.2 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 1.0 | 1.1 | 1.5 | 1.4 | 1.0 |
| 1984 | 1.5 | 1.2 | 1.2 | 0.9 | 0.8 | 0.6 | 0.6 | 0.5 | 0.9 | 1.2 | 1.7 | 1.6 | 1.1 |
| 1985 | 1.4 | 1.2 | 1.3 | 0.9 | 0.7 | 0.8 | 0.6 | 0.7 | 1.1 | 1.3 | 1.1 | 1.5 | 1.1 |
| 1986 | 1.5 | 0.8 | 1.4 | 1.1 | 0.7 | 0.7 | 0.5 | 0.8 | 1.0 | 1.2 | 1.6 | 1.6 | 1.1 |
| 1987 | 1.3 | 1.1 | 1.1 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 0.7 | 1.1 | 1.3 | 1.3 | 1.0 |
| MEAN | 1.3 | 1.2 | 1.2 | 0.9 | 0.7 | 0.6 | 0.6 | 0.7 | 0.9 | 1.1 | 1.3 | 1.3 | |

## LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S67 (47.53N 85.15W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.0 | 3.5 | 2.6 | 3.1 | 2.0 | 1.5 | 1.5 | 1.5 | 2.6 | 4.0 | 2.8 | 3.4 |
| 1957 | 3.8 | 3.3 | 3.2 | 2.5 | 2.4 | 3.2 | 3.0 | 1.9 | 2.9 | 2.5 | 3.3 | 4.7 |
| 1958 | 2.9 | 3.3 | 2.2 | 4.5 | 3.1 | 2.0 | 1.8 | 1.9 | 2.6 | 3.4 | 5.9 | 3.7 |
| 1959 | 3.4 | 4.9 | 2.9 | 2.5 | 4.1 | 2.4 | 1.7 | 1.5 | 3.0 | 3.5 | 4.7 | 6.2 |
| 1960 | 3.5 | 3.0 | 2.4 | 3.1 | 1.6 | 1.4 | 1.8 | 2.0 | 2.7 | 3.7 | 4.6 | 4.3 |
| 1961 | 3.5 | 3.4 | 4.2 | 2.2 | 2.6 | 1.9 | 1.8 | 2.2 | 2.8 | 3.1 | 4.3 | 4.9 |
| 1962 | 3.8 | 2.5 | 3.1 | 2.8 | 1.8 | 1.5 | 1.7 | 1.5 | 2.6 | 4.5 | 3.4 | 4.9 |
| 1963 | 3.5 | 4.2 | 3.1 | 4.2 | 2.5 | 2.1 | 2.3 | 1.4 | 1.7 | 2.6 | 4.5 | 3.9 |
| 1964 | 5.2 | 5.2 | 4.2 | 5.3 | 3.6 | 3.2 | 1.7 | 3.3 | 4.5 | 3.8 | 5.8 | 3.2 |
| 1965 | 4.4 | 4.8 | 3.4 | 3.0 | 2.1 | 2.2 | 2.2 | 2.1 | 3.3 | 4.8 | 5.5 | 4.2 |
| 1966 | 6.0 | 4.3 | 4.6 | 3.2 | 2.6 | 2.8 | 2.1 | 2.6 | 4.0 | 6.2 | 3.7 | 4.4 |
| 1967 | 4.3 | 4.0 | 3.3 | 3.8 | 3.0 | 1.8 | 2.2 | 1.9 | 3.1 | 4.1 | 3.9 | 5.1 |
| 1968 | 3.6 | 5.7 | 4.3 | 3.6 | 2.5 | 1.7 | 3.2 | 2.6 | 2.5 | 3.8 | 4.6 | 4.3 |
| 1969 | 4.0 | 4.2 | 3.4 | 2.5 | 1.8 | 2.3 | 2.0 | 2.5 | 2.7 | 4.1 | 3.9 | 4.0 |
| 1970 | 3.8 | 4.4 | 3.6 | 4.1 | 2.7 | 1.9 | 2.1 | 2.0 | 3.1 | 4.4 | 4.3 | 5.2 |
| 1971 | 4.1 | 4.9 | 4.8 | 3.1 | 1.8 | 1.3 | 2.0 | 1.7 | 2.9 | 3.8 | 5.0 | 5.1 |
| 1972 | 5.8 | 4.5 | 3.0 | 3.1 | 1.6 | 1.6 | 1.4 | 1.5 | 3.8 | 5.7 | 4.0 | 4.5 |
| 1973 | 3.6 | 2.8 | 4.3 | 3.3 | 2.3 | 1.7 | 1.9 | 1.9 | 3.5 | 4.1 | 3.9 | 3.5 |
| 1974 | 4.1 | 4.6 | 3.4 | 2.4 | 1.8 | 1.5 | 1.9 | 1.9 | 2.5 | 3.2 | 3.6 | 3.6 |
| 1975 | 5.7 | 4.0 | 2.5 | 1.9 | 1.3 | 2.2 | 2.1 | 2.8 | 2.3 | 4.7 | 4.2 | 4.5 |
| 1976 | 7.8 | 4.5 | 4.4 | 3.2 | 3.7 | 2.0 | 2.0 | 2.9 | 3.5 | 4.2 | 4.8 | 5.5 |
| 1977 | 4.7 | 4.8 | 4.8 | 1.8 | 1.7 | 1.3 | 2.3 | 2.2 | 5.4 | 4.5 | 7.4 | 3.2 |
| 1978 | 3.6 | 2.3 | 3.8 | 2.4 | 1.6 | 1.7 | 2.1 | 3.3 | 2.8 | 3.9 | 5.0 | 4.4 |
| 1979 | 3.4 | 3.1 | 3.0 | 2.4 | 2.1 | 1.8 | 1.6 | 1.9 | 3.2 | 2.2 | 4.6 | 4.3 |
| 1980 | 7.2 | 4.2 | 5.1 | 1.8 | 2.7 | 1.7 | 1.2 | 1.7 | 3.9 | 4.6 | 4.7 | 3.9 |
| 1981 | 2.9 | 3.5 | 3.1 | 2.6 | 1.6 | 2.8 | 2.0 | 1.4 | 4.2 | 3.3 | 4.6 | 4.8 |
| 1982 | 5.4 | 4.1 | 6.5 | 5.8 | 1.4 | 2.0 | 1.6 | 1.8 | 3.1 | 4.5 | 4.5 | 4.8 |
| 1983 | 4.3 | 5.3 | 3.7 | 2.4 | 1.6 | 2.0 | 2.2 | 2.0 | 3.2 | 3.7 | 5.8 | 3.8 |
| 1984 | 5.2 | 3.0 | 4.2 | 3.6 | 2.5 | 3.0 | 1.7 | 2.5 | 2.8 | 4.7 | 5.4 | 5.6 |
| 1985 | 5.3 | 3.9 | 4.7 | 3.1 | 1.8 | 3.4 | 1.8 | 2.2 | 4.9 | 3.5 | 3.1 | 5.0 |
| 1986 | 5.4 | 2.2 | 4.5 | 2.9 | 2.6 | 2.9 | 1.1 | 2.3 | 3.1 | 3.5 | 5.8 | 4.9 |
| 1987 | 3.9 | 4.1 | 3.9 | 4.0 | 2.9 | 2.1 | 1.9 | 3.1 | 2.6 | 3.5 | 4.6 | 4.2 |

## 32 YR. STATISTICS FOR WIS STATION S67

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.0 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.6 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 7.8 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 282.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 76011500 |

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 223 | 602 | 31 | 1 | . | . | . | . | . | . | 857 |
| 0.50-0.99 | . | 564 | 1189 | 9 | 5 | 2 | . | . | . | . | 1769 |
| 1.00-1.49 | . | . | 1118 | 6 | 10 | 7 | . | . | . | . | 1141 |
| 1.50-1.99 | . | . | 108 | 333 | 5 | 9 | . | . | . | . | 455 |
| 2.00-2.49 | . | . | . | 263 | 1 | 3 | 3 | 1 | . | . | 271 |
| 2.50-2.99 | . | . | . | 20 | 33 | . | 1 | . | . | . | 54 |
| 3.00-3.49 | . | . | . | . | 3 | . | 1 | 1 | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 223 | 1166 | 2446 | 632 | 57 | 23 | 5 | 2 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 4266.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 198 | 612 | 53 | 4 | . | . | . | . | . | . | 867 |
| 0.50-0.99 | . | 751 | 1236 | 10 | 7 | 1 | . | . | . | . | 2005 |
| 1.00-1.49 | . | . | 778 | 108 | 3 | 9 | . | . | . | . | 898 |
| 1.50-1.99 | . | . | 67 | 367 | 2 | 1 | . | . | . | . | 437 |
| 2.00-2.49 | . | . | 4 | 179 | 12 | . | . | . | . | . | 195 |
| 2.50-2.99 | . | . | . | 3 | 33 | . | . | . | . | . | 36 |
| 3.00-3.49 | . | . | . | . | 5 | . | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 198 | 1363 | 2138 | 671 | 62 | 13 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 4166.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 262 | 697 | 50 | 2 | 1 | . | . | . | . | . | 1012 |
| 0.50-0.99 | . | 1118 | 1128 | 13 | 3 | 1 | . | . | . | . | 2263 |
| 1.00-1.49 | . | . | 391 | 149 | 1 | . | . | . | . | . | 541 |
| 1.50-1.99 | . | . | 111 | 143 | 2 | 1 | . | . | . | . | 257 |
| 2.00-2.49 | . | . | 4 | 16 | 7 | . | . | . | . | . | 27 |
| 2.50-2.99 | . | . | . | 3 | 1 | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 262 | 1815 | 1684 | 326 | 15 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 3843.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 232 | 576 | 51 | 4 | . | . | . | . | . | . | 863 |
| 0.50-0.99 | . | 911 | 324 | 7 | . | . | . | . | . | . | 1242 |
| 1.00-1.49 | . | . | 160 | 32 | . | . | . | . | . | . | 192 |
| 1.50-1.99 | . | . | 42 | 10 | . | . | . | . | . | . | 52 |
| 2.00-2.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 232 | 1487 | 577 | 55 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.2 NO. OF CASES= 2202.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 250 | 655 | 52 | 1 | . | . | . | . | . | . | 958 |
| 0.50-0.99 | . | 601 | 60 | 8 | . | . | . | . | . | . | 669 |
| 1.00-1.49 | . | . | 139 | 3 | . | . | . | . | . | . | 142 |
| 1.50-1.99 | . | . | 25 | . | . | . | . | . | . | . | 25 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 250 | 1256 | 276 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 3.0 NO. OF CASES= 1681.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 235 | 396 | 14 | . | . | . | . | . | . | . | 645 |
| 0.50-0.99 | . | 361 | 35 | . | . | . | . | . | . | . | 396 |
| 1.00-1.49 | . | . | 49 | . | . | . | . | . | . | . | 49 |
| 1.50-1.99 | . | . | 17 | 1 | . | . | . | . | . | . | 18 |
| 2.00-2.49 | . | . | 1 | . | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 235 | 757 | 116 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 2.9 NO. OF CASES= 1040.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 144 | 345 | 67 | 7 | . | . | . | . | . | . | 563 |
| 0.50-0.99 | . | 648 | 80 | 33 | 5 | . | . | . | . | . | 766 |
| 1.00-1.49 | . | . | 73 | 9 | 5 | 1 | . | . | . | . | 88 |
| 1.50-1.99 | . | . | 26 | 3 | 5 | 2 | . | . | . | . | 36 |
| 2.00-2.49 | . | . | . | . | 2 | 2 | . | . | . | . | 4 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 144 | 993 | 246 | 52 | 17 | 5 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 1368.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 193 | 640 | 491 | 72 | 5 | . | . | . | . | . | 1401 |
| 0.50-0.99 | . | 1034 | 824 | 546 | 131 | 7 | . | . | . | . | 2542 |
| 1.00-1.49 | . | . | 145 | 364 | 214 | 20 | . | . | . | . | 743 |
| 1.50-1.99 | . | . | 10 | 77 | 163 | 31 | . | . | . | . | 281 |
| 2.00-2.49 | . | . | . | 7 | 98 | 13 | 1 | . | . | . | 119 |
| 2.50-2.99 | . | . | . | . | 4 | 6 | . | . | . | . | 10 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 193 | 1674 | 1470 | 1066 | 615 | 78 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 4777.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 167 | 733 | 845 | 136 | 17 | . | . | . | . | . | 1898 |
| 0.50-0.99 | . | 712 | 1805 | 755 | 253 | 5 | 1 | . | . | . | 3531 |
| 1.00-1.49 | . | . | 503 | 662 | 368 | 25 | . | . | . | . | 1558 |
| 1.50-1.99 | . | . | 43 | 315 | 181 | 21 | . | . | . | . | 560 |
| 2.00-2.49 | . | . | . | 111 | 118 | 25 | . | . | . | . | 254 |
| 2.50-2.99 | . | . | . | 3 | 73 | 10 | . | . | . | . | 86 |
| 3.00-3.49 | . | . | . | . | 7 | 38 | . | . | . | . | 45 |
| 3.50-3.99 | . | . | . | . | . | 9 | . | . | . | . | 9 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 167 | 1445 | 3196 | 1982 | 1017 | 133 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.6 NO. OF CASES= 7440.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 174 | 857 | 709 | 27 | . | . | . | . | . | . | 1767 |
| 0.50-0.99 | . | 664 | 2413 | 730 | 69 | . | . | . | . | . | 3876 |
| 1.00-1.49 | . | . | 671 | 655 | 267 | 14 | . | . | . | . | 1607 |
| 1.50-1.99 | . | . | 56 | 394 | 218 | 50 | 2 | . | . | . | 720 |
| 2.00-2.49 | . | . | . | 180 | 116 | 68 | 1 | . | . | . | 365 |
| 2.50-2.99 | . | . | . | 2 | 152 | 22 | 7 | . | . | . | 183 |
| 3.00-3.49 | . | . | . | . | 14 | 100 | 3 | . | . | . | 117 |
| 3.50-3.99 | . | . | . | . | . | 52 | 2 | 3 | . | . | 57 |
| 4.00-4.49 | . | . | . | . | . | 5 | 6 | . | . | . | 11 |
| 4.50-4.99 | . | . | . | . | . | . | 9 | 2 | . | . | 11 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 4 | . | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 174 | 1521 | 3849 | 1988 | 836 | 311 | 31 | 9 | 3 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.6 NO. OF CASES= 8171.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 214 | 1041 | 564 | 8 | . | . | . | . | . | . | 1827 |
| 0.50-0.99 | . | 743 | 3274 | 881 | 19 | . | . | . | . | . | 4917 |
| 1.00-1.49 | . | . | 745 | 975 | 377 | 10 | . | . | . | . | 2107 |
| 1.50-1.99 | . | . | 66 | 356 | 372 | 74 | . | . | . | . | 868 |
| 2.00-2.49 | . | . | 3 | 151 | 119 | 156 | 2 | . | . | . | 431 |
| 2.50-2.99 | . | . | . | 4 | 136 | 69 | 11 | . | . | . | 220 |
| 3.00-3.49 | . | . | . | . | 6 | 104 | 19 | 4 | . | . | 133 |
| 3.50-3.99 | . | . | . | . | . | 47 | 19 | 9 | . | . | 75 |
| 4.00-4.49 | . | . | . | . | . | 8 | 39 | 12 | 1 | . | 60 |
| 4.50-4.99 | . | . | . | . | . | . | 11 | 16 | . | . | 27 |
| 5.00-5.49 | . | . | . | . | . | . | . | 25 | 3 | . | 28 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 1 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 214 | 1784 | 4652 | 2375 | 1029 | 468 | 101 | 70 | 7 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.7 NO. OF CASES= 10023.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 196 | 977 | 311 | 3 | 2 | . | . | . | . | . | 1489 |
| 0.50-0.99 | . | 728 | 2773 | 386 | 21 | . | . | . | . | . | 3908 |
| 1.00-1.49 | . | . | 728 | 910 | 151 | 24 | . | 1 | . | . | 1814 |
| 1.50-1.99 | . | . | 58 | 357 | 262 | 66 | 2 | 1 | . | . | 746 |
| 2.00-2.49 | . | . | . | 131 | 156 | 146 | 10 | 1 | . | . | 444 |
| 2.50-2.99 | . | . | . | 4 | 101 | 114 | 18 | 5 | . | . | 242 |
| 3.00-3.49 | . | . | . | . | 14 | 81 | 29 | 12 | 1 | . | 137 |
| 3.50-3.99 | . | . | . | . | . | 28 | 39 | 16 | 2 | . | 85 |
| 4.00-4.49 | . | . | . | . | . | 1 | 18 | 14 | 1 | . | 34 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 11 | 3 | . | 17 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | 1 | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | | | | | | | | | 1 | | 1 |
| TOTAL | 196 | 1705 | 3870 | 1791 | 707 | 460 | 119 | 66 | 13 | 1 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.7 NO. OF CASES= 8365.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 214 | 1166 | 1066 | 57 | . | . | . | . | . | . | 2503 |
| 0.50-0.99 | . | 669 | 4324 | 2945 | 99 | 3 | . | . | . | . | 8040 |
| 1.00-1.49 | . | 1 | 740 | 1719 | 1328 | 167 | 2 | . | . | . | 3957 |
| 1.50-1.99 | . | . | 68 | 388 | 563 | 736 | 51 | 2 | . | . | 1808 |
| 2.00-2.49 | . | . | . | 140 | 122 | 462 | 243 | 71 | . | . | 1038 |
| 2.50-2.99 | . | . | . | 10 | 130 | 166 | 137 | 112 | 17 | 1 | 573 |
| 3.00-3.49 | . | . | . | . | 14 | 119 | 54 | 90 | 40 | 2 | 319 |
| 3.50-3.99 | . | . | . | . | . | 37 | 37 | 29 | 42 | 13 | 158 |
| 4.00-4.49 | . | . | . | . | . | 6 | 24 | 24 | 29 | 9 | 92 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 19 | 21 | 13 | 57 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | 12 | 7 | 23 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 4 | 4 | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 4 | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 214 | 1836 | 6198 | 5259 | 2256 | 1696 | 552 | 352 | 167 | 55 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 5.3 NO. OF CASES= 17407.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 183 | 949 | 636 | 56 | . | . | . | . | . | . | 1824 |
| 0.50-0.99 | . | 725 | 2850 | 1203 | 120 | 2 | . | . | . | . | 4900 |
| 1.00-1.49 | . | . | 1173 | 688 | 576 | 127 | 1 | . | . | . | 2565 |
| 1.50-1.99 | . | . | 159 | 337 | 298 | 242 | 16 | 2 | . | . | 1054 |
| 2.00-2.49 | . | . | . | 188 | 141 | 191 | 45 | 7 | . | . | 572 |
| 2.50-2.99 | . | . | . | 21 | 79 | 147 | 57 | 26 | 1 | . | 331 |
| 3.00-3.49 | . | . | . | 1 | 18 | 100 | 68 | 33 | 6 | . | 226 |
| 3.50-3.99 | . | . | . | . | . | 24 | 25 | 25 | 7 | . | 81 |
| 4.00-4.49 | . | . | . | . | . | 4 | 22 | 13 | 6 | . | 45 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | 5 | 1 | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 2 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 183 | 1674 | 4818 | 2494 | 1232 | 837 | 235 | 109 | 29 | 3 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.9 NO. OF CASES= 10879.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 141 | 529 | 133 | 14 | 1 | . | . | . | . | . | 818 |
| 0.50-0.99 | . | 533 | 1163 | 176 | 60 | 10 | 1 | . | . | . | 1943 |
| 1.00-1.49 | . | . | 842 | 45 | 74 | 63 | 5 | . | . | . | 1029 |
| 1.50-1.99 | . | . | 155 | 220 | 47 | 60 | 11 | . | . | . | 493 |
| 2.00-2.49 | . | . | 2 | 117 | 19 | 42 | 14 | 1 | . | . | 195 |
| 2.50-2.99 | . | . | . | 18 | 8 | 36 | 29 | 3 | . | . | 94 |
| 3.00-3.49 | . | . | . | 3 | 3 | 3 | 20 | 11 | . | . | 40 |
| 3.50-3.99 | . | . | . | . | 1 | 1 | 2 | 2 | . | . | 6 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | 1 | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 141 | 1062 | 2295 | 593 | 213 | 216 | 82 | 17 | 1 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 4337.

STATION S68 47.67N 85.15W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

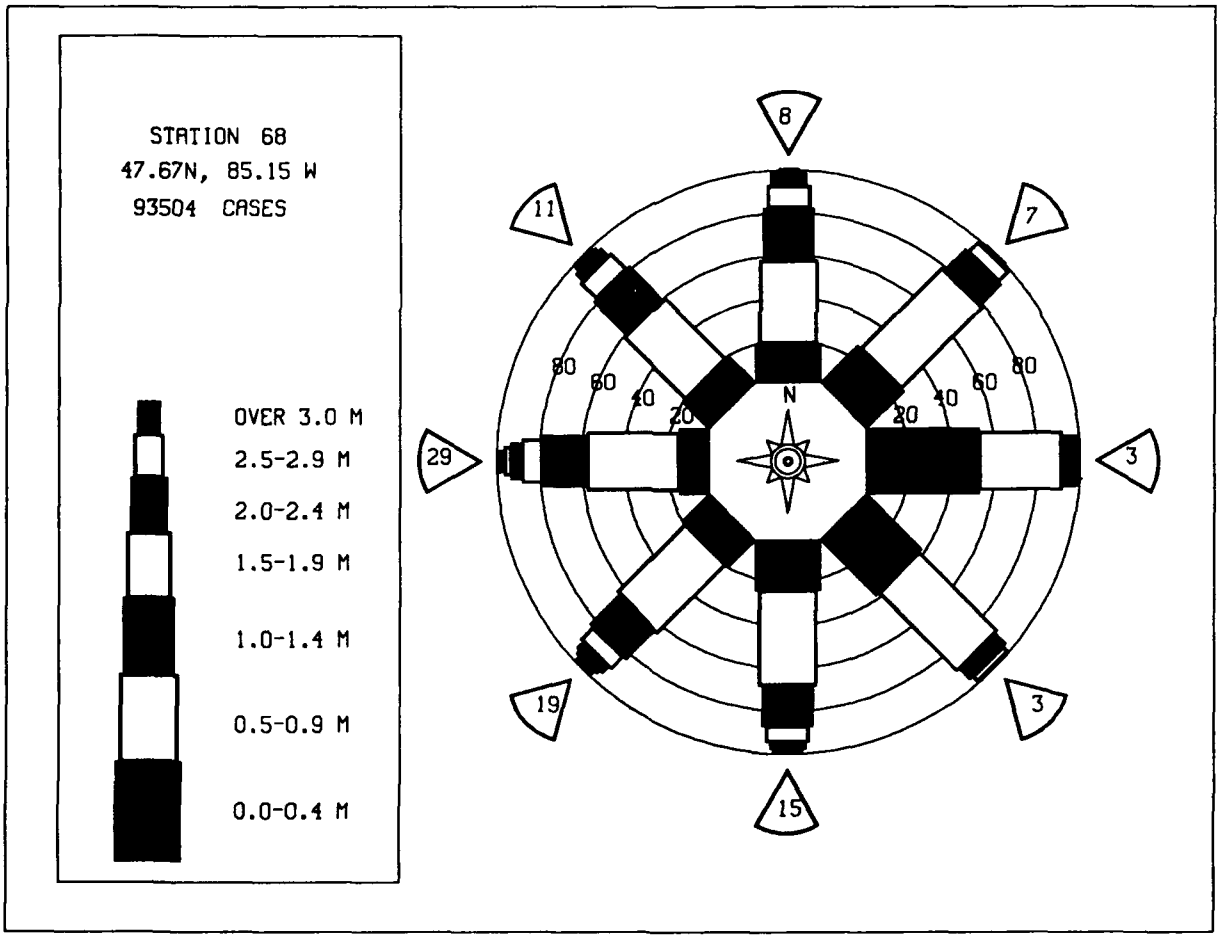
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 194 | 498 | 18 | . | . | . | . | . | . | . | 710 |
| 0.50-0.99 | . | 448 | 995 | 4 | 3 | 1 | . | . | . | . | 1451 |
| 1.00-1.49 | . | . | 928 | 5 | 1 | 5 | . | . | . | . | 939 |
| 1.50-1.99 | . | . | 149 | 259 | 6 | 9 | . | . | . | . | 423 |
| 2.00-2.49 | . | . | . | 191 | . | 4 | 7 | . | . | . | 202 |
| 2.50-2.99 | . | . | . | 31 | 9 | 2 | 4 | 1 | . | . | 47 |
| 3.00-3.49 | . | . | . | 1 | 1 | . | . | 2 | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 194 | 946 | 2090 | 491 | 20 | 21 | 11 | 3 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 4.0 NO. OF CASES= 3539.

STATION S68 47.67N 85.15W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 322 | 1128 | 509 | 39 | 2 | . | . | . | . | . | 2000 |
| 0.50-0.99 | . | 1121 | 2448 | 771 | 80 | 3 | . | . | . | . | 4423 |
| 1.00-1.49 | . | . | 918 | 633 | 338 | 47 | . | . | . | . | 1936 |
| 1.50-1.99 | . | . | 116 | 356 | 212 | 130 | 8 | . | . | . | 822 |
| 2.00-2.49 | . | . | 1 | 168 | 91 | 111 | 33 | 8 | . | . | 412 |
| 2.50-2.99 | . | . | . | 12 | 76 | 57 | 26 | 14 | 1 | . | 186 |
| 3.00-3.49 | . | . | . | . | 8 | 54 | 19 | 15 | 4 | . | 100 |
| 3.50-3.99 | . | . | . | . | . | 20 | 12 | 8 | 5 | 1 | 46 |
| 4.00-4.49 | . | . | . | . | . | 2 | 11 | 6 | 3 | . | 22 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 5 | 2 | 1 | 11 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | 1 | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 322 | 2249 | 3992 | 1979 | 807 | 424 | 112 | 60 | 17 | 2 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S68 (47.67N 85.15W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 1.0 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.9 | 0.9 | 0.9 | 0.7 |
| 1957 | 1.2 | 1.1 | 0.9 | 0.8 | 0.8 | 0.7 | 0.6 | 0.6 | 0.8 | 0.7 | 1.1 | 1.2 | 0.9 |
| 1958 | 0.8 | 1.0 | 0.5 | 0.8 | 0.8 | 0.7 | 0.5 | 0.6 | 0.8 | 0.8 | 1.5 | 1.0 | 0.8 |
| 1959 | 1.0 | 1.0 | 0.9 | 0.8 | 0.8 | 0.5 | 0.6 | 0.5 | 0.8 | 0.8 | 1.2 | 1.0 | 0.8 |
| 1960 | 1.0 | 0.9 | 0.7 | 0.8 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.9 | 1.3 | 1.1 | 0.8 |
| 1961 | 0.8 | 0.8 | 0.9 | 0.6 | 0.7 | 0.6 | 0.4 | 0.5 | 0.8 | 0.8 | 1.1 | 1.0 | 0.8 |
| 1962 | 1.3 | 0.7 | 0.6 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.7 | 1.0 | 1.1 | 0.7 |
| 1963 | 1.2 | 1.2 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.9 | 1.1 | 1.2 | 0.9 |
| 1964 | 1.4 | 1.3 | 1.2 | 1.0 | 0.9 | 0.7 | 0.6 | 0.9 | 1.0 | 1.2 | 1.1 | 1.1 | 1.0 |
| 1965 | 1.6 | 1.6 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.6 | 0.9 | 1.2 | 1.5 | 1.3 | 1.1 |
| 1966 | 1.4 | 1.5 | 1.4 | 1.0 | 1.0 | 0.8 | 0.8 | 0.7 | 1.1 | 1.6 | 1.4 | 1.5 | 1.2 |
| 1967 | 1.4 | 1.5 | 1.4 | 1.1 | 0.9 | 0.7 | 0.7 | 0.7 | 1.0 | 1.3 | 1.4 | 1.7 | 1.1 |
| 1968 | 1.3 | 1.8 | 1.4 | 1.1 | 0.8 | 0.7 | 0.8 | 0.8 | 0.9 | 1.3 | 1.3 | 1.4 | 1.1 |
| 1969 | 1.5 | 1.0 | 1.2 | 0.8 | 0.8 | 0.7 | 0.6 | 0.8 | 0.9 | 1.2 | 1.3 | 1.1 | 1.0 |
| 1970 | 1.1 | 1.4 | 1.1 | 1.0 | 0.8 | 0.6 | 0.6 | 0.6 | 1.1 | 1.3 | 1.2 | 1.1 | 1.0 |
| 1971 | 1.4 | 1.3 | 1.2 | 0.9 | 0.7 | 0.5 | 0.7 | 0.6 | 0.8 | 1.1 | 1.2 | 1.2 | 1.0 |
| 1972 | 1.7 | 1.2 | 1.1 | 0.8 | 0.5 | 0.6 | 0.6 | 0.5 | 0.9 | 1.2 | 1.0 | 1.1 | 0.9 |
| 1973 | 1.3 | 1.1 | 1.0 | 0.9 | 0.6 | 0.5 | 0.6 | 0.6 | 0.9 | 1.0 | 1.3 | 1.0 | 0.9 |
| 1974 | 1.1 | 0.9 | 1.2 | 0.8 | 0.6 | 0.7 | 0.6 | 0.7 | 0.9 | 1.1 | 1.1 | 1.0 | 0.9 |
| 1975 | 1.2 | 0.9 | 0.9 | 0.6 | 0.5 | 0.6 | 0.6 | 0.7 | 0.8 | 1.3 | 1.2 | 1.1 | 0.9 |
| 1976 | 1.6 | 1.4 | 1.5 | 0.9 | 0.8 | 0.7 | 0.6 | 0.7 | 0.9 | 0.9 | 1.4 | 1.3 | 1.1 |
| 1977 | 1.3 | 1.2 | 1.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 | 0.9 | 1.1 | 1.0 | 0.9 |
| 1978 | 1.2 | 1.0 | 1.1 | 0.7 | 0.6 | 0.6 | 0.6 | 1.2 | 0.9 | 1.3 | 1.4 | 1.6 | 1.0 |
| 1979 | 1.1 | 0.8 | 1.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 1.0 | 0.7 | 1.5 | 1.7 | 0.9 |
| 1980 | 1.2 | 0.9 | 1.2 | 0.7 | 0.7 | 0.6 | 0.5 | 0.7 | 1.0 | 1.1 | 1.0 | 1.3 | 0.9 |
| 1981 | 1.0 | 1.2 | 0.9 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.8 | 1.1 | 1.2 | 1.1 | 0.9 |
| 1982 | 1.6 | 1.3 | 1.5 | 1.0 | 0.6 | 0.6 | 0.7 | 0.6 | 0.9 | 1.2 | 1.3 | 1.4 | 1.1 |
| 1983 | 1.3 | 1.2 | 1.2 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 1.0 | 1.1 | 1.5 | 1.4 | 1.0 |
| 1984 | 1.5 | 1.2 | 1.2 | 0.9 | 0.8 | 0.6 | 0.6 | 0.6 | 0.9 | 1.2 | 1.7 | 1.6 | 1.1 |
| 1985 | 1.3 | 1.2 | 1.4 | 0.9 | 0.7 | 0.9 | 0.7 | 0.7 | 1.2 | 1.4 | 1.1 | 1.5 | 1.1 |
| 1986 | 1.6 | 0.8 | 1.5 | 1.1 | 0.8 | 0.8 | 0.5 | 0.8 | 1.1 | 1.2 | 1.6 | 1.7 | 1.1 |
| 1987 | 1.2 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.7 | 0.7 | 1.1 | 1.2 | 1.3 | 0.9 |
| MEAN | 1.2 | 1.1 | 1.1 | 0.8 | 0.7 | 0.6 | 0.6 | 0.7 | 0.9 | 1.1 | 1.3 | 1.3 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S68 (47.67N 85.15W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.2 | 3.3 | 2.7 | 2.7 | 2.1 | 1.4 | 1.4 | 1.2 | 2.1 | 3.9 | 2.2 | 3.3 |
| 1957 | 3.5 | 3.3 | 2.9 | 2.3 | 2.5 | 3.3 | 2.5 | 1.5 | 2.3 | 1.9 | 2.9 | 3.9 |
| 1958 | 2.7 | 2.6 | 1.8 | 4.5 | 2.6 | 1.9 | 1.8 | 1.7 | 2.4 | 3.1 | 6.7 | 3.6 |
| 1959 | 3.6 | 4.9 | 2.3 | 2.9 | 3.9 | 1.8 | 1.6 | 1.5 | 2.6 | 2.9 | 4.5 | 5.6 |
| 1960 | 3.0 | 2.4 | 2.3 | 3.0 | 1.4 | 1.3 | 1.7 | 2.1 | 2.1 | 3.0 | 4.3 | 3.8 |
| 1961 | 2.7 | 3.1 | 4.1 | 2.5 | 2.4 | 1.7 | 1.6 | 1.7 | 2.5 | 2.8 | 4.1 | 4.5 |
| 1962 | 3.6 | 2.2 | 2.9 | 2.5 | 1.5 | 1.2 | 1.4 | 1.4 | 2.2 | 4.2 | 3.4 | 4.3 |
| 1963 | 3.2 | 3.3 | 2.7 | 3.3 | 2.2 | 1.9 | 1.8 | 1.2 | 1.7 | 2.6 | 3.7 | 3.8 |
| 1964 | 5.2 | 5.0 | 3.3 | 5.2 | 4.2 | 3.0 | 1.5 | 3.0 | 4.3 | 3.9 | 5.8 | 3.0 |
| 1965 | 4.1 | 5.1 | 2.9 | 3.0 | 2.3 | 2.3 | 2.0 | 1.9 | 3.1 | 4.4 | 4.8 | 4.3 |
| 1966 | 6.4 | 4.0 | 4.8 | 3.2 | 2.8 | 2.9 | 2.1 | 2.2 | 3.4 | 5.9 | 3.3 | 4.4 |
| 1967 | 4.2 | 3.7 | 3.4 | 3.9 | 3.0 | 1.9 | 1.9 | 1.7 | 2.7 | 4.4 | 3.6 | 5.3 |
| 1968 | 3.4 | 5.2 | 4.6 | 3.6 | 2.7 | 1.7 | 3.2 | 2.6 | 2.5 | 3.7 | 4.3 | 3.8 |
| 1969 | 3.9 | 3.6 | 3.5 | 2.6 | 1.9 | 2.2 | 2.2 | 2.3 | 2.8 | 4.3 | 3.8 | 3.3 |
| 1970 | 3.3 | 4.0 | 3.3 | 4.2 | 2.6 | 1.8 | 1.8 | 1.6 | 3.0 | 4.9 | 3.9 | 5.0 |
| 1971 | 4.1 | 4.6 | 4.5 | 2.7 | 2.2 | 1.3 | 1.7 | 1.6 | 3.0 | 4.0 | 5.0 | 5.2 |
| 1972 | 4.8 | 3.8 | 2.6 | 2.9 | 1.4 | 1.4 | 1.3 | 1.5 | 3.8 | 4.6 | 3.9 | 4.2 |
| 1973 | 3.3 | 2.6 | 4.1 | 2.9 | 1.8 | 1.2 | 1.9 | 1.5 | 2.9 | 3.6 | 3.2 | 4.0 |
| 1974 | 3.9 | 4.1 | 3.2 | 2.4 | 1.9 | 1.5 | 1.8 | 1.9 | 2.2 | 3.5 | 3.5 | 4.0 |
| 1975 | 5.3 | 3.3 | 2.1 | 1.6 | 1.4 | 2.2 | 1.7 | 2.7 | 2.4 | 4.8 | 3.6 | 3.7 |
| 1976 | 7.8 | 4.4 | 4.1 | 2.9 | 3.0 | 1.9 | 1.7 | 2.5 | 3.3 | 3.9 | 4.5 | 5.4 |
| 1977 | 4.4 | 4.3 | 4.1 | 1.8 | 1.7 | 1.5 | 2.2 | 2.3 | 5.3 | 5.0 | 7.3 | 3.5 |
| 1978 | 4.0 | 2.4 | 3.9 | 2.4 | 1.7 | 1.7 | 2.3 | 3.2 | 2.6 | 4.0 | 4.9 | 4.8 |
| 1979 | 3.6 | 3.1 | 2.6 | 2.0 | 2.3 | 1.8 | 1.4 | 1.9 | 2.8 | 2.3 | 4.5 | 4.3 |
| 1980 | 6.9 | 4.5 | 4.0 | 1.9 | 2.8 | 1.6 | 1.2 | 1.8 | 3.9 | 4.2 | 4.1 | 4.1 |
| 1981 | 2.8 | 3.6 | 3.2 | 2.6 | 1.8 | 2.9 | 1.9 | 1.4 | 4.3 | 3.7 | 5.2 | 5.1 |
| 1982 | 4.9 | 4.1 | 6.2 | 5.3 | 1.5 | 1.9 | 1.6 | 1.7 | 3.2 | 5.2 | 4.6 | 4.6 |
| 1983 | 4.6 | 6.2 | 3.3 | 2.4 | 1.8 | 1.9 | 2.1 | 2.4 | 3.3 | 3.7 | 5.5 | 4.1 |
| 1984 | 5.4 | 3.3 | 4.3 | 3.6 | 2.2 | 3.0 | 1.7 | 2.6 | 3.0 | 5.1 | 5.2 | 6.1 |
| 1985 | 4.8 | 4.1 | 4.5 | 3.0 | 1.9 | 3.2 | 1.9 | 2.5 | 5.6 | 3.7 | 3.4 | 5.6 |
| 1986 | 6.2 | 2.1 | 4.5 | 2.8 | 2.2 | 3.1 | 1.3 | 2.7 | 3.0 | 3.8 | 6.4 | 5.2 |
| 1987 | 3.4 | 3.9 | 3.4 | 3.4 | 2.9 | 1.8 | 1.7 | 2.7 | 2.0 | 3.2 | 4.1 | 4.3 |

32 YR. STATISTICS FOR WIS STATION S68

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 4.5 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.4 |
| LARGEST WAVE HS . . . . . | (METERS) | 7.8 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 280.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 76011500 |

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 356 | 467 | 17 | 1 | . | . | . | . | . | . | 841 |
| 0.50-0.99 | . | 1470 | 1056 | . | 1 | 1 | . | 1 | . | . | 2526 |
| 1.00-1.49 | . | . | 735 | . | . | . | . | . | . | . | 738 |
| 1.50-1.99 | . | . | 243 | 178 | . | 2 | . | . | . | . | 423 |
| 2.00-2.49 | . | . | . | 60 | . | . | 2 | . | . | . | 62 |
| 2.50-2.99 | . | . | . | 5 | . | . | . | 1 | . | . | 6 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 356 | 1937 | 2051 | 244 | 1 | 3 | 2 | 2 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 4303.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 397 | 625 | 20 | 2 | . | . | . | . | . | . | 1044 |
| 0.50-0.99 | . | 973 | 1371 | . | 1 | 1 | . | . | . | . | 2346 |
| 1.00-1.49 | . | . | 1253 | . | . | 1 | . | . | . | . | 1254 |
| 1.50-1.99 | . | . | 166 | 397 | . | 1 | 1 | . | . | . | 565 |
| 2.00-2.49 | . | . | . | 223 | . | . | . | 1 | . | . | 224 |
| 2.50-2.99 | . | . | . | 18 | 14 | . | . | . | . | . | 32 |
| 3.00-3.49 | . | . | . | . | 10 | . | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 397 | 1598 | 2810 | 640 | 25 | 3 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 5126.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 388 | 741 | 22 | 1 | . | 1 | . | . | . | . | 1153 |
| 0.50-0.99 | . | 596 | 1369 | . | 1 | . | . | . | . | . | 1966 |
| 1.00-1.49 | . | . | 1082 | . | . | . | . | . | . | . | 1082 |
| 1.50-1.99 | . | . | 56 | 290 | . | . | . | . | . | . | 346 |
| 2.00-2.49 | . | . | . | 127 | . | . | . | . | . | . | 127 |
| 2.50-2.99 | . | . | . | 5 | 8 | . | . | . | . | . | 13 |
| 3.00-3.49 | . | . | . | . | 5 | . | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 388 | 1337 | 2529 | 423 | 14 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 4393.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 317 | 589 | 22 | 1 | . | . | . | . | . | . | 929 |
| 0.50-0.99 | . | 574 | 466 | . | . | 1 | . | . | . | . | 1041 |
| 1.00-1.49 | . | . | 315 | 1 | . | 1 | . | . | . | . | 317 |
| 1.50-1.99 | . | . | 23 | 39 | . | 1 | . | . | . | . | 63 |
| 2.00-2.49 | . | . | . | 14 | . | . | . | . | . | . | 14 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 317 | 1163 | 826 | 55 | 0 | 3 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 2215.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 313 | 694 | 18 | | | | | | | | 1025 |
| 0.50-0.99 | . | 612 | 60 | 2 | 1 | . | . | . | . | . | 675 |
| 1.00-1.49 | . | . | 139 | 1 | . | . | . | . | . | . | 140 |
| 1.50-1.99 | . | . | 18 | . | . | . | . | . | . | . | 19 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 313 | 1306 | 236 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 1741.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 241 | 395 | 12 | . | . | . | . | . | . | . | 648 |
| 0.50-0.99 | . | 387 | 35 | . | . | . | . | . | . | . | 422 |
| 1.00-1.49 | . | . | 53 | . | . | . | . | . | . | . | 53 |
| 1.50-1.99 | . | . | 18 | . | . | . | . | . | . | . | 18 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 241 | 782 | 118 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 2.9 NO. OF CASES= 1071.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 207 | 300 | 25 | 2 | | | | | | | 534 |
| 0.50-0.99 | . | 534 | 58 | 5 | 7 | . | . | . | . | . | 604 |
| 1.00-1.49 | . | . | 65 | . | . | 1 | . | . | . | . | 66 |
| 1.50-1.99 | . | . | 22 | 1 | 2 | 3 | . | . | . | . | 28 |
| 2.00-2.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 207 | 834 | 170 | 8 | 10 | 4 | 0 | 0 | 0 | 0 | 0 |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 1158.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 269 | 671 | 286 | 102 | 8 | | | | | | 1336 |
| 0.50-0.99 | . | 1250 | 315 | 295 | 122 | 5 | . | . | . | . | 1987 |
| 1.00-1.49 | . | . | 103 | 60 | 54 | 18 | . | . | . | . | 235 |
| 1.50-1.99 | . | . | 29 | 14 | 71 | 18 | 1 | . | . | . | 133 |
| 2.00-2.49 | . | . | 2 | 3 | 16 | 13 | . | . | . | . | 34 |
| 2.50-2.99 | . | . | . | . | 2 | 3 | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 269 | 1921 | 735 | 474 | 273 | 58 | 1 | 0 | 0 | 0 | 0 |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 3500.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 258 | 798 | 982 | 216 | 33 | . | . | . | . | . | 2287 |
| 0.50-0.99 | . | 888 | 1674 | 1017 | 399 | 20 | . | . | . | . | 3998 |
| 1.00-1.49 | . | . | 489 | 612 | 511 | 52 | . | . | . | . | 1664 |
| 1.50-1.99 | . | . | 71 | 252 | 228 | 37 | 1 | . | . | . | 589 |
| 2.00-2.49 | . | . | . | 88 | 102 | 27 | . | . | . | . | 217 |
| 2.50-2.99 | . | . | . | 6 | 77 | 17 | . | . | . | . | 100 |
| 3.00-3.49 | . | . | . | . | 7 | 32 | 1 | . | . | . | 40 |
| 3.50-3.99 | . | . | . | . | . | 14 | 2 | . | . | . | 16 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 258 | 1686 | 3216 | 2191 | 1357 | 199 | 5 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.7 NO. OF CASES= 8348.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 235 | 991 | 845 | 39 | . | . | . | . | . | . | 2110 |
| 0.50-0.99 | . | 890 | 2890 | 1063 | 105 | . | . | . | . | . | 4948 |
| 1.00-1.49 | . | . | 736 | 733 | 383 | 25 | . | . | . | . | 1877 |
| 1.50-1.99 | . | . | 79 | 398 | 293 | 71 | 1 | . | . | . | 842 |
| 2.00-2.49 | . | . | . | 183 | 131 | 87 | 3 | . | . | . | 404 |
| 2.50-2.99 | . | . | . | 5 | 178 | 40 | 7 | 1 | . | . | 231 |
| 3.00-3.49 | . | . | . | . | 19 | 101 | 4 | . | . | . | 124 |
| 3.50-3.99 | . | . | . | . | . | 66 | 6 | 3 | . | . | 75 |
| 4.00-4.49 | . | . | . | . | . | 7 | 16 | . | . | . | 23 |
| 4.50-4.99 | . | . | . | . | . | . | 9 | 3 | . | . | 12 |
| 5.00-5.49 | . | . | . | . | . | . | . | 6 | . | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 235 | 1881 | 4550 | 2421 | 1109 | 397 | 46 | 15 | 1 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 9980.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 274 | 1150 | 547 | 7 | 1 | . | . | . | . | . | 1979 |
| 0.50-0.99 | . | 957 | 3805 | 791 | 22 | 1 | . | . | . | . | 5576 |
| 1.00-1.49 | . | . | 1033 | 987 | 373 | 13 | . | . | . | . | 2406 |
| 1.50-1.99 | . | . | 88 | 438 | 358 | 97 | . | . | . | . | 981 |
| 2.00-2.49 | . | . | . | 171 | 180 | 142 | 1 | . | . | . | 494 |
| 2.50-2.99 | . | . | . | 10 | 111 | 103 | 14 | 1 | . | . | 239 |
| 3.00-3.49 | . | . | . | . | 16 | 111 | 28 | 3 | . | . | 158 |
| 3.50-3.99 | . | . | . | . | . | 49 | 28 | 7 | . | . | 84 |
| 4.00-4.49 | . | . | . | . | . | 3 | 45 | 16 | . | . | 64 |
| 4.50-4.99 | . | . | . | . | . | 1 | 7 | 21 | 1 | . | 30 |
| 5.00-5.49 | . | . | . | . | . | . | . | 14 | 1 | . | 15 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 274 | 2107 | 5473 | 2404 | 1061 | 520 | 123 | 64 | 3 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.6 NO. OF CASES= 11264.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 269 | 1241 | 456 | 16 | 5 | . | . | . | . | . | 1987 |
| 0.50-0.99 | . | 868 | 3763 | 502 | 21 | . | . | . | . | . | 5154 |
| 1.00-1.49 | . | 1 | 886 | 1266 | 208 | 22 | 1 | . | . | . | 2384 |
| 1.50-1.99 | . | . | 67 | 447 | 418 | 88 | 3 | . | . | . | 1023 |
| 2.00-2.49 | . | . | 1 | 137 | 158 | 185 | 10 | . | . | . | 491 |
| 2.50-2.99 | . | . | . | 5 | 128 | 116 | 32 | 9 | . | . | 290 |
| 3.00-3.49 | . | . | . | . | 11 | 91 | 26 | 12 | . | . | 140 |
| 3.50-3.99 | . | . | . | . | . | 42 | 31 | 11 | . | . | 84 |
| 4.00-4.49 | . | . | . | . | . | 3 | 18 | 16 | 2 | . | 39 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 14 | 5 | . | 25 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 3 | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| TOTAL | 269 | 2110 | 5173 | 2373 | 949 | 547 | 127 | 67 | 14 | 2 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 10894.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 286 | 1274 | 1008 | 38 | 6 | | | | | | 2612 |
| 0.50-0.99 | . | 1094 | 4378 | 1936 | 162 | 21 | 2 | | | | 7593 |
| 1.00-1.49 | . | . | 867 | 1505 | 896 | 173 | 9 | 1 | | | 3451 |
| 1.50-1.99 | . | . | 84 | 398 | 473 | 348 | 23 | 2 | | | 1328 |
| 2.00-2.49 | . | . | 1 | 151 | 143 | 291 | 64 | 12 | 2 | | 664 |
| 2.50-2.99 | . | . | . | 10 | 137 | 116 | 71 | 31 | 1 | | 366 |
| 3.00-3.49 | . | . | . | . | 9 | 117 | 31 | 23 | 2 | | 182 |
| 3.50-3.99 | . | . | . | . | . | 35 | 31 | 16 | 9 | 1 | 92 |
| 4.00-4.49 | . | . | . | . | . | 4 | 23 | 19 | 3 | 2 | 51 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 7 | 2 | | 12 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | 1 | | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 4 | | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 7.00+ | | | | | | | | | | 1 | 1 |
| TOTAL | 286 | 2368 | 6338 | 4038 | 1826 | 1105 | 257 | 115 | 27 | 6 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 4.9 NO. OF CASES= 15325.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 245 | 973 | 479 | 97 | 4 | | | | | | 1798 |
| 0.50-0.99 | . | 2077 | 1194 | 854 | 317 | 72 | 2 | . | . | . | 4516 |
| 1.00-1.49 | . | . | 440 | 271 | 275 | 214 | 25 | . | . | . | 1225 |
| 1.50-1.99 | . | . | 131 | 103 | 173 | 149 | 37 | 3 | . | . | 596 |
| 2.00-2.49 | . | . | 6 | 29 | 55 | 116 | 59 | 16 | . | . | 281 |
| 2.50-2.99 | . | . | . | 2 | 14 | 29 | 35 | 14 | 1 | . | 95 |
| 3.00-3.49 | . | . | . | . | 3 | 18 | 6 | 7 | 2 | . | 36 |
| 3.50-3.99 | . | . | . | . | . | 4 | 2 | 1 | 1 | . | 8 |
| 4.00-4.49 | . | . | . | . | . | 1 | 4 | 1 | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 2 | 2 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 245 | 3050 | 2250 | 1356 | 841 | 603 | 172 | 45 | 8 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 8034.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 203 | 574 | 36 | 7 | 4 | 1 | | | | | 825 |
| 0.50-0.99 | . | 1470 | 334 | 29 | 49 | 18 | 1 | . | . | . | 1901 |
| 1.00-1.49 | . | . | 374 | 2 | 14 | 27 | 4 | . | . | . | 421 |
| 1.50-1.99 | . | . | 117 | 3 | 11 | 20 | 7 | 1 | . | . | 159 |
| 2.00-2.49 | . | . | 2 | 11 | 2 | 8 | 13 | 6 | 1 | . | 43 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | 1 | . | . | 2 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 203 | 2044 | 863 | 54 | 80 | 74 | 25 | 8 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 3146.

STATION S69 47.80N 85.15W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

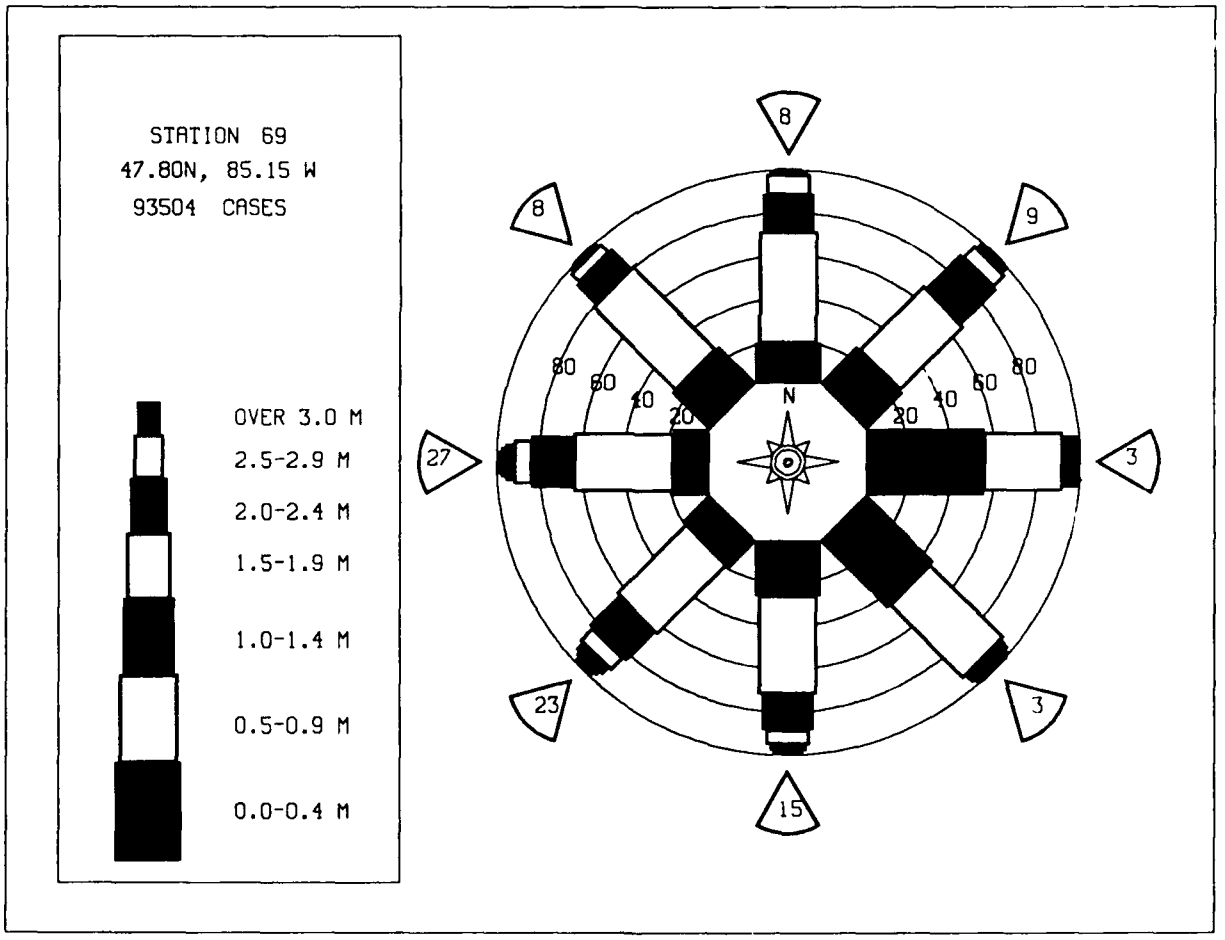
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 269 | 394 | 10 | | | | | | | | 673 |
| 0.50-0.99 | . | 1159 | 587 | . | 1 | . | . | . | . | . | 1747 |
| 1.00-1.49 | . | . | 491 | . | . | . | . | . | . | . | 491 |
| 1.50-1.99 | . | . | 172 | 82 | . | 1 | 1 | . | . | . | 256 |
| 2.00-2.49 | . | . | . | 42 | . | 1 | . | . | . | . | 43 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 269 | 1553 | 1260 | 124 | 1 | 2 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 3006.

STATION S69 47.80N 85.15W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 453 | 1188 | 479 | 53 | 6 | . | . | . | . | . | 2179 |
| 0.50-0.99 | . | 1580 | 2336 | 649 | 121 | 14 | . | . | . | . | 4700 |
| 1.00-1.49 | . | . | 906 | 544 | 271 | 55 | 4 | . | . | . | 1780 |
| 1.50-1.99 | . | . | 139 | 304 | 203 | 84 | 7 | . | . | . | 737 |
| 2.00-2.49 | . | . | 1 | 124 | 79 | 87 | 15 | 3 | . | . | 309 |
| 2.50-2.99 | . | . | . | 7 | 67 | 42 | 16 | 5 | . | . | 137 |
| 3.00-3.49 | . | . | . | . | 8 | 47 | 9 | 4 | . | . | 68 |
| 3.50-3.99 | . | . | . | . | . | 21 | 10 | 3 | 1 | . | 35 |
| 4.00-4.49 | . | . | . | . | . | 1 | 10 | 5 | . | . | 16 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 4 | 1 | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 453 | 2768 | 3861 | 1681 | 755 | 351 | 73 | 27 | 2 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 4.3 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S69 (47.80N 85.15W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 0.9 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.8 | 0.8 | 0.7 | 0.6 |
| 1957 | 1.0 | 0.9 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 0.6 | 1.0 | 1.0 | 0.8 |
| 1958 | 0.7 | 0.8 | 0.5 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.3 | 0.9 | 0.7 |
| 1959 | 0.8 | 0.9 | 0.8 | 0.6 | 0.7 | 0.5 | 0.6 | 0.4 | 0.7 | 0.7 | 1.0 | 0.9 | 0.7 |
| 1960 | 0.8 | 0.7 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 1.1 | 1.0 | 0.7 |
| 1961 | 0.7 | 0.7 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.8 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1962 | 1.1 | 0.6 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.9 | 1.0 | 0.7 |
| 1963 | 1.0 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.5 | 0.7 | 0.9 | 1.0 | 1.1 | 0.8 |
| 1964 | 1.2 | 1.3 | 1.1 | 1.0 | 0.9 | 0.7 | 0.6 | 0.8 | 1.0 | 1.1 | 1.0 | 1.0 | 1.0 |
| 1965 | 1.4 | 1.4 | 0.9 | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.9 | 1.1 | 1.3 | 1.2 | 1.0 |
| 1966 | 1.1 | 1.3 | 1.3 | 0.8 | 0.9 | 0.7 | 0.8 | 0.6 | 1.0 | 1.4 | 1.2 | 1.2 | 1.0 |
| 1967 | 1.3 | 1.3 | 1.3 | 0.9 | 0.8 | 0.7 | 0.6 | 0.7 | 0.9 | 1.2 | 1.2 | 1.5 | 1.0 |
| 1968 | 1.2 | 1.5 | 1.3 | 1.0 | 0.8 | 0.6 | 0.8 | 0.7 | 0.8 | 1.2 | 1.2 | 1.2 | 1.0 |
| 1969 | 1.4 | 0.9 | 1.1 | 0.8 | 0.7 | 0.7 | 0.6 | 0.8 | 0.9 | 1.2 | 1.2 | 1.0 | 0.9 |
| 1970 | 1.0 | 1.3 | 1.0 | 0.9 | 0.8 | 0.6 | 0.6 | 0.6 | 1.0 | 1.2 | 1.1 | 1.0 | 0.9 |
| 1971 | 1.2 | 1.2 | 1.1 | 0.8 | 0.7 | 0.5 | 0.7 | 0.6 | 0.8 | 1.0 | 1.1 | 1.1 | 0.9 |
| 1972 | 1.4 | 1.0 | 1.0 | 0.7 | 0.4 | 0.6 | 0.5 | 0.5 | 0.9 | 1.1 | 0.9 | 0.9 | 0.8 |
| 1973 | 1.2 | 1.0 | 1.0 | 0.9 | 0.6 | 0.5 | 0.6 | 0.6 | 0.9 | 0.9 | 1.1 | 0.9 | 0.9 |
| 1974 | 1.0 | 0.8 | 1.1 | 0.7 | 0.6 | 0.7 | 0.6 | 0.7 | 0.8 | 1.1 | 1.1 | 1.0 | 0.8 |
| 1975 | 1.1 | 0.8 | 0.8 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | 0.8 | 1.2 | 1.2 | 1.0 | 0.8 |
| 1976 | 1.4 | 1.3 | 1.3 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 0.8 | 1.3 | 1.1 | 1.0 |
| 1977 | 1.1 | 1.1 | 0.9 | 0.6 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 | 0.9 | 1.0 | 1.0 | 0.8 |
| 1978 | 1.1 | 0.9 | 1.0 | 0.7 | 0.7 | 0.6 | 0.6 | 1.2 | 0.9 | 1.2 | 1.4 | 1.5 | 1.0 |
| 1979 | 1.0 | 0.9 | 1.0 | 0.6 | 0.6 | 0.6 | 0.5 | 0.6 | 1.0 | 0.7 | 1.4 | 1.6 | 0.9 |
| 1980 | 1.1 | 0.9 | 1.1 | 0.7 | 0.7 | 0.6 | 0.5 | 0.7 | 0.9 | 1.0 | 1.0 | 1.1 | 0.9 |
| 1981 | 0.9 | 1.2 | 0.9 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.8 | 1.1 | 1.1 | 1.1 | 0.9 |
| 1982 | 1.4 | 1.3 | 1.5 | 1.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.9 | 1.1 | 1.2 | 1.3 | 1.0 |
| 1983 | 1.2 | 1.2 | 1.2 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 1.0 | 1.1 | 1.5 | 1.3 | 1.0 |
| 1984 | 1.5 | 1.2 | 1.1 | 0.9 | 0.8 | 0.6 | 0.6 | 0.6 | 0.9 | 1.2 | 1.5 | 1.5 | 1.0 |
| 1985 | 1.2 | 1.2 | 1.3 | 0.8 | 0.7 | 0.8 | 0.7 | 0.7 | 1.2 | 1.4 | 1.1 | 1.4 | 1.0 |
| 1986 | 1.4 | 0.8 | 1.4 | 1.1 | 0.8 | 0.8 | 0.6 | 0.8 | 1.1 | 1.2 | 1.6 | 1.6 | 1.1 |
| 1987 | 1.1 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.6 | 0.6 | 0.6 | 1.0 | 1.1 | 1.2 | 0.8 |
| MEAN | 1.1 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.8 | 1.0 | 1.1 | 1.1 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S69 (47.80N 85.15W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.5 | 2.4 | 2.4 | 2.0 | 1.7 | 1.6 | 1.2 | 1.0 | 1.6 | 2.8 | 1.9 | 2.2 |
| 1957 | 3.4 | 3.2 | 2.4 | 2.1 | 2.5 | 3.2 | 1.9 | 1.5 | 2.4 | 1.5 | 2.8 | 2.9 |
| 1958 | 2.4 | 2.4 | 1.4 | 4.4 | 2.1 | 2.0 | 1.4 | 1.3 | 2.0 | 2.1 | 7.5 | 2.6 |
| 1959 | 3.8 | 4.8 | 2.3 | 2.0 | 3.7 | 1.7 | 1.6 | 1.5 | 2.4 | 2.1 | 3.0 | 3.7 |
| 1960 | 2.6 | 1.9 | 2.0 | 2.4 | 1.6 | 1.3 | 1.7 | 2.0 | 1.8 | 2.6 | 3.5 | 3.7 |
| 1961 | 2.4 | 2.2 | 3.1 | 2.0 | 1.7 | 1.8 | 1.2 | 1.9 | 2.0 | 2.5 | 4.0 | 3.3 |
| 1962 | 3.1 | 1.9 | 1.9 | 1.9 | 1.5 | 1.3 | 1.3 | 1.4 | 2.0 | 4.0 | 2.8 | 4.3 |
| 1963 | 2.8 | 3.1 | 2.3 | 2.5 | 2.2 | 2.1 | 2.0 | 1.3 | 1.9 | 2.8 | 2.9 | 3.7 |
| 1964 | 5.0 | 4.2 | 3.5 | 4.9 | 3.6 | 2.9 | 1.4 | 2.8 | 3.9 | 3.7 | 5.7 | 3.2 |
| 1965 | 4.0 | 3.4 | 2.4 | 3.1 | 2.3 | 2.5 | 2.0 | 1.8 | 3.2 | 4.2 | 4.0 | 3.9 |
| 1966 | 3.2 | 3.6 | 4.4 | 2.7 | 2.2 | 2.3 | 2.3 | 2.0 | 2.9 | 5.4 | 3.2 | 3.9 |
| 1967 | 4.2 | 3.9 | 3.5 | 3.2 | 3.1 | 1.8 | 1.7 | 1.4 | 2.8 | 4.1 | 3.0 | 4.5 |
| 1968 | 3.8 | 4.7 | 3.5 | 3.3 | 2.0 | 1.7 | 2.4 | 2.1 | 2.7 | 3.6 | 3.5 | 3.5 |
| 1969 | 3.4 | 3.0 | 3.7 | 2.6 | 1.6 | 2.1 | 1.8 | 2.3 | 3.0 | 4.1 | 3.6 | 3.0 |
| 1970 | 2.8 | 4.0 | 2.9 | 3.2 | 2.0 | 1.8 | 1.5 | 1.5 | 3.4 | 4.5 | 4.0 | 4.3 |
| 1971 | 4.1 | 3.3 | 3.7 | 2.2 | 2.6 | 1.4 | 2.1 | 1.6 | 2.9 | 4.2 | 4.5 | 5.7 |
| 1972 | 4.1 | 3.8 | 2.3 | 2.7 | 1.2 | 1.5 | 1.4 | 1.6 | 3.5 | 4.0 | 3.7 | 3.4 |
| 1973 | 3.2 | 2.8 | 4.1 | 2.9 | 1.8 | 1.2 | 1.9 | 1.3 | 2.9 | 3.6 | 3.2 | 4.0 |
| 1974 | 3.6 | 3.6 | 3.3 | 2.5 | 2.0 | 1.6 | 1.5 | 1.9 | 2.2 | 3.5 | 3.3 | 3.6 |
| 1975 | 5.0 | 2.6 | 1.9 | 1.5 | 1.5 | 1.9 | 1.7 | 2.7 | 2.4 | 5.1 | 3.7 | 3.0 |
| 1976 | 6.9 | 4.4 | 4.2 | 2.8 | 2.4 | 2.1 | 1.4 | 2.1 | 3.6 | 4.1 | 4.5 | 5.5 |
| 1977 | 3.8 | 3.3 | 2.7 | 1.9 | 1.7 | 1.8 | 2.1 | 2.2 | 5.3 | 4.9 | 7.4 | 3.5 |
| 1978 | 3.7 | 2.5 | 4.3 | 2.1 | 1.9 | 1.5 | 2.2 | 3.1 | 2.5 | 4.1 | 5.2 | 4.6 |
| 1979 | 3.4 | 3.1 | 2.6 | 1.6 | 2.3 | 2.0 | 1.3 | 2.0 | 2.9 | 2.2 | 4.5 | 4.1 |
| 1980 | 6.0 | 4.7 | 3.1 | 2.2 | 2.7 | 1.5 | 1.2 | 1.8 | 4.3 | 4.1 | 3.2 | 4.0 |
| 1981 | 2.7 | 3.4 | 3.1 | 2.9 | 2.1 | 2.9 | 1.8 | 1.5 | 4.2 | 3.6 | 5.0 | 5.2 |
| 1982 | 5.1 | 4.5 | 5.9 | 4.2 | 1.7 | 1.6 | 1.5 | 1.5 | 3.1 | 4.7 | 4.8 | 4.6 |
| 1983 | 4.2 | 5.7 | 3.3 | 2.4 | 2.2 | 1.8 | 2.2 | 2.3 | 3.3 | 3.7 | 5.0 | 4.0 |
| 1984 | 5.1 | 3.3 | 4.2 | 3.7 | 1.7 | 2.7 | 1.5 | 2.4 | 3.0 | 5.0 | 4.5 | 5.9 |
| 1985 | 4.1 | 3.8 | 4.5 | 2.7 | 1.7 | 3.0 | 1.9 | 2.3 | 5.4 | 4.0 | 3.4 | 4.8 |
| 1986 | 6.6 | 2.1 | 4.6 | 2.9 | 2.2 | 3.1 | 1.3 | 2.7 | 3.1 | 4.2 | 5.9 | 4.9 |
| 1987 | 3.2 | 4.0 | 3.0 | 2.7 | 2.9 | 1.5 | 1.7 | 2.0 | 1.9 | 3.1 | 3.7 | 4.5 |

32 YR. STATISTICS FOR WIS STATION S69

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.3 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 7.5 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 272.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 58112906 |

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 744 | 1612 | 10 | 1 | . | . | . | . | . | . | 2367 |
| 0.50-0.99 | . | 2191 | 133 | . | . | . | . | . | . | . | 2324 |
| 1.00-1.49 | . | . | 541 | . | . | . | . | . | . | . | 541 |
| 1.50-1.99 | . | . | 48 | . | . | . | . | . | . | . | 48 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 744 | 3803 | 732 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 4940.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 685 | 1229 | 10 | 1 | . | . | . | . | . | . | 1925 |
| 0.50-0.99 | . | 2033 | 403 | . | . | . | . | . | . | . | 2436 |
| 1.00-1.49 | . | . | 542 | . | . | . | . | . | . | . | 542 |
| 1.50-1.99 | . | . | 172 | 24 | . | . | . | . | . | . | 196 |
| 2.00-2.49 | . | . | . | 12 | . | . | . | . | . | . | 12 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 685 | 3262 | 1127 | 41 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 4787.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 627 | 1048 | 13 | . | . | . | . | . | . | . | 1688 |
| 0.50-0.99 | . | 2615 | 685 | . | . | . | . | . | . | . | 3300 |
| 1.00-1.49 | . | . | 557 | . | . | . | . | . | . | . | 557 |
| 1.50-1.99 | . | . | 186 | 20 | . | 1 | . | . | . | . | 207 |
| 2.00-2.49 | . | . | . | 10 | . | . | . | . | . | . | 10 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 627 | 3663 | 1441 | 30 | 0 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 5392.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 441 | 543 | 10 | . | . | . | . | . | . | . | 994 |
| 0.50-0.99 | . | 1506 | 467 | . | . | . | . | . | . | . | 1973 |
| 1.00-1.49 | . | . | 296 | . | . | . | . | . | . | . | 296 |
| 1.50-1.99 | . | . | 75 | 25 | . | 1 | . | . | . | . | 101 |
| 2.00-2.49 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 441 | 2049 | 848 | 29 | 0 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.2 NO. OF CASES= 3154.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 356 | 314 | 7 | . | . | . | . | . | . | . | 677 |
| 0.50-0.99 | . | 948 | 537 | . | . | . | . | . | . | . | 1485 |
| 1.00-1.49 | . | . | 251 | . | . | . | . | . | . | . | 251 |
| 1.50-1.99 | . | . | 71 | 50 | . | 2 | . | . | . | . | 123 |
| 2.00-2.49 | . | . | . | 10 | . | . | . | . | . | . | 10 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 356 | 1262 | 866 | 60 | 0 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 2385.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 294 | 242 | 6 | . | . | . | . | . | . | . | 542 |
| 0.50-0.99 | . | 638 | 214 | . | . | . | . | . | . | . | 852 |
| 1.00-1.49 | . | . | 113 | . | . | . | . | . | . | . | 113 |
| 1.50-1.99 | . | . | 41 | 21 | . | . | . | . | . | . | 62 |
| 2.00-2.49 | . | . | . | 6 | . | . | . | . | . | . | 6 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 294 | 880 | 374 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 1477.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 272 | 392 | 8 | . | . | . | . | . | . | . | 672 |
| 0.50-0.99 | . | 766 | 139 | . | . | . | . | . | . | . | 905 |
| 1.00-1.49 | . | . | 83 | . | 1 | 1 | . | . | . | . | 85 |
| 1.50-1.99 | . | . | 33 | . | 2 | 5 | . | . | . | . | 40 |
| 2.00-2.49 | . | . | . | 2 | 1 | 1 | . | . | . | . | 4 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 272 | 1158 | 263 | 2 | 4 | 7 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.0 NO. OF CASES= 1599.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 413 | 715 | 164 | 45 | 4 | . | . | . | . | . | 1341 |
| 0.50-0.99 | . | 1429 | 289 | 144 | 89 | 5 | . | . | . | . | 1956 |
| 1.00-1.49 | . | . | 131 | 32 | 57 | 9 | . | . | . | . | 229 |
| 1.50-1.99 | . | . | 37 | 16 | 70 | 20 | . | . | . | . | 143 |
| 2.00-2.49 | . | . | 2 | 2 | 11 | 8 | . | . | . | . | 23 |
| 2.50-2.99 | . | . | . | . | 1 | 1 | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 413 | 2144 | 623 | 239 | 232 | 46 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 3468.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 448 | 1072 | 1267 | 326 | 45 | . | . | . | . | . | 3158 |
| 0.50-0.99 | . | 1222 | 2145 | 1316 | 512 | 31 | . | . | . | . | 5226 |
| 1.00-1.49 | . | . | 680 | 703 | 498 | 69 | . | . | . | . | 1950 |
| 1.50-1.99 | . | . | 82 | 320 | 256 | 40 | 1 | . | . | . | 699 |
| 2.00-2.49 | . | . | . | 132 | 101 | 39 | . | . | . | . | 272 |
| 2.50-2.99 | . | . | . | 4 | 99 | 26 | . | . | . | . | 129 |
| 3.00-3.49 | . | . | . | . | 5 | 60 | . | 1 | . | . | 66 |
| 3.50-3.99 | . | . | . | . | . | 22 | 4 | . | . | . | 26 |
| 4.00-4.49 | . | . | . | . | . | 1 | 6 | . | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 448 | 2294 | 4174 | 2801 | 1516 | 288 | 11 | 2 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 10798.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 541 | 1350 | 1606 | 94 | 6 | . | . | . | . | . | 3597 |
| 0.50-0.99 | . | 1243 | 3711 | 1657 | 240 | 6 | . | . | . | . | 6857 |
| 1.00-1.49 | . | . | 950 | 837 | 561 | 66 | . | . | . | . | 2414 |
| 1.50-1.99 | . | . | 80 | 491 | 308 | 137 | 2 | . | . | . | 1018 |
| 2.00-2.49 | . | . | . | 201 | 94 | 100 | 9 | 1 | . | . | 405 |
| 2.50-2.99 | . | . | . | 7 | 209 | 51 | 9 | 1 | . | . | 277 |
| 3.00-3.49 | . | . | . | . | 18 | 132 | 3 | . | . | . | 153 |
| 3.50-3.99 | . | . | . | . | . | 80 | 16 | 2 | . | . | 98 |
| 4.00-4.49 | . | . | . | . | . | 11 | 28 | 12 | . | . | 51 |
| 4.50-4.99 | . | . | . | . | . | . | 10 | 8 | 1 | . | 19 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 5 | 1 | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 5 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 541 | 2593 | 6347 | 3287 | 1436 | 583 | 80 | 31 | 8 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.6 NO. OF CASES= 13955.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 798 | 1602 | 1522 | 163 | 25 | 7 | . | . | . | . | 4117 |
| 0.50-0.99 | . | 1864 | 3091 | 1483 | 367 | 110 | 13 | 3 | . | . | 6931 |
| 1.00-1.49 | . | . | 970 | 624 | 475 | 268 | 25 | 6 | . | . | 2368 |
| 1.50-1.99 | . | . | 93 | 445 | 182 | 189 | 36 | 2 | 1 | . | 948 |
| 2.00-2.49 | . | . | . | 151 | 87 | 87 | 35 | 9 | 3 | . | 372 |
| 2.50-2.99 | . | . | . | 6 | 121 | 63 | 19 | 9 | 3 | . | 221 |
| 3.00-3.49 | . | . | . | . | 11 | 96 | 13 | 7 | . | . | 127 |
| 3.50-3.99 | . | . | . | . | . | 45 | 32 | 12 | 3 | 1 | 93 |
| 4.00-4.49 | . | . | . | . | . | 6 | 22 | 28 | 4 | . | 60 |
| 4.50-4.99 | . | . | . | . | . | 1 | 5 | 17 | 1 | . | 24 |
| 5.00-5.49 | . | . | . | . | . | . | . | 8 | 4 | . | 12 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 6 | 1 | 8 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 798 | 3466 | 5676 | 2872 | 1268 | 872 | 200 | 102 | 28 | 3 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.5 NO. OF CASES= 14318.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1017 | 1920 | 819 | 494 | 316 | 233 | 20 | 6 | . | . | 4825 |
| 0.50-0.99 | . | 2772 | 370 | 366 | 317 | 475 | 172 | 86 | 21 | 1 | 4580 |
| 1.00-1.49 | . | . | 322 | 90 | 102 | 179 | 51 | 59 | 22 | 4 | 829 |
| 1.50-1.99 | . | . | 60 | 45 | 37 | 75 | 27 | 25 | 9 | 5 | 283 |
| 2.00-2.49 | . | . | 3 | 18 | 14 | 18 | 9 | 14 | 10 | 2 | 88 |
| 2.50-2.99 | . | . | . | 1 | 6 | 6 | 2 | 3 | 6 | 1 | 25 |
| 3.00-3.49 | . | . | . | . | . | 8 | 4 | 4 | 2 | . | 18 |
| 3.50-3.99 | . | . | . | . | . | 1 | 3 | 2 | . | . | 6 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | 2 | 3 | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 1017 | 4692 | 1574 | 1014 | 792 | 995 | 289 | 202 | 77 | 15 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 9998.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 864 | 1525 | 20 | 9 | 27 | 34 | 2 | . | . | . | 2481 |
| 0.50-0.99 | . | 1959 | 208 | 1 | 3 | 26 | 35 | 28 | 2 | . | 2262 |
| 1.00-1.49 | . | . | 285 | . | 1 | 2 | 3 | 2 | 6 | 2 | 301 |
| 1.50-1.99 | . | . | 99 | . | . | 11 | 4 | 3 | 4 | . | 121 |
| 2.00-2.49 | . | . | 2 | 2 | . | . | 1 | 1 | 3 | 1 | 10 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 864 | 3484 | 614 | 12 | 31 | 73 | 45 | 34 | 16 | 6 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.2 NO. OF CASES= 4852.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 497 | 999 | 5 | . | 1 | | . | | . | . | 1502 |
| 0.50-0.99 | . | 1848 | 309 | . | . | 1 | . | 1 | . | . | 2159 |
| 1.00-1.49 | . | . | 295 | . | . | . | . | . | 2 | . | 297 |
| 1.50-1.99 | . | . | 142 | 12 | . | 1 | . | 1 | 2 | . | 158 |
| 2.00-2.49 | . | . | 1 | 18 | . | . | . | . | . | . | 19 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 497 | 2847 | 752 | 31 | 1 | 2 | 0 | 2 | 4 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 3871.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 355 | 747 | 5 | 2 | . | . | . | . | . | . | 1109 |
| 0.50-0.99 | . | 2163 | 542 | . | . | . | . | . | . | . | 2705 |
| 1.00-1.49 | . | . | 405 | . | . | . | . | . | . | . | 405 |
| 1.50-1.99 | . | . | 193 | 29 | . | . | . | . | . | . | 222 |
| 2.00-2.49 | . | . | . | 14 | . | . | . | . | . | . | 14 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 355 | 2910 | 1145 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 4170.

STATION S70 47.95N 85.15W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

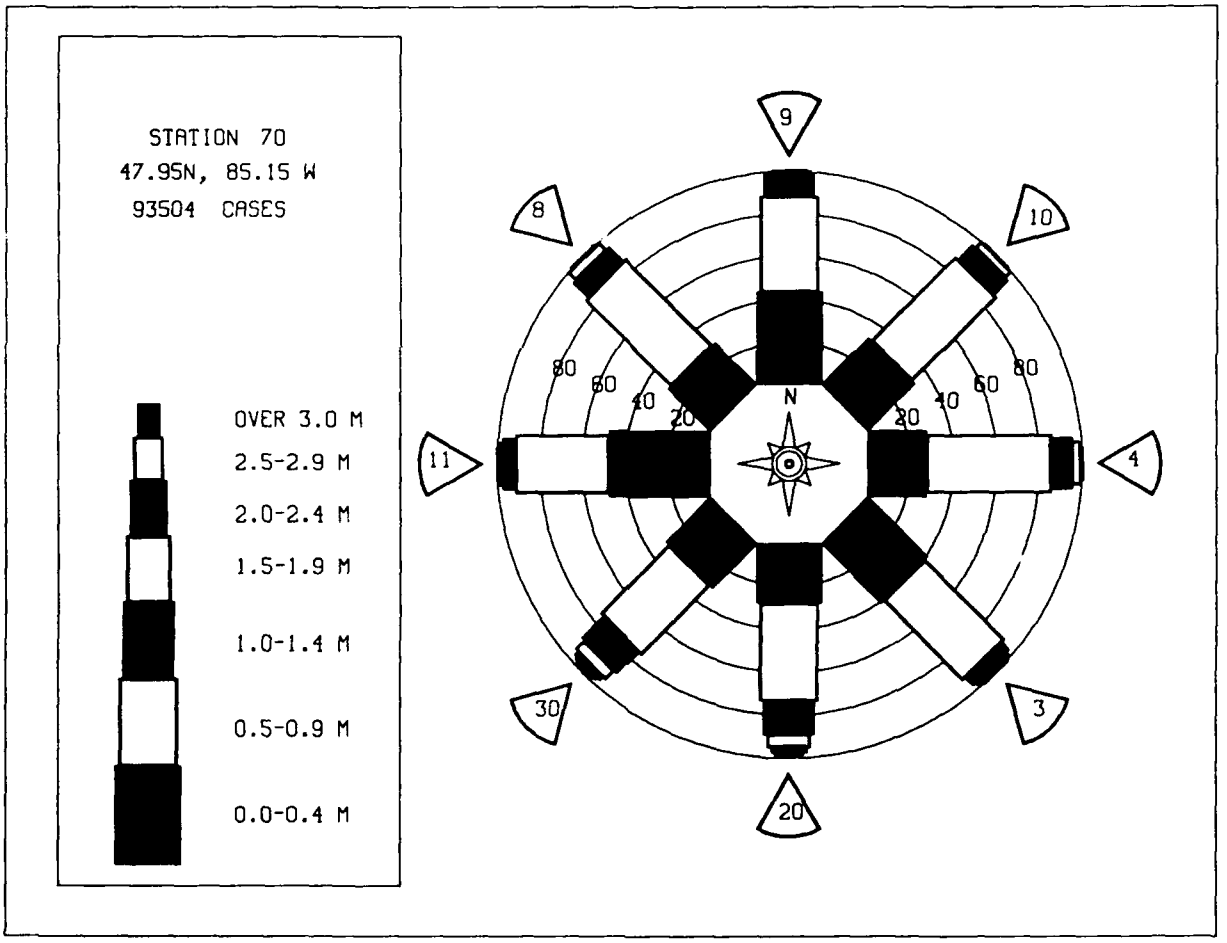
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 532 | 1064 | 9 | . | . | . | . | . | . | . | 1605 |
| 0.50-0.99 | . | 2039 | 313 | . | . | . | . | . | . | . | 2352 |
| 1.00-1.49 | . | . | 503 | . | . | . | . | . | . | . | 503 |
| 1.50-1.99 | . | . | 157 | 13 | . | . | . | . | . | . | 170 |
| 2.00-2.49 | . | . | 1 | 4 | . | . | . | . | . | . | 5 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 532 | 3103 | 983 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.1 NO. OF CASES= 4340.

STATION S70 47.95N 85.15W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 889 | 1638 | 548 | 113 | 42 | 27 | 2 | . | . | . | 3259 |
| 0.50-0.99 | . | 2724 | 1356 | 496 | 153 | 65 | 22 | 11 | 2 | . | 4829 |
| 1.00-1.49 | . | . | 693 | 228 | 169 | 59 | 8 | 6 | 3 | . | 1166 |
| 1.50-1.99 | . | . | 157 | 151 | 85 | 48 | 7 | 3 | 1 | . | 452 |
| 2.00-2.49 | . | . | . | 59 | 31 | 25 | 5 | 2 | 1 | . | 123 |
| 2.50-2.99 | . | . | . | 2 | 43 | 14 | 3 | 1 | 1 | . | 64 |
| 3.00-3.49 | . | . | . | . | 3 | 30 | 2 | 1 | . | . | 36 |
| 3.50-3.99 | . | . | . | . | . | 15 | 5 | 1 | . | . | 21 |
| 4.00-4.49 | . | . | . | . | . | 1 | 5 | 4 | . | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 889 | 4362 | 2754 | 1049 | 526 | 284 | 60 | 32 | 9 | 0 | |

MEAN HS(M)= 0.7 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S70 (47.95N 85.15W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.4 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.7 | 0.6 | 0.5 | 0.5 |
| 1957 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.5 | 0.7 | 0.7 | 0.6 |
| 1958 | 0.5 | 0.6 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.9 | 0.6 | 0.5 |
| 1959 | 0.6 | 0.6 | 0.6 | 0.5 | 0.6 | 0.4 | 0.4 | 0.3 | 0.5 | 0.5 | 0.7 | 0.6 | 0.5 |
| 1960 | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.8 | 0.7 | 0.5 |
| 1961 | 0.5 | 0.5 | 0.6 | 0.4 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.6 | 0.8 | 0.6 | 0.5 |
| 1962 | 0.7 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.5 | 0.8 | 0.8 | 0.5 |
| 1963 | 0.7 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 0.8 | 0.9 | 0.7 |
| 1964 | 1.0 | 1.0 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.7 | 0.8 | 0.9 | 0.8 | 0.9 | 0.8 |
| 1965 | 1.0 | 1.0 | 0.7 | 0.6 | 0.7 | 0.7 | 0.6 | 0.5 | 0.7 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1966 | 0.8 | 1.0 | 1.1 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.8 | 1.1 | 1.0 | 1.0 | 0.8 |
| 1967 | 1.0 | 1.0 | 1.1 | 0.7 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 1.0 | 0.9 | 1.1 | 0.8 |
| 1968 | 1.0 | 1.0 | 1.0 | 0.9 | 0.7 | 0.6 | 0.7 | 0.6 | 0.7 | 1.0 | 1.0 | 1.0 | 0.8 |
| 1969 | 1.1 | 0.7 | 0.8 | 0.7 | 0.6 | 0.6 | 0.5 | 0.7 | 0.7 | 0.9 | 0.9 | 0.8 | 0.8 |
| 1970 | 0.8 | 1.0 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 1.1 | 0.9 | 0.8 | 0.8 |
| 1971 | 0.8 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 0.9 | 0.9 | 0.7 |
| 1972 | 1.0 | 0.8 | 0.8 | 0.6 | 0.4 | 0.5 | 0.4 | 0.5 | 0.7 | 0.9 | 0.8 | 0.8 | 0.7 |
| 1973 | 0.9 | 0.9 | 0.8 | 0.7 | 0.6 | 0.4 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 0.8 | 0.7 |
| 1974 | 0.8 | 0.7 | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.9 | 0.9 | 0.8 | 0.7 |
| 1975 | 0.9 | 0.6 | 0.7 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.7 | 1.1 | 1.0 | 0.9 | 0.7 |
| 1976 | 1.1 | 1.0 | 1.1 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 | 0.9 | 0.8 | 0.7 |
| 1977 | 0.7 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 | 0.7 | 0.9 | 0.7 | 0.6 |
| 1978 | 0.8 | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 1.0 | 0.8 | 1.0 | 1.2 | 1.2 | 0.8 |
| 1979 | 0.8 | 0.7 | 0.8 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.9 | 0.6 | 1.2 | 1.3 | 0.7 |
| 1980 | 0.8 | 0.7 | 1.0 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 |
| 1981 | 0.8 | 1.0 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 | 0.9 | 0.9 | 0.9 | 0.7 |
| 1982 | 1.0 | 1.0 | 1.2 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.8 | 1.0 | 1.1 | 1.0 | 0.8 |
| 1983 | 1.0 | 1.0 | 1.0 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.8 | 0.9 | 1.3 | 1.0 | 0.8 |
| 1984 | 1.3 | 1.1 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.8 | 1.1 | 1.3 | 1.2 | 0.9 |
| 1985 | 0.9 | 0.9 | 1.1 | 0.7 | 0.6 | 0.7 | 0.6 | 0.7 | 1.2 | 1.2 | 0.8 | 1.0 | 0.9 |
| 1986 | 1.2 | 0.6 | 1.2 | 0.9 | 0.7 | 0.7 | 0.5 | 0.7 | 1.0 | 1.1 | 1.4 | 1.4 | 0.9 |
| 1987 | 0.9 | 0.7 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.7 | 0.9 | 0.9 | 0.7 |
| MEAN | 0.8 | 0.8 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 0.9 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S70 (47.95N 85.15W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.8 | 1.7 | 2.0 | 1.2 | 1.3 | 0.9 | 0.7 | 0.9 | 1.2 | 2.8 | 1.4 | 1.6 |
| 1957 | 2.7 | 2.8 | 2.0 | 1.7 | 1.4 | 3.3 | 1.3 | 1.3 | 1.9 | 1.6 | 2.1 | 1.9 |
| 1958 | 2.1 | 1.6 | 0.8 | 1.8 | 1.7 | 1.6 | 0.8 | 1.3 | 1.7 | 1.7 | 4.2 | 1.7 |
| 1959 | 2.0 | 3.3 | 2.2 | 1.6 | 3.8 | 1.5 | 1.2 | 0.9 | 2.0 | 1.5 | 1.8 | 1.7 |
| 1960 | 1.9 | 1.4 | 1.7 | 1.4 | 1.2 | 1.2 | 1.2 | 2.2 | 1.7 | 1.9 | 2.6 | 3.3 |
| 1961 | 1.5 | 1.4 | 2.0 | 1.2 | 1.6 | 1.8 | 0.7 | 2.0 | 1.8 | 2.1 | 4.1 | 1.5 |
| 1962 | 1.9 | 1.5 | 1.4 | 1.2 | 1.3 | 1.4 | 0.9 | 1.4 | 1.6 | 3.0 | 2.8 | 3.5 |
| 1963 | 2.0 | 3.0 | 2.5 | 2.1 | 2.0 | 2.4 | 1.9 | 1.1 | 1.8 | 3.0 | 2.3 | 2.9 |
| 1964 | 5.7 | 4.4 | 3.7 | 4.5 | 3.7 | 2.0 | 1.4 | 2.7 | 3.7 | 3.8 | 2.2 | 2.8 |
| 1965 | 4.2 | 3.3 | 1.9 | 2.8 | 1.7 | 1.8 | 1.7 | 1.5 | 2.9 | 3.0 | 3.7 | 3.6 |
| 1966 | 2.8 | 3.0 | 3.7 | 2.2 | 2.2 | 1.7 | 2.1 | 1.8 | 2.3 | 5.7 | 3.2 | 4.1 |
| 1967 | 3.1 | 4.1 | 3.6 | 3.3 | 2.9 | 1.9 | 1.3 | 1.7 | 2.5 | 4.3 | 3.1 | 3.5 |
| 1968 | 3.4 | 2.1 | 3.6 | 3.1 | 2.0 | 2.0 | 2.2 | 1.4 | 2.6 | 2.9 | 3.0 | 3.5 |
| 1969 | 3.4 | 2.7 | 3.4 | 1.8 | 1.8 | 2.1 | 1.2 | 2.2 | 3.1 | 3.8 | 3.8 | 2.7 |
| 1970 | 2.7 | 3.5 | 2.7 | 3.0 | 2.3 | 1.8 | 1.5 | 1.4 | 3.3 | 4.5 | 4.2 | 2.1 |
| 1971 | 2.3 | 3.1 | 2.9 | 2.0 | 2.8 | 1.3 | 1.7 | 1.7 | 3.1 | 3.9 | 4.1 | 3.8 |
| 1972 | 3.9 | 4.1 | 2.1 | 1.7 | 1.0 | 1.4 | 1.3 | 1.6 | 3.0 | 3.1 | 3.0 | 2.3 |
| 1973 | 2.8 | 2.7 | 3.7 | 2.7 | 1.5 | 1.0 | 1.7 | 1.4 | 1.9 | 3.5 | 3.2 | 4.3 |
| 1974 | 2.9 | 2.2 | 2.1 | 1.5 | 2.0 | 1.7 | 1.2 | 1.8 | 2.6 | 3.3 | 3.1 | 2.9 |
| 1975 | 4.5 | 1.7 | 1.6 | 1.2 | 1.7 | 1.6 | 1.7 | 2.9 | 2.5 | 5.1 | 4.1 | 2.9 |
| 1976 | 4.0 | 3.4 | 3.3 | 1.9 | 2.2 | 1.8 | 1.3 | 1.6 | 3.2 | 4.3 | 2.1 | 3.3 |
| 1977 | 4.2 | 3.1 | 2.5 | 1.5 | 1.2 | 1.3 | 1.3 | 2.3 | 4.4 | 5.1 | 7.8 | 3.5 |
| 1978 | 4.0 | 2.3 | 3.9 | 1.5 | 1.4 | 1.5 | 2.5 | 3.5 | 2.7 | 3.0 | 5.0 | 4.5 |
| 1979 | 3.6 | 3.2 | 2.1 | 1.5 | 2.3 | 2.2 | 1.5 | 2.3 | 2.9 | 2.4 | 3.7 | 4.1 |
| 1980 | 4.3 | 4.4 | 2.6 | 1.6 | 1.9 | 1.6 | 1.1 | 1.8 | 4.0 | 4.3 | 3.1 | 4.0 |
| 1981 | 3.0 | 3.8 | 2.3 | 2.6 | 2.0 | 2.1 | 1.9 | 1.4 | 4.3 | 3.7 | 5.6 | 5.2 |
| 1982 | 5.4 | 4.2 | 4.4 | 2.5 | 1.3 | 1.2 | 1.4 | 1.4 | 3.4 | 4.7 | 5.7 | 5.1 |
| 1983 | 4.2 | 5.9 | 2.4 | 2.7 | 1.6 | 1.7 | 1.9 | 2.4 | 3.3 | 3.8 | 5.3 | 3.9 |
| 1984 | 5.5 | 3.7 | 4.3 | 3.5 | 1.8 | 2.6 | 1.6 | 2.7 | 3.1 | 5.4 | 5.0 | 5.3 |
| 1985 | 3.9 | 3.5 | 4.3 | 2.6 | 1.8 | 3.2 | 1.9 | 2.7 | 5.9 | 4.4 | 2.7 | 5.3 |
| 1986 | 6.8 | 2.1 | 4.7 | 3.0 | 1.7 | 3.1 | 1.3 | 2.9 | 3.3 | 4.4 | 6.3 | 5.6 |
| 1987 | 3.0 | 2.5 | 1.9 | 1.9 | 2.4 | 1.2 | 1.7 | 1.5 | 1.7 | 2.8 | 3.5 | 4.0 |

32 YR. STATISTICS FOR WIS STATION S70

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.7 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.9 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 225.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 7.8 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 237.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 77112118 |

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 432 | 1124 | 56 | 8 | . | . | . | . | . | . | 1620 |
| 0.50-0.99 | . | 1399 | 272 | 14 | 20 | 4 | . | . | . | . | 1709 |
| 1.00-1.49 | . | . | 420 | 10 | 8 | 17 | 2 | . | . | . | 457 |
| 1.50-1.99 | . | . | 98 | 3 | . | 4 | 3 | . | . | . | 108 |
| 2.00-2.49 | . | . | 4 | . | . | . | . | . | . | . | 4 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 432 | 2523 | 850 | 35 | 28 | 25 | 5 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 3652.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 398 | 952 | 56 | 4 | . | . | . | . | . | . | 1410 |
| 0.50-0.99 | . | 1055 | 720 | 7 | 16 | 4 | . | . | . | . | 1802 |
| 1.00-1.49 | . | . | 788 | 9 | 1 | 3 | 1 | . | . | . | 802 |
| 1.50-1.99 | . | . | 105 | 218 | . | . | . | . | . | . | 323 |
| 2.00-2.49 | . | . | . | 111 | . | . | . | . | . | . | 111 |
| 2.50-2.99 | . | . | . | 14 | 5 | . | . | . | . | . | 19 |
| 3.00-3.49 | . | . | . | . | 8 | . | . | . | . | . | 8 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 398 | 2007 | 1669 | 363 | 30 | 7 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 4193.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 422 | 774 | 49 | 3 | . | . | . | . | . | . | 1248 |
| 0.50-0.99 | . | 859 | 1441 | 1 | 1 | 2 | . | . | . | . | 2304 |
| 1.00-1.49 | . | . | 1235 | 3 | 1 | 2 | . | . | . | . | 1241 |
| 1.50-1.99 | . | . | 59 | 347 | . | . | . | . | . | . | 406 |
| 2.00-2.49 | . | . | . | 168 | . | . | . | . | . | . | 168 |
| 2.50-2.99 | . | . | . | 8 | 18 | . | . | . | . | . | 26 |
| 3.00-3.49 | . | . | . | . | 4 | . | . | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 422 | 1633 | 2784 | 530 | 24 | 4 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 5053.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 296 | 467 | 39 | . | . | . | . | . | . | . | 802 |
| 0.50-0.99 | . | 636 | 918 | 2 | . | . | . | . | . | . | 1556 |
| 1.00-1.49 | . | . | 561 | . | . | . | . | . | . | . | 561 |
| 1.50-1.99 | . | . | 39 | 127 | . | . | . | . | . | . | 166 |
| 2.00-2.49 | . | . | . | 53 | . | 1 | . | . | . | . | 54 |
| 2.50-2.99 | . | . | . | 4 | 1 | . | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 296 | 1103 | 1557 | 186 | 1 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 2944.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 239 | 304 | 21 | . | . | . | . | . | . | . | 564 |
| 0.50-0.99 | . | 821 | 530 | 1 | . | . | . | . | . | . | 1352 |
| 1.00-1.49 | . | . | 240 | 1 | . | . | . | . | . | . | 241 |
| 1.50-1.99 | . | . | 68 | 50 | . | . | . | . | . | . | 118 |
| 2.00-2.49 | . | . | . | 12 | . | . | . | . | . | . | 12 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 239 | 1125 | 859 | 65 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 2144.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 205 | 238 | 12 | . | . | . | . | . | . | . | 455 |
| 0.50-0.99 | . | 434 | 306 | . | . | . | . | . | . | . | 740 |
| 1.00-1.49 | . | . | 137 | 1 | . | . | . | . | . | . | 138 |
| 1.50-1.99 | . | . | 33 | 32 | . | . | . | . | . | . | 65 |
| 2.00-2.49 | . | . | . | 17 | . | . | . | . | . | . | 17 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 205 | 672 | 488 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 1327.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 161 | 302 | 74 | 8 | . | . | . | . | . | . | 545 |
| 0.50-0.99 | . | 433 | 577 | 79 | 2 | . | . | . | . | . | 1091 |
| 1.00-1.49 | . | . | 238 | 21 | 11 | 2 | . | . | . | . | 272 |
| 1.50-1.99 | . | . | 24 | 35 | 20 | 3 | . | . | . | . | 82 |
| 2.00-2.49 | . | . | . | 29 | 11 | 12 | 1 | . | . | . | 53 |
| 2.50-2.99 | . | . | . | 1 | 1 | 8 | . | . | . | . | 10 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 161 | 735 | 913 | 173 | 46 | 25 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 1930.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 214 | 616 | 617 | 93 | . | . | . | . | . | . | 1540 |
| 0.50-0.99 | . | 506 | 1495 | 596 | 130 | 8 | . | . | . | . | 2735 |
| 1.00-1.49 | . | . | 551 | 205 | 163 | 54 | . | . | . | . | 973 |
| 1.50-1.99 | . | . | 47 | 122 | 91 | 68 | . | . | . | . | 328 |
| 2.00-2.49 | . | . | . | 42 | 49 | 36 | . | . | . | . | 127 |
| 2.50-2.99 | . | . | . | 4 | 16 | 48 | . | . | . | . | 68 |
| 3.00-3.49 | . | . | . | . | 1 | 9 | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 214 | 1122 | 2710 | 1062 | 450 | 224 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 5418.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 235 | 758 | 546 | 9 | | . | . | . | . | . | 1548 |
| 0.50-0.99 | . | 580 | 1996 | 366 | 18 | . | 1 | . | . | . | 2961 |
| 1.00-1.49 | . | . | 571 | 544 | 186 | 11 | . | . | . | . | 1312 |
| 1.50-1.99 | . | . | 63 | 308 | 177 | 26 | . | . | . | . | 574 |
| 2.00-2.49 | . | . | . | 137 | 81 | 41 | . | . | . | . | 259 |
| 2.50-2.99 | . | . | . | 2 | 115 | 28 | 1 | . | . | . | 146 |
| 3.00-3.49 | . | . | . | . | 10 | 52 | 1 | . | . | . | 63 |
| 3.50-3.99 | . | . | . | . | . | 31 | 9 | . | . | . | 40 |
| 4.00-4.49 | . | . | . | . | . | . | 6 | . | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 235 | 1338 | 3176 | 1366 | 587 | 189 | 18 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 6472.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 194 | 970 | 597 | 19 | | . | . | . | . | . | 1780 |
| 0.50-0.99 | . | 702 | 3055 | 1004 | 33 | . | . | . | . | . | 4794 |
| 1.00-1.49 | . | . | 699 | 806 | 442 | 9 | . | . | . | . | 1956 |
| 1.50-1.99 | . | . | 57 | 378 | 345 | 87 | . | . | . | . | 867 |
| 2.00-2.49 | . | . | . | 155 | 135 | 125 | 4 | . | . | . | 419 |
| 2.50-2.99 | . | . | . | 5 | 154 | 58 | 9 | 1 | . | . | 227 |
| 3.00-3.49 | . | . | . | . | 8 | 113 | 7 | 1 | . | . | 129 |
| 3.50-3.99 | . | . | . | . | . | 64 | 7 | 3 | . | . | 74 |
| 4.00-4.49 | . | . | . | . | . | 8 | 12 | 1 | . | . | 21 |
| 4.50-4.99 | . | . | . | . | . | 1 | 6 | 2 | . | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 1 | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 194 | 1672 | 4408 | 2367 | 1117 | 465 | 45 | 15 | 1 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.7 NO. OF CASES= 9631.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 296 | 1167 | 422 | 1 | 1 | . | . | . | . | . | 1887 |
| 0.50-0.99 | . | 871 | 3592 | 513 | 12 | 1 | . | . | . | . | 4989 |
| 1.00-1.49 | . | . | 791 | 1102 | 214 | 5 | . | . | . | . | 2112 |
| 1.50-1.99 | . | . | 63 | 386 | 368 | 63 | 1 | . | . | . | 881 |
| 2.00-2.49 | . | . | . | 151 | 129 | 147 | 1 | . | . | . | 428 |
| 2.50-2.99 | . | . | . | 7 | 133 | 86 | 17 | . | . | . | 243 |
| 3.00-3.49 | . | . | . | . | 14 | 111 | 20 | 7 | . | . | 152 |
| 3.50-3.99 | . | . | . | . | . | 53 | 26 | 7 | . | . | 86 |
| 4.00-4.49 | . | . | . | . | . | 5 | 40 | 12 | 1 | . | 58 |
| 4.50-4.99 | . | . | . | . | . | . | 18 | 19 | . | . | 37 |
| 5.00-5.49 | . | . | . | . | . | . | . | 18 | 3 | . | 21 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | 1 | . | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 296 | 2038 | 4868 | 2160 | 871 | 471 | 123 | 68 | 6 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.6 NO. OF CASES= 10210.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 257 | 1195 | 398 | 22 | 4 | . | . | . | . | . | 1876 |
| 0.50-0.99 | . | 841 | 3575 | 399 | 25 | 3 | . | . | . | . | 4843 |
| 1.00-1.49 | . | . | 804 | 1258 | 180 | 21 | 3 | . | . | . | 2266 |
| 1.50-1.99 | . | . | 54 | 423 | 406 | 85 | 3 | . | . | . | 971 |
| 2.00-2.49 | . | . | . | 126 | 163 | 175 | 7 | . | . | . | 471 |
| 2.50-2.99 | . | . | . | 1 | 121 | 98 | 35 | 6 | . | . | 261 |
| 3.00-3.49 | . | . | . | . | 10 | 96 | 22 | 14 | . | . | 142 |
| 3.50-3.99 | . | . | . | . | . | 35 | 32 | 11 | 2 | . | 80 |
| 4.00-4.49 | . | . | . | . | . | 1 | 23 | 13 | 5 | . | 42 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 11 | 6 | . | 20 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 1 | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 4 | 1 | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| TOTAL | 257 | 2036 | 4831 | 2229 | 909 | 514 | 128 | 60 | 20 | 2 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.6 NO. OF CASES= 10293.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 291 | 1292 | 1007 | 27 | 7 | 1 | . | . | . | . | 2625 |
| 0.50-0.99 | . | 993 | 4476 | 1707 | 101 | 24 | 2 | . | . | . | 7303 |
| 1.00-1.49 | . | . | 824 | 1680 | 829 | 111 | 7 | 1 | 1 | . | 3453 |
| 1.50-1.99 | . | . | 77 | 388 | 565 | 341 | 13 | 4 | . | . | 1388 |
| 2.00-2.49 | . | . | . | 142 | 160 | 320 | 57 | 6 | 2 | . | 687 |
| 2.50-2.99 | . | . | . | 6 | 130 | 100 | 56 | 24 | 2 | . | 318 |
| 3.00-3.49 | . | . | . | . | 14 | 112 | 38 | 29 | 1 | . | 194 |
| 3.50-3.99 | . | . | . | . | . | 28 | 37 | 23 | 5 | . | 93 |
| 4.00-4.49 | . | . | . | . | . | 1 | 17 | 17 | 5 | 1 | 41 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 7 | 4 | . | 15 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | 2 | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 291 | 2285 | 6384 | 3950 | 1806 | 1038 | 231 | 114 | 31 | 3 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 4.9 NO. OF CASES= 15109.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 266 | 1017 | 828 | 120 | 3 | . | . | . | . | . | 2234 |
| 0.50-0.99 | . | 1735 | 1700 | 1274 | 388 | 60 | 1 | . | . | . | 5158 |
| 1.00-1.49 | . | . | 374 | 526 | 426 | 306 | 39 | 1 | . | . | 1672 |
| 1.50-1.99 | . | . | 79 | 146 | 214 | 167 | 43 | 4 | . | . | 653 |
| 2.00-2.49 | . | . | 1 | 33 | 84 | 159 | 66 | 9 | . | . | 352 |
| 2.50-2.99 | . | . | . | . | 24 | 53 | 56 | 20 | . | . | 153 |
| 3.00-3.49 | . | . | . | . | 3 | 22 | 13 | 10 | . | . | 48 |
| 3.50-3.99 | . | . | . | . | . | 9 | 3 | 2 | 2 | . | 16 |
| 4.00-4.49 | . | . | . | . | . | . | 7 | . | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 2 | 1 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 266 | 2752 | 2982 | 2099 | 1142 | 776 | 231 | 48 | 3 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 9649.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 219 | 560 | 156 | 47 | 8 | . | . | . | . | . | 990 |
| 0.50-0.99 | . | 1353 | 219 | 148 | 109 | 38 | . | . | . | . | 1867 |
| 1.00-1.49 | . | . | 204 | 32 | 49 | 66 | 2 | . | . | . | 353 |
| 1.50-1.99 | . | . | 66 | 3 | 21 | 34 | 12 | . | . | . | 136 |
| 2.00-2.49 | . | . | 3 | 6 | 2 | 8 | 9 | 7 | . | . | 35 |
| 2.50-2.99 | . | . | . | 1 | . | 1 | 3 | 2 | . | . | 7 |
| 3.00-3.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 219 | 1913 | 648 | 237 | 189 | 147 | 27 | 9 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 3178.

STATION S71 47.80N 85.37W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

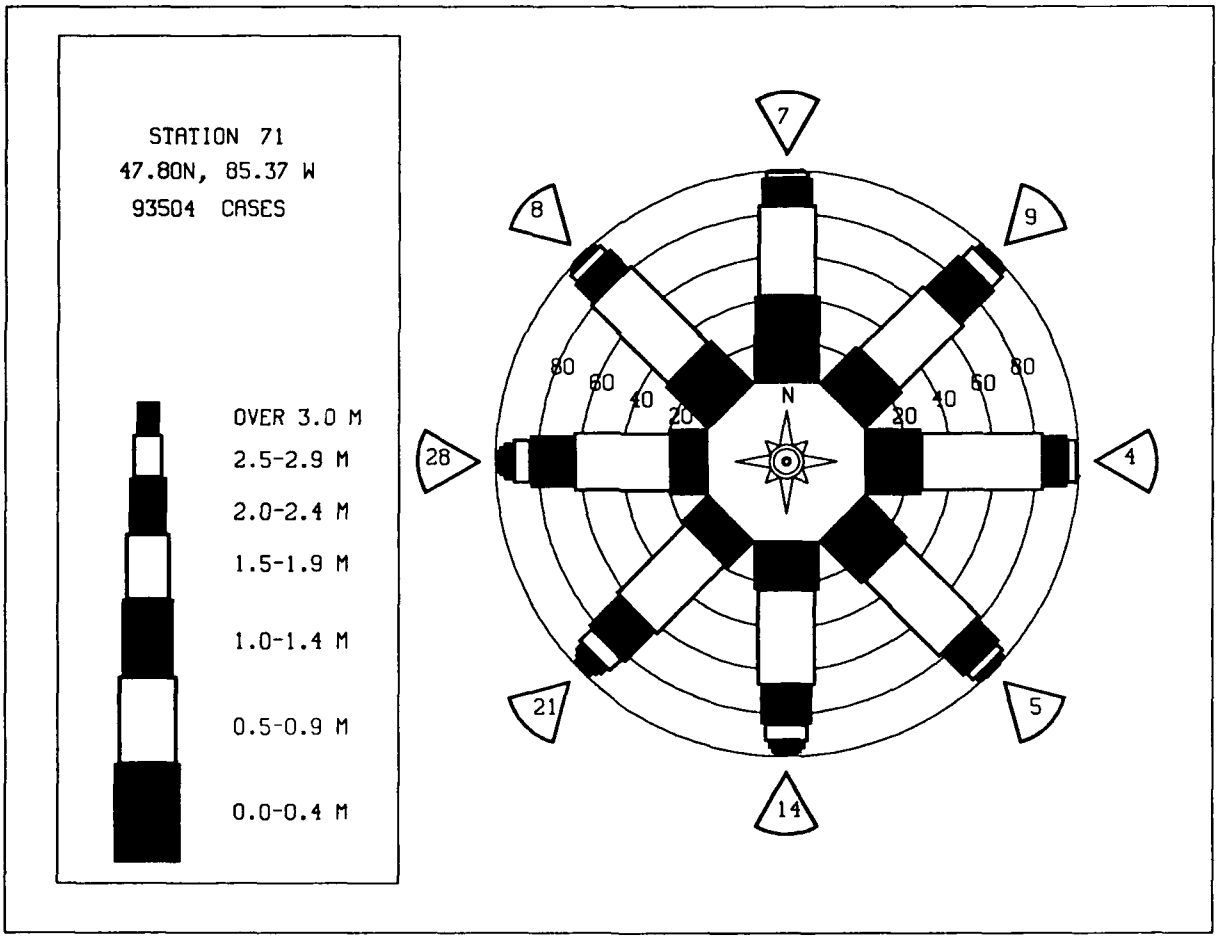
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 313 | 685 | 24 | 3 | . | . | . | . | . | . | 1025 |
| 0.50-0.99 | . | 1008 | 109 | 1 | 3 | 7 | . | . | . | . | 1128 |
| 1.00-1.49 | . | . | 202 | . | 1 | 4 | . | . | . | . | 207 |
| 1.50-1.99 | . | . | 83 | . | . | 3 | 1 | 1 | . | . | 88 |
| 2.00-2.49 | . | . | 3 | 5 | . | . | . | . | . | . | 8 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 313 | 1693 | 421 | 9 | 4 | 14 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 2301.

STATION S71 47.80N 85.37W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 444 | 1242 | 491 | 36 | 2 | . | . | . | . | . | 2215 |
| 0.50-0.99 | . | 1423 | 2498 | 611 | 86 | 15 | . | . | . | . | 4633 |
| 1.00-1.49 | . | . | 864 | 620 | 251 | 61 | 5 | . | . | . | 1801 |
| 1.50-1.99 | . | . | 102 | 297 | 221 | 88 | 7 | . | . | . | 715 |
| 2.00-2.49 | . | . | 1 | 119 | 81 | 102 | 14 | 2 | . | . | 319 |
| 2.50-2.99 | . | . | . | 5 | 72 | 48 | 17 | 5 | . | . | 147 |
| 3.00-3.49 | . | . | . | . | 7 | 51 | 10 | 6 | . | . | 74 |
| 3.50-3.99 | . | . | . | . | . | 22 | 11 | 4 | . | . | 37 |
| 4.00-4.49 | . | . | . | . | . | 1 | 10 | 4 | 1 | . | 16 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 4 | 1 | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 444 | 2665 | 3956 | 1688 | 720 | 388 | 77 | 28 | 2 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S71 (47.80N 85.37W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 0.9 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.9 | 0.8 | 0.7 | 0.6 |
| 1957 | 1.0 | 1.0 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 0.6 | 1.0 | 1.0 | 0.8 |
| 1958 | 0.6 | 0.8 | 0.4 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.3 | 0.9 | 0.7 |
| 1959 | 0.8 | 0.9 | 0.7 | 0.6 | 0.7 | 0.5 | 0.6 | 0.4 | 0.7 | 0.7 | 1.0 | 0.9 | 0.7 |
| 1960 | 0.8 | 0.7 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 1.1 | 1.0 | 0.7 |
| 1961 | 0.7 | 0.7 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.8 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1962 | 1.1 | 0.7 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 1.0 | 1.0 | 0.7 |
| 1963 | 1.0 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.9 | 1.0 | 1.1 | 0.8 |
| 1964 | 1.3 | 1.2 | 1.1 | 1.0 | 0.9 | 0.7 | 0.6 | 0.8 | 1.0 | 1.1 | 1.0 | 1.1 | 1.0 |
| 1965 | 1.4 | 1.4 | 0.9 | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.9 | 1.1 | 1.3 | 1.2 | 1.0 |
| 1966 | 1.1 | 1.3 | 1.3 | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 | 1.0 | 1.4 | 1.2 | 1.2 | 1.0 |
| 1967 | 1.3 | 1.3 | 1.3 | 0.9 | 0.9 | 0.7 | 0.6 | 0.7 | 1.0 | 1.3 | 1.2 | 1.6 | 1.1 |
| 1968 | 1.2 | 1.4 | 1.3 | 1.1 | 0.8 | 0.7 | 0.8 | 0.7 | 0.9 | 1.2 | 1.3 | 1.2 | 1.1 |
| 1969 | 1.4 | 0.9 | 1.1 | 0.8 | 0.7 | 0.8 | 0.6 | 0.8 | 0.9 | 1.2 | 1.2 | 1.0 | 0.9 |
| 1970 | 1.0 | 1.3 | 1.0 | 1.0 | 0.8 | 0.6 | 0.6 | 0.6 | 1.0 | 1.3 | 1.1 | 1.0 | 1.0 |
| 1971 | 1.2 | 1.2 | 1.1 | 0.9 | 0.7 | 0.5 | 0.7 | 0.6 | 0.9 | 1.1 | 1.1 | 1.1 | 0.9 |
| 1972 | 1.4 | 1.1 | 1.0 | 0.8 | 0.5 | 0.5 | 0.5 | 0.5 | 0.9 | 1.1 | 1.0 | 1.0 | 0.9 |
| 1973 | 1.2 | 1.1 | 1.0 | 0.9 | 0.6 | 0.5 | 0.6 | 0.6 | 0.9 | 1.0 | 1.2 | 1.0 | 0.9 |
| 1974 | 1.0 | 0.8 | 1.1 | 0.8 | 0.6 | 0.7 | 0.6 | 0.7 | 0.9 | 1.1 | 1.1 | 1.0 | 0.9 |
| 1975 | 1.1 | 0.8 | 0.8 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | 0.8 | 1.3 | 1.3 | 1.1 | 0.8 |
| 1976 | 1.4 | 1.3 | 1.4 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 0.8 | 1.2 | 1.1 | 0.9 |
| 1977 | 1.1 | 1.1 | 0.9 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 | 1.0 | 0.8 |
| 1978 | 1.0 | 0.9 | 1.0 | 0.7 | 0.6 | 0.6 | 0.6 | 1.2 | 0.9 | 1.2 | 1.5 | 1.6 | 1.0 |
| 1979 | 1.0 | 0.8 | 1.0 | 0.6 | 0.6 | 0.6 | 0.5 | 0.6 | 1.0 | 0.7 | 1.5 | 1.7 | 0.9 |
| 1980 | 1.1 | 0.9 | 1.2 | 0.7 | 0.6 | 0.6 | 0.4 | 0.7 | 0.9 | 1.0 | 1.0 | 1.1 | 0.8 |
| 1981 | 0.9 | 1.1 | 0.9 | 0.9 | 0.7 | 0.6 | 0.6 | 0.5 | 0.8 | 1.0 | 1.1 | 1.1 | 0.8 |
| 1982 | 1.3 | 1.3 | 1.4 | 0.9 | 0.6 | 0.6 | 0.6 | 0.6 | 0.9 | 1.1 | 1.2 | 1.3 | 1.0 |
| 1983 | 1.2 | 1.2 | 1.1 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 1.0 | 1.1 | 1.5 | 1.3 | 1.0 |
| 1984 | 1.5 | 1.2 | 1.1 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.9 | 1.2 | 1.5 | 1.5 | 1.0 |
| 1985 | 1.2 | 1.1 | 1.3 | 0.8 | 0.7 | 0.8 | 0.6 | 0.7 | 1.2 | 1.3 | 1.1 | 1.4 | 1.0 |
| 1986 | 1.4 | 0.7 | 1.4 | 1.0 | 0.8 | 0.7 | 0.5 | 0.8 | 1.1 | 1.1 | 1.6 | 1.6 | 1.1 |
| 1987 | 1.1 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.6 | 0.6 | 0.6 | 0.9 | 1.1 | 1.2 | 0.8 |
| MEAN | 1.1 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.8 | 1.0 | 1.2 | 1.1 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S71 (47.80N 85.37W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.6 | 2.4 | 2.4 | 2.0 | 1.7 | 1.7 | 1.1 | 1.0 | 1.7 | 2.7 | 2.1 | 2.1 |
| 1957 | 3.2 | 3.1 | 2.5 | 2.1 | 2.5 | 3.3 | 2.0 | 1.5 | 2.4 | 1.6 | 2.7 | 3.0 |
| 1958 | 2.3 | 2.3 | 1.3 | 4.3 | 2.1 | 1.9 | 1.4 | 1.3 | 2.0 | 2.2 | 7.5 | 2.7 |
| 1959 | 3.9 | 4.9 | 2.3 | 1.9 | 3.8 | 1.5 | 1.6 | 1.6 | 2.3 | 2.2 | 2.9 | 3.7 |
| 1960 | 2.5 | 1.8 | 1.9 | 2.4 | 1.6 | 1.2 | 1.3 | 2.2 | 1.7 | 2.4 | 3.4 | 3.7 |
| 1961 | 2.3 | 2.2 | 3.2 | 2.0 | 1.9 | 1.8 | 1.2 | 2.0 | 2.0 | 2.3 | 4.1 | 3.2 |
| 1962 | 2.8 | 1.8 | 1.9 | 2.0 | 1.5 | 1.4 | 1.2 | 1.4 | 1.9 | 3.7 | 2.8 | 4.5 |
| 1963 | 2.7 | 3.1 | 2.6 | 2.6 | 2.2 | 2.5 | 2.0 | 1.3 | 2.1 | 3.2 | 3.1 | 3.6 |
| 1964 | 5.4 | 4.6 | 3.8 | 4.8 | 3.6 | 2.8 | 1.4 | 2.7 | 3.9 | 3.8 | 5.7 | 3.1 |
| 1965 | 4.0 | 3.5 | 2.5 | 3.0 | 2.4 | 2.6 | 1.9 | 1.7 | 3.2 | 4.2 | 3.8 | 3.9 |
| 1966 | 3.4 | 3.5 | 4.3 | 3.0 | 2.2 | 2.3 | 2.4 | 2.0 | 3.1 | 5.6 | 3.5 | 3.9 |
| 1967 | 4.0 | 4.0 | 3.6 | 3.1 | 3.3 | 2.0 | 1.5 | 1.7 | 3.0 | 4.2 | 3.0 | 4.6 |
| 1968 | 4.0 | 4.8 | 3.9 | 3.6 | 2.4 | 1.7 | 2.4 | 2.1 | 2.9 | 3.7 | 3.6 | 3.7 |
| 1969 | 3.6 | 3.1 | 3.9 | 2.5 | 1.8 | 2.2 | 1.8 | 2.4 | 3.1 | 4.1 | 3.8 | 3.3 |
| 1970 | 2.9 | 4.1 | 3.3 | 3.2 | 2.5 | 1.9 | 1.5 | 1.5 | 3.3 | 4.5 | 4.1 | 4.1 |
| 1971 | 4.0 | 3.5 | 3.8 | 2.1 | 2.8 | 1.5 | 2.3 | 1.7 | 3.0 | 4.2 | 4.6 | 5.6 |
| 1972 | 4.1 | 4.0 | 2.4 | 2.7 | 1.1 | 1.3 | 1.4 | 1.6 | 3.4 | 3.6 | 3.8 | 3.1 |
| 1973 | 3.1 | 2.8 | 4.1 | 2.8 | 1.9 | 1.3 | 1.8 | 1.4 | 3.1 | 3.6 | 3.4 | 3.9 |
| 1974 | 3.7 | 3.6 | 3.2 | 2.5 | 2.0 | 1.6 | 1.4 | 1.8 | 2.4 | 3.5 | 3.3 | 3.8 |
| 1975 | 5.0 | 2.5 | 2.1 | 1.5 | 1.8 | 1.9 | 1.7 | 3.1 | 2.4 | 4.9 | 4.3 | 3.2 |
| 1976 | 6.7 | 4.3 | 4.0 | 2.8 | 2.5 | 2.0 | 1.4 | 2.1 | 3.4 | 4.1 | 4.4 | 4.9 |
| 1977 | 3.7 | 3.3 | 2.9 | 1.9 | 1.8 | 1.8 | 2.2 | 2.2 | 5.3 | 5.2 | 7.7 | 3.5 |
| 1978 | 3.8 | 2.5 | 4.5 | 2.0 | 1.9 | 1.5 | 2.3 | 3.3 | 2.6 | 4.2 | 4.7 | 4.7 |
| 1979 | 3.3 | 3.0 | 2.6 | 1.7 | 2.2 | 1.8 | 1.3 | 1.8 | 2.8 | 2.3 | 4.4 | 4.1 |
| 1980 | 6.1 | 5.1 | 3.4 | 2.2 | 2.6 | 1.5 | 1.2 | 1.9 | 4.4 | 4.2 | 3.3 | 3.9 |
| 1981 | 2.8 | 3.6 | 3.0 | 3.0 | 2.1 | 2.8 | 1.8 | 1.4 | 4.4 | 3.5 | 5.2 | 5.9 |
| 1982 | 4.9 | 4.4 | 5.9 | 4.6 | 1.7 | 1.7 | 1.5 | 1.5 | 3.1 | 4.5 | 4.9 | 4.8 |
| 1983 | 4.0 | 5.5 | 3.3 | 2.5 | 2.1 | 1.8 | 2.2 | 2.4 | 3.2 | 3.7 | 5.0 | 3.7 |
| 1984 | 5.0 | 3.4 | 4.3 | 3.7 | 1.8 | 2.7 | 1.5 | 2.4 | 3.0 | 5.2 | 4.6 | 6.0 |
| 1985 | 4.4 | 3.8 | 4.6 | 2.6 | 1.7 | 3.0 | 1.9 | 2.5 | 5.5 | 3.9 | 3.2 | 4.6 |
| 1986 | 5.5 | 2.1 | 4.6 | 2.9 | 2.2 | 3.0 | 1.2 | 2.9 | 3.0 | 4.2 | 6.3 | 5.2 |
| 1987 | 3.1 | 4.2 | 3.1 | 2.8 | 2.9 | 1.3 | 2.0 | 2.0 | 1.8 | 3.1 | 4.0 | 4.7 |

32 YR. STATISTICS FOR WIS STATION S71

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.4 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 7.7 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 253.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 77112118 |

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 422 | 1033 | 118 | 21 | 1 | . | . | . | . | . | 1595 |
| 0.50-0.99 | . | 1452 | 220 | 54 | 67 | 8 | . | . | . | . | 1801 |
| 1.00-1.49 | . | . | 382 | 33 | 24 | 34 | . | . | . | . | 473 |
| 1.50-1.99 | . | . | 103 | 6 | 1 | 9 | 3 | . | . | . | 122 |
| 2.00-2.49 | . | . | 4 | 1 | . | . | . | . | . | . | 5 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 422 | 2485 | 827 | 115 | 93 | 51 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 3744.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 359 | 973 | 118 | 13 | . | . | . | . | . | . | 1463 |
| 0.50-0.99 | . | 1402 | 712 | 42 | 33 | 6 | . | . | . | . | 2195 |
| 1.00-1.49 | . | . | 503 | 87 | 9 | 6 | 1 | . | . | . | 606 |
| 1.50-1.99 | . | . | 174 | 117 | 1 | 3 | 1 | . | . | . | 296 |
| 2.00-2.49 | . | . | 12 | 26 | 1 | . | . | . | . | . | 39 |
| 2.50-2.99 | . | . | . | 3 | 3 | . | . | . | . | . | 6 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 359 | 2375 | 1519 | 288 | 47 | 15 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 4315.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 412 | 1013 | 88 | 3 | . | . | . | . | . | . | 1516 |
| 0.50-0.99 | . | 1306 | 1367 | 11 | 7 | . | . | . | . | . | 2691 |
| 1.00-1.49 | . | . | 663 | 114 | 4 | . | . | . | . | . | 781 |
| 1.50-1.99 | . | . | 64 | 274 | . | . | . | . | . | . | 338 |
| 2.00-2.49 | . | . | 5 | 41 | 9 | . | . | . | . | . | 55 |
| 2.50-2.99 | . | . | . | 1 | 3 | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 412 | 2319 | 2187 | 444 | 23 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 5044.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 241 | 565 | 50 | 1 | . | . | . | . | . | . | 857 |
| 0.50-0.99 | . | 676 | 766 | 9 | 1 | . | . | . | . | . | 1452 |
| 1.00-1.49 | . | . | 459 | 27 | 2 | . | . | . | . | . | 488 |
| 1.50-1.99 | . | . | 28 | 116 | 1 | . | . | . | . | . | 145 |
| 2.00-2.49 | . | . | . | 51 | . | . | . | . | . | . | 51 |
| 2.50-2.99 | . | . | . | 1 | 1 | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 241 | 1241 | 1303 | 205 | 5 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 2808.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 183 | 449 | 31 | . | . | . | . | . | . | . | 663 |
| 0.50-0.99 | . | 417 | 725 | 2 | . | . | . | . | . | . | 1144 |
| 1.00-1.49 | . | . | 418 | 8 | 2 | . | . | . | . | . | 428 |
| 1.50-1.99 | . | . | 34 | 99 | 2 | 1 | . | . | . | . | 136 |
| 2.00-2.49 | . | . | . | 68 | 2 | 4 | . | . | . | . | 74 |
| 2.50-2.99 | . | . | . | 3 | 2 | . | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 183 | 866 | 1208 | 180 | 8 | 5 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.7 NO. OF CASES= 2295.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 161 | 301 | 17 | . | . | . | . | . | . | . | 479 |
| 0.50-0.99 | . | 222 | 520 | 1 | . | . | . | . | . | . | 743 |
| 1.00-1.49 | . | . | 207 | 19 | 2 | . | . | . | . | . | 228 |
| 1.50-1.99 | . | . | 13 | 69 | 6 | . | . | . | . | . | 88 |
| 2.00-2.49 | . | . | . | 32 | 9 | 1 | . | . | . | . | 42 |
| 2.50-2.99 | . | . | . | 1 | 11 | 3 | . | . | . | . | 15 |
| 3.00-3.49 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 161 | 523 | 757 | 122 | 28 | 8 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 1502.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 145 | 317 | 130 | 12 | . | . | . | . | . | . | 604 |
| 0.50-0.99 | . | 349 | 819 | 211 | 13 | . | . | . | . | . | 1392 |
| 1.00-1.49 | . | . | 231 | 162 | 69 | 4 | . | . | . | . | 466 |
| 1.50-1.99 | . | . | 8 | 83 | 41 | 14 | . | . | . | . | 146 |
| 2.00-2.49 | . | . | . | 14 | 20 | 10 | . | . | . | . | 44 |
| 2.50-2.99 | . | . | . | . | 35 | 7 | 1 | . | . | . | 43 |
| 3.00-3.49 | . | . | . | . | 1 | 22 | . | . | . | . | 23 |
| 3.50-3.99 | . | . | . | . | . | 7 | 1 | . | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 145 | 666 | 1188 | 482 | 179 | 64 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 2561.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 168 | 622 | 647 | 43 | . | . | . | . | . | . | 1480 |
| 0.50-0.99 | . | 476 | 1756 | 687 | 64 | 1 | . | . | . | . | 2984 |
| 1.00-1.49 | . | . | 349 | 427 | 220 | 14 | . | . | . | . | 1010 |
| 1.50-1.99 | . | . | 24 | 160 | 127 | 45 | . | . | . | . | 356 |
| 2.00-2.49 | . | . | . | 57 | 37 | 45 | . | . | . | . | 139 |
| 2.50-2.99 | . | . | . | . | 48 | 22 | . | . | . | . | 70 |
| 3.00-3.49 | . | . | . | . | 2 | 38 | . | . | . | . | 40 |
| 3.50-3.99 | . | . | . | . | . | 10 | . | . | . | . | 10 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 168 | 1098 | 2776 | 1374 | 498 | 175 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.5 NO. OF CASES= 5708.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 209 | 836 | 371 | 8 | . | . | . | . | . | . | 1424 |
| 0.50-0.99 | . | 536 | 2190 | 297 | 8 | . | . | . | . | . | 3031 |
| 1.00-1.49 | . | . | 535 | 627 | 164 | 5 | . | . | . | . | 1331 |
| 1.50-1.99 | . | . | 36 | 329 | 209 | 19 | . | . | . | . | 593 |
| 2.00-2.49 | . | . | . | 135 | 106 | 37 | . | . | . | . | 278 |
| 2.50-2.99 | . | . | . | 2 | 108 | 36 | 1 | . | . | . | 147 |
| 3.00-3.49 | . | . | . | . | 4 | 89 | 1 | . | . | . | 94 |
| 3.50-3.99 | . | . | . | . | . | 34 | 9 | . | . | . | 43 |
| 4.00-4.49 | . | . | . | . | . | 3 | 11 | 1 | . | . | 15 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 209 | 1372 | 3132 | 1398 | 599 | 223 | 23 | 2 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.5 NO. OF CASES= 6519.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 235 | 902 | 487 | 6 | . | . | . | . | . | . | 1630 |
| 0.50-0.99 | . | 715 | 3179 | 882 | 7 | . | . | . | . | . | 4783 |
| 1.00-1.49 | . | . | 711 | 1007 | 398 | 1 | . | . | . | . | 2117 |
| 1.50-1.99 | . | . | 66 | 345 | 433 | 90 | . | . | . | . | 934 |
| 2.00-2.49 | . | . | . | 154 | 143 | 148 | 3 | . | . | . | 448 |
| 2.50-2.99 | . | . | . | 7 | 144 | 90 | 10 | . | . | . | 251 |
| 3.00-3.49 | . | . | . | . | 22 | 119 | 8 | 2 | . | . | 151 |
| 3.50-3.99 | . | . | . | . | 1 | 44 | 11 | 1 | . | . | 57 |
| 4.00-4.49 | . | . | . | . | . | 6 | 9 | 5 | . | . | 20 |
| 4.50-4.99 | . | . | . | . | . | 1 | 7 | 5 | . | . | 13 |
| 5.00-5.49 | . | . | . | . | . | . | . | 6 | . | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 235 | 1617 | 4443 | 2401 | 1148 | 499 | 48 | 19 | 4 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.7 NO. OF CASES= 9754.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 311 | 1131 | 329 | 2 | . | . | . | . | . | . | 1773 |
| 0.50-0.99 | . | 808 | 3128 | 340 | 10 | . | . | . | . | . | 4286 |
| 1.00-1.49 | . | . | 724 | 944 | 144 | 7 | . | . | . | . | 1819 |
| 1.50-1.99 | . | . | 48 | 374 | 342 | 47 | . | . | . | . | 811 |
| 2.00-2.49 | . | . | . | 136 | 132 | 122 | 1 | . | . | . | 391 |
| 2.50-2.99 | . | . | . | 4 | 115 | 80 | 21 | 1 | . | . | 221 |
| 3.00-3.49 | . | . | . | . | 19 | 94 | 14 | 4 | . | . | 131 |
| 3.50-3.99 | . | . | . | . | . | 52 | 28 | 6 | 1 | . | 87 |
| 4.00-4.49 | . | . | . | . | . | 5 | 47 | 7 | 1 | . | 60 |
| 4.50-4.99 | . | . | . | . | . | 1 | 11 | 25 | 1 | . | 38 |
| 5.00-5.49 | . | . | . | . | . | . | . | 14 | 2 | . | 16 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 1 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 311 | 1939 | 4229 | 1800 | 762 | 408 | 122 | 61 | 8 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 9029.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 248 | 1115 | 333 | 23 | 3 | . | . | . | . | . | 1722 |
| 0.50-0.99 | . | 825 | 3319 | 353 | 25 | 1 | . | . | . | . | 4523 |
| 1.00-1.49 | . | 1 | 766 | 1145 | 142 | 27 | 4 | . | . | . | 2085 |
| 1.50-1.99 | . | . | 62 | 396 | 371 | 73 | 4 | . | . | . | 906 |
| 2.00-2.49 | . | . | . | 108 | 162 | 167 | 11 | . | . | . | 448 |
| 2.50-2.99 | . | . | . | 2 | 126 | 84 | 26 | 5 | . | . | 243 |
| 3.00-3.49 | . | . | . | . | 8 | 87 | 26 | 16 | 1 | . | 138 |
| 3.50-3.99 | . | . | . | . | . | 31 | 27 | 13 | 1 | . | 72 |
| 4.00-4.49 | . | . | . | . | . | 2 | 18 | 10 | 6 | . | 36 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 17 | 2 | . | 20 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 9 | 2 | . | 12 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 248 | 1941 | 4480 | 2027 | 837 | 472 | 118 | 70 | 18 | 1 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.6 NO. OF CASES= 9568.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 303 | 1294 | 786 | 22 | 3 | . | . | . | . | . | 2408 |
| 0.50-0.99 | . | 909 | 4322 | 1280 | 36 | 18 | 1 | . | . | . | 6566 |
| 1.00-1.49 | . | . | 796 | 1851 | 622 | 48 | 8 | 2 | . | . | 3327 |
| 1.50-1.99 | . | . | 70 | 410 | 632 | 282 | 7 | 2 | . | . | 1403 |
| 2.00-2.49 | . | . | . | 125 | 174 | 312 | 47 | 3 | 1 | . | 662 |
| 2.50-2.99 | . | . | . | 2 | 133 | 105 | 48 | 22 | 1 | . | 311 |
| 3.00-3.49 | . | . | . | . | 7 | 91 | 32 | 18 | 1 | . | 149 |
| 3.50-3.99 | . | . | . | . | . | 26 | 37 | 24 | 5 | . | 92 |
| 4.00-4.49 | . | . | . | . | . | 2 | 14 | 16 | 4 | . | 36 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 11 | 5 | 1 | 20 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 1 | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 303 | 2203 | 5974 | 3690 | 1607 | 884 | 197 | 103 | 27 | 2 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.9 NO. OF CASES= 14034.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 234 | 1060 | 843 | 56 | . | . | . | . | . | . | 2193 |
| 0.50-0.99 | . | 1221 | 2397 | 1266 | 226 | 17 | . | . | . | . | 5127 |
| 1.00-1.49 | . | . | 447 | 963 | 587 | 229 | 9 | 1 | . | . | 2236 |
| 1.50-1.99 | . | . | 48 | 245 | 247 | 247 | 31 | . | . | . | 818 |
| 2.00-2.49 | . | . | 1 | 52 | 158 | 140 | 52 | 6 | . | . | 409 |
| 2.50-2.99 | . | . | . | 2 | 48 | 125 | 55 | 12 | . | . | 242 |
| 3.00-3.49 | . | . | . | . | 5 | 47 | 50 | 12 | . | . | 114 |
| 3.50-3.99 | . | . | . | . | . | 8 | 16 | 7 | . | . | 31 |
| 4.00-4.49 | . | . | . | . | . | . | 5 | 6 | 2 | . | 13 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 2 | 1 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 234 | 2281 | 3736 | 2584 | 1271 | 813 | 221 | 47 | 4 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.9 NO. OF CASES= 10479.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 178 | 550 | 346 | 44 | . | . | . | . | . | . | 1118 |
| 0.50-0.99 | . | 1109 | 537 | 357 | 150 | 19 | . | . | . | . | 2172 |
| 1.00-1.49 | . | . | 150 | 175 | 135 | 134 | 6 | . | . | . | 600 |
| 1.50-1.99 | . | . | 35 | 57 | 53 | 69 | 17 | . | . | . | 231 |
| 2.00-2.49 | . | . | 2 | 3 | 31 | 28 | 16 | 2 | . | . | 82 |
| 2.50-2.99 | . | . | . | 1 | 1 | 12 | 19 | 7 | . | . | 40 |
| 3.00-3.49 | . | . | . | . | . | . | 1 | 5 | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 178 | 1659 | 1070 | 637 | 370 | 262 | 60 | 15 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.3 NO. OF CASES= 3988.

STATION S72 47.80N 85.57W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

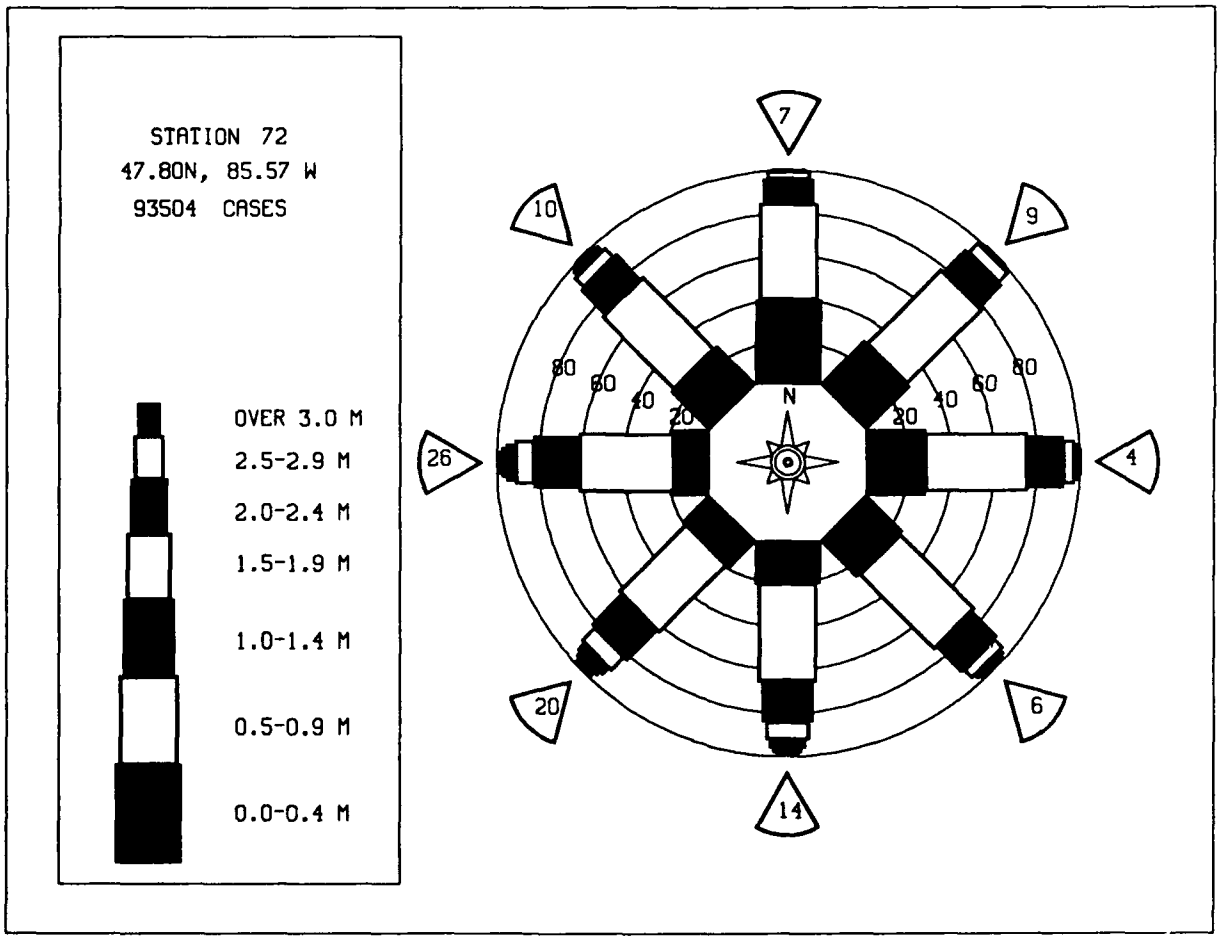
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 296 | 619 | 59 | 5 | . | . | . | . | . | . | 979 |
| 0.50-0.99 | . | 857 | 113 | 35 | 24 | 10 | . | . | . | . | 1039 |
| 1.00-1.49 | . | . | 145 | 5 | 18 | 12 | . | . | . | . | 180 |
| 1.50-1.99 | . | . | 59 | 4 | 7 | 11 | 1 | 1 | . | . | 83 |
| 2.00-2.49 | . | . | 2 | 4 | 4 | 3 | . | . | . | . | 13 |
| 2.50-2.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 296 | 1476 | 378 | 53 | 53 | 38 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 2156.

STATION S72 47.80N 85.57W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 411 | 1278 | 476 | 26 | . | . | . | . | . | . | 2191 |
| 0.50-0.99 | . | 1328 | 2607 | 583 | 67 | 8 | . | . | . | . | 4593 |
| 1.00-1.49 | . | . | 749 | 760 | 254 | 52 | 2 | . | . | . | 1817 |
| 1.50-1.99 | . | . | 87 | 309 | 247 | 91 | 6 | . | . | . | 740 |
| 2.00-2.49 | . | . | 2 | 101 | 99 | 102 | 13 | 1 | . | . | 318 |
| 2.50-2.99 | . | . | . | 3 | 78 | 57 | 18 | 4 | . | . | 160 |
| 3.00-3.49 | . | . | . | . | 7 | 59 | 13 | 5 | . | . | 84 |
| 3.50-3.99 | . | . | . | . | . | 21 | 13 | 5 | . | . | 39 |
| 4.00-4.49 | . | . | . | . | . | 1 | 10 | 4 | 1 | . | 16 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 6 | . | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 411 | 2606 | 3921 | 1782 | 752 | 391 | 77 | 28 | 2 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S72 (47.80N 85.57W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.9 | 0.8 | 0.7 | 0.6 |
| 1957 | 1.0 | 1.0 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 0.6 | 1.0 | 1.0 | 0.8 |
| 1958 | 0.6 | 0.8 | 0.4 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.3 | 0.9 | 0.7 |
| 1959 | 0.9 | 0.9 | 0.8 | 0.6 | 0.7 | 0.5 | 0.6 | 0.4 | 0.7 | 0.7 | 1.0 | 0.9 | 0.7 |
| 1960 | 0.8 | 0.7 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 1.1 | 1.0 | 0.7 |
| 1961 | 0.7 | 0.7 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.8 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1962 | 1.1 | 0.7 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 1.0 | 1.0 | 0.7 |
| 1963 | 1.1 | 1.1 | 1.0 | 0.8 | 0.8 | 0.6 | 0.6 | 0.6 | 0.8 | 1.0 | 1.0 | 1.2 | 0.9 |
| 1964 | 1.3 | 1.2 | 1.1 | 1.1 | 0.9 | 0.7 | 0.6 | 0.9 | 1.0 | 1.1 | 1.1 | 1.1 | 1.0 |
| 1965 | 1.4 | 1.5 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.6 | 0.9 | 1.1 | 1.3 | 1.2 | 1.0 |
| 1966 | 1.2 | 1.4 | 1.4 | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 | 1.1 | 1.4 | 1.3 | 1.3 | 1.1 |
| 1967 | 1.3 | 1.4 | 1.4 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 1.0 | 1.4 | 1.3 | 1.7 | 1.1 |
| 1968 | 1.3 | 1.5 | 1.4 | 1.1 | 0.9 | 0.7 | 0.8 | 0.7 | 0.9 | 1.3 | 1.3 | 1.3 | 1.1 |
| 1969 | 1.5 | 1.0 | 1.1 | 0.8 | 0.8 | 0.8 | 0.6 | 0.8 | 0.9 | 1.2 | 1.2 | 1.0 | 1.0 |
| 1970 | 1.1 | 1.4 | 1.1 | 1.1 | 0.9 | 0.7 | 0.6 | 0.6 | 1.1 | 1.4 | 1.2 | 1.1 | 1.0 |
| 1971 | 1.2 | 1.3 | 1.1 | 0.9 | 0.7 | 0.5 | 0.7 | 0.6 | 0.9 | 1.2 | 1.1 | 1.2 | 1.0 |
| 1972 | 1.5 | 1.1 | 1.0 | 0.8 | 0.5 | 0.5 | 0.5 | 0.6 | 1.0 | 1.2 | 1.0 | 1.0 | 0.9 |
| 1973 | 1.2 | 1.1 | 1.0 | 0.9 | 0.7 | 0.5 | 0.6 | 0.6 | 0.9 | 1.1 | 1.2 | 1.0 | 0.9 |
| 1974 | 1.1 | 0.9 | 1.2 | 0.8 | 0.6 | 0.7 | 0.6 | 0.7 | 0.9 | 1.1 | 1.2 | 1.0 | 0.9 |
| 1975 | 1.1 | 0.8 | 0.8 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 0.8 | 1.3 | 1.3 | 1.2 | 0.9 |
| 1976 | 1.5 | 1.3 | 1.5 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 0.8 | 1.2 | 1.1 | 1.0 |
| 1977 | 1.1 | 1.1 | 0.9 | 0.6 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 | 1.0 | 0.8 |
| 1978 | 1.0 | 0.8 | 1.0 | 0.7 | 0.6 | 0.6 | 0.6 | 1.2 | 0.9 | 1.3 | 1.5 | 1.6 | 1.0 |
| 1979 | 1.0 | 0.8 | 0.9 | 0.6 | 0.5 | 0.6 | 0.5 | 0.6 | 0.9 | 0.7 | 1.5 | 1.7 | 0.9 |
| 1980 | 1.1 | 0.8 | 1.2 | 0.7 | 0.6 | 0.5 | 0.4 | 0.6 | 1.0 | 1.1 | 1.0 | 1.2 | 0.8 |
| 1981 | 0.9 | 1.1 | 0.8 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.8 | 1.0 | 1.1 | 1.0 | 0.8 |
| 1982 | 1.3 | 1.2 | 1.4 | 0.9 | 0.6 | 0.6 | 0.6 | 0.5 | 0.9 | 1.1 | 1.3 | 1.3 | 1.0 |
| 1983 | 1.2 | 1.1 | 1.0 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 1.0 | 1.1 | 1.5 | 1.3 | 0.9 |
| 1984 | 1.4 | 1.2 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.9 | 1.2 | 1.6 | 1.5 | 1.0 |
| 1985 | 1.2 | 1.1 | 1.2 | 0.8 | 0.6 | 0.7 | 0.6 | 0.7 | 1.2 | 1.3 | 1.0 | 1.3 | 1.0 |
| 1986 | 1.4 | 0.7 | 1.3 | 1.0 | 0.7 | 0.7 | 0.5 | 0.7 | 1.0 | 1.1 | 1.5 | 1.6 | 1.0 |
| 1987 | 1.1 | 0.9 | 1.0 | 0.7 | 0.6 | 0.5 | 0.6 | 0.7 | 0.6 | 1.0 | 1.1 | 1.2 | 0.8 |
| MEAN | 1.1 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.9 | 1.0 | 1.2 | 1.2 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S72 (47.80N 85.57W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.7 | 2.8 | 2.2 | 2.1 | 1.7 | 1.7 | 1.1 | 1.0 | 2.0 | 2.8 | 2.2 | 2.2 |
| 1957 | 3.2 | 3.1 | 2.5 | 2.0 | 2.6 | 3.3 | 2.1 | 1.5 | 2.5 | 1.6 | 2.5 | 3.3 |
| 1958 | 2.4 | 2.4 | 1.3 | 4.3 | 2.3 | 1.9 | 1.5 | 1.4 | 2.0 | 2.2 | 7.4 | 2.6 |
| 1959 | 3.9 | 4.9 | 2.5 | 2.0 | 3.8 | 1.5 | 1.6 | 1.6 | 2.1 | 2.3 | 2.8 | 3.7 |
| 1960 | 2.5 | 1.9 | 1.9 | 2.4 | 1.2 | 1.3 | 1.5 | 2.2 | 1.7 | 2.7 | 3.3 | 3.4 |
| 1961 | 2.4 | 2.3 | 3.3 | 2.0 | 2.0 | 1.8 | 1.3 | 2.0 | 2.1 | 2.3 | 4.1 | 2.9 |
| 1962 | 2.8 | 1.9 | 2.0 | 2.0 | 1.5 | 1.4 | 1.3 | 1.4 | 2.0 | 3.7 | 2.9 | 4.6 |
| 1963 | 2.7 | 3.2 | 2.7 | 3.0 | 2.3 | 2.5 | 1.9 | 1.3 | 2.0 | 3.3 | 3.4 | 3.6 |
| 1964 | 5.7 | 4.6 | 3.7 | 4.7 | 3.3 | 2.8 | 1.4 | 2.7 | 4.1 | 3.9 | 5.7 | 3.2 |
| 1965 | 4.1 | 3.5 | 2.9 | 3.0 | 2.5 | 2.7 | 1.9 | 1.6 | 3.2 | 4.1 | 4.2 | 3.9 |
| 1966 | 3.7 | 4.0 | 4.3 | 3.5 | 2.3 | 2.3 | 2.5 | 2.6 | 3.4 | 5.5 | 3.7 | 3.8 |
| 1967 | 4.0 | 3.9 | 3.7 | 3.1 | 3.3 | 2.0 | 1.5 | 1.7 | 3.2 | 4.5 | 3.2 | 4.8 |
| 1968 | 4.1 | 5.0 | 4.4 | 3.6 | 2.7 | 2.2 | 2.4 | 2.3 | 2.9 | 4.0 | 3.4 | 3.7 |
| 1969 | 4.2 | 3.4 | 3.9 | 2.5 | 2.1 | 2.2 | 1.8 | 2.5 | 3.3 | 4.4 | 3.9 | 3.4 |
| 1970 | 3.0 | 4.1 | 3.7 | 3.3 | 2.7 | 1.9 | 1.5 | 1.6 | 3.3 | 4.7 | 4.2 | 4.1 |
| 1971 | 3.8 | 3.7 | 3.9 | 2.0 | 2.9 | 1.5 | 2.4 | 1.7 | 3.3 | 4.2 | 4.7 | 5.6 |
| 1972 | 4.2 | 4.1 | 2.7 | 2.7 | 1.1 | 1.4 | 1.4 | 1.6 | 3.8 | 4.0 | 3.9 | 3.2 |
| 1973 | 3.1 | 3.0 | 4.1 | 2.8 | 1.8 | 1.3 | 1.8 | 1.5 | 3.1 | 3.7 | 3.6 | 4.0 |
| 1974 | 3.8 | 3.7 | 3.2 | 2.7 | 2.2 | 1.7 | 1.5 | 1.8 | 2.5 | 3.5 | 3.3 | 3.8 |
| 1975 | 4.9 | 2.7 | 2.3 | 1.5 | 1.9 | 1.9 | 1.8 | 3.1 | 2.4 | 5.1 | 4.8 | 3.6 |
| 1976 | 6.4 | 4.4 | 4.0 | 2.9 | 2.8 | 2.0 | 1.5 | 2.3 | 3.5 | 3.9 | 4.4 | 4.9 |
| 1977 | 3.7 | 3.5 | 3.2 | 1.8 | 1.8 | 1.4 | 2.2 | 2.0 | 5.4 | 4.7 | 7.3 | 3.5 |
| 1978 | 3.5 | 2.2 | 4.5 | 2.2 | 1.7 | 1.5 | 2.3 | 3.2 | 2.7 | 4.2 | 4.7 | 4.6 |
| 1979 | 3.3 | 3.1 | 2.2 | 1.9 | 2.2 | 1.8 | 1.3 | 1.8 | 2.8 | 2.3 | 4.6 | 4.2 |
| 1980 | 6.3 | 5.0 | 4.1 | 1.9 | 2.5 | 1.4 | 1.2 | 1.9 | 4.5 | 4.2 | 3.4 | 4.1 |
| 1981 | 2.8 | 3.4 | 3.0 | 3.0 | 1.6 | 2.9 | 1.5 | 1.4 | 4.6 | 3.6 | 5.2 | 5.6 |
| 1982 | 5.1 | 4.5 | 6.1 | 4.7 | 1.5 | 1.7 | 1.5 | 1.4 | 3.0 | 4.5 | 5.0 | 4.9 |
| 1983 | 4.0 | 5.6 | 2.5 | 2.4 | 1.7 | 1.7 | 2.4 | 2.0 | 3.3 | 3.6 | 5.1 | 3.7 |
| 1984 | 5.1 | 3.1 | 4.1 | 3.9 | 2.0 | 2.7 | 1.3 | 2.3 | 2.9 | 5.2 | 4.6 | 6.1 |
| 1985 | 4.8 | 4.0 | 4.7 | 2.8 | 1.8 | 3.0 | 1.7 | 2.3 | 5.5 | 3.6 | 2.9 | 4.5 |
| 1986 | 6.0 | 2.6 | 4.5 | 2.8 | 1.8 | 2.6 | 1.1 | 2.8 | 2.9 | 4.2 | 6.4 | 5.6 |
| 1987 | 3.5 | 3.8 | 3.5 | 3.1 | 3.0 | 1.3 | 2.0 | 2.3 | 1.7 | 3.2 | 3.9 | 4.6 |

32 YR. STATISTICS FOR WIS STATION S72

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.4 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 7.4 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 275.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 58112906 |

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 357 | 934 | 304 | 17 | . | . | . | . | . | . | 1612 |
| 0.50-0.99 | . | 1264 | 350 | 290 | 71 | 4 | . | . | . | . | 1979 |
| 1.00-1.49 | . | . | 294 | 100 | 180 | 56 | . | . | . | . | 630 |
| 1.50-1.99 | . | . | 117 | 5 | 20 | 65 | 3 | . | . | . | 210 |
| 2.00-2.49 | . | . | 5 | 1 | 4 | 13 | 2 | . | . | . | 25 |
| 2.50-2.99 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 357 | 2198 | 1070 | 413 | 275 | 139 | 6 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 4179.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 304 | 900 | 206 | 9 | . | . | . | . | . | . | 1419 |
| 0.50-0.99 | . | 1546 | 559 | 129 | 41 | 3 | . | . | . | . | 2278 |
| 1.00-1.49 | . | . | 426 | 156 | 53 | 13 | . | . | . | . | 648 |
| 1.50-1.99 | . | . | 265 | 32 | 7 | 20 | . | 1 | . | . | 325 |
| 2.00-2.49 | . | . | 5 | 21 | . | 1 | . | . | . | . | 27 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | 1 | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 304 | 2446 | 1461 | 349 | 101 | 37 | 0 | 2 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 4403.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 402 | 1038 | 128 | 10 | . | . | . | . | . | . | 1578 |
| 0.50-0.99 | . | 1641 | 1202 | 47 | 7 | 1 | . | . | . | . | 2898 |
| 1.00-1.49 | . | . | 408 | 194 | 9 | . | . | . | . | . | 611 |
| 1.50-1.99 | . | . | 143 | 105 | . | 1 | . | . | . | . | 249 |
| 2.00-2.49 | . | . | 4 | 18 | 6 | . | . | . | . | . | 28 |
| 2.50-2.99 | . | . | . | 1 | 1 | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 402 | 2679 | 1885 | 375 | 23 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 5024.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 189 | 583 | 70 | 1 | . | . | . | . | . | . | 843 |
| 0.50-0.99 | . | 747 | 784 | 23 | 1 | . | . | . | . | . | 1555 |
| 1.00-1.49 | . | . | 311 | 52 | 4 | . | . | . | . | . | 367 |
| 1.50-1.99 | . | . | 42 | 99 | 2 | . | . | . | . | . | 143 |
| 2.00-2.49 | . | . | 1 | 33 | 3 | . | . | . | . | . | 37 |
| 2.50-2.99 | . | . | . | 1 | 11 | . | . | . | . | . | 12 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 189 | 1330 | 1208 | 209 | 22 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 2773.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 150 | 423 | 43 | 1 | . | . | . | . | . | . | 617 |
| 0.50-0.99 | . | 363 | 816 | 19 | . | . | . | . | . | . | 1198 |
| 1.00-1.49 | . | . | 336 | 41 | 5 | . | . | . | . | . | 382 |
| 1.50-1.99 | . | . | 13 | 148 | 7 | 5 | . | . | . | . | 173 |
| 2.00-2.49 | . | . | . | 71 | 17 | 5 | . | . | . | . | 93 |
| 2.50-2.99 | . | . | . | 2 | 29 | 1 | . | . | . | . | 32 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 150 | 786 | 1208 | 282 | 59 | 11 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 2343.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 133 | 299 | 25 | . | . | . | . | . | . | . | 457 |
| 0.50-0.99 | . | 221 | 587 | 9 | . | . | . | . | . | . | 817 |
| 1.00-1.49 | . | . | 193 | 81 | 4 | . | . | . | . | . | 278 |
| 1.50-1.99 | . | . | 4 | 96 | 17 | 3 | . | . | . | . | 120 |
| 2.00-2.49 | . | . | . | 25 | 27 | 7 | . | . | . | . | 59 |
| 2.50-2.99 | . | . | . | 1 | 24 | 5 | . | . | . | . | 30 |
| 3.00-3.49 | . | . | . | . | 3 | 11 | 1 | . | . | . | 15 |
| 3.50-3.99 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 133 | 520 | 809 | 212 | 75 | 30 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 1673.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 139 | 355 | 181 | 13 | . | . | . | . | . | . | 688 |
| 0.50-0.99 | . | 331 | 919 | 295 | 26 | . | . | . | . | . | 1571 |
| 1.00-1.49 | . | . | 213 | 218 | 127 | 10 | . | . | . | . | 568 |
| 1.50-1.99 | . | . | 8 | 84 | 60 | 28 | . | . | . | . | 180 |
| 2.00-2.49 | . | . | . | 13 | 12 | 29 | . | . | . | . | 54 |
| 2.50-2.99 | . | . | . | . | 28 | 8 | . | . | . | . | 36 |
| 3.00-3.49 | . | . | . | . | . | 27 | . | . | . | . | 27 |
| 3.50-3.99 | . | . | . | . | . | 9 | . | . | . | . | 9 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 139 | 686 | 1321 | 623 | 253 | 112 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.4 NO. OF CASES= 2945.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 149 | 675 | 591 | 25 | . | . | . | . | . | . | 1440 |
| 0.50-0.99 | . | 418 | 1915 | 637 | 32 | . | . | . | . | . | 3002 |
| 1.00-1.49 | . | . | 375 | 466 | 226 | 16 | . | . | . | . | 1083 |
| 1.50-1.99 | . | . | 25 | 154 | 151 | 38 | . | . | . | . | 368 |
| 2.00-2.49 | . | . | . | 60 | 48 | 50 | 1 | . | . | . | 159 |
| 2.50-2.99 | . | . | . | 1 | 45 | 20 | 2 | . | . | . | 68 |
| 3.00-3.49 | . | . | . | . | 3 | 34 | 1 | . | . | . | 38 |
| 3.50-3.99 | . | . | . | . | . | 11 | 3 | . | . | . | 14 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 149 | 1093 | 2906 | 1343 | 505 | 169 | 8 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.5 NO. OF CASES= 5783.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 187 | 835 | 317 | 3 | . | . | . | . | . | . | 1342 |
| 0.50-0.99 | . | 572 | 2127 | 275 | . | 1 | . | . | . | . | 2975 |
| 1.00-1.49 | . | . | 601 | 556 | 132 | 2 | . | . | . | . | 1291 |
| 1.50-1.99 | . | . | 84 | 253 | 241 | 26 | . | . | . | . | 604 |
| 2.00-2.49 | . | . | . | 97 | 127 | 60 | . | . | . | . | 284 |
| 2.50-2.99 | . | . | . | 9 | 41 | 74 | 3 | . | . | . | 127 |
| 3.00-3.49 | . | . | . | . | 2 | 57 | 3 | . | . | . | 62 |
| 3.50-3.99 | . | . | . | . | . | 11 | 11 | . | . | . | 22 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 187 | 1407 | 3129 | 1193 | 543 | 231 | 17 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 6283.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 239 | 936 | 465 | 7 | . | . | . | . | . | . | 1647 |
| 0.50-0.99 | . | 680 | 3218 | 829 | 3 | . | . | . | . | . | 4730 |
| 1.00-1.49 | . | . | 729 | 1215 | 355 | 3 | . | . | . | . | 2302 |
| 1.50-1.99 | . | . | 95 | 313 | 550 | 64 | . | . | . | . | 1022 |
| 2.00-2.49 | . | . | . | 117 | 198 | 202 | 2 | . | . | . | 519 |
| 2.50-2.99 | . | . | . | 7 | 98 | 168 | 14 | . | . | . | 287 |
| 3.00-3.49 | . | . | . | . | 9 | 129 | 18 | 4 | . | . | 160 |
| 3.50-3.99 | . | . | . | . | 1 | 31 | 24 | 3 | . | . | 59 |
| 4.00-4.49 | . | . | . | . | . | 2 | 13 | 7 | . | . | 22 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 12 | . | . | 17 |
| 5.00-5.49 | . | . | . | . | . | . | . | 9 | . | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 239 | 1616 | 4507 | 2488 | 1214 | 599 | 76 | 37 | 1 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 10093.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 309 | 1050 | 272 | 2 | 1 | . | . | . | . | . | 1634 |
| 0.50-0.99 | . | 676 | 2760 | 229 | 7 | . | . | . | . | . | 3672 |
| 1.00-1.49 | . | . | 632 | 818 | 103 | 6 | . | . | . | . | 1559 |
| 1.50-1.99 | . | . | 48 | 348 | 325 | 34 | . | . | . | . | 755 |
| 2.00-2.49 | . | . | . | 117 | 136 | 118 | 1 | . | . | . | 372 |
| 2.50-2.99 | . | . | . | 3 | 104 | 70 | 14 | 1 | . | . | 192 |
| 3.00-3.49 | . | . | . | . | 12 | 89 | 19 | 4 | . | . | 124 |
| 3.50-3.99 | . | . | . | . | . | 42 | 34 | 3 | . | . | 79 |
| 4.00-4.49 | . | . | . | . | . | 4 | 57 | 5 | . | . | 66 |
| 4.50-4.99 | . | . | . | . | . | . | 11 | 21 | 1 | . | 33 |
| 5.00-5.49 | . | . | . | . | . | . | . | 6 | . | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 1 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 309 | 1726 | 3712 | 1517 | 688 | 363 | 136 | 43 | 4 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.5 NO. OF CASES= 7963.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 279 | 1132 | 283 | 21 | 1 | . | . | . | . | . | 1716 |
| 0.50-0.99 | . | 717 | 2993 | 297 | 37 | 4 | . | . | . | . | 4048 |
| 1.00-1.49 | . | . | 706 | 1057 | 115 | 34 | 3 | . | . | . | 1915 |
| 1.50-1.99 | . | . | 48 | 409 | 333 | 52 | 2 | . | . | . | 845 |
| 2.00-2.49 | . | . | . | 93 | 147 | 155 | 10 | 1 | . | . | 406 |
| 2.50-2.99 | . | . | . | . | 97 | 94 | 24 | 2 | . | . | 217 |
| 3.00-3.49 | . | . | . | . | 5 | 99 | 26 | 12 | 1 | . | 143 |
| 3.50-3.99 | . | . | . | . | . | 21 | 31 | 16 | 2 | . | 70 |
| 4.00-4.49 | . | . | . | . | . | . | 22 | 9 | 1 | . | 32 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 16 | 3 | . | 20 |
| 5.00-5.49 | . | . | . | . | . | . | . | 9 | 2 | . | 11 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 279 | 1849 | 4031 | 1877 | 735 | 459 | 119 | 65 | 13 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.6 NO. OF CASES= 8830.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 276 | 1318 | 566 | 16 | 1 | . | . | . | . | . | 2177 |
| 0.50-0.99 | . | 700 | 4182 | 784 | 13 | 10 | . | . | . | . | 5689 |
| 1.00-1.49 | . | . | 720 | 1953 | 285 | 22 | 7 | 1 | . | . | 2988 |
| 1.50-1.99 | . | . | 51 | 426 | 701 | 176 | 1 | 3 | . | . | 1358 |
| 2.00-2.49 | . | . | 1 | 121 | 199 | 319 | 18 | 5 | 1 | . | 664 |
| 2.50-2.99 | . | . | . | 8 | 131 | 108 | 42 | 11 | 2 | . | 302 |
| 3.00-3.49 | . | . | . | . | 9 | 93 | 25 | 21 | 2 | . | 150 |
| 3.50-3.99 | . | . | . | . | . | 25 | 29 | 20 | 2 | . | 76 |
| 4.00-4.49 | . | . | . | . | . | 2 | 16 | 19 | 3 | 1 | 41 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 13 | 8 | 1 | 23 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | 3 | . | 7 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 3 | 1 | 5 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 276 | 2018 | 5520 | 3308 | 1339 | 755 | 139 | 98 | 28 | 4 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.8 NO. OF CASES= 12633.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 198 | 1013 | 712 | 21 | . | . | . | . | . | . | 1944 |
| 0.50-0.99 | . | 648 | 3156 | 1109 | 66 | 4 | 1 | . | . | . | 4984 |
| 1.00-1.49 | . | . | 644 | 1056 | 509 | 81 | 2 | 1 | . | . | 2293 |
| 1.50-1.99 | . | . | 50 | 308 | 321 | 205 | 5 | . | . | . | 889 |
| 2.00-2.49 | . | . | . | 121 | 79 | 151 | 39 | 2 | . | . | 392 |
| 2.50-2.99 | . | . | . | 5 | 133 | 53 | 28 | 2 | . | . | 221 |
| 3.00-3.49 | . | . | . | . | 12 | 105 | 26 | 8 | . | . | 151 |
| 3.50-3.99 | . | . | . | . | . | 49 | 32 | 6 | . | . | 87 |
| 4.00-4.49 | . | . | . | . | . | 3 | 28 | 6 | 1 | . | 38 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 8 | 1 | . | 11 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 198 | 1661 | 4562 | 2620 | 1120 | 651 | 163 | 33 | 6 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 10316.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 152 | 464 | 442 | 19 | . | . | . | . | . | . | 1077 |
| 0.50-0.99 | . | 587 | 1320 | 530 | 87 | 1 | . | . | . | . | 2525 |
| 1.00-1.49 | . | . | 435 | 420 | 249 | 79 | . | . | . | . | 1183 |
| 1.50-1.99 | . | . | 42 | 240 | 143 | 118 | 5 | . | . | . | 548 |
| 2.00-2.49 | . | . | 1 | 91 | 51 | 75 | 21 | . | . | . | 239 |
| 2.50-2.99 | . | . | . | 5 | 90 | 21 | 10 | . | . | . | 126 |
| 3.00-3.49 | . | . | . | . | 3 | 82 | 12 | 1 | . | . | 98 |
| 3.50-3.99 | . | . | . | . | . | 35 | 21 | . | . | . | 56 |
| 4.00-4.49 | . | . | . | . | . | 1 | 19 | 3 | . | . | 23 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 3 | . | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | 1 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 152 | 1051 | 2240 | 1305 | 623 | 412 | 91 | 10 | 1 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.8 NO. OF CASES= 5518.

STATION S73 47.80N 85.78W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

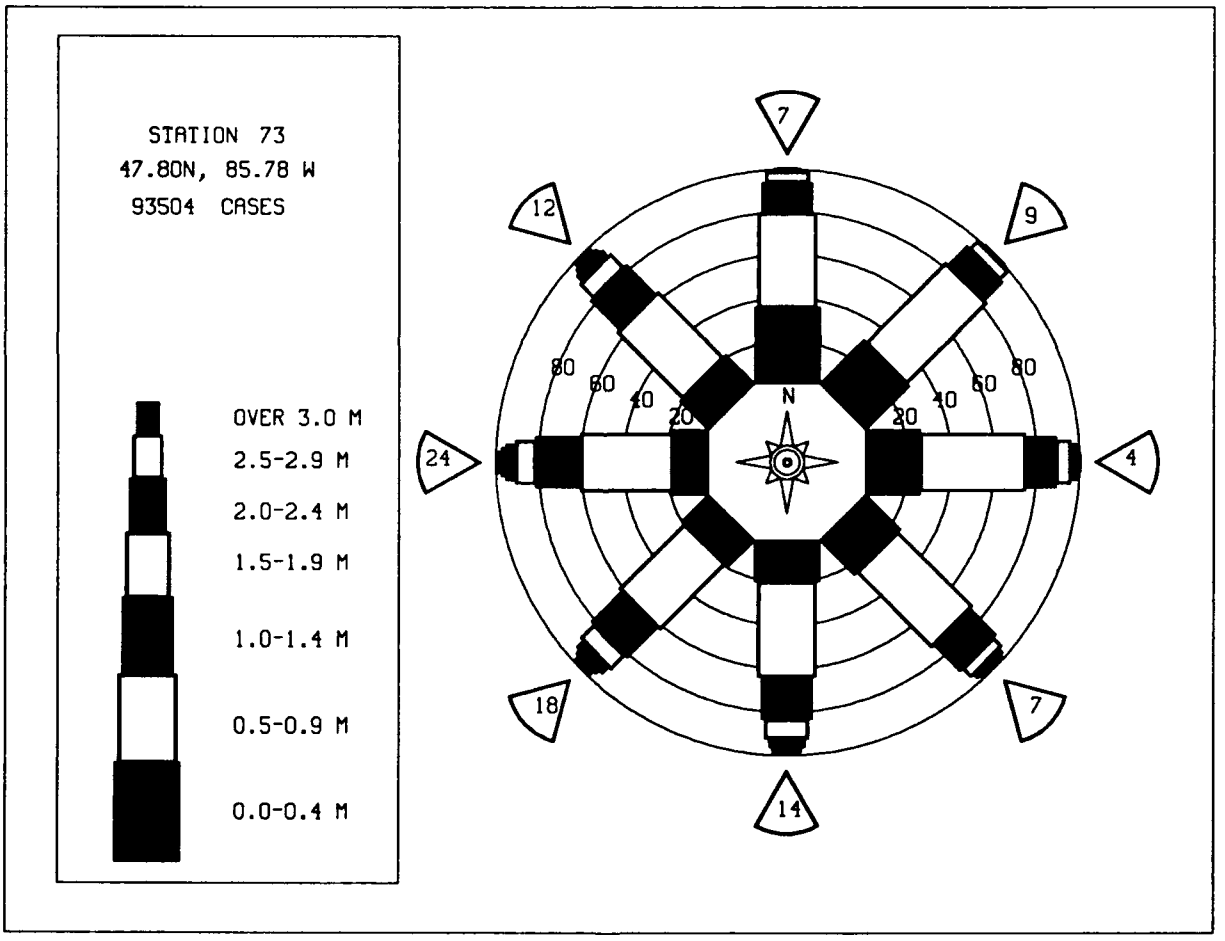
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 212 | 552 | 108 | 4 | . | . | . | . | . | . | 876 |
| 0.50-0.99 | . | 567 | 432 | 158 | 19 | 2 | . | . | . | . | 1178 |
| 1.00-1.49 | . | . | 207 | 144 | 75 | 20 | . | . | . | . | 446 |
| 1.50-1.99 | . | . | 48 | 82 | 49 | 49 | . | . | . | . | 228 |
| 2.00-2.49 | . | . | 1 | 39 | 17 | 28 | 4 | . | . | . | 89 |
| 2.50-2.99 | . | . | . | 1 | 33 | 13 | 3 | 1 | . | . | 51 |
| 3.00-3.49 | . | . | . | . | 5 | 27 | 1 | . | . | . | 33 |
| 3.50-3.99 | . | . | . | . | 1 | 4 | 8 | . | . | . | 13 |
| 4.00-4.49 | . | . | . | . | . | . | 5 | 2 | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 212 | 1119 | 796 | 428 | 199 | 143 | 21 | 5 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 2745.

STATION S73 47.80N 85.78W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 368 | 1251 | 472 | 17 | . | . | . | . | . | . | 2108 |
| 0.50-0.99 | . | 1168 | 2732 | 566 | 41 | 3 | . | . | . | . | 4510 |
| 1.00-1.49 | . | . | 723 | 853 | 243 | 34 | 1 | . | . | . | 1854 |
| 1.50-1.99 | . | . | 109 | 310 | 293 | 88 | 1 | . | . | . | 801 |
| 2.00-2.49 | . | . | 1 | 104 | 107 | 122 | 10 | . | . | . | 344 |
| 2.50-2.99 | . | . | . | 4 | 87 | 64 | 14 | 1 | . | . | 170 |
| 3.00-3.49 | . | . | . | . | 6 | 75 | 13 | 5 | . | . | 99 |
| 3.50-3.99 | . | . | . | . | . | 24 | 19 | 4 | . | . | 47 |
| 4.00-4.49 | . | . | . | . | . | 1 | 16 | 5 | . | . | 22 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 7 | 1 | . | 10 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 368 | 2419 | 4037 | 1854 | 777 | 411 | 76 | 25 | 1 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S73 (47.80N 85.78W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 1.0 | 0.8 | 0.8 | 0.7 |
| 1957 | 1.0 | 1.1 | 0.8 | 0.8 | 0.7 | 0.7 | 0.5 | 0.6 | 0.8 | 0.7 | 1.0 | 1.1 | 0.8 |
| 1958 | 0.7 | 0.8 | 0.4 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.8 | 1.4 | 0.9 | 0.7 |
| 1959 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 0.5 | 0.6 | 0.5 | 0.7 | 0.7 | 1.0 | 0.9 | 0.7 |
| 1960 | 0.9 | 0.8 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.9 | 1.2 | 1.0 | 0.7 |
| 1961 | 0.8 | 0.8 | 0.9 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.8 | 0.8 | 1.1 | 0.9 | 0.7 |
| 1962 | 1.1 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 1.0 | 1.1 | 0.7 |
| 1963 | 1.1 | 1.2 | 1.1 | 0.9 | 0.8 | 0.6 | 0.7 | 0.6 | 0.8 | 1.0 | 1.1 | 1.2 | 0.9 |
| 1964 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 | 0.8 | 0.6 | 0.9 | 1.0 | 1.1 | 1.1 | 1.1 | 1.1 |
| 1965 | 1.5 | 1.5 | 0.9 | 0.8 | 0.9 | 0.9 | 0.8 | 0.7 | 1.0 | 1.2 | 1.4 | 1.3 | 1.1 |
| 1966 | 1.3 | 1.5 | 1.5 | 0.9 | 1.0 | 0.8 | 0.8 | 0.7 | 1.2 | 1.5 | 1.3 | 1.3 | 1.1 |
| 1967 | 1.4 | 1.5 | 1.5 | 1.0 | 1.0 | 0.8 | 0.7 | 0.7 | 1.1 | 1.4 | 1.4 | 1.7 | 1.2 |
| 1968 | 1.3 | 1.6 | 1.5 | 1.2 | 0.9 | 0.7 | 0.8 | 0.8 | 0.9 | 1.3 | 1.4 | 1.4 | 1.2 |
| 1969 | 1.6 | 1.1 | 1.2 | 0.9 | 0.8 | 0.8 | 0.6 | 0.9 | 0.9 | 1.3 | 1.3 | 1.1 | 1.0 |
| 1970 | 1.1 | 1.4 | 1.2 | 1.1 | 0.9 | 0.7 | 0.6 | 0.6 | 1.1 | 1.4 | 1.2 | 1.1 | 1.0 |
| 1971 | 1.3 | 1.3 | 1.2 | 1.0 | 0.7 | 0.6 | 0.7 | 0.6 | 0.9 | 1.2 | 1.2 | 1.2 | 1.0 |
| 1972 | 1.5 | 1.2 | 1.1 | 0.8 | 0.5 | 0.6 | 0.5 | 0.6 | 1.0 | 1.3 | 1.0 | 1.1 | 0.9 |
| 1973 | 1.2 | 1.1 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 1.0 | 1.1 | 1.3 | 1.0 | 0.9 |
| 1974 | 1.1 | 0.9 | 1.2 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 0.9 | 1.2 | 1.2 | 1.1 | 0.9 |
| 1975 | 1.1 | 0.8 | 0.9 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.4 | 1.3 | 1.2 | 0.9 |
| 1976 | 1.6 | 1.4 | 1.6 | 0.8 | 0.7 | 0.7 | 0.5 | 0.6 | 0.8 | 0.8 | 1.3 | 1.2 | 1.0 |
| 1977 | 1.1 | 1.1 | 0.9 | 0.6 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.1 | 1.0 | 0.8 |
| 1978 | 1.1 | 0.8 | 1.0 | 0.7 | 0.6 | 0.6 | 0.6 | 1.2 | 0.8 | 1.3 | 1.6 | 1.7 | 1.0 |
| 1979 | 1.0 | 0.8 | 0.9 | 0.6 | 0.5 | 0.6 | 0.5 | 0.6 | 0.9 | 0.7 | 1.5 | 1.8 | 0.9 |
| 1980 | 1.1 | 0.8 | 1.2 | 0.6 | 0.6 | 0.5 | 0.4 | 0.6 | 1.0 | 1.1 | 1.0 | 1.2 | 0.9 |
| 1981 | 0.9 | 1.1 | 0.8 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.8 | 1.1 | 1.1 | 1.0 | 0.8 |
| 1982 | 1.4 | 1.2 | 1.4 | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.9 | 1.1 | 1.3 | 1.3 | 1.0 |
| 1983 | 1.2 | 1.1 | 1.0 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 1.0 | 1.1 | 1.5 | 1.3 | 0.9 |
| 1984 | 1.4 | 1.1 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.9 | 1.2 | 1.6 | 1.5 | 1.0 |
| 1985 | 1.2 | 1.1 | 1.2 | 0.8 | 0.6 | 0.7 | 0.5 | 0.6 | 1.1 | 1.3 | 1.0 | 1.3 | 1.0 |
| 1986 | 1.4 | 0.7 | 1.3 | 1.0 | 0.6 | 0.6 | 0.5 | 0.7 | 1.0 | 1.0 | 1.5 | 1.6 | 1.0 |
| 1987 | 1.2 | 1.0 | 1.1 | 0.7 | 0.6 | 0.5 | 0.6 | 0.7 | 0.6 | 1.0 | 1.2 | 1.2 | 0.9 |
| MEAN | 1.2 | 1.1 | 1.1 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.9 | 1.1 | 1.2 | 1.2 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S73 (47.80N 85.78W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.8 | 3.4 | 2.3 | 2.4 | 1.8 | 1.7 | 1.2 | 1.1 | 2.5 | 2.9 | 2.2 | 2.4 |
| 1957 | 3.2 | 3.1 | 2.6 | 2.0 | 2.6 | 3.3 | 2.4 | 1.6 | 2.6 | 1.8 | 2.5 | 3.9 |
| 1958 | 2.4 | 2.6 | 1.4 | 4.4 | 2.6 | 1.9 | 1.6 | 1.6 | 2.2 | 2.2 | 7.3 | 3.0 |
| 1959 | 3.9 | 4.8 | 2.6 | 2.2 | 3.7 | 1.6 | 1.8 | 1.6 | 2.1 | 2.7 | 3.0 | 3.8 |
| 1960 | 2.5 | 2.2 | 2.0 | 2.5 | 1.2 | 1.4 | 1.6 | 2.3 | 1.8 | 3.5 | 3.8 | 3.4 |
| 1961 | 3.0 | 2.5 | 3.5 | 2.2 | 2.2 | 2.0 | 1.3 | 2.0 | 2.1 | 2.3 | 4.1 | 3.0 |
| 1962 | 2.6 | 1.9 | 2.1 | 2.0 | 1.5 | 1.5 | 1.4 | 1.3 | 2.2 | 3.7 | 2.9 | 4.9 |
| 1963 | 2.8 | 4.1 | 2.8 | 3.9 | 2.4 | 2.3 | 2.0 | 1.3 | 2.2 | 3.0 | 4.0 | 3.6 |
| 1964 | 5.4 | 4.7 | 3.6 | 4.7 | 3.5 | 2.8 | 1.9 | 2.6 | 4.3 | 3.7 | 5.6 | 3.4 |
| 1965 | 4.1 | 3.5 | 3.4 | 3.0 | 2.5 | 2.9 | 1.8 | 1.7 | 3.2 | 4.3 | 5.4 | 3.9 |
| 1966 | 4.4 | 4.1 | 4.2 | 3.6 | 2.3 | 2.7 | 2.6 | 2.6 | 4.1 | 5.4 | 3.8 | 3.8 |
| 1967 | 4.0 | 3.7 | 3.7 | 3.6 | 3.3 | 1.8 | 1.9 | 1.7 | 3.2 | 3.9 | 4.3 | 4.9 |
| 1968 | 3.9 | 5.2 | 3.8 | 3.8 | 2.7 | 1.8 | 2.4 | 2.3 | 3.0 | 4.1 | 4.7 | 3.8 |
| 1969 | 3.6 | 3.7 | 3.9 | 2.8 | 2.0 | 2.2 | 1.6 | 2.6 | 3.2 | 4.8 | 3.9 | 4.2 |
| 1970 | 3.4 | 4.5 | 3.8 | 4.0 | 2.5 | 1.8 | 1.5 | 1.6 | 3.5 | 5.0 | 4.5 | 4.1 |
| 1971 | 3.7 | 3.9 | 4.2 | 2.7 | 3.0 | 1.5 | 2.4 | 1.7 | 3.6 | 4.7 | 4.7 | 5.7 |
| 1972 | 4.4 | 4.2 | 3.1 | 2.8 | 1.1 | 1.6 | 1.4 | 1.6 | 4.0 | 5.3 | 3.7 | 3.4 |
| 1973 | 2.8 | 3.0 | 4.1 | 2.4 | 2.0 | 1.4 | 1.8 | 1.5 | 3.1 | 3.7 | 3.8 | 4.0 |
| 1974 | 4.0 | 4.0 | 3.3 | 2.7 | 2.2 | 2.1 | 1.6 | 1.8 | 2.5 | 3.5 | 3.3 | 3.8 |
| 1975 | 4.8 | 3.0 | 2.2 | 1.5 | 2.0 | 1.9 | 2.0 | 3.1 | 2.5 | 5.2 | 4.3 | 4.3 |
| 1976 | 6.1 | 4.7 | 4.7 | 3.2 | 3.5 | 2.4 | 1.6 | 3.0 | 3.6 | 3.8 | 4.4 | 4.9 |
| 1977 | 3.9 | 3.6 | 3.6 | 1.6 | 1.8 | 1.3 | 2.2 | 2.1 | 5.4 | 4.6 | 7.1 | 3.1 |
| 1978 | 3.4 | 2.3 | 4.4 | 2.4 | 1.8 | 1.7 | 2.2 | 3.3 | 2.8 | 4.2 | 4.6 | 4.4 |
| 1979 | 3.2 | 3.1 | 2.1 | 2.2 | 2.2 | 1.7 | 1.3 | 1.7 | 2.8 | 2.0 | 4.6 | 4.3 |
| 1980 | 6.6 | 4.8 | 4.9 | 1.8 | 1.8 | 1.4 | 1.2 | 1.9 | 4.8 | 3.9 | 4.3 | 4.4 |
| 1981 | 2.7 | 3.4 | 3.0 | 2.5 | 1.5 | 3.0 | 1.5 | 1.4 | 4.4 | 3.9 | 5.2 | 5.5 |
| 1982 | 4.4 | 4.6 | 6.2 | 4.8 | 1.3 | 1.7 | 1.5 | 1.6 | 2.9 | 4.6 | 5.1 | 4.7 |
| 1983 | 4.1 | 5.9 | 2.3 | 2.4 | 1.5 | 1.7 | 2.4 | 1.9 | 3.2 | 3.4 | 5.4 | 3.9 |
| 1984 | 5.9 | 3.0 | 4.1 | 4.0 | 2.4 | 2.7 | 1.4 | 2.6 | 2.8 | 5.2 | 5.0 | 6.1 |
| 1985 | 5.0 | 4.3 | 4.8 | 2.8 | 1.8 | 3.1 | 1.4 | 2.1 | 5.3 | 3.6 | 2.9 | 4.6 |
| 1986 | 5.8 | 2.9 | 4.6 | 2.6 | 1.9 | 2.4 | 1.1 | 2.8 | 3.2 | 3.9 | 6.1 | 5.2 |
| 1987 | 3.7 | 3.8 | 4.1 | 3.9 | 2.9 | 1.5 | 1.9 | 2.8 | 2.1 | 3.3 | 4.5 | 4.5 |

32 YR. STATISTICS FOR WIS STATION S73

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.5 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 7.3 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 279.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 58112906 |

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 425 | 874 | 339 | 18 | . | . | . | . | . | . | 1656 |
| 0.50-0.99 | . | 1263 | 377 | 360 | 50 | . | . | . | . | . | 2050 |
| 1.00-1.49 | . | . | 264 | 165 | 187 | 22 | . | . | . | . | 638 |
| 1.50-1.99 | . | . | 104 | 11 | 73 | 50 | . | . | . | . | 238 |
| 2.00-2.49 | . | . | 8 | 2 | 7 | 14 | 1 | . | . | . | 32 |
| 2.50-2.99 | . | . | . | . | . | 2 | 2 | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 425 | 2137 | 1092 | 556 | 317 | 88 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 4327.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 397 | 887 | 209 | 9 | . | . | . | . | . | . | 1502 |
| 0.50-0.99 | . | 1896 | 367 | 158 | 38 | . | . | . | . | . | 2459 |
| 1.00-1.49 | . | . | 513 | 28 | 39 | 12 | . | . | . | . | 592 |
| 1.50-1.99 | . | . | 254 | 11 | 13 | 18 | . | . | . | . | 296 |
| 2.00-2.49 | . | . | 3 | 10 | . | . | . | . | . | . | 13 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 397 | 2783 | 1346 | 217 | 90 | 30 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 4557.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 528 | 1167 | 122 | 8 | . | . | . | . | . | . | 1825 |
| 0.50-0.99 | . | 2407 | 485 | 37 | 20 | 1 | . | . | . | . | 2950 |
| 1.00-1.49 | . | . | 332 | 1 | 3 | 1 | . | . | . | . | 337 |
| 1.50-1.99 | . | . | 128 | 8 | 2 | 4 | . | . | . | . | 142 |
| 2.00-2.49 | . | . | 2 | 7 | . | 1 | 1 | . | . | . | 11 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 528 | 3574 | 1069 | 61 | 25 | 7 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 4930.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 279 | 626 | 115 | 2 | . | . | . | . | . | . | 1022 |
| 0.50-0.99 | . | 1079 | 113 | 40 | 6 | . | . | . | . | . | 1238 |
| 1.00-1.49 | . | . | 124 | 6 | 19 | 2 | . | . | . | . | 151 |
| 1.50-1.99 | . | . | 35 | 3 | 16 | 5 | . | . | . | . | 59 |
| 2.00-2.49 | . | . | 1 | . | . | 2 | . | . | . | . | 3 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 279 | 1705 | 388 | 51 | 41 | 9 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.2 NO. OF CASES= 2317.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 300 | 611 | 87 | 7 | . | . | . | . | . | . | 1005 |
| 0.50-0.99 | . | 543 | 62 | 74 | 5 | . | . | . | . | . | 684 |
| 1.00-1.49 | . | . | 42 | 35 | 16 | . | . | . | . | . | 93 |
| 1.50-1.99 | . | . | 5 | 2 | 19 | 6 | . | . | . | . | 32 |
| 2.00-2.49 | . | . | . | . | . | 6 | . | . | . | . | 6 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 300 | 1154 | 196 | 118 | 40 | 12 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 1708.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 193 | 311 | 49 | 2 | . | . | . | . | . | . | 555 |
| 0.50-0.99 | . | 298 | 155 | 25 | . | . | . | . | . | . | 478 |
| 1.00-1.49 | . | . | 51 | 27 | 1 | . | . | . | . | . | 79 |
| 1.50-1.99 | . | . | 5 | 27 | 11 | 3 | . | . | . | . | 46 |
| 2.00-2.49 | . | . | . | 7 | 2 | 2 | . | . | . | . | 11 |
| 2.50-2.99 | . | . | . | 1 | 3 | 1 | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 193 | 609 | 260 | 89 | 17 | 7 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 1106.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 171 | 303 | 296 | 65 | 3 | . | . | . | . | . | 838 |
| 0.50-0.99 | . | 403 | 494 | 291 | 103 | 1 | . | . | . | . | 1292 |
| 1.00-1.49 | . | . | 112 | 124 | 88 | 40 | . | . | . | . | 364 |
| 1.50-1.99 | . | . | 9 | 41 | 27 | 36 | . | . | . | . | 113 |
| 2.00-2.49 | . | . | . | 20 | 9 | 17 | 2 | . | . | . | 48 |
| 2.50-2.99 | . | . | . | 1 | 18 | 8 | . | . | . | . | 27 |
| 3.00-3.49 | . | . | . | . | . | 14 | 2 | . | . | . | 16 |
| 3.50-3.99 | . | . | . | . | . | 4 | 6 | . | . | . | 10 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 171 | 706 | 911 | 542 | 248 | 120 | 12 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.4 NO. OF CASES= 2545.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 187 | 629 | 757 | 134 | 2 | . | . | . | . | . | 1709 |
| 0.50-0.99 | . | 457 | 1409 | 812 | 193 | 9 | . | . | . | . | 2880 |
| 1.00-1.49 | . | 1 | 288 | 250 | 250 | 104 | . | . | . | . | 893 |
| 1.50-1.99 | . | . | 22 | 139 | 69 | 75 | 3 | . | . | . | 308 |
| 2.00-2.49 | . | . | . | 52 | 23 | 45 | 2 | . | . | . | 122 |
| 2.50-2.99 | . | . | . | 2 | 29 | 12 | 2 | . | . | . | 45 |
| 3.00-3.49 | . | . | . | . | 2 | 25 | 3 | 1 | . | . | 31 |
| 3.50-3.99 | . | . | . | . | . | 10 | 2 | . | . | . | 12 |
| 4.00-4.49 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 187 | 1087 | 2476 | 1389 | 568 | 280 | 15 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 5628.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 247 | 983 | 442 | 8 | . | . | . | . | . | . | 1680 |
| 0.50-0.99 | . | 605 | 2252 | 419 | 4 | . | . | . | . | . | 3280 |
| 1.00-1.49 | . | . | 548 | 718 | 211 | 1 | . | . | . | . | 1478 |
| 1.50-1.99 | . | . | 47 | 293 | 250 | 59 | . | . | . | . | 649 |
| 2.00-2.49 | . | . | . | 128 | 98 | 82 | . | . | . | . | 308 |
| 2.50-2.99 | . | . | . | 7 | 100 | 48 | 6 | 1 | . | . | 162 |
| 3.00-3.49 | . | . | . | . | 5 | 95 | 3 | 1 | . | . | 104 |
| 3.50-3.99 | . | . | . | . | . | 32 | 12 | . | . | . | 44 |
| 4.00-4.49 | . | . | . | . | . | 1 | 17 | . | . | . | 18 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 247 | 1588 | 3289 | 1573 | 668 | 318 | 39 | 3 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.5 NO. OF CASES= 7234.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 312 | 1051 | 614 | 9 | 1 | . | . | . | . | . | 1987 |
| 0.50-0.99 | . | 674 | 3287 | 957 | 12 | . | . | . | . | . | 4930 |
| 1.00-1.49 | . | . | 633 | 1373 | 466 | 3 | . | . | . | . | 2475 |
| 1.50-1.99 | . | . | 49 | 377 | 544 | 97 | 1 | . | . | . | 1068 |
| 2.00-2.49 | . | . | . | 142 | 156 | 212 | 1 | . | . | . | 511 |
| 2.50-2.99 | . | . | . | 4 | 139 | 111 | 20 | . | . | . | 274 |
| 3.00-3.49 | . | . | . | . | 14 | 154 | 19 | 7 | . | . | 194 |
| 3.50-3.99 | . | . | . | . | . | 86 | 25 | 4 | 1 | . | 116 |
| 4.00-4.49 | . | . | . | . | . | 7 | 48 | 13 | . | . | 68 |
| 4.50-4.99 | . | . | . | . | . | . | 16 | 16 | . | . | 32 |
| 5.00-5.49 | . | . | . | . | . | . | . | 9 | . | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 312 | 1725 | 4583 | 2862 | 1332 | 670 | 130 | 50 | 2 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.8 NO. OF CASES= 10922.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 333 | 1009 | 283 | 9 | 1 | . | . | . | . | . | 1635 |
| 0.50-0.99 | . | 663 | 2498 | 248 | 13 | . | . | . | . | . | 3422 |
| 1.00-1.49 | . | . | 634 | 782 | 102 | 9 | . | . | . | . | 1527 |
| 1.50-1.99 | . | . | 39 | 337 | 285 | 33 | . | . | . | . | 694 |
| 2.00-2.49 | . | . | . | 101 | 124 | 111 | 2 | . | . | . | 338 |
| 2.50-2.99 | . | . | . | 1 | 105 | 67 | 18 | . | . | . | 191 |
| 3.00-3.49 | . | . | . | . | 7 | 86 | 23 | 5 | . | . | 121 |
| 3.50-3.99 | . | . | . | . | . | 50 | 26 | 5 | . | . | 81 |
| 4.00-4.49 | . | . | . | . | . | 2 | 47 | 11 | 1 | . | 61 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 14 | . | . | 22 |
| 5.00-5.49 | . | . | . | . | . | . | . | 11 | . | . | 11 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 333 | 1672 | 3454 | 1478 | 637 | 358 | 124 | 47 | 7 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 7600.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 294 | 1201 | 544 | 64 | 3 | . | . | . | . | . | 2106 |
| 0.50-0.99 | . | 689 | 3089 | 659 | 132 | 9 | . | . | . | . | 4578 |
| 1.00-1.49 | . | . | 756 | 1075 | 234 | 172 | 2 | . | . | . | 2239 |
| 1.50-1.99 | . | . | 48 | 405 | 321 | 180 | 42 | 6 | . | . | 1002 |
| 2.00-2.49 | . | . | . | 100 | 174 | 171 | 44 | 21 | . | . | 510 |
| 2.50-2.99 | . | . | . | 1 | 118 | 100 | 31 | 12 | 10 | . | 272 |
| 3.00-3.49 | . | . | . | . | 7 | 87 | 23 | 18 | 6 | . | 141 |
| 3.50-3.99 | . | . | . | . | . | 36 | 27 | 13 | 4 | . | 80 |
| 4.00-4.49 | . | . | . | . | . | . | 22 | 11 | 2 | . | 35 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 16 | 5 | . | 25 |
| 5.00-5.49 | . | . | . | . | . | . | . | 12 | 2 | 1 | 15 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 4 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 294 | 1890 | 4437 | 2304 | 989 | 755 | 195 | 110 | 36 | 1 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.8 NO. OF CASES= 10317.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 293 | 1331 | 578 | 55 | 2 | . | . | . | . | . | 2259 |
| 0.50-0.99 | . | 689 | 3967 | 641 | 124 | 50 | . | . | . | . | 5471 |
| 1.00-1.49 | . | . | 788 | 1786 | 272 | 217 | 24 | 2 | . | . | 3089 |
| 1.50-1.99 | . | . | 47 | 474 | 596 | 168 | 77 | 39 | 2 | . | 1403 |
| 2.00-2.49 | . | . | . | 124 | 214 | 293 | 23 | 35 | 10 | . | 699 |
| 2.50-2.99 | . | . | . | 6 | 135 | 135 | 42 | 10 | 12 | . | 340 |
| 3.00-3.49 | . | . | . | . | 23 | 86 | 36 | 19 | . | . | 164 |
| 3.50-3.99 | . | . | . | . | . | 48 | 33 | 13 | 5 | . | 99 |
| 4.00-4.49 | . | . | . | . | . | 4 | 28 | 10 | 1 | . | 43 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 12 | 4 | 2 | 21 |
| 5.00-5.49 | . | . | . | . | . | . | . | 8 | 4 | 1 | 13 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 293 | 2020 | 5380 | 3086 | 1366 | 1001 | 266 | 150 | 43 | 3 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.9 NO. OF CASES= 12747.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 205 | 1030 | 642 | 17 | 1 | . | . | . | . | . | 1895 |
| 0.50-0.99 | . | 639 | 2871 | 834 | 55 | 6 | . | . | . | . | 4405 |
| 1.00-1.49 | . | . | 651 | 998 | 408 | 59 | 3 | . | . | . | 2119 |
| 1.50-1.99 | . | . | 50 | 310 | 315 | 172 | 3 | . | . | . | 850 |
| 2.00-2.49 | . | . | . | 118 | 86 | 146 | 18 | 3 | . | . | 371 |
| 2.50-2.99 | . | . | . | 11 | 116 | 54 | 19 | 3 | . | . | 203 |
| 3.00-3.49 | . | . | . | . | 14 | 94 | 17 | 2 | . | . | 127 |
| 3.50-3.99 | . | . | . | . | . | 50 | 27 | 5 | . | . | 82 |
| 4.00-4.49 | . | . | . | . | . | 2 | 23 | 4 | . | . | 29 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 3 | . | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 205 | 1669 | 4214 | 2288 | 995 | 583 | 116 | 22 | 1 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.8 NO. OF CASES= 9454.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 141 | 417 | 416 | 10 | . | . | . | . | . | . | 984 |
| 0.50-0.99 | . | 580 | 1425 | 459 | 49 | . | . | . | . | . | 2513 |
| 1.00-1.49 | . | . | 426 | 524 | 214 | 33 | . | . | . | . | 1197 |
| 1.50-1.99 | . | . | 48 | 238 | 147 | 103 | 2 | . | . | . | 538 |
| 2.00-2.49 | . | . | . | 82 | 64 | 75 | 3 | 1 | . | . | 225 |
| 2.50-2.99 | . | . | . | 4 | 85 | 41 | 4 | . | . | . | 134 |
| 3.00-3.49 | . | . | . | . | 3 | 80 | . | . | . | . | 83 |
| 3.50-3.99 | . | . | . | . | . | 35 | 11 | . | . | . | 46 |
| 4.00-4.49 | . | . | . | . | . | 2 | 9 | 1 | . | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 141 | 997 | 2315 | 1317 | 562 | 369 | 30 | 4 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 5375.

STATION S74 47.95N 86.00W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

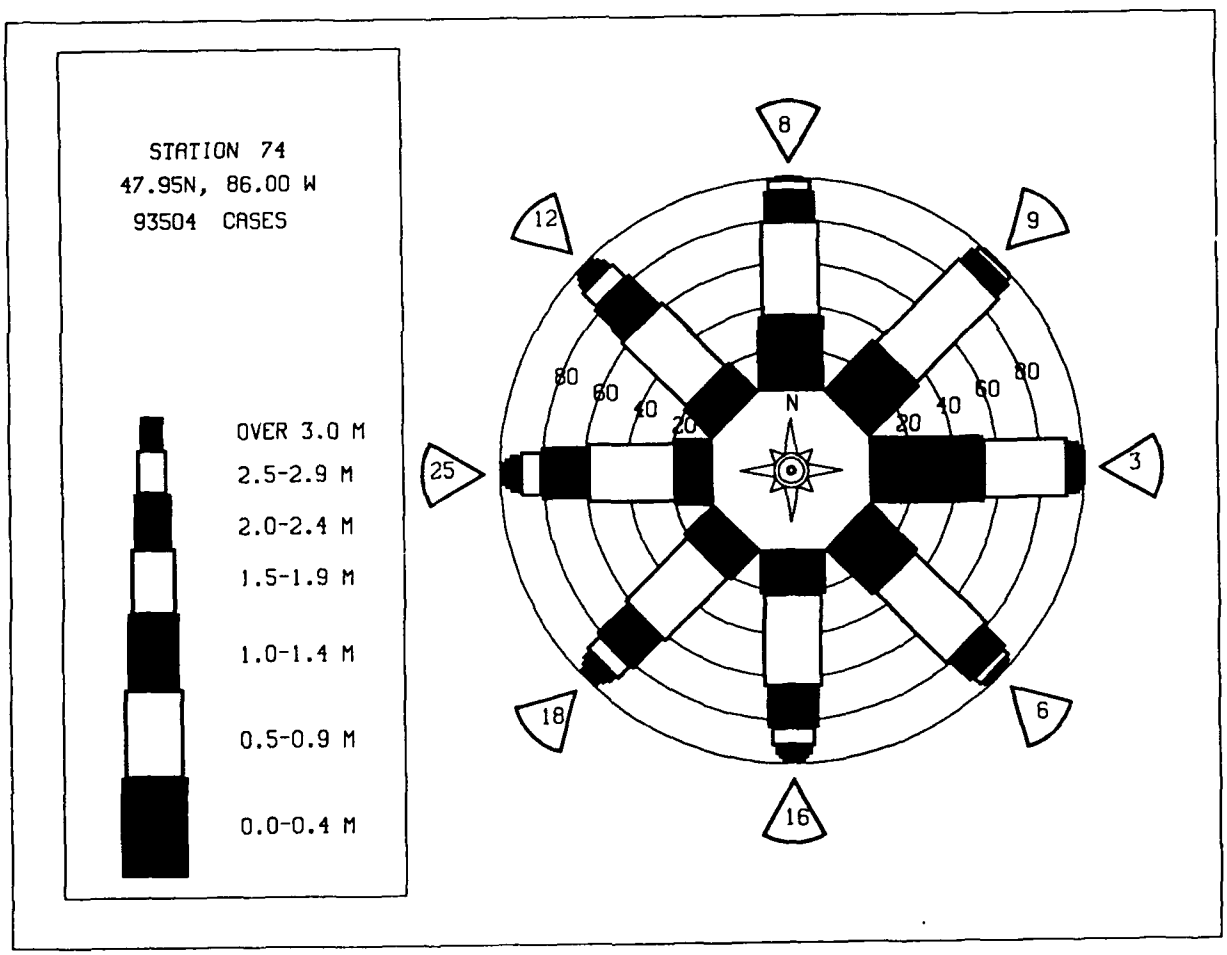
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 202 | 457 | 134 | 2 | . | . | . | . | . | . | 795 |
| 0.50-0.99 | . | 517 | 503 | 171 | 12 | . | . | . | . | . | 1203 |
| 1.00-1.49 | . | . | 159 | 218 | 105 | 8 | . | . | . | . | 490 |
| 1.50-1.99 | . | . | 35 | 88 | 72 | 40 | . | . | . | . | 235 |
| 2.00-2.49 | . | . | . | 41 | 14 | 29 | 2 | . | . | . | 86 |
| 2.50-2.99 | . | . | . | 2 | 35 | 17 | 4 | 1 | . | . | 59 |
| 3.00-3.49 | . | . | . | . | 2 | 22 | 3 | . | . | . | 27 |
| 3.50-3.99 | . | . | . | . | . | 8 | 4 | 2 | . | . | 14 |
| 4.00-4.49 | . | . | . | . | . | . | 4 | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 202 | 974 | 831 | 522 | 240 | 124 | 17 | 3 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.3 NO. OF CASES= 2737.

STATION S74 47.95N 86.00W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 451 | 1289 | 563 | 42 | 1 | . | . | . | . | . | 2346 |
| 0.50-0.99 | . | 1340 | 2336 | 619 | 82 | 7 | . | . | . | . | 4384 |
| 1.00-1.49 | . | . | 632 | 811 | 262 | 68 | 2 | . | . | . | 1775 |
| 1.50-1.99 | . | . | 93 | 277 | 276 | 105 | 12 | 4 | . | . | 767 |
| 2.00-2.49 | . | . | 1 | 94 | 97 | 121 | 10 | 6 | 1 | . | 330 |
| 2.50-2.99 | . | . | . | 4 | 88 | 60 | 15 | 2 | 2 | . | 171 |
| 3.00-3.49 | . | . | . | . | 8 | 74 | 13 | 5 | . | . | 100 |
| 3.50-3.99 | . | . | . | . | . | 36 | 17 | 4 | 1 | . | 58 |
| 4.00-4.49 | . | . | . | . | . | 1 | 20 | 5 | . | . | 26 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 6 | . | . | 10 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 451 | 2629 | 3625 | 1847 | 814 | 472 | 93 | 36 | 5 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S74 (47.95N 86.00W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MONTH | | | | | | | |
| 1956 | 0.5 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 1.0 | 0.8 | 0.7 | 0.7 |
| 1957 | 1.0 | 1.0 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.6 | 0.8 | 0.7 | 1.0 | 1.0 | 0.8 |
| 1958 | 0.6 | 0.8 | 0.4 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.7 | 0.7 | 1.3 | 0.9 | 0.7 |
| 1959 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 0.5 | 0.6 | 0.5 | 0.7 | 0.7 | 1.0 | 0.9 | 0.7 |
| 1960 | 0.8 | 0.7 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 1.1 | 1.0 | 0.7 |
| 1961 | 0.8 | 0.7 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.8 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1962 | 1.1 | 0.7 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 1.0 | 1.1 | 0.7 |
| 1963 | 1.1 | 1.2 | 1.1 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.8 | 1.1 | 1.1 | 1.2 | 0.9 |
| 1964 | 1.4 | 1.3 | 1.1 | 1.1 | 1.0 | 0.8 | 0.6 | 0.9 | 1.0 | 1.2 | 1.1 | 1.1 | 1.1 |
| 1965 | 1.5 | 1.5 | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.7 | 1.0 | 1.2 | 1.4 | 1.2 | 1.1 |
| 1966 | 1.2 | 1.5 | 1.4 | 0.9 | 1.0 | 0.8 | 0.8 | 0.7 | 1.2 | 1.5 | 1.3 | 1.3 | 1.1 |
| 1967 | 1.4 | 1.5 | 1.6 | 1.0 | 1.0 | 0.8 | 0.7 | 0.8 | 1.2 | 1.5 | 1.4 | 1.7 | 1.2 |
| 1968 | 1.3 | 1.6 | 1.5 | 1.1 | 0.9 | 0.7 | 0.9 | 0.8 | 0.9 | 1.4 | 1.3 | 1.3 | 1.1 |
| 1969 | 1.5 | 1.1 | 1.2 | 0.9 | 0.8 | 0.8 | 0.6 | 0.9 | 1.0 | 1.3 | 1.3 | 1.1 | 1.0 |
| 1970 | 1.2 | 1.5 | 1.2 | 1.1 | 0.8 | 0.7 | 0.6 | 0.7 | 1.1 | 1.4 | 1.2 | 1.1 | 1.0 |
| 1971 | 1.3 | 1.3 | 1.2 | 1.0 | 0.7 | 0.6 | 0.8 | 0.6 | 1.0 | 1.2 | 1.2 | 1.2 | 1.0 |
| 1972 | 1.5 | 1.2 | 1.0 | 0.8 | 0.5 | 0.6 | 0.6 | 0.6 | 1.0 | 1.3 | 1.0 | 1.0 | 0.9 |
| 1973 | 1.2 | 1.2 | 1.0 | 0.9 | 0.6 | 0.6 | 0.6 | 0.6 | 1.0 | 1.1 | 1.3 | 1.0 | 0.9 |
| 1974 | 1.1 | 0.9 | 1.2 | 0.8 | 0.7 | 0.7 | 0.6 | 0.8 | 1.0 | 1.2 | 1.2 | 1.1 | 0.9 |
| 1975 | 1.1 | 0.9 | 0.9 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.4 | 1.3 | 1.3 | 0.9 |
| 1976 | 1.5 | 1.4 | 1.4 | 0.8 | 0.6 | 0.6 | 0.4 | 0.6 | 0.8 | 0.8 | 1.2 | 1.2 | 0.9 |
| 1977 | 1.1 | 1.1 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 0.8 | 1.0 | 1.0 | 0.8 |
| 1978 | 1.0 | 0.8 | 0.9 | 0.7 | 0.5 | 0.5 | 0.5 | 1.1 | 0.8 | 1.2 | 1.3 | 1.5 | 0.9 |
| 1979 | 0.9 | 0.7 | 0.9 | 0.5 | 0.5 | 0.6 | 0.4 | 0.6 | 0.9 | 0.8 | 1.4 | 1.6 | 0.8 |
| 1980 | 1.1 | 0.8 | 1.2 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 1.0 | 1.2 | 1.0 | 1.2 | 0.8 |
| 1981 | 0.9 | 1.1 | 0.8 | 0.8 | 0.5 | 0.5 | 0.4 | 0.4 | 0.8 | 1.1 | 1.1 | 1.0 | 0.8 |
| 1982 | 1.4 | 1.2 | 1.4 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.8 | 1.2 | 1.3 | 1.3 | 1.0 |
| 1983 | 1.2 | 1.0 | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 1.0 | 1.1 | 1.4 | 1.3 | 0.9 |
| 1984 | 1.4 | 1.1 | 1.0 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 1.0 | 1.3 | 1.7 | 1.5 | 1.0 |
| 1985 | 1.2 | 1.1 | 1.2 | 0.7 | 0.5 | 0.7 | 0.5 | 0.6 | 1.1 | 1.4 | 1.0 | 1.3 | 0.9 |
| 1986 | 1.3 | 0.7 | 1.3 | 0.9 | 0.5 | 0.6 | 0.4 | 0.6 | 0.9 | 1.0 | 1.6 | 1.5 | 0.9 |
| 1987 | 1.1 | 0.9 | 1.0 | 0.6 | 0.6 | 0.4 | 0.5 | 0.6 | 0.6 | 1.0 | 1.1 | 1.1 | 0.8 |
| MEAN | 1.1 | 1.1 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.9 | 1.1 | 1.2 | 1.2 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S74 (47.95N 86.00W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MONTH | | | | | | |
| 1956 | 1.8 | 3.2 | 2.6 | 2.4 | 1.8 | 1.8 | 1.2 | 1.2 | 1.8 | 3.2 | 2.2 | 2.6 |
| 1957 | 3.1 | 3.0 | 2.6 | 2.1 | 2.4 | 3.0 | 2.2 | 1.6 | 2.4 | 1.8 | 2.4 | 3.7 |
| 1958 | 2.4 | 2.6 | 1.4 | 4.4 | 2.5 | 2.0 | 1.6 | 1.6 | 2.1 | 2.4 | 7.4 | 2.9 |
| 1959 | 4.4 | 5.5 | 2.8 | 2.1 | 3.5 | 1.7 | 1.8 | 1.6 | 2.0 | 2.7 | 3.1 | 3.6 |
| 1960 | 2.4 | 2.1 | 1.9 | 2.6 | 1.2 | 1.4 | 1.6 | 2.5 | 1.8 | 3.2 | 3.5 | 3.5 |
| 1961 | 2.8 | 2.6 | 3.3 | 2.4 | 2.1 | 2.0 | 1.3 | 2.3 | 2.1 | 2.3 | 4.3 | 2.8 |
| 1962 | 2.6 | 1.9 | 2.1 | 2.0 | 1.5 | 1.5 | 1.4 | 1.3 | 2.3 | 3.7 | 3.0 | 4.9 |
| 1963 | 2.8 | 3.8 | 3.1 | 3.7 | 2.4 | 2.6 | 2.4 | 1.2 | 2.3 | 3.8 | 3.8 | 3.9 |
| 1964 | 5.3 | 4.6 | 4.4 | 4.8 | 3.3 | 2.5 | 1.8 | 2.8 | 4.5 | 4.5 | 5.3 | 3.6 |
| 1965 | 4.1 | 3.5 | 3.4 | 3.1 | 2.5 | 3.0 | 1.8 | 1.7 | 3.2 | 3.9 | 5.5 | 3.8 |
| 1966 | 4.0 | 3.9 | 4.4 | 3.3 | 2.5 | 2.7 | 3.0 | 2.6 | 3.8 | 5.5 | 4.3 | 4.2 |
| 1967 | 4.0 | 4.2 | 4.1 | 4.0 | 3.3 | 2.3 | 1.8 | 1.7 | 3.5 | 4.6 | 4.0 | 5.1 |
| 1968 | 4.3 | 5.0 | 4.4 | 4.0 | 2.9 | 2.4 | 2.7 | 2.4 | 3.3 | 4.0 | 4.4 | 3.8 |
| 1969 | 3.8 | 3.8 | 4.0 | 3.0 | 2.2 | 2.2 | 1.6 | 2.6 | 3.8 | 5.1 | 4.2 | 3.8 |
| 1970 | 3.6 | 4.2 | 3.7 | 4.2 | 2.7 | 1.9 | 1.5 | 1.8 | 3.9 | 5.4 | 4.6 | 4.1 |
| 1971 | 3.7 | 3.7 | 3.8 | 2.9 | 3.2 | 1.8 | 2.5 | 1.8 | 3.8 | 4.7 | 5.1 | 5.3 |
| 1972 | 4.3 | 4.7 | 3.3 | 3.0 | 1.2 | 1.6 | 1.6 | 1.7 | 3.5 | 4.9 | 4.2 | 3.5 |
| 1973 | 2.8 | 3.6 | 4.1 | 2.5 | 2.0 | 1.5 | 1.9 | 1.6 | 3.3 | 3.7 | 4.2 | 4.3 |
| 1974 | 4.1 | 4.0 | 3.8 | 2.8 | 2.2 | 1.9 | 1.7 | 2.2 | 2.7 | 4.1 | 3.5 | 4.2 |
| 1975 | 4.5 | 2.9 | 2.1 | 1.5 | 2.1 | 1.9 | 2.0 | 3.3 | 2.6 | 5.1 | 4.5 | 4.0 |
| 1976 | 5.6 | 4.4 | 4.3 | 3.3 | 3.2 | 2.3 | 1.6 | 2.8 | 3.4 | 3.8 | 4.3 | 5.0 |
| 1977 | 4.2 | 3.7 | 3.9 | 1.5 | 1.7 | 1.2 | 2.2 | 2.3 | 5.3 | 4.3 | 7.2 | 2.9 |
| 1978 | 3.3 | 2.2 | 4.3 | 2.5 | 1.8 | 1.7 | 2.1 | 3.2 | 2.8 | 4.5 | 4.5 | 4.2 |
| 1979 | 3.5 | 3.1 | 2.1 | 2.2 | 2.2 | 2.0 | 1.4 | 2.1 | 2.6 | 2.4 | 4.9 | 4.2 |
| 1980 | 6.5 | 4.4 | 4.8 | 1.5 | 1.7 | 1.3 | 1.1 | 2.1 | 4.8 | 4.1 | 4.1 | 4.4 |
| 1981 | 2.6 | 3.1 | 3.0 | 2.4 | 1.4 | 2.8 | 1.2 | 1.3 | 4.6 | 4.7 | 5.0 | 5.0 |
| 1982 | 5.3 | 4.3 | 6.2 | 5.0 | 1.9 | 1.8 | 1.4 | 1.6 | 2.7 | 5.1 | 5.7 | 4.9 |
| 1983 | 4.3 | 6.5 | 2.1 | 2.4 | 1.4 | 1.6 | 2.4 | 1.8 | 3.4 | 3.5 | 5.4 | 4.5 |
| 1984 | 5.7 | 2.9 | 3.9 | 3.9 | 2.3 | 2.9 | 1.4 | 2.8 | 3.4 | 5.4 | 5.4 | 6.2 |
| 1985 | 4.9 | 4.1 | 4.5 | 2.9 | 1.7 | 3.3 | 1.3 | 2.2 | 5.2 | 3.8 | 3.1 | 5.1 |
| 1986 | 5.2 | 2.1 | 4.8 | 3.0 | 1.7 | 2.0 | 1.1 | 2.6 | 3.0 | 4.6 | 6.1 | 5.0 |
| 1987 | 3.6 | 3.8 | 3.6 | 4.0 | 2.9 | 1.3 | 2.0 | 2.5 | 2.1 | 3.5 | 4.5 | 4.7 |

32 YR. STATISTICS FOR WIS STATION S74

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.5 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 7.4 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 278.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 58112906 |

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 235 | 641 | 36 | . | . | . | . | . | . | . | 912 |
| 0.50-0.99 | . | 537 | 1863 | 27 | . | . | . | . | . | . | 2427 |
| 1.00-1.49 | . | . | 1411 | 105 | 18 | . | . | . | . | . | 1534 |
| 1.50-1.99 | . | . | 202 | 445 | 42 | 3 | . | . | . | . | 692 |
| 2.00-2.49 | . | . | . | 365 | 22 | 8 | . | . | . | . | 395 |
| 2.50-2.99 | . | . | . | 36 | 44 | 7 | . | . | . | . | 87 |
| 3.00-3.49 | . | . | . | . | 11 | 1 | 1 | . | . | . | 13 |
| 3.50-3.99 | . | . | . | . | 2 | 1 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 235 | 1178 | 3512 | 978 | 139 | 20 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 5680.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 225 | 814 | 44 | . | . | . | . | . | . | . | 1083 |
| 0.50-0.99 | . | 1194 | 1117 | 22 | 3 | . | . | . | . | . | 2336 |
| 1.00-1.49 | . | . | 750 | 33 | 2 | 2 | . | . | . | . | 787 |
| 1.50-1.99 | . | . | 145 | 178 | 2 | 1 | . | . | . | . | 326 |
| 2.00-2.49 | . | . | 2 | 139 | 2 | 2 | . | . | . | . | 145 |
| 2.50-2.99 | . | . | . | 4 | 18 | . | . | . | . | . | 22 |
| 3.00-3.49 | . | . | . | . | 5 | . | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 225 | 2008 | 2058 | 376 | 32 | 5 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.7 NO. OF CASES= 4406.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 425 | 1122 | 67 | 5 | . | . | . | . | . | . | 1619 |
| 0.50-0.99 | . | 2420 | 594 | 18 | 8 | 3 | . | . | . | . | 3043 |
| 1.00-1.49 | . | . | 351 | 16 | 4 | 2 | . | . | . | . | 373 |
| 1.50-1.99 | . | . | 141 | 12 | . | 6 | 1 | . | . | . | 160 |
| 2.00-2.49 | . | . | 2 | 8 | 1 | 1 | 1 | . | . | . | 13 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 425 | 3542 | 1155 | 59 | 13 | 12 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 4877.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 220 | 705 | 91 | 1 | . | . | . | . | . | . | 1017 |
| 0.50-0.99 | . | 1167 | 160 | 10 | 8 | . | . | . | . | . | 1345 |
| 1.00-1.49 | . | . | 140 | 7 | 6 | 7 | . | . | . | . | 160 |
| 1.50-1.99 | . | . | 43 | . | 5 | 10 | . | . | . | . | 58 |
| 2.00-2.49 | . | . | 1 | . | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 220 | 1872 | 435 | 18 | 19 | 17 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.2 NO. OF CASES= 2421.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 265 | 727 | 66 | 3 | . | . | . | . | . | . | 1061 |
| 0.50-0.99 | . | 612 | 69 | 25 | 5 | . | . | . | . | . | 711 |
| 1.00-1.49 | . | . | 66 | 3 | 10 | 2 | . | . | . | . | 81 |
| 1.50-1.99 | . | . | 11 | 1 | 4 | 11 | . | . | . | . | 27 |
| 2.00-2.49 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 265 | 1339 | 212 | 32 | 19 | 16 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 1767.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 164 | 409 | 33 | 1 | . | . | . | . | . | . | 607 |
| 0.50-0.99 | . | 321 | 124 | 6 | . | . | . | . | . | . | 451 |
| 1.00-1.49 | . | . | 50 | 16 | 3 | . | . | . | . | . | 69 |
| 1.50-1.99 | . | . | 7 | 18 | 3 | 2 | . | . | . | . | 30 |
| 2.00-2.49 | . | . | . | 5 | 4 | 2 | . | . | . | . | 11 |
| 2.50-2.99 | . | . | . | . | 3 | 1 | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 164 | 730 | 214 | 46 | 13 | 6 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.2 NO. OF CASES= 1103.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 185 | 341 | 201 | 66 | 5 | . | . | . | . | . | 798 |
| 0.50-0.99 | . | 478 | 371 | 172 | 105 | 7 | . | . | . | . | 1133 |
| 1.00-1.49 | . | . | 115 | 58 | 51 | 42 | . | . | . | . | 266 |
| 1.50-1.99 | . | . | 8 | 37 | 18 | 34 | . | . | . | . | 97 |
| 2.00-2.49 | . | . | . | 16 | 8 | 10 | 1 | 1 | . | . | 36 |
| 2.50-2.99 | . | . | . | 1 | 6 | 8 | 2 | 1 | . | . | 18 |
| 3.00-3.49 | . | . | . | . | . | 7 | 1 | 1 | . | . | 9 |
| 3.50-3.99 | . | . | . | . | . | 3 | 4 | . | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 185 | 819 | 695 | 350 | 193 | 111 | 11 | 3 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 2223.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 226 | 653 | 704 | 173 | 9 | . | . | . | . | . | 1765 |
| 0.50-0.99 | . | 529 | 1245 | 664 | 314 | 32 | . | . | . | . | 2784 |
| 1.00-1.49 | . | 1 | 350 | 232 | 176 | 141 | . | . | . | . | 900 |
| 1.50-1.99 | . | . | 29 | 149 | 52 | 68 | 8 | . | . | . | 306 |
| 2.00-2.49 | . | . | . | 80 | 23 | 37 | 6 | 1 | . | . | 147 |
| 2.50-2.99 | . | . | . | 1 | 43 | 6 | 3 | 2 | . | . | 55 |
| 3.00-3.49 | . | . | . | . | 12 | 23 | 3 | . | . | . | 38 |
| 3.50-3.99 | . | . | . | . | . | 6 | 2 | 1 | . | . | 9 |
| 4.00-4.49 | . | . | . | . | . | 1 | 2 | 2 | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 226 | 1183 | 2328 | 1299 | 629 | 314 | 26 | 6 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.6 NO. OF CASES= 5635.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 316 | 1078 | 472 | 4 | . | . | . | . | . | . | 1870 |
| 0.50-0.99 | . | 662 | 2645 | 465 | 14 | . | . | . | . | . | 3786 |
| 1.00-1.49 | . | . | 604 | 813 | 253 | 6 | . | . | . | . | 1676 |
| 1.50-1.99 | . | . | 53 | 341 | 282 | 79 | 1 | . | . | . | 756 |
| 2.00-2.49 | . | . | . | 151 | 88 | 108 | 1 | . | . | . | 348 |
| 2.50-2.99 | . | . | . | 5 | 147 | 44 | 7 | 1 | . | . | 204 |
| 3.00-3.49 | . | . | . | . | 8 | 109 | 9 | 1 | . | . | 127 |
| 3.50-3.99 | . | . | . | . | . | 56 | 26 | . | 1 | . | 83 |
| 4.00-4.49 | . | . | . | . | . | 4 | 23 | . | . | . | 27 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 8 | . | . | 12 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 316 | 1740 | 3774 | 1779 | 792 | 406 | 71 | 11 | 1 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.6 NO. OF CASES= 8327.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 298 | 1042 | 474 | 10 | . | . | . | . | . | . | 1824 |
| 0.50-0.99 | . | 595 | 3056 | 760 | 18 | . | . | . | . | . | 4429 |
| 1.00-1.49 | . | . | 623 | 1243 | 393 | 5 | . | . | . | . | 2264 |
| 1.50-1.99 | . | . | 50 | 375 | 457 | 99 | . | . | . | . | 981 |
| 2.00-2.49 | . | . | 1 | 145 | 124 | 199 | 4 | . | . | . | 473 |
| 2.50-2.99 | . | . | . | 4 | 133 | 93 | 24 | 2 | . | . | 256 |
| 3.00-3.49 | . | . | . | . | 16 | 129 | 24 | 10 | . | . | 179 |
| 3.50-3.99 | . | . | . | . | . | 71 | 40 | 9 | . | . | 120 |
| 4.00-4.49 | . | . | . | . | . | 10 | 59 | 12 | 1 | . | 82 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 23 | . | . | 27 |
| 5.00-5.49 | . | . | . | . | . | . | . | 11 | 1 | . | 12 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 298 | 1637 | 4204 | 2537 | 1141 | 606 | 155 | 67 | 4 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.8 NO. OF CASES= 9976.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 290 | 934 | 268 | 4 | 2 | . | . | . | . | . | 1498 |
| 0.50-0.99 | . | 566 | 2321 | 272 | 13 | . | . | . | . | . | 3172 |
| 1.00-1.49 | . | . | 647 | 757 | 120 | 5 | . | . | . | . | 1529 |
| 1.50-1.99 | . | . | 34 | 320 | 249 | 37 | . | . | . | . | 640 |
| 2.00-2.49 | . | . | . | 95 | 126 | 96 | 2 | . | . | . | 319 |
| 2.50-2.99 | . | . | . | 1 | 111 | 53 | 9 | 1 | . | . | 175 |
| 3.00-3.49 | . | . | . | . | 5 | 83 | 27 | 5 | . | . | 120 |
| 3.50-3.99 | . | . | . | . | . | 51 | 27 | 6 | 1 | . | 85 |
| 4.00-4.49 | . | . | . | . | . | 3 | 40 | 13 | 2 | . | 58 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 20 | . | . | 26 |
| 5.00-5.49 | . | . | . | . | . | . | . | 9 | . | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 3 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 290 | 1500 | 3270 | 1449 | 626 | 328 | 111 | 56 | 10 | 1 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 7162.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 239 | 1083 | 507 | 57 | . | . | . | . | . | . | 1886 |
| 0.50-0.99 | . | 670 | 2844 | 756 | 180 | 8 | . | . | . | . | 4458 |
| 1.00-1.49 | . | . | 782 | 970 | 319 | 209 | 1 | . | . | . | 2281 |
| 1.50-1.99 | . | . | 42 | 426 | 320 | 222 | 44 | 3 | . | . | 1057 |
| 2.00-2.49 | . | . | 1 | 114 | 155 | 160 | 59 | 33 | 1 | . | 523 |
| 2.50-2.99 | . | . | . | 4 | 132 | 125 | 25 | 29 | 8 | . | 323 |
| 3.00-3.49 | . | . | . | . | 12 | 93 | 23 | 19 | 11 | . | 158 |
| 3.50-3.99 | . | . | . | . | . | 43 | 29 | 16 | 3 | 1 | 92 |
| 4.00-4.49 | . | . | . | . | . | 4 | 22 | 14 | 3 | . | 43 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 16 | . | . | 21 |
| 5.00-5.49 | . | . | . | . | . | . | . | 14 | 4 | 1 | 19 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 5 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 239 | 1753 | 4176 | 2327 | 1118 | 864 | 208 | 146 | 37 | 4 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 10190.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 258 | 1195 | 222 | 19 | 1 | . | . | . | . | . | 1695 |
| 0.50-0.99 | . | 649 | 3561 | 352 | 94 | 23 | . | . | . | . | 4679 |
| 1.00-1.49 | . | . | 898 | 1451 | 151 | 221 | 5 | . | . | . | 2726 |
| 1.50-1.99 | . | . | 50 | 550 | 444 | 137 | 71 | 23 | . | . | 1275 |
| 2.00-2.49 | . | . | . | 128 | 235 | 231 | 37 | 54 | 5 | . | 690 |
| 2.50-2.99 | . | . | . | 5 | 154 | 172 | 25 | 18 | 17 | . | 391 |
| 3.00-3.49 | . | . | . | . | 13 | 112 | 29 | 13 | 7 | 2 | 176 |
| 3.50-3.99 | . | . | . | . | 1 | 56 | 31 | 9 | 3 | 1 | 101 |
| 4.00-4.49 | . | . | . | . | . | 5 | 31 | 8 | 2 | 1 | 47 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 12 | . | 1 | 19 |
| 5.00-5.49 | . | . | . | . | . | . | . | 9 | . | 1 | 10 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 6 | 1 | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 258 | 1844 | 4731 | 2505 | 1093 | 957 | 235 | 149 | 40 | 7 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 11073.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 126 | 1029 | 197 | 4 | . | . | . | . | . | . | 1356 |
| 0.50-0.99 | . | 549 | 3167 | 260 | 19 | 2 | . | . | . | . | 3997 |
| 1.00-1.49 | . | . | 746 | 1252 | 108 | 24 | . | . | . | . | 2130 |
| 1.50-1.99 | . | . | 57 | 417 | 397 | 44 | 7 | 3 | . | . | 925 |
| 2.00-2.49 | . | . | . | 119 | 164 | 168 | 1 | . | . | . | 452 |
| 2.50-2.99 | . | . | . | 9 | 132 | 110 | 7 | 5 | . | . | 263 |
| 3.00-3.49 | . | . | . | . | 14 | 118 | 12 | . | . | . | 144 |
| 3.50-3.99 | . | . | . | . | . | 64 | 19 | 2 | . | . | 85 |
| 4.00-4.49 | . | . | . | . | . | 5 | 19 | 5 | . | 1 | 30 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 2 | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 126 | 1578 | 4167 | 2061 | 834 | 535 | 68 | 19 | 2 | 1 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.7 NO. OF CASES= 8799.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 108 | 577 | 112 | . | . | . | . | . | . | . | 797 |
| 0.50-0.99 | . | 362 | 2238 | 80 | . | . | . | . | . | . | 2680 |
| 1.00-1.49 | . | . | 662 | 823 | 56 | 2 | . | . | . | . | 1543 |
| 1.50-1.99 | . | . | 49 | 407 | 237 | 12 | . | . | . | . | 705 |
| 2.00-2.49 | . | . | . | 115 | 130 | 80 | . | . | . | . | 325 |
| 2.50-2.99 | . | . | . | 5 | 129 | 62 | 2 | . | . | . | 198 |
| 3.00-3.49 | . | . | . | . | 11 | 117 | 2 | . | . | . | 130 |
| 3.50-3.99 | . | . | . | . | . | 26 | . | . | . | . | 26 |
| 4.00-4.49 | . | . | . | . | . | 1 | 5 | . | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 1 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 108 | 939 | 3061 | 1430 | 563 | 300 | 13 | 1 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.7 NO. OF CASES= 6008.

STATION S75 48.08N 86.22W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

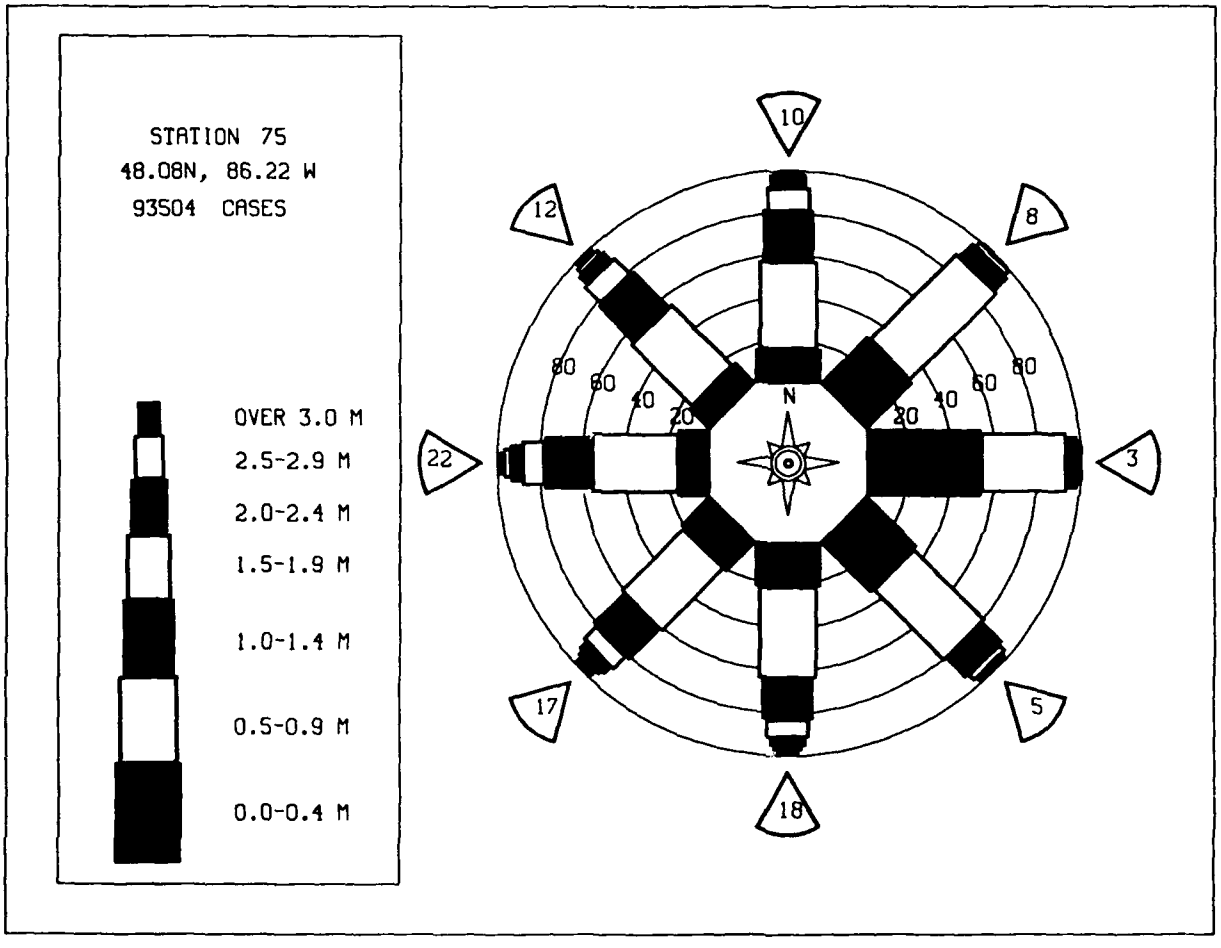
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 124 | 388 | 20 | . | . | . | . | . | . | . | 532 |
| 0.50-0.99 | . | 259 | 1269 | 18 | . | . | . | . | . | . | 1546 |
| 1.00-1.49 | . | . | 640 | 392 | 6 | . | . | . | . | . | 1038 |
| 1.50-1.99 | . | . | 73 | 320 | 141 | 1 | . | . | . | . | 535 |
| 2.00-2.49 | . | . | . | 124 | 90 | 32 | . | . | . | . | 246 |
| 2.50-2.99 | . | . | . | 20 | 86 | 31 | . | . | . | . | 137 |
| 3.00-3.49 | . | . | . | . | 5 | 51 | . | . | . | . | 56 |
| 3.50-3.99 | . | . | . | . | 1 | 19 | 1 | . | . | . | 21 |
| 4.00-4.49 | . | . | . | . | . | 2 | 3 | . | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 124 | 647 | 2002 | 874 | 329 | 136 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 3857.

STATION S75 48.08N 86.22W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 371 | 1274 | 352 | 35 | 1 | . | . | . | . | . | 2033 |
| 0.50-0.99 | . | 1157 | 2665 | 391 | 78 | 7 | . | . | . | . | 4298 |
| 1.00-1.49 | . | . | 884 | 817 | 168 | 67 | . | . | . | . | 1936 |
| 1.50-1.99 | . | . | 100 | 400 | 265 | 77 | 13 | 2 | . | . | 857 |
| 2.00-2.49 | . | . | . | 160 | 117 | 114 | 11 | 8 | . | . | 410 |
| 2.50-2.99 | . | . | . | 9 | 114 | 71 | 10 | 6 | 2 | . | 212 |
| 3.00-3.49 | . | . | . | . | 11 | 84 | 13 | 5 | 1 | . | 114 |
| 3.50-3.99 | . | . | . | . | . | 40 | 18 | 4 | . | . | 62 |
| 4.00-4.49 | . | . | . | . | . | 3 | 21 | 5 | . | . | 29 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 8 | . | . | 11 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 371 | 2431 | 4001 | 1812 | 754 | 463 | 89 | 42 | 4 | 0 | |

MEAN HS(M)= 1.0 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S75 (48.08N 86.22W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 | 1.0 | 0.8 | 0.8 | 0.7 |
| 1957 | 1.1 | 1.1 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.8 | 0.7 | 1.0 | 1.1 | 0.8 |
| 1958 | 0.7 | 0.9 | 0.5 | 0.7 | 0.8 | 0.7 | 0.5 | 0.6 | 0.7 | 0.8 | 1.4 | 1.0 | 0.8 |
| 1959 | 1.0 | 1.0 | 0.9 | 0.7 | 0.8 | 0.5 | 0.6 | 0.5 | 0.7 | 0.7 | 1.0 | 0.9 | 0.8 |
| 1960 | 0.9 | 0.8 | 0.7 | 0.7 | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 | 0.9 | 1.1 | 1.1 | 0.8 |
| 1961 | 0.8 | 0.8 | 0.9 | 0.6 | 0.7 | 0.6 | 0.4 | 0.6 | 0.8 | 0.8 | 1.1 | 0.9 | 0.7 |
| 1962 | 1.2 | 0.8 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 1.1 | 1.2 | 0.7 |
| 1963 | 1.2 | 1.2 | 1.2 | 1.0 | 0.9 | 0.7 | 0.8 | 0.6 | 0.9 | 1.1 | 1.1 | 1.3 | 1.0 |
| 1964 | 1.4 | 1.4 | 1.3 | 1.1 | 1.0 | 0.9 | 0.7 | 1.0 | 1.1 | 1.3 | 1.1 | 1.2 | 1.1 |
| 1965 | 1.5 | 1.7 | 1.0 | 0.9 | 1.0 | 1.0 | 0.9 | 0.7 | 1.0 | 1.3 | 1.5 | 1.3 | 1.1 |
| 1966 | 1.3 | 1.6 | 1.5 | 1.0 | 1.1 | 0.9 | 0.9 | 0.8 | 1.3 | 1.5 | 1.5 | 1.4 | 1.2 |
| 1967 | 1.5 | 1.6 | 1.7 | 1.1 | 1.1 | 0.9 | 0.8 | 0.9 | 1.3 | 1.6 | 1.6 | 1.8 | 1.3 |
| 1968 | 1.4 | 1.8 | 1.7 | 1.2 | 1.0 | 0.8 | 1.0 | 0.9 | 1.0 | 1.4 | 1.4 | 1.4 | 1.2 |
| 1969 | 1.6 | 1.2 | 1.4 | 1.0 | 0.9 | 0.9 | 0.7 | 0.9 | 1.1 | 1.4 | 1.4 | 1.1 | 1.1 |
| 1970 | 1.2 | 1.6 | 1.3 | 1.1 | 0.9 | 0.8 | 0.7 | 0.7 | 1.2 | 1.5 | 1.3 | 1.1 | 1.1 |
| 1971 | 1.3 | 1.4 | 1.3 | 1.1 | 0.8 | 0.6 | 0.8 | 0.7 | 1.0 | 1.3 | 1.3 | 1.2 | 1.1 |
| 1972 | 1.6 | 1.2 | 1.2 | 0.9 | 0.6 | 0.7 | 0.6 | 0.6 | 1.1 | 1.4 | 1.1 | 1.0 | 1.0 |
| 1973 | 1.3 | 1.3 | 1.1 | 1.0 | 0.7 | 0.6 | 0.7 | 0.6 | 1.0 | 1.1 | 1.4 | 1.0 | 1.0 |
| 1974 | 1.2 | 1.0 | 1.2 | 0.9 | 0.7 | 0.8 | 0.7 | 0.8 | 1.0 | 1.3 | 1.3 | 1.1 | 1.0 |
| 1975 | 1.1 | 0.9 | 1.0 | 0.6 | 0.6 | 0.7 | 0.7 | 0.9 | 1.0 | 1.5 | 1.4 | 1.3 | 1.0 |
| 1976 | 1.4 | 1.4 | 1.4 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 0.8 | 1.3 | 1.2 | 1.0 |
| 1977 | 1.2 | 1.2 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 0.9 | 1.1 | 1.0 | 0.8 |
| 1978 | 1.1 | 0.9 | 0.9 | 0.7 | 0.5 | 0.5 | 0.5 | 1.0 | 0.8 | 1.2 | 1.3 | 1.5 | 0.9 |
| 1979 | 1.0 | 0.7 | 1.0 | 0.5 | 0.6 | 0.6 | 0.4 | 0.7 | 1.0 | 1.0 | 1.6 | 1.5 | 0.9 |
| 1980 | 1.1 | 0.8 | 1.2 | 0.6 | 0.6 | 0.5 | 0.5 | 0.7 | 1.2 | 1.5 | 1.1 | 1.2 | 0.9 |
| 1981 | 0.9 | 1.1 | 0.9 | 0.8 | 0.5 | 0.6 | 0.4 | 0.4 | 1.0 | 1.3 | 1.3 | 1.0 | 0.8 |
| 1982 | 1.4 | 1.2 | 1.4 | 0.9 | 0.6 | 0.6 | 0.5 | 0.5 | 0.9 | 1.4 | 1.6 | 1.4 | 1.0 |
| 1983 | 1.2 | 1.0 | 1.0 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 1.1 | 1.3 | 1.6 | 1.3 | 1.0 |
| 1984 | 1.4 | 1.1 | 1.0 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 1.2 | 1.5 | 1.8 | 1.5 | 1.0 |
| 1985 | 1.3 | 1.1 | 1.2 | 0.8 | 0.6 | 0.8 | 0.5 | 0.7 | 1.3 | 1.6 | 1.2 | 1.4 | 1.0 |
| 1986 | 1.4 | 0.7 | 1.3 | 0.9 | 0.6 | 0.6 | 0.4 | 0.7 | 1.0 | 1.1 | 1.7 | 1.5 | 1.0 |
| 1987 | 1.2 | 0.9 | 1.0 | 0.6 | 0.6 | 0.4 | 0.5 | 0.6 | 0.6 | 1.0 | 1.1 | 1.2 | 0.8 |
| MEAN | 1.2 | 1.1 | 1.1 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 0.9 | 1.2 | 1.3 | 1.2 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S75 (48.08N 86.22W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.9 | 3.1 | 2.8 | 2.5 | 1.8 | 1.9 | 1.2 | 1.2 | 1.8 | 3.3 | 2.1 | 2.8 |
| 1957 | 3.1 | 3.0 | 2.6 | 2.1 | 2.6 | 3.0 | 1.9 | 1.6 | 2.2 | 1.7 | 2.6 | 3.7 |
| 1958 | 2.5 | 2.6 | 1.4 | 4.3 | 2.4 | 2.3 | 1.6 | 1.6 | 2.2 | 2.6 | 7.4 | 2.9 |
| 1959 | 4.2 | 5.2 | 2.7 | 2.2 | 3.5 | 1.9 | 1.8 | 1.7 | 2.1 | 2.6 | 3.3 | 3.6 |
| 1960 | 2.3 | 2.1 | 1.9 | 2.7 | 1.3 | 1.5 | 1.6 | 2.7 | 1.8 | 3.0 | 3.2 | 3.7 |
| 1961 | 2.4 | 2.6 | 3.2 | 2.4 | 1.9 | 2.2 | 1.3 | 2.3 | 2.0 | 2.3 | 4.5 | 2.8 |
| 1962 | 2.8 | 2.4 | 2.1 | 2.1 | 1.6 | 1.5 | 1.4 | 1.2 | 2.3 | 3.7 | 3.1 | 4.6 |
| 1963 | 2.8 | 3.6 | 3.1 | 3.4 | 2.5 | 2.8 | 2.6 | 1.2 | 2.4 | 4.3 | 3.6 | 4.0 |
| 1964 | 5.2 | 4.4 | 4.7 | 4.7 | 3.3 | 2.4 | 1.8 | 3.0 | 4.7 | 4.9 | 4.9 | 3.6 |
| 1965 | 3.9 | 3.8 | 3.2 | 3.2 | 2.9 | 3.2 | 1.8 | 2.0 | 3.2 | 3.8 | 5.0 | 3.6 |
| 1966 | 4.3 | 4.4 | 4.5 | 3.6 | 2.8 | 2.8 | 3.0 | 2.6 | 3.5 | 5.3 | 4.4 | 4.4 |
| 1967 | 4.0 | 4.3 | 4.3 | 4.0 | 3.3 | 2.6 | 2.3 | 2.1 | 3.3 | 4.7 | 3.9 | 5.1 |
| 1968 | 4.7 | 4.7 | 4.8 | 3.8 | 3.0 | 2.4 | 3.0 | 2.5 | 3.2 | 4.3 | 4.4 | 4.1 |
| 1969 | 3.9 | 3.8 | 3.9 | 2.9 | 2.2 | 2.5 | 1.7 | 2.7 | 3.8 | 5.3 | 4.3 | 3.5 |
| 1970 | 3.7 | 4.6 | 3.7 | 3.9 | 2.7 | 2.3 | 2.1 | 2.0 | 3.8 | 5.7 | 4.7 | 4.0 |
| 1971 | 3.7 | 4.4 | 3.5 | 2.9 | 3.2 | 1.8 | 2.4 | 1.8 | 4.2 | 4.7 | 5.1 | 5.0 |
| 1972 | 4.0 | 4.7 | 3.3 | 3.0 | 1.5 | 2.3 | 1.8 | 1.9 | 4.3 | 4.6 | 4.4 | 3.3 |
| 1973 | 2.8 | 3.7 | 4.4 | 2.6 | 1.8 | 1.4 | 1.9 | 1.9 | 3.3 | 3.6 | 4.1 | 5.3 |
| 1974 | 4.5 | 3.8 | 3.5 | 2.8 | 2.1 | 2.0 | 1.7 | 2.6 | 2.8 | 3.9 | 3.5 | 3.9 |
| 1975 | 4.3 | 2.8 | 2.2 | 1.8 | 2.5 | 2.0 | 2.0 | 3.5 | 2.7 | 5.4 | 4.9 | 3.9 |
| 1976 | 5.2 | 4.4 | 4.1 | 3.5 | 3.0 | 2.1 | 1.2 | 2.6 | 3.4 | 3.7 | 4.5 | 5.0 |
| 1977 | 4.4 | 3.9 | 4.0 | 1.8 | 1.7 | 1.4 | 2.3 | 2.2 | 5.5 | 4.1 | 7.2 | 3.0 |
| 1978 | 3.2 | 2.1 | 3.9 | 2.7 | 1.9 | 1.6 | 1.7 | 2.8 | 2.8 | 4.2 | 4.3 | 4.3 |
| 1979 | 3.3 | 2.9 | 2.7 | 2.4 | 2.9 | 2.5 | 1.4 | 2.4 | 2.3 | 2.8 | 5.3 | 4.2 |
| 1980 | 5.9 | 3.9 | 4.4 | 1.8 | 1.6 | 1.4 | 1.2 | 2.2 | 5.8 | 4.4 | 4.0 | 4.4 |
| 1981 | 2.7 | 3.0 | 3.0 | 2.5 | 1.3 | 2.5 | 1.0 | 1.2 | 5.1 | 4.9 | 5.2 | 4.7 |
| 1982 | 5.1 | 4.1 | 6.6 | 5.0 | 2.5 | 2.3 | 1.4 | 1.5 | 2.7 | 5.2 | 6.6 | 4.8 |
| 1983 | 4.3 | 6.1 | 3.0 | 2.4 | 1.6 | 1.5 | 2.5 | 2.1 | 3.6 | 3.9 | 5.1 | 4.0 |
| 1984 | 5.2 | 2.9 | 3.8 | 3.0 | 2.2 | 3.1 | 1.4 | 2.7 | 3.9 | 5.9 | 5.9 | 6.4 |
| 1985 | 4.7 | 4.0 | 4.5 | 3.1 | 1.6 | 3.4 | 1.5 | 2.5 | 5.4 | 4.4 | 3.4 | 5.2 |
| 1986 | 5.1 | 2.1 | 4.7 | 2.8 | 2.2 | 1.8 | 1.1 | 2.6 | 3.5 | 5.1 | 6.4 | 4.5 |
| 1987 | 3.5 | 3.8 | 3.5 | 3.7 | 2.9 | 1.3 | 2.0 | 2.3 | 2.1 | 3.2 | 4.1 | 4.4 |

32 YR. STATISTICS FOR WIS STATION S75

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.0 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.5 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 7.4 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 283.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 58112906 |

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 243 | 322 | 29 | . | . | . | . | . | . | . | 594 |
| 0.50-0.99 | . | 1303 | 1440 | 31 | . | . | . | . | . | . | 2774 |
| 1.00-1.49 | . | . | 789 | 164 | 3 | . | . | . | . | . | 956 |
| 1.50-1.99 | . | . | 351 | 195 | 21 | . | . | . | . | . | 567 |
| 2.00-2.49 | . | . | . | 140 | 25 | . | . | . | . | . | 165 |
| 2.50-2.99 | . | . | . | 14 | 3 | 2 | . | . | . | . | 19 |
| 3.00-3.49 | . | . | . | 2 | 1 | . | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 243 | 1625 | 2609 | 546 | 53 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 4757.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 249 | 686 | 35 | . | . | . | . | . | . | . | 970 |
| 0.50-0.99 | . | 1598 | 1002 | 18 | 1 | 1 | . | . | . | . | 2620 |
| 1.00-1.49 | . | . | 719 | 17 | 2 | . | . | . | . | . | 738 |
| 1.50-1.99 | . | . | 252 | 164 | 1 | . | . | . | . | . | 417 |
| 2.00-2.49 | . | . | . | 73 | 2 | . | . | . | . | . | 75 |
| 2.50-2.99 | . | . | . | 5 | 1 | . | . | . | . | . | 6 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 249 | 2284 | 2008 | 277 | 8 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 4519.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 436 | 1027 | 35 | 1 | . | . | . | . | . | . | 1499 |
| 0.50-0.99 | . | 2515 | 546 | 8 | 2 | . | . | . | . | . | 3071 |
| 1.00-1.49 | . | . | 337 | 7 | . | . | . | . | . | . | 344 |
| 1.50-1.99 | . | . | 146 | 16 | 1 | . | . | . | . | . | 163 |
| 2.00-2.49 | . | . | 1 | 5 | . | 1 | . | . | . | . | 7 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 436 | 3542 | 1065 | 37 | 3 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 4759.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 236 | 690 | 44 | . | . | . | . | . | . | . | 970 |
| 0.50-0.99 | . | 1219 | 165 | 2 | 1 | 1 | . | . | . | . | 1388 |
| 1.00-1.49 | . | . | 181 | . | 2 | 1 | . | . | . | . | 184 |
| 1.50-1.99 | . | . | 49 | . | . | . | . | . | . | . | 49 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 236 | 1909 | 439 | 2 | 3 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.1 NO. OF CASES= 2427.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 287 | 690 | 21 | 1 | . | . | . | . | . | . | 999 |
| 0.50-0.99 | . | 709 | 45 | 1 | . | . | . | . | . | . | 755 |
| 1.00-1.49 | . | . | 101 | . | . | 3 | . | . | . | . | 104 |
| 1.50-1.99 | . | . | 19 | . | . | . | . | . | . | . | 19 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 287 | 1399 | 186 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.0 NO. OF CASES= 1759.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 175 | 420 | 12 | . | . | . | . | . | . | . | 607 |
| 0.50-0.99 | . | 387 | 23 | 1 | . | . | . | . | . | . | 411 |
| 1.00-1.49 | . | . | 40 | . | . | . | . | . | . | . | 40 |
| 1.50-1.99 | . | . | 5 | . | 1 | . | . | . | . | . | 6 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 175 | 807 | 80 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.9 NO. OF CASES= 998.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 211 | 322 | 58 | 31 | 6 | . | . | . | . | . | 628 |
| 0.50-0.99 | . | 590 | 65 | 23 | 53 | 25 | . | . | . | . | 756 |
| 1.00-1.49 | . | . | 51 | 11 | 3 | 18 | 1 | . | . | . | 84 |
| 1.50-1.99 | . | . | 12 | 5 | 4 | 6 | 3 | 1 | . | . | 31 |
| 2.00-2.49 | . | . | . | 1 | . | 3 | . | . | . | . | 4 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 211 | 912 | 186 | 71 | 66 | 52 | 4 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 1414.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 265 | 657 | 443 | 313 | 53 | . | . | . | . | . | 1731 |
| 0.50-0.99 | . | 928 | 563 | 283 | 300 | 117 | . | . | . | . | 2191 |
| 1.00-1.49 | . | . | 118 | 135 | 64 | 106 | 7 | . | . | . | 430 |
| 1.50-1.99 | . | . | 37 | 49 | 22 | 33 | 8 | 2 | . | . | 151 |
| 2.00-2.49 | . | . | . | 19 | 16 | 13 | 12 | 4 | . | . | 64 |
| 2.50-2.99 | . | . | . | . | 11 | 4 | 4 | 2 | . | . | 21 |
| 3.00-3.49 | . | . | . | . | 6 | 5 | . | 2 | . | . | 13 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 265 | 1585 | 1161 | 799 | 472 | 280 | 31 | 10 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.4 NO. OF CASES= 4318.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 309 | 1075 | 622 | 20 | | | | | | | 2026 |
| 0.50-0.99 | . | 885 | 2589 | 580 | 66 | 3 | | | | | 4123 |
| 1.00-1.49 | . | . | 624 | 724 | 305 | 49 | | | | | 1702 |
| 1.50-1.99 | . | . | 73 | 382 | 211 | 93 | | | | | 759 |
| 2.00-2.49 | . | . | . | 147 | 114 | 86 | 5 | | | | 352 |
| 2.50-2.99 | . | . | . | 6 | 114 | 48 | 4 | 1 | | | 173 |
| 3.00-3.49 | . | . | . | . | 13 | 104 | 9 | 2 | | | 128 |
| 3.50-3.99 | . | . | . | . | . | 49 | 21 | 1 | 1 | | 72 |
| 4.00-4.49 | . | . | . | . | . | 7 | 27 | | 1 | | 35 |
| 4.50-4.99 | . | . | . | . | . | . | 9 | 6 | . | | 15 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | | 0 |
| TOTAL | 309 | 1960 | 3908 | 1859 | 823 | 439 | 75 | 13 | 2 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.6 NO. OF CASES= 8794.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 298 | 1020 | 518 | 16 | | | | | | | 1852 |
| 0.50-0.99 | . | 670 | 3000 | 840 | 26 | 1 | | | | | 4537 |
| 1.00-1.49 | . | 1 | 714 | 1226 | 451 | 13 | | | | | 2405 |
| 1.50-1.99 | . | . | 57 | 399 | 410 | 140 | | | | | 1006 |
| 2.00-2.49 | . | . | 1 | 171 | 119 | 185 | 10 | 1 | | | 487 |
| 2.50-2.99 | . | . | . | 2 | 151 | 88 | 34 | 5 | | | 280 |
| 3.00-3.49 | . | . | . | . | 22 | 124 | 24 | 10 | | | 180 |
| 3.50-3.99 | . | . | . | . | . | 79 | 44 | 10 | | | 133 |
| 4.00-4.49 | . | . | . | . | . | 11 | 57 | 13 | | | 81 |
| 4.50-4.99 | . | . | . | . | . | . | 10 | 33 | | | 43 |
| 5.00-5.49 | . | . | . | . | . | . | . | 13 | 1 | | 14 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 1 | | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | | 0 |
| TOTAL | 298 | 1691 | 4290 | 2654 | 1179 | 641 | 179 | 87 | 3 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 10326.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 298 | 925 | 334 | 11 | 1 | . | . | . | . | . | 1569 |
| 0.50-0.99 | . | 624 | 2448 | 251 | 14 | . | . | . | . | . | 3337 |
| 1.00-1.49 | . | . | 684 | 828 | 118 | 5 | . | . | . | . | 1635 |
| 1.50-1.99 | . | . | 40 | 359 | 266 | 36 | . | . | . | . | 701 |
| 2.00-2.49 | . | . | 1 | 122 | 122 | 87 | 3 | . | . | . | 335 |
| 2.50-2.99 | . | . | . | . | 115 | 72 | 13 | . | . | . | 200 |
| 3.00-3.49 | . | . | . | . | 6 | 80 | 29 | 4 | . | . | 119 |
| 3.50-3.99 | . | . | . | . | . | 64 | 23 | 6 | 1 | . | 94 |
| 4.00-4.49 | . | . | . | . | . | 1 | 37 | 16 | 2 | . | 56 |
| 4.50-4.99 | . | . | . | . | . | . | 12 | 14 | . | . | 26 |
| 5.00-5.49 | . | . | . | . | . | . | . | 10 | 1 | . | 11 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 4 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 6 | . | 6 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 0 | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 298 | 1549 | 3507 | 1571 | 642 | 345 | 117 | 53 | 15 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.6 NO. OF CASES= 7590.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 226 | 1082 | 549 | 55 | 4 | . | . | . | . | . | 1916 |
| 0.50-0.99 | . | 632 | 3312 | 495 | 99 | 8 | . | . | . | . | 4546 |
| 1.00-1.49 | . | . | 884 | 1254 | 197 | 113 | 1 | . | . | . | 2449 |
| 1.50-1.99 | . | . | 56 | 555 | 391 | 170 | 35 | 3 | . | . | 1210 |
| 2.00-2.49 | . | . | . | 124 | 249 | 174 | 45 | 28 | . | . | 620 |
| 2.50-2.99 | . | . | . | 3 | 142 | 143 | 18 | 24 | 7 | 1 | 338 |
| 3.00-3.49 | . | . | . | . | 7 | 115 | 26 | 16 | 14 | . | 178 |
| 3.50-3.99 | . | . | . | . | . | 49 | 28 | 18 | 3 | . | 98 |
| 4.00-4.49 | . | . | . | . | . | 2 | 38 | 13 | 4 | . | 57 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 16 | 1 | . | 20 |
| 5.00-5.49 | . | . | . | . | . | . | . | 18 | 1 | . | 19 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 8 | . | 11 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 226 | 1714 | 4801 | 2486 | 1089 | 774 | 194 | 139 | 41 | 2 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.9 NO. OF CASES= 10740.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 239 | 1247 | 683 | 14 | 1 | . | . | . | . | . | 2184 |
| 0.50-0.99 | . | 725 | 4523 | 725 | 56 | 26 | . | . | . | . | 6055 |
| 1.00-1.49 | . | . | 962 | 2413 | 131 | 88 | 4 | . | . | . | 3598 |
| 1.50-1.99 | . | . | 54 | 667 | 697 | 91 | 35 | 19 | 1 | . | 1564 |
| 2.00-2.49 | . | . | . | 155 | 319 | 218 | 14 | 37 | 4 | . | 747 |
| 2.50-2.99 | . | . | . | 5 | 170 | 182 | 9 | 20 | 8 | . | 394 |
| 3.00-3.49 | . | . | . | . | 18 | 144 | 23 | 6 | 10 | 2 | 203 |
| 3.50-3.99 | . | . | . | . | . | 52 | 31 | 6 | 2 | 1 | 92 |
| 4.00-4.49 | . | . | . | . | . | 2 | 28 | 9 | . | 2 | 41 |
| 4.50-4.99 | . | . | . | . | . | . | 9 | 11 | 1 | 1 | 22 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | . | 1 | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 3 | 2 | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 239 | 1972 | 6222 | 3979 | 1392 | 803 | 153 | 116 | 30 | 9 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.9 NO. OF CASES= 13968.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 140 | 987 | 312 | 2 | . | . | . | . | . | . | 1441 |
| 0.50-0.99 | . | 700 | 2860 | 298 | 10 | 1 | . | . | . | . | 3869 |
| 1.00-1.49 | . | . | 774 | 1130 | 111 | 22 | . | . | . | . | 2037 |
| 1.50-1.99 | . | . | 51 | 485 | 355 | 23 | 2 | 3 | . | . | 919 |
| 2.00-2.49 | . | . | 1 | 147 | 216 | 91 | 3 | 2 | . | . | 460 |
| 2.50-2.99 | . | . | . | 9 | 162 | 69 | 3 | . | . | . | 243 |
| 3.00-3.49 | . | . | . | . | 24 | 97 | 8 | . | 1 | . | 130 |
| 3.50-3.99 | . | . | . | . | . | 43 | 19 | 2 | . | . | 64 |
| 4.00-4.49 | . | . | . | . | . | 2 | 16 | 2 | . | . | 20 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 4 | . | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 140 | 1687 | 3998 | 2071 | 878 | 348 | 54 | 15 | 3 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 8610.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 110 | 419 | 90 | . | . | . | . | . | . | . | 619 |
| 0.50-0.99 | . | 470 | 1869 | 80 | . | . | . | . | . | . | 2419 |
| 1.00-1.49 | . | . | 687 | 652 | 44 | 1 | . | . | . | . | 1384 |
| 1.50-1.99 | . | . | 56 | 439 | 133 | 2 | . | . | . | . | 630 |
| 2.00-2.49 | . | . | 1 | 159 | 133 | 17 | . | . | . | . | 310 |
| 2.50-2.99 | . | . | . | 6 | 182 | 9 | . | . | . | . | 197 |
| 3.00-3.49 | . | . | . | . | 7 | 54 | 1 | . | . | . | 62 |
| 3.50-3.99 | . | . | . | . | . | 11 | . | . | . | . | 11 |
| 4.00-4.49 | . | . | . | . | . | 3 | 1 | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 110 | 889 | 2703 | 1336 | 499 | 97 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.6 NO. OF CASES= 5281.

STATION S76 48.23N 86.22W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

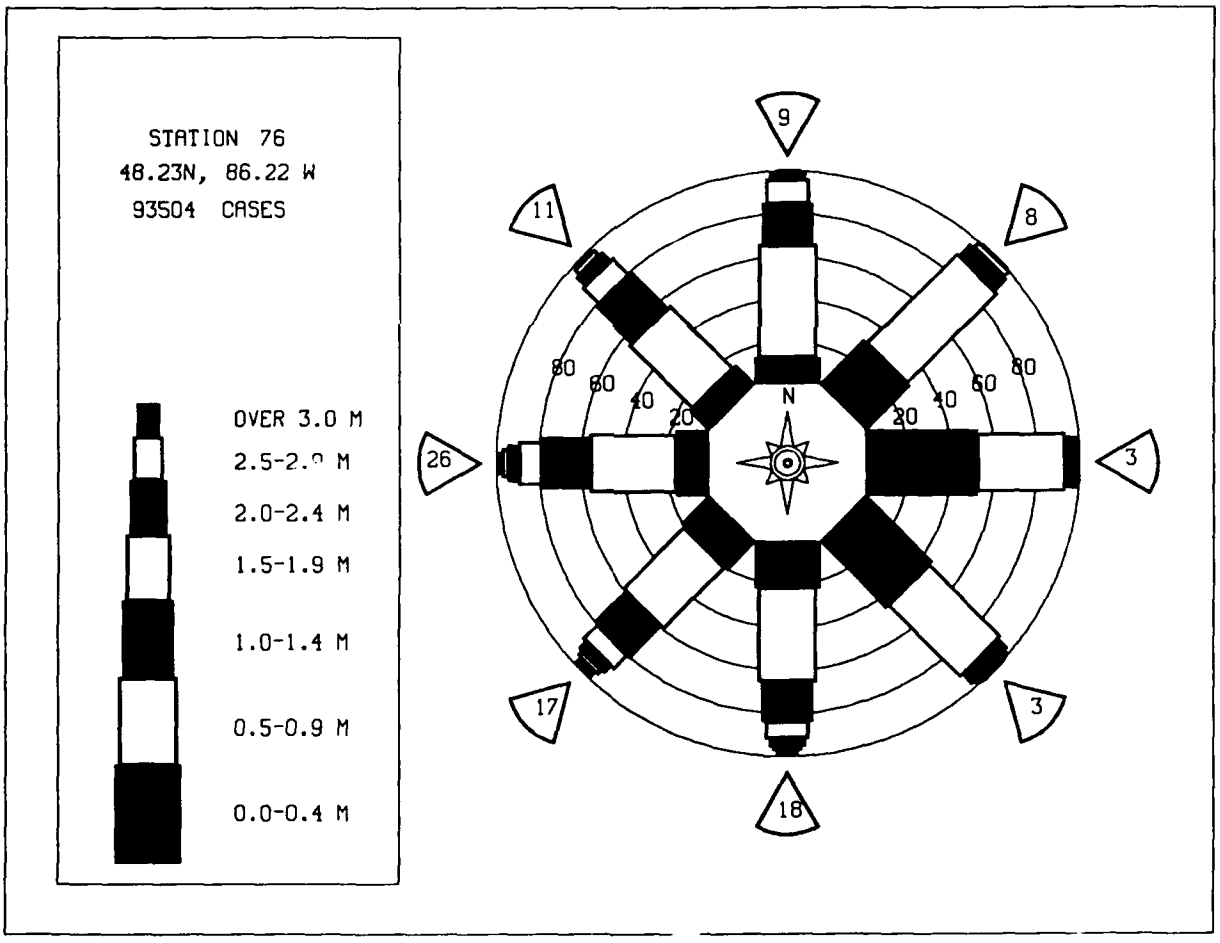
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 103 | 231 | 16 | . | . | . | . | . | . | . | 350 |
| 0.50-0.99 | . | 553 | 1013 | 13 | . | . | . | . | . | . | 1579 |
| 1.00-1.49 | . | . | 490 | 294 | . | . | . | . | . | . | 784 |
| 1.50-1.99 | . | . | 116 | 260 | 52 | . | . | . | . | . | 428 |
| 2.00-2.49 | . | . | 2 | 105 | 80 | 3 | . | . | . | . | 190 |
| 2.50-2.99 | . | . | . | 5 | 80 | 6 | . | . | . | . | 91 |
| 3.00-3.49 | . | . | . | . | 6 | 22 | 1 | . | . | . | 29 |
| 3.50-3.99 | . | . | . | . | . | 6 | . | . | . | . | 6 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 103 | 784 | 1637 | 677 | 218 | 38 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.3 NO. OF CASES= 3244.

STATION S76 48.23N 86.22W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 383 | 1180 | 381 | 46 | 6 | . | . | . | . | . | 1996 |
| 0.50-0.99 | . | 1451 | 2547 | 365 | 63 | 18 | . | . | . | . | 4444 |
| 1.00-1.49 | . | . | 816 | 886 | 143 | 42 | 1 | . | . | . | 1888 |
| 1.50-1.99 | . | . | 138 | 398 | 256 | 59 | 8 | 2 | . | . | 861 |
| 2.00-2.49 | . | . | . | 137 | 139 | 88 | 9 | 7 | . | . | 380 |
| 2.50-2.99 | . | . | . | 5 | 113 | 62 | 8 | 5 | 1 | . | 194 |
| 3.00-3.49 | . | . | . | . | 11 | 74 | 12 | 4 | 2 | . | 103 |
| 3.50-3.99 | . | . | . | . | . | 35 | 16 | 4 | . | . | 55 |
| 4.00-4.49 | . | . | . | . | . | 3 | 20 | 5 | . | . | 28 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 8 | . | . | 12 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | . | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 383 | 2631 | 3882 | 1837 | 731 | 381 | 78 | 41 | 4 | 0 | |

MEAN HS(M)= 1.0 LARGEST HS(M)= 7.6 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S76 (48.23N 86.22W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 | 1.0 | 0.8 | 0.8 | 0.7 |
| 1957 | 1.0 | 1.1 | 0.8 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.8 | 0.7 | 1.0 | 1.0 | 0.8 |
| 1958 | 0.7 | 0.9 | 0.5 | 0.7 | 0.8 | 0.7 | 0.6 | 0.6 | 0.7 | 0.8 | 1.3 | 1.0 | 0.8 |
| 1959 | 1.0 | 1.0 | 0.8 | 0.7 | 0.8 | 0.5 | 0.7 | 0.5 | 0.7 | 0.7 | 1.0 | 0.9 | 0.8 |
| 1960 | 0.8 | 0.8 | 0.7 | 0.7 | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 1.1 | 1.1 | 0.7 |
| 1961 | 0.8 | 0.7 | 0.8 | 0.6 | 0.7 | 0.6 | 0.4 | 0.6 | 0.8 | 0.8 | 1.1 | 0.9 | 0.7 |
| 1962 | 1.2 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 1.1 | 1.2 | 0.7 |
| 1963 | 1.2 | 1.2 | 1.2 | 1.0 | 0.9 | 0.7 | 0.8 | 0.6 | 0.9 | 1.2 | 1.1 | 1.3 | 1.0 |
| 1964 | 1.4 | 1.4 | 1.2 | 1.0 | 1.0 | 0.9 | 0.7 | 1.0 | 1.1 | 1.3 | 1.1 | 1.1 | 1.1 |
| 1965 | 1.5 | 1.6 | 1.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.7 | 1.0 | 1.2 | 1.4 | 1.3 | 1.1 |
| 1966 | 1.3 | 1.6 | 1.4 | 1.0 | 1.0 | 0.9 | 0.9 | 0.8 | 1.3 | 1.5 | 1.4 | 1.4 | 1.2 |
| 1967 | 1.4 | 1.6 | 1.7 | 1.1 | 1.1 | 0.9 | 0.8 | 0.9 | 1.3 | 1.6 | 1.6 | 1.7 | 1.3 |
| 1968 | 1.3 | 1.7 | 1.6 | 1.2 | 0.9 | 0.8 | 1.0 | 0.9 | 1.0 | 1.4 | 1.4 | 1.4 | 1.2 |
| 1969 | 1.5 | 1.2 | 1.3 | 0.9 | 0.9 | 0.9 | 0.7 | 1.0 | 1.1 | 1.4 | 1.4 | 1.1 | 1.1 |
| 1970 | 1.2 | 1.5 | 1.2 | 1.1 | 0.9 | 0.8 | 0.7 | 0.7 | 1.2 | 1.4 | 1.3 | 1.0 | 1.1 |
| 1971 | 1.3 | 1.3 | 1.2 | 1.0 | 0.8 | 0.7 | 0.9 | 0.7 | 1.0 | 1.3 | 1.3 | 1.2 | 1.1 |
| 1972 | 1.5 | 1.2 | 1.1 | 0.8 | 0.6 | 0.7 | 0.6 | 0.6 | 1.1 | 1.4 | 1.1 | 1.0 | 1.0 |
| 1973 | 1.3 | 1.2 | 1.1 | 0.9 | 0.7 | 0.6 | 0.7 | 0.6 | 1.0 | 1.1 | 1.3 | 1.0 | 1.0 |
| 1974 | 1.1 | 1.0 | 1.2 | 0.9 | 0.7 | 0.8 | 0.7 | 0.9 | 1.1 | 1.3 | 1.3 | 1.1 | 1.0 |
| 1975 | 1.2 | 1.0 | 1.0 | 0.6 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 | 1.5 | 1.4 | 1.3 | 1.0 |
| 1976 | 1.3 | 1.3 | 1.3 | 0.8 | 0.6 | 0.6 | 0.4 | 0.6 | 0.8 | 0.8 | 1.3 | 1.2 | 0.9 |
| 1977 | 1.2 | 1.1 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 0.8 | 1.0 | 1.0 | 0.8 |
| 1978 | 1.1 | 0.8 | 0.9 | 0.7 | 0.5 | 0.5 | 0.5 | 0.9 | 0.8 | 1.1 | 1.2 | 1.4 | 0.9 |
| 1979 | 1.0 | 0.7 | 0.9 | 0.5 | 0.6 | 0.7 | 0.4 | 0.7 | 1.0 | 1.0 | 1.6 | 1.4 | 0.9 |
| 1980 | 1.0 | 0.8 | 1.1 | 0.6 | 0.6 | 0.6 | 0.5 | 0.7 | 1.3 | 1.5 | 1.2 | 1.2 | 0.9 |
| 1981 | 0.9 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.4 | 0.4 | 1.0 | 1.3 | 1.3 | 1.0 | 0.8 |
| 1982 | 1.4 | 1.2 | 1.3 | 0.9 | 0.6 | 0.6 | 0.5 | 0.5 | 0.9 | 1.4 | 1.6 | 1.3 | 1.0 |
| 1983 | 1.1 | 1.0 | 0.9 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 1.2 | 1.3 | 1.6 | 1.3 | 0.9 |
| 1984 | 1.3 | 1.0 | 1.0 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 1.2 | 1.5 | 1.9 | 1.5 | 1.0 |
| 1985 | 1.2 | 1.1 | 1.2 | 0.7 | 0.6 | 0.8 | 0.5 | 0.7 | 1.3 | 1.7 | 1.2 | 1.4 | 1.0 |
| 1986 | 1.3 | 0.7 | 1.2 | 0.9 | 0.6 | 0.6 | 0.5 | 0.7 | 1.0 | 1.2 | 1.7 | 1.5 | 1.0 |
| 1987 | 1.1 | 0.9 | 0.9 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.6 | 1.0 | 1.0 | 1.1 | 0.8 |
| MEAN | 1.2 | 1.1 | 1.0 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 1.0 | 1.2 | 1.3 | 1.2 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S76 (48.23N 86.22W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.0 | 2.8 | 3.0 | 2.4 | 1.9 | 1.9 | 1.2 | 1.2 | 1.7 | 3.2 | 2.2 | 3.0 |
| 1957 | 2.9 | 3.0 | 2.7 | 2.2 | 2.6 | 3.0 | 1.9 | 1.6 | 2.1 | 1.7 | 2.6 | 3.5 |
| 1958 | 2.5 | 2.3 | 1.3 | 4.3 | 2.3 | 2.3 | 1.6 | 1.9 | 2.2 | 2.4 | 7.6 | 3.0 |
| 1959 | 4.0 | 5.1 | 2.7 | 2.5 | 3.5 | 1.9 | 1.8 | 1.7 | 2.1 | 2.2 | 3.1 | 3.8 |
| 1960 | 2.5 | 2.3 | 1.9 | 3.0 | 1.2 | 1.6 | 1.6 | 2.7 | 1.8 | 2.7 | 3.0 | 3.7 |
| 1961 | 2.3 | 2.6 | 3.2 | 3.0 | 1.6 | 2.3 | 1.2 | 2.3 | 2.2 | 2.3 | 4.5 | 3.2 |
| 1962 | 2.6 | 2.5 | 2.1 | 1.9 | 1.5 | 1.5 | 1.4 | 1.2 | 2.1 | 3.8 | 3.2 | 4.7 |
| 1963 | 2.7 | 3.5 | 3.1 | 3.1 | 2.5 | 2.7 | 2.6 | 1.2 | 2.5 | 4.1 | 3.2 | 4.1 |
| 1964 | 5.5 | 4.5 | 4.7 | 4.6 | 3.3 | 2.5 | 1.8 | 3.2 | 4.0 | 5.2 | 4.8 | 3.6 |
| 1965 | 3.9 | 3.8 | 2.9 | 3.1 | 2.9 | 3.2 | 1.8 | 2.0 | 3.3 | 3.6 | 4.7 | 3.4 |
| 1966 | 4.3 | 4.6 | 4.7 | 3.9 | 2.9 | 2.8 | 3.2 | 2.7 | 3.3 | 5.2 | 4.7 | 4.5 |
| 1967 | 4.0 | 4.5 | 4.5 | 4.0 | 3.2 | 2.4 | 2.1 | 2.1 | 3.2 | 5.0 | 4.3 | 5.0 |
| 1968 | 4.9 | 4.5 | 4.9 | 3.6 | 3.0 | 2.9 | 3.2 | 2.6 | 3.3 | 4.2 | 4.4 | 4.2 |
| 1969 | 4.1 | 3.8 | 3.8 | 2.9 | 2.3 | 2.6 | 2.0 | 2.6 | 4.0 | 5.3 | 4.5 | 3.2 |
| 1970 | 3.7 | 4.8 | 3.4 | 3.9 | 2.9 | 2.1 | 1.9 | 2.1 | 3.9 | 5.2 | 4.7 | 3.9 |
| 1971 | 3.6 | 4.6 | 3.8 | 2.8 | 3.4 | 2.0 | 2.3 | 2.1 | 4.4 | 4.8 | 5.1 | 4.8 |
| 1972 | 4.1 | 4.7 | 3.1 | 3.0 | 1.6 | 2.1 | 1.8 | 1.9 | 4.4 | 4.2 | 4.7 | 3.2 |
| 1973 | 2.8 | 3.8 | 4.2 | 2.6 | 1.8 | 1.4 | 1.9 | 2.1 | 3.3 | 3.8 | 4.0 | 5.3 |
| 1974 | 4.5 | 3.4 | 3.6 | 2.8 | 2.0 | 1.9 | 1.9 | 2.7 | 3.0 | 3.9 | 3.4 | 3.8 |
| 1975 | 4.1 | 2.7 | 2.3 | 1.7 | 2.7 | 2.1 | 2.1 | 3.5 | 2.7 | 5.8 | 4.8 | 3.6 |
| 1976 | 4.9 | 4.3 | 3.9 | 3.5 | 2.7 | 1.9 | 1.3 | 2.5 | 3.4 | 3.6 | 4.4 | 4.9 |
| 1977 | 4.2 | 3.8 | 3.7 | 1.7 | 1.7 | 1.3 | 2.1 | 2.2 | 5.1 | 4.1 | 6.9 | 2.9 |
| 1978 | 3.1 | 1.9 | 4.0 | 2.6 | 1.8 | 1.5 | 1.7 | 2.7 | 2.8 | 3.9 | 4.3 | 4.3 |
| 1979 | 3.5 | 2.8 | 2.2 | 2.2 | 3.1 | 2.9 | 1.4 | 2.6 | 2.3 | 3.0 | 5.5 | 3.9 |
| 1980 | 5.6 | 3.8 | 4.1 | 1.8 | 1.7 | 1.4 | 1.4 | 2.4 | 6.0 | 4.4 | 3.7 | 4.4 |
| 1981 | 2.6 | 2.9 | 2.9 | 2.3 | 1.3 | 2.4 | 1.1 | 1.1 | 5.3 | 5.2 | 5.3 | 4.8 |
| 1982 | 5.1 | 3.9 | 6.7 | 4.8 | 3.0 | 2.5 | 1.7 | 1.9 | 2.5 | 5.7 | 7.0 | 4.8 |
| 1983 | 4.3 | 6.2 | 2.6 | 2.4 | 1.5 | 1.7 | 2.7 | 2.3 | 3.8 | 4.3 | 5.2 | 3.8 |
| 1984 | 5.4 | 2.9 | 3.7 | 3.9 | 2.1 | 3.2 | 1.5 | 2.8 | 4.3 | 6.0 | 5.9 | 6.4 |
| 1985 | 4.5 | 4.0 | 4.4 | 2.8 | 1.6 | 3.0 | 1.6 | 2.6 | 5.7 | 4.7 | 3.3 | 5.4 |
| 1986 | 5.3 | 1.9 | 4.5 | 2.6 | 1.9 | 1.7 | 1.4 | 2.9 | 3.7 | 5.5 | 6.4 | 4.4 |
| 1987 | 3.5 | 3.7 | 3.5 | 3.3 | 2.9 | 1.3 | 2.0 | 2.1 | 1.9 | 3.2 | 4.0 | 4.3 |

32 YR. STATISTICS FOR WIS STATION S76

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.0 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.4 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 7.6 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 283.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 58112906 |

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 223 | 637 | 12 | . | . | . | . | . | . | . | 872 |
| 0.50-0.99 | . | 596 | 1761 | 5 | 1 | . | . | . | . | . | 2363 |
| 1.00-1.49 | . | . | 1566 | 17 | . | . | . | . | . | . | 1583 |
| 1.50-1.99 | . | . | 110 | 510 | 4 | . | . | . | . | . | 624 |
| 2.00-2.49 | . | . | . | 351 | 3 | 1 | . | . | . | . | 355 |
| 2.50-2.99 | . | . | . | 19 | 41 | 1 | . | . | . | . | 61 |
| 3.00-3.49 | . | . | . | . | 11 | . | . | . | . | . | 11 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 223 | 1233 | 3449 | 902 | 60 | 4 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 5497.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 207 | 702 | 7 | 1 | . | . | . | . | . | . | 917 |
| 0.50-0.99 | . | 1113 | 967 | . | . | . | . | . | . | . | 2080 |
| 1.00-1.49 | . | . | 705 | 12 | . | . | . | . | . | . | 717 |
| 1.50-1.99 | . | . | 127 | 154 | . | . | . | . | . | . | 281 |
| 2.00-2.49 | . | . | . | 111 | . | . | . | . | . | . | 111 |
| 2.50-2.99 | . | . | . | 7 | 12 | . | . | . | . | . | 19 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 207 | 1815 | 1806 | 285 | 12 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 3863.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 425 | 1103 | 17 | 1 | . | . | . | . | . | . | 1546 |
| 0.50-0.99 | . | 2397 | 560 | . | 2 | . | . | . | . | . | 2959 |
| 1.00-1.49 | . | . | 452 | 4 | . | . | . | . | . | . | 456 |
| 1.50-1.99 | . | . | 158 | 17 | 1 | . | 1 | . | . | . | 177 |
| 2.00-2.49 | . | . | 2 | 4 | 2 | . | . | . | . | . | 8 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 425 | 3500 | 1189 | 26 | 5 | 0 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 4816.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 209 | 457 | 20 | . | . | . | . | . | . | . | 686 |
| 0.50-0.99 | . | 1667 | 532 | 2 | 2 | . | . | . | . | . | 2203 |
| 1.00-1.49 | . | . | 355 | 1 | . | 4 | . | . | . | . | 360 |
| 1.50-1.99 | . | . | 131 | 28 | . | . | . | . | . | . | 159 |
| 2.00-2.49 | . | . | . | 17 | 1 | . | . | . | . | . | 18 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 209 | 2124 | 1038 | 48 | 3 | 4 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 3208.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 226 | 283 | 13 | . | . | . | . | . | . | . | 522 |
| 0.50-0.99 | . | 885 | 575 | . | . | . | . | . | . | . | 1460 |
| 1.00-1.49 | . | . | 227 | 1 | 1 | 3 | . | . | . | . | 232 |
| 1.50-1.99 | . | . | 57 | 42 | . | 1 | . | . | . | . | 100 |
| 2.00-2.49 | . | . | . | 11 | . | . | . | 1 | . | . | 12 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 226 | 1168 | 872 | 54 | 1 | 4 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 2181.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 170 | 224 | 4 | . | . | . | . | . | . | . | 398 |
| 0.50-0.99 | . | 490 | 366 | . | . | . | . | . | . | . | 856 |
| 1.00-1.49 | . | . | 129 | . | 1 | . | . | . | . | . | 130 |
| 1.50-1.99 | . | . | 34 | 27 | . | . | . | . | . | . | 61 |
| 2.00-2.49 | . | . | . | 7 | . | 1 | . | . | . | . | 8 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 170 | 714 | 533 | 34 | 1 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 1363.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 203 | 358 | 45 | 12 | 4 | . | . | . | . | . | 622 |
| 0.50-0.99 | . | 416 | 442 | 21 | 55 | 12 | . | . | . | . | 946 |
| 1.00-1.49 | . | . | 217 | 4 | 7 | 24 | 1 | . | . | . | 253 |
| 1.50-1.99 | . | . | 29 | 23 | 5 | 11 | 3 | . | . | . | 71 |
| 2.00-2.49 | . | . | . | 18 | 3 | 4 | . | 1 | . | . | 26 |
| 2.50-2.99 | . | . | . | 2 | . | 2 | 2 | 1 | . | . | 7 |
| 3.00-3.49 | . | . | . | . | 1 | 1 | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 203 | 774 | 733 | 80 | 75 | 54 | 6 | 2 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 1812.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 268 | 767 | 484 | 236 | 43 | . | . | . | . | . | 1798 |
| 0.50-0.99 | . | 644 | 1491 | 356 | 270 | 90 | . | . | . | . | 2851 |
| 1.00-1.49 | . | . | 548 | 155 | 86 | 100 | 6 | . | . | . | 895 |
| 1.50-1.99 | . | . | 74 | 189 | 49 | 39 | 9 | . | . | . | 360 |
| 2.00-2.49 | . | . | . | 99 | 50 | 23 | 9 | 4 | . | . | 185 |
| 2.50-2.99 | . | . | . | 17 | 63 | 22 | 4 | 6 | . | . | 112 |
| 3.00-3.49 | . | . | . | . | 13 | 39 | 6 | 4 | . | . | 62 |
| 3.50-3.99 | . | . | . | . | 4 | 21 | . | . | . | . | 25 |
| 4.00-4.49 | . | . | . | . | . | 16 | 6 | 1 | . | . | 23 |
| 4.50-4.99 | . | . | . | . | . | . | 9 | 2 | . | . | 11 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 7 | . | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 268 | 1411 | 2597 | 1052 | 578 | 350 | 51 | 27 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 5941.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 330 | 1023 | 689 | 4 | 1 | . | . | . | . | . | 2047 |
| 0.50-0.99 | . | 672 | 3114 | 1107 | 35 | 3 | . | . | . | . | 4931 |
| 1.00-1.49 | . | . | 688 | 1151 | 536 | 24 | . | . | . | . | 2399 |
| 1.50-1.99 | . | . | 64 | 356 | 405 | 152 | . | . | . | . | 977 |
| 2.00-2.49 | . | . | . | 149 | 121 | 149 | 5 | . | . | . | 424 |
| 2.50-2.99 | . | . | . | 6 | 136 | 69 | 33 | 4 | . | . | 248 |
| 3.00-3.49 | . | . | . | . | 16 | 108 | 12 | 13 | . | . | 149 |
| 3.50-3.99 | . | . | . | . | . | 57 | 25 | 6 | . | . | 88 |
| 4.00-4.49 | . | . | . | . | . | 6 | 38 | 4 | 2 | . | 50 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 20 | 2 | . | 29 |
| 5.00-5.49 | . | . | . | . | . | . | . | 8 | 3 | . | 11 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 330 | 1695 | 4555 | 2773 | 1250 | 568 | 120 | 56 | 13 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 10642.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 293 | 924 | 349 | 11 | . | . | . | . | . | . | 1577 |
| 0.50-0.99 | . | 632 | 2319 | 536 | 24 | . | . | . | . | . | 3511 |
| 1.00-1.49 | . | . | 634 | 891 | 243 | 18 | . | . | . | . | 1786 |
| 1.50-1.99 | . | . | 54 | 350 | 335 | 111 | 3 | . | . | . | 853 |
| 2.00-2.49 | . | . | . | 135 | 116 | 164 | 9 | . | . | . | 424 |
| 2.50-2.99 | . | . | . | 2 | 139 | 78 | 38 | 4 | . | . | 261 |
| 3.00-3.49 | . | . | . | . | 13 | 112 | 24 | 10 | . | . | 159 |
| 3.50-3.99 | . | . | . | . | . | 72 | 35 | 11 | . | . | 118 |
| 4.00-4.49 | . | . | . | . | . | 4 | 49 | 14 | 2 | . | 69 |
| 4.50-4.99 | . | . | . | . | . | . | 9 | 26 | 1 | . | 36 |
| 5.00-5.49 | . | . | . | . | . | . | . | 14 | 1 | . | 15 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 4 | . | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 293 | 1556 | 3356 | 1925 | 870 | 559 | 167 | 81 | 12 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.8 NO. OF CASES= 8266.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 291 | 1010 | 315 | 27 | 1 | . | . | . | . | . | 1644 |
| 0.50-0.99 | . | 650 | 2451 | 453 | 84 | 7 | . | . | . | . | 3645 |
| 1.00-1.49 | . | 1 | 747 | 811 | 194 | 68 | . | . | . | . | 1821 |
| 1.50-1.99 | . | . | 51 | 340 | 270 | 73 | 6 | . | . | . | 740 |
| 2.00-2.49 | . | . | . | 112 | 106 | 99 | 2 | 1 | . | . | 320 |
| 2.50-2.99 | . | . | . | 2 | 109 | 66 | 18 | 1 | . | . | 196 |
| 3.00-3.49 | . | . | . | . | 9 | 98 | 21 | 6 | 2 | . | 136 |
| 3.50-3.99 | . | . | . | . | . | 57 | 24 | 3 | 2 | . | 86 |
| 4.00-4.49 | . | . | . | . | . | 1 | 38 | 7 | 1 | . | 47 |
| 4.50-4.99 | . | . | . | . | . | . | 10 | 10 | . | . | 20 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 11 | 2 | . | 14 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | . | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 291 | 1661 | 3564 | 1745 | 773 | 469 | 120 | 43 | 11 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 8132.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 252 | 1289 | 371 | 67 | 3 | . | . | . | . | . | 1982 |
| 0.50-0.99 | . | 819 | 3279 | 387 | 179 | 71 | 16 | 1 | . | . | 4735 |
| 1.00-1.49 | . | . | 901 | 1124 | 124 | 232 | 16 | . | . | . | 2398 |
| 1.50-1.99 | . | . | 45 | 524 | 308 | 94 | 71 | 27 | . | . | 1069 |
| 2.00-2.49 | . | . | . | 127 | 221 | 140 | 21 | 22 | 3 | . | 534 |
| 2.50-2.99 | . | . | . | 1 | 159 | 117 | 13 | 11 | 6 | 1 | 308 |
| 3.00-3.49 | . | . | . | . | 10 | 152 | 25 | 7 | 9 | . | 203 |
| 3.50-3.99 | . | . | . | . | . | 62 | 31 | 6 | 1 | . | 100 |
| 4.00-4.49 | . | . | . | . | . | . | 54 | 23 | . | . | 77 |
| 4.50-4.99 | . | . | . | . | . | . | 10 | 19 | 6 | . | 35 |
| 5.00-5.49 | . | . | . | . | . | . | . | 21 | 6 | . | 27 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 5 | . | 8 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 6 | . | 6 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | | | | | | | | | | 1 | 1 |
| TOTAL | 252 | 2108 | 4596 | 2230 | 1004 | 868 | 241 | 140 | 44 | 2 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.8 NO. OF CASES= 10758.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 255 | 1276 | 132 | 2 | | | . | . | . | . | 1665 |
| 0.50-0.99 | . | 853 | 3705 | 191 | 28 | 28 | . | . | . | . | 4805 |
| 1.00-1.49 | . | . | 1001 | 1569 | 47 | 67 | 9 | 3 | . | . | 2696 |
| 1.50-1.99 | . | . | 56 | 658 | 445 | 26 | 17 | 21 | 2 | . | 1225 |
| 2.00-2.49 | . | . | 1 | 150 | 308 | 159 | 2 | 19 | 6 | . | 645 |
| 2.50-2.99 | . | . | . | 3 | 187 | 146 | 8 | 2 | 6 | 1 | 353 |
| 3.00-3.49 | . | . | . | . | 12 | 149 | 24 | 2 | . | . | 187 |
| 3.50-3.99 | . | . | . | . | . | 56 | 35 | 4 | . | 2 | 97 |
| 4.00-4.49 | . | . | . | . | . | 2 | 38 | 2 | 1 | . | 43 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 12 | . | . | 16 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 7 | 1 | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 3 | 1 | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 2 | 1 | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 255 | 2129 | 4895 | 2573 | 1027 | 633 | 138 | 74 | 22 | 5 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.7 NO. OF CASES= 11009.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 145 | 895 | 65 | | | . | . | . | . | . | 1105 |
| 0.50-0.99 | . | 635 | 2637 | 126 | 2 | . | . | . | . | . | 3400 |
| 1.00-1.49 | . | . | 1042 | 728 | 20 | 10 | . | 1 | . | . | 1801 |
| 1.50-1.99 | . | . | 66 | 625 | 158 | 4 | 2 | . | . | . | 855 |
| 2.00-2.49 | . | . | . | 209 | 148 | 27 | 1 | 3 | . | . | 388 |
| 2.50-2.99 | . | . | . | 9 | 156 | 42 | 1 | . | . | . | 208 |
| 3.00-3.49 | . | . | . | . | 22 | 55 | 1 | . | . | . | 78 |
| 3.50-3.99 | . | . | . | . | 1 | 29 | 11 | . | . | . | 41 |
| 4.00-4.49 | . | . | . | . | . | 1 | 10 | 1 | . | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 145 | 1530 | 3810 | 1697 | 507 | 168 | 27 | 6 | 2 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.5 NO. OF CASES= 7392.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 110 | 480 | 16 | | . | . | . | . | . | . | 606 |
| 0.50-0.99 | . | 356 | 1869 | 23 | . | . | . | . | . | . | 2248 |
| 1.00-1.49 | . | . | 901 | 265 | 4 | . | . | . | . | . | 1170 |
| 1.50-1.99 | . | . | 43 | 521 | 33 | . | . | . | . | . | 597 |
| 2.00-2.49 | . | . | . | 237 | 72 | 6 | . | . | . | . | 315 |
| 2.50-2.99 | . | . | . | 3 | 122 | 5 | . | . | . | . | 130 |
| 3.00-3.49 | . | . | . | . | 27 | 3 | . | . | . | . | 30 |
| 3.50-3.99 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 110 | 836 | 2829 | 1049 | 258 | 18 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 4777.

STATION S77 48.38N 86.43W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

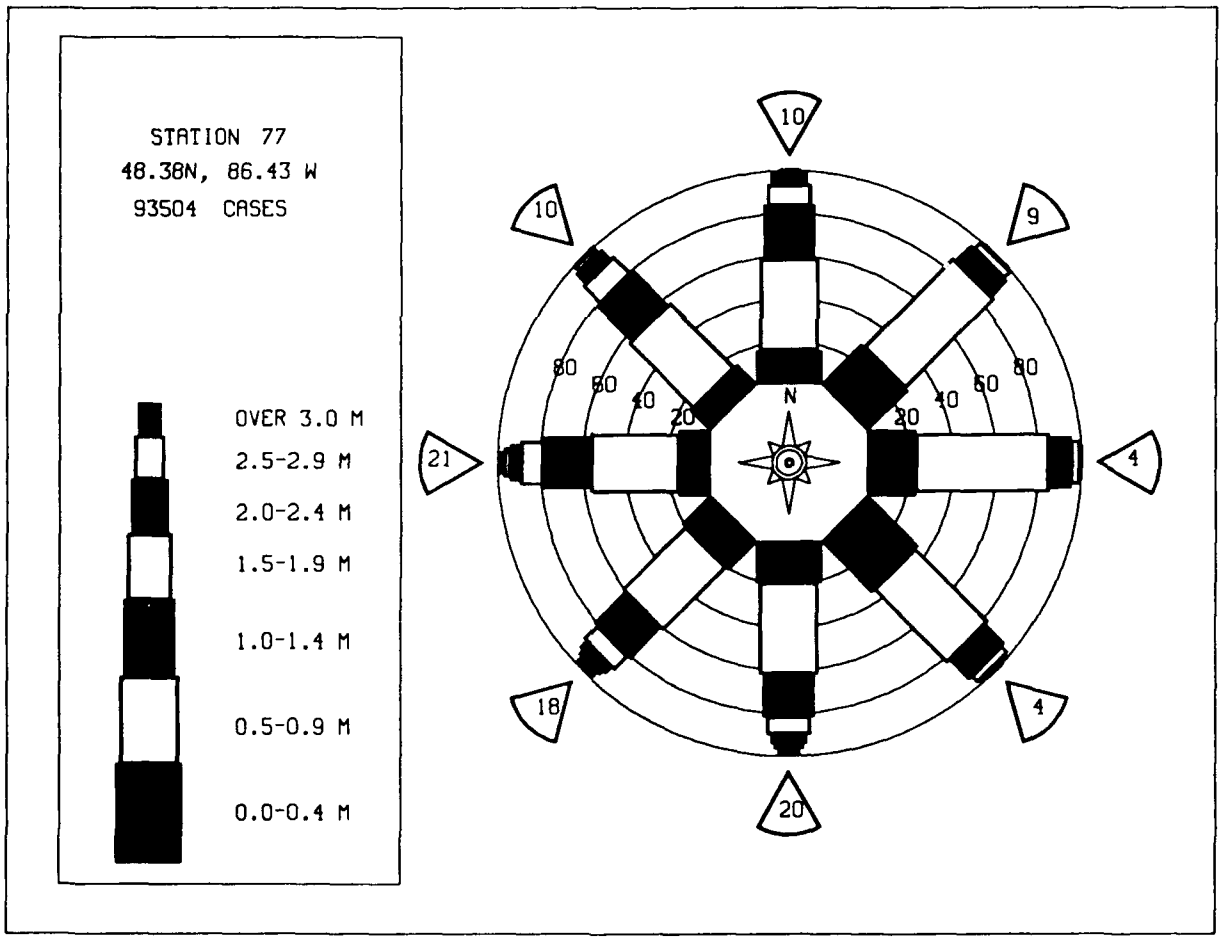
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 116 | 368 | 2 | . | . | . | . | . | . | . | 486 |
| 0.50-0.99 | . | 306 | 1436 | . | . | . | . | . | . | . | 1742 |
| 1.00-1.49 | . | . | 928 | 85 | . | . | . | . | . | . | 1013 |
| 1.50-1.99 | . | . | 55 | 422 | 3 | . | . | . | . | . | 480 |
| 2.00-2.49 | . | . | . | 210 | 54 | . | . | . | . | . | 264 |
| 2.50-2.99 | . | . | . | 10 | 91 | 1 | . | . | . | . | 102 |
| 3.00-3.49 | . | . | . | . | 8 | 6 | . | . | . | . | 14 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 116 | 674 | 2421 | 727 | 156 | 11 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 3847.

STATION S77 48.38N 86.43W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 373 | 1180 | 254 | 36 | 5 | . | . | . | . | . | 1848 |
| 0.50-0.99 | . | 1313 | 2751 | 321 | 68 | 21 | . | . | . | . | 4474 |
| 1.00-1.49 | . | . | 1104 | 682 | 126 | 55 | 3 | . | . | . | 1970 |
| 1.50-1.99 | . | . | 116 | 479 | 202 | 51 | 11 | 4 | . | . | 863 |
| 2.00-2.49 | . | . | . | 195 | 121 | 77 | 5 | 5 | . | . | 403 |
| 2.50-2.99 | . | . | . | 8 | 122 | 55 | 11 | 3 | 1 | . | 200 |
| 3.00-3.49 | . | . | . | . | 14 | 72 | 11 | 4 | 1 | . | 102 |
| 3.50-3.99 | . | . | . | . | . | 36 | 16 | 3 | . | . | 55 |
| 4.00-4.49 | . | . | . | . | . | 3 | 23 | 5 | . | . | 31 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 9 | . | . | 14 |
| 5.00-5.49 | . | . | . | . | . | . | . | 7 | 1 | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 373 | 2493 | 4225 | 1721 | 658 | 370 | 85 | 41 | 5 | 0 | |

MEAN HS(M)= 1.0 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S77 (48.38N 86.43W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MONTH | | | | | | | |
| 1956 | 0.6 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.6 | 1.0 | 0.8 | 0.8 | 0.7 |
| 1957 | 1.0 | 1.0 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.6 | 0.8 | 0.7 | 1.0 | 1.0 | 0.8 |
| 1958 | 0.7 | 0.9 | 0.5 | 0.7 | 0.8 | 0.7 | 0.5 | 0.6 | 0.7 | 0.7 | 1.3 | 1.0 | 0.8 |
| 1959 | 0.9 | 1.0 | 0.8 | 0.7 | 0.8 | 0.5 | 0.7 | 0.4 | 0.7 | 0.7 | 1.0 | 0.8 | 0.8 |
| 1960 | 0.8 | 0.8 | 0.7 | 0.7 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.8 | 1.0 | 1.0 | 0.7 |
| 1961 | 0.8 | 0.7 | 0.8 | 0.6 | 0.7 | 0.6 | 0.4 | 0.6 | 0.8 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1962 | 1.1 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 1.1 | 1.2 | 0.7 |
| 1963 | 1.1 | 1.2 | 1.2 | 1.0 | 0.9 | 0.8 | 0.8 | 0.7 | 0.9 | 1.2 | 1.1 | 1.3 | 1.0 |
| 1964 | 1.4 | 1.4 | 1.3 | 1.1 | 1.0 | 0.9 | 0.7 | 1.0 | 1.1 | 1.3 | 1.1 | 1.2 | 1.1 |
| 1965 | 1.5 | 1.6 | 1.0 | 0.9 | 1.0 | 1.0 | 0.6 | 0.8 | 1.0 | 1.2 | 1.4 | 1.3 | 1.1 |
| 1966 | 1.2 | 1.6 | 1.5 | 1.0 | 1.0 | 0.9 | 0.8 | 0.8 | 1.3 | 1.5 | 1.5 | 1.4 | 1.2 |
| 1967 | 1.4 | 1.6 | 1.7 | 1.1 | 1.1 | 0.9 | 0.8 | 0.9 | 1.3 | 1.7 | 1.6 | 1.7 | 1.3 |
| 1968 | 1.4 | 1.6 | 1.7 | 1.3 | 1.0 | 0.8 | 1.0 | 0.9 | 1.0 | 1.5 | 1.4 | 1.4 | 1.2 |
| 1969 | 1.5 | 1.2 | 1.4 | 1.0 | 0.9 | 0.9 | 0.7 | 1.0 | 1.1 | 1.5 | 1.4 | 1.1 | 1.1 |
| 1970 | 1.2 | 1.5 | 1.3 | 1.1 | 0.9 | 0.8 | 0.7 | 0.7 | 1.2 | 1.5 | 1.4 | 1.1 | 1.1 |
| 1971 | 1.3 | 1.3 | 1.3 | 1.1 | 0.9 | 0.7 | 0.8 | 0.7 | 1.1 | 1.4 | 1.4 | 1.2 | 1.1 |
| 1972 | 1.5 | 1.2 | 1.2 | 0.9 | 0.6 | 0.7 | 0.6 | 0.6 | 1.1 | 1.4 | 1.2 | 1.0 | 1.0 |
| 1973 | 1.3 | 1.3 | 1.1 | 1.0 | 0.7 | 0.6 | 0.7 | 0.6 | 1.1 | 1.2 | 1.4 | 1.0 | 1.0 |
| 1974 | 1.1 | 1.0 | 1.2 | 0.9 | 0.8 | 0.8 | 0.7 | 0.9 | 1.1 | 1.4 | 1.4 | 1.1 | 1.0 |
| 1975 | 1.1 | 0.9 | 1.0 | 0.7 | 0.6 | 0.7 | 0.7 | 0.9 | 1.0 | 1.5 | 1.4 | 1.3 | 1.0 |
| 1976 | 1.3 | 1.3 | 1.3 | 0.8 | 0.6 | 0.6 | 0.4 | 0.6 | 0.8 | 0.8 | 1.2 | 1.2 | 0.9 |
| 1977 | 1.2 | 1.1 | 0.9 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 1.0 | 1.0 | 0.8 |
| 1978 | 1.0 | 0.8 | 0.9 | 0.7 | 0.5 | 0.5 | 0.5 | 0.9 | 0.7 | 1.1 | 1.2 | 1.3 | 0.8 |
| 1979 | 0.9 | 0.7 | 0.9 | 0.5 | 0.7 | 0.8 | 0.5 | 0.8 | 1.1 | 1.3 | 1.8 | 1.4 | 0.9 |
| 1980 | 1.0 | 0.8 | 1.0 | 0.5 | 0.7 | 0.6 | 0.5 | 0.8 | 1.5 | 1.7 | 1.3 | 1.2 | 1.0 |
| 1981 | 0.9 | 1.0 | 0.8 | 0.7 | 0.6 | 0.7 | 0.5 | 0.5 | 1.1 | 1.6 | 1.5 | 1.0 | 0.9 |
| 1982 | 1.4 | 1.1 | 1.3 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 1.0 | 1.6 | 1.8 | 1.3 | 1.1 |
| 1983 | 1.1 | 1.0 | 1.0 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 | 1.3 | 1.5 | 1.7 | 1.3 | 1.0 |
| 1984 | 1.3 | 1.0 | 1.0 | 0.7 | 0.7 | 0.7 | 0.5 | 0.6 | 1.4 | 1.8 | 2.1 | 1.4 | 1.1 |
| 1985 | 1.2 | 1.0 | 1.2 | 0.7 | 0.7 | 0.9 | 0.6 | 0.8 | 1.5 | 2.0 | 1.4 | 1.3 | 1.1 |
| 1986 | 1.3 | 0.7 | 1.2 | 0.9 | 0.7 | 0.7 | 0.5 | 0.8 | 1.1 | 1.3 | 1.8 | 1.4 | 1.0 |
| 1987 | 1.1 | 0.9 | 0.9 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.6 | 0.9 | 1.1 | 1.1 | 0.8 |
| MEAN | 1.1 | 1.1 | 1.1 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 1.0 | 1.3 | 1.3 | 1.2 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S77 (48.38N 86.43W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MONTH | | | | | | |
| 1956 | 1.9 | 2.8 | 3.0 | 2.2 | 1.9 | 1.9 | 1.2 | 1.2 | 1.7 | 3.2 | 2.1 | 2.7 |
| 1957 | 2.9 | 3.0 | 2.8 | 2.1 | 2.4 | 3.0 | 1.7 | 1.6 | 2.0 | 1.7 | 2.4 | 3.2 |
| 1958 | 2.5 | 2.1 | 1.5 | 4.2 | 2.3 | 2.3 | 1.6 | 1.9 | 2.0 | 2.4 | 7.4 | 2.8 |
| 1959 | 4.0 | 4.8 | 2.8 | 2.3 | 3.5 | 1.9 | 1.8 | 1.7 | 2.2 | 2.1 | 2.7 | 3.5 |
| 1960 | 2.1 | 2.2 | 1.9 | 2.7 | 1.3 | 1.5 | 1.7 | 2.7 | 1.8 | 2.3 | 2.8 | 3.7 |
| 1961 | 2.3 | 2.4 | 2.9 | 2.3 | 1.8 | 2.3 | 1.2 | 2.3 | 2.0 | 2.3 | 4.3 | 2.7 |
| 1962 | 2.5 | 2.5 | 2.0 | 1.8 | 1.5 | 1.5 | 1.3 | 1.2 | 1.9 | 3.7 | 3.2 | 4.8 |
| 1963 | 2.7 | 3.5 | 3.1 | 2.7 | 2.6 | 2.8 | 2.6 | 1.2 | 2.7 | 4.3 | 3.0 | 3.9 |
| 1964 | 4.9 | 4.3 | 4.7 | 4.5 | 3.5 | 2.4 | 1.7 | 3.2 | 4.1 | 5.7 | 4.8 | 3.6 |
| 1965 | 3.9 | 3.8 | 2.7 | 3.1 | 2.9 | 3.2 | 1.8 | 2.0 | 3.3 | 3.7 | 4.7 | 3.2 |
| 1966 | 3.6 | 4.7 | 4.6 | 4.1 | 2.9 | 2.7 | 3.1 | 2.7 | 3.0 | 5.3 | 4.9 | 4.6 |
| 1967 | 4.0 | 4.9 | 4.7 | 3.6 | 3.5 | 2.5 | 1.8 | 2.1 | 3.4 | 5.5 | 4.0 | 4.7 |
| 1968 | 4.9 | 4.3 | 4.9 | 3.6 | 3.0 | 2.7 | 3.5 | 2.5 | 3.2 | 4.4 | 4.6 | 4.7 |
| 1969 | 4.4 | 3.9 | 3.7 | 2.8 | 2.7 | 2.7 | 1.7 | 2.7 | 4.0 | 5.1 | 4.9 | 2.8 |
| 1970 | 3.7 | 4.0 | 3.4 | 3.8 | 3.0 | 2.3 | 2.1 | 2.1 | 4.1 | 5.2 | 5.0 | 4.0 |
| 1971 | 3.5 | 4.7 | 3.8 | 2.8 | 3.1 | 1.7 | 2.0 | 2.1 | 4.7 | 5.2 | 5.4 | 4.8 |
| 1972 | 3.9 | 4.7 | 3.0 | 2.8 | 1.6 | 2.1 | 1.6 | 1.9 | 4.8 | 4.3 | 5.1 | 3.1 |
| 1973 | 2.8 | 3.6 | 4.4 | 2.6 | 1.7 | 1.4 | 1.9 | 2.0 | 3.5 | 4.0 | 4.2 | 5.3 |
| 1974 | 4.5 | 3.1 | 3.4 | 2.7 | 2.0 | 2.0 | 1.6 | 2.7 | 3.0 | 4.0 | 3.6 | 4.0 |
| 1975 | 3.9 | 2.3 | 2.4 | 1.6 | 2.7 | 2.4 | 2.1 | 3.5 | 2.9 | 6.4 | 5.2 | 3.4 |
| 1976 | 4.9 | 4.2 | 4.1 | 3.5 | 2.3 | 2.1 | 1.3 | 2.3 | 3.2 | 3.4 | 4.4 | 5.0 |
| 1977 | 4.2 | 3.9 | 3.4 | 1.7 | 1.8 | 1.4 | 2.1 | 2.1 | 5.2 | 3.7 | 6.7 | 3.2 |
| 1978 | 2.8 | 1.9 | 3.8 | 2.8 | 1.6 | 1.5 | 1.5 | 2.3 | 2.7 | 4.0 | 4.0 | 4.1 |
| 1979 | 3.2 | 2.3 | 2.7 | 2.0 | 3.7 | 3.5 | 1.4 | 2.7 | 2.7 | 3.8 | 5.6 | 3.9 |
| 1980 | 5.4 | 3.6 | 3.6 | 1.8 | 2.3 | 1.9 | 1.9 | 3.3 | 6.0 | 5.3 | 4.5 | 4.3 |
| 1981 | 2.5 | 2.9 | 3.0 | 2.4 | 1.4 | 3.2 | 1.1 | 1.2 | 5.6 | 5.5 | 5.3 | 4.3 |
| 1982 | 4.8 | 3.9 | 7.0 | 5.0 | 3.6 | 3.1 | 2.0 | 2.5 | 3.1 | 6.0 | 6.7 | 4.7 |
| 1983 | 4.2 | 5.6 | 2.8 | 2.4 | 1.7 | 2.1 | 3.1 | 2.8 | 4.1 | 5.4 | 5.4 | 3.9 |
| 1984 | 5.2 | 2.6 | 3.8 | 4.0 | 2.3 | 3.4 | 1.9 | 3.0 | 5.4 | 6.4 | 6.9 | 5.7 |
| 1985 | 4.4 | 3.9 | 4.3 | 2.5 | 2.1 | 3.2 | 2.1 | 2.7 | 6.0 | 5.6 | 3.7 | 4.6 |
| 1986 | 4.3 | 1.9 | 4.3 | 2.7 | 2.4 | 1.6 | 1.2 | 3.0 | 4.1 | 6.3 | 6.3 | 4.1 |
| 1987 | 3.1 | 3.7 | 3.3 | 3.1 | 2.9 | 1.3 | 1.9 | 1.8 | 1.9 | 3.2 | 3.9 | 4.1 |

32 YR. STATISTICS FOR WIS STATION S77

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 1.0 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.4 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 7.4 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 280.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 58112906 |

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 336 | 350 | 7 | . | . | . | . | . | . | . | 693 |
| 0.50-0.99 | . | 1627 | 1456 | . | . | . | . | . | . | . | 3083 |
| 1.00-1.49 | . | . | 961 | 3 | . | . | . | . | . | . | 964 |
| 1.50-1.99 | . | . | 295 | 245 | . | . | . | . | . | . | 540 |
| 2.00-2.49 | . | . | . | 90 | . | . | . | . | . | . | 90 |
| 2.50-2.99 | . | . | . | 7 | 2 | . | . | . | . | . | 9 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 336 | 1977 | 2719 | 345 | 3 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 5037.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 281 | 656 | 5 | . | . | . | . | . | . | . | 942 |
| 0.50-0.99 | . | 1553 | 882 | 1 | . | . | . | . | . | . | 2436 |
| 1.00-1.49 | . | . | 653 | . | . | . | . | . | . | . | 653 |
| 1.50-1.99 | . | . | 225 | 154 | . | . | . | . | . | . | 379 |
| 2.00-2.49 | . | . | . | 59 | . | . | . | . | . | . | 59 |
| 2.50-2.99 | . | . | . | 4 | 1 | . | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 281 | 2209 | 1765 | 218 | 2 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 4189.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 507 | 1006 | 11 | . | 1 | . | . | . | . | . | 1524 |
| 0.50-0.99 | . | 2186 | 433 | . | . | . | . | . | . | . | 2620 |
| 1.00-1.49 | . | . | 311 | . | . | . | . | . | . | . | 311 |
| 1.50-1.99 | . | . | 128 | 16 | 2 | . | . | . | . | . | 146 |
| 2.00-2.49 | . | . | 1 | 5 | . | . | . | . | . | . | 6 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 507 | 3192 | 884 | 21 | 3 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 4311.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 285 | 749 | 7 | . | . | . | . | . | . | . | 1041 |
| 0.50-0.99 | . | 1688 | 253 | 2 | . | 1 | . | . | . | . | 1944 |
| 1.00-1.49 | . | . | 242 | 1 | . | . | . | . | . | . | 243 |
| 1.50-1.99 | . | . | 94 | 2 | . | . | . | . | . | . | 96 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 285 | 2437 | 596 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.1 NO. OF CASES= 3112.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 301 | 744 | 10 | 1 | . | . | . | . | . | . | 1056 |
| 0.50-0.99 | . | 727 | 44 | 1 | . | . | . | . | . | . | 772 |
| 1.00-1.49 | . | . | 116 | . | . | . | . | . | . | . | 116 |
| 1.50-1.99 | . | . | 14 | . | . | . | . | . | . | . | 14 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 301 | 1471 | 184 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 2.9 NO. OF CASES= 1836.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 192 | 437 | 4 | . | . | . | . | . | . | . | 633 |
| 0.50-0.99 | . | 426 | 65 | . | . | . | . | . | . | . | 491 |
| 1.00-1.49 | . | . | 55 | 1 | . | . | . | . | . | . | 56 |
| 1.50-1.99 | . | . | 18 | 18 | . | . | . | . | . | . | 36 |
| 2.00-2.49 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 192 | 863 | 142 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.0 NO. OF CASES= 1144.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 242 | 398 | 25 | 16 | 5 | . | . | . | . | . | 686 |
| 0.50-0.99 | . | 552 | 254 | 5 | 22 | 22 | . | . | . | . | 855 |
| 1.00-1.49 | . | . | 148 | . | . | 9 | 3 | . | . | . | 160 |
| 1.50-1.99 | . | . | 24 | 23 | . | 2 | 3 | 1 | . | . | 53 |
| 2.00-2.49 | . | . | . | 16 | . | 1 | . | . | . | . | 17 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 242 | 950 | 451 | 62 | 27 | 34 | 6 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 1666.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 331 | 753 | 409 | 271 | 90 | 1 | . | . | . | . | 1855 |
| 0.50-0.99 | . | 773 | 1224 | 182 | 201 | 146 | 3 | . | . | . | 2529 |
| 1.00-1.49 | . | . | 503 | 102 | 25 | 67 | 12 | . | . | . | 709 |
| 1.50-1.99 | . | . | 63 | 152 | 23 | 25 | 5 | 2 | . | . | 270 |
| 2.00-2.49 | . | . | . | 105 | 22 | 14 | 3 | 7 | . | . | 151 |
| 2.50-2.99 | . | . | . | 19 | 53 | 7 | 6 | 5 | . | . | 90 |
| 3.00-3.49 | . | . | . | . | 24 | 14 | 1 | . | . | . | 39 |
| 3.50-3.99 | . | . | . | . | . | 28 | . | . | . | . | 28 |
| 4.00-4.49 | . | . | . | . | . | 9 | 8 | . | . | . | 17 |
| 4.50-4.99 | . | . | . | . | . | 2 | 13 | 1 | . | . | 16 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | . | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 331 | 1526 | 2199 | 831 | 438 | 313 | 51 | 23 | 1 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.3 NO. OF CASES= 5363.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 382 | 1106 | 945 | 28 | . | . | . | . | . | . | 2461 |
| 0.50-0.99 | . | 818 | 3093 | 1392 | 94 | 12 | . | . | . | . | 5409 |
| 1.00-1.49 | . | . | 731 | 1012 | 625 | 57 | 1 | . | . | . | 2426 |
| 1.50-1.99 | . | . | 63 | 359 | 360 | 185 | 1 | 1 | . | . | 969 |
| 2.00-2.49 | . | . | . | 141 | 110 | 136 | 17 | 3 | . | . | 407 |
| 2.50-2.99 | . | . | . | 6 | 150 | 60 | 25 | 10 | . | . | 251 |
| 3.00-3.49 | . | . | . | . | 20 | 97 | 18 | 10 | 2 | . | 147 |
| 3.50-3.99 | . | . | . | . | . | 66 | 21 | 7 | . | . | 94 |
| 4.00-4.49 | . | . | . | . | . | 6 | 37 | 10 | 1 | . | 54 |
| 4.50-4.99 | . | . | . | . | . | . | 9 | 17 | 2 | . | 28 |
| 5.00-5.49 | . | . | . | . | . | 1 | . | 12 | 3 | . | 16 |
| 5.50-5.99 | . | . | . | . | . | . | . | 9 | 2 | . | 11 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| TOTAL | 382 | 1924 | 4832 | 2938 | 1359 | 620 | 129 | 79 | 15 | 1 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.8 NO. OF CASES= 11502.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 360 | 1024 | 443 | 22 | 1 | . | . | . | . | . | 1850 |
| 0.50-0.99 | . | 728 | 2378 | 606 | 48 | 4 | . | . | . | . | 3764 |
| 1.00-1.49 | . | . | 687 | 843 | 301 | 33 | . | . | . | . | 1864 |
| 1.50-1.99 | . | . | 66 | 355 | 334 | 129 | 4 | . | . | . | 888 |
| 2.00-2.49 | . | . | . | 134 | 121 | 172 | 19 | 1 | . | . | 447 |
| 2.50-2.99 | . | . | . | 2 | 146 | 85 | 41 | 3 | . | . | 277 |
| 3.00-3.49 | . | . | . | . | 16 | 124 | 28 | 12 | . | . | 180 |
| 3.50-3.99 | . | . | . | . | . | 71 | 38 | 12 | 2 | . | 123 |
| 4.00-4.49 | . | . | . | . | . | 5 | 56 | 14 | 3 | . | 78 |
| 4.50-4.99 | . | . | . | . | . | . | 13 | 24 | 2 | . | 39 |
| 5.00-5.49 | . | . | . | . | . | . | . | 11 | 5 | . | 16 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 6 | . | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 360 | 1752 | 3574 | 1962 | 967 | 623 | 199 | 80 | 23 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.8 NO. OF CASES= 8941.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 336 | 1104 | 517 | 86 | 3 | 1 | . | . | . | . | 2047 |
| 0.50-0.99 | . | 816 | 2639 | 536 | 171 | 40 | 2 | . | . | . | 4204 |
| 1.00-1.49 | . | . | 841 | 844 | 220 | 145 | 12 | . | . | . | 2062 |
| 1.50-1.99 | . | . | 48 | 375 | 286 | 101 | 16 | 2 | . | . | 828 |
| 2.00-2.49 | . | . | . | 118 | 118 | 117 | 6 | 4 | . | . | 363 |
| 2.50-2.99 | . | . | . | 2 | 108 | 75 | 22 | 5 | 1 | . | 213 |
| 3.00-3.49 | . | . | . | . | 9 | 89 | 25 | 10 | 4 | . | 137 |
| 3.50-3.99 | . | . | . | . | . | 59 | 37 | 7 | 2 | . | 105 |
| 4.00-4.49 | . | . | . | . | . | 3 | 33 | 6 | 1 | . | 43 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 20 | 1 | . | 29 |
| 5.00-5.49 | . | . | . | . | . | . | . | 11 | 4 | . | 15 |
| 5.50-5.99 | . | . | . | . | . | . | . | 7 | 4 | . | 11 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 336 | 1920 | 4045 | 1961 | 915 | 630 | 161 | 72 | 20 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.7 NO. OF CASES= 9429.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 319 | 1444 | 484 | 67 | 23 | 1 | . | . | . | . | 2338 |
| 0.50-0.99 | . | 973 | 3597 | 402 | 150 | 146 | 5 | . | . | . | 5273 |
| 1.00-1.49 | . | . | 999 | 1191 | 130 | 192 | 84 | 11 | 1 | . | 2608 |
| 1.50-1.99 | . | . | 55 | 526 | 325 | 59 | 59 | 53 | 5 | . | 1082 |
| 2.00-2.49 | . | . | . | 136 | 181 | 135 | 18 | 23 | 4 | 1 | 498 |
| 2.50-2.99 | . | . | . | 1 | 185 | 115 | 12 | 8 | 9 | . | 330 |
| 3.00-3.49 | . | . | . | . | 10 | 154 | 22 | 7 | 1 | . | 194 |
| 3.50-3.99 | . | . | . | . | . | 63 | 31 | 8 | 2 | 1 | 105 |
| 4.00-4.49 | . | . | . | . | . | 1 | 60 | 23 | 1 | . | 85 |
| 4.50-4.99 | . | . | . | . | . | . | 11 | 25 | 5 | 1 | 42 |
| 5.00-5.49 | . | . | . | . | . | . | . | 21 | 8 | . | 29 |
| 5.50-5.99 | . | . | . | . | . | . | . | 7 | 11 | . | 18 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 6 | 1 | 7 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 5 | 1 | 6 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| TOTAL | 319 | 2417 | 5135 | 2323 | 1004 | 866 | 302 | 186 | 59 | 7 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.8 NO. OF CASES= 11825.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 280 | 1235 | 174 | . | 2 | . | . | . | . | . | 1691 |
| 0.50-0.99 | . | 1023 | 3703 | 159 | 16 | 23 | . | . | . | . | 4924 |
| 1.00-1.49 | . | . | 1328 | 1332 | 56 | 22 | 14 | 5 | . | . | 2757 |
| 1.50-1.99 | . | . | 97 | 700 | 314 | 31 | 10 | 17 | 1 | . | 1170 |
| 2.00-2.49 | . | . | 1 | 197 | 241 | 126 | 6 | 11 | 6 | 1 | 589 |
| 2.50-2.99 | . | . | . | 8 | 164 | 120 | 5 | . | 1 | 2 | 300 |
| 3.00-3.49 | . | . | . | . | 4 | 122 | 6 | 2 | . | 1 | 135 |
| 3.50-3.99 | . | . | . | . | . | 67 | 17 | 4 | 1 | . | 89 |
| 4.00-4.49 | . | . | . | . | . | 2 | 27 | 2 | . | . | 31 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 4 | 1 | . | 13 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 2 | 1 | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| TOTAL | 280 | 2258 | 5303 | 2396 | 797 | 513 | 94 | 49 | 15 | 6 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.6 NO. OF CASES= 10969.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 175 | 894 | 71 | . | . | . | . | . | . | . | 1140 |
| 0.50-0.99 | . | 784 | 2486 | 54 | . | . | . | . | . | . | 3324 |
| 1.00-1.49 | . | . | 1392 | 339 | 4 | . | . | . | . | . | 1735 |
| 1.50-1.99 | . | . | 185 | 476 | 56 | 5 | 2 | . | . | . | 724 |
| 2.00-2.49 | . | . | . | 210 | 38 | 13 | 1 | . | . | . | 262 |
| 2.50-2.99 | . | . | . | 25 | 50 | 20 | . | . | 1 | . | 96 |
| 3.00-3.49 | . | . | . | 2 | 2 | 35 | 1 | . | . | . | 40 |
| 3.50-3.99 | . | . | . | . | . | 13 | 2 | . | . | . | 15 |
| 4.00-4.49 | . | . | . | . | . | 1 | 7 | . | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 175 | 1678 | 4134 | 1106 | 150 | 87 | 14 | 2 | 2 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 6882.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 136 | 438 | 12 | . | . | . | . | . | . | . | 586 |
| 0.50-0.99 | . | 540 | 1420 | 8 | . | . | . | . | . | . | 1968 |
| 1.00-1.49 | . | . | 924 | 27 | 2 | . | . | . | . | . | 953 |
| 1.50-1.99 | . | . | 116 | 346 | 12 | . | . | . | . | . | 474 |
| 2.00-2.49 | . | . | . | 159 | 2 | . | . | . | . | . | 161 |
| 2.50-2.99 | . | . | . | 21 | 8 | . | . | . | . | . | 29 |
| 3.00-3.49 | . | . | . | . | 3 | . | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 136 | 978 | 2472 | 561 | 27 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 3910.

STATION S78 48.52N 86.43W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

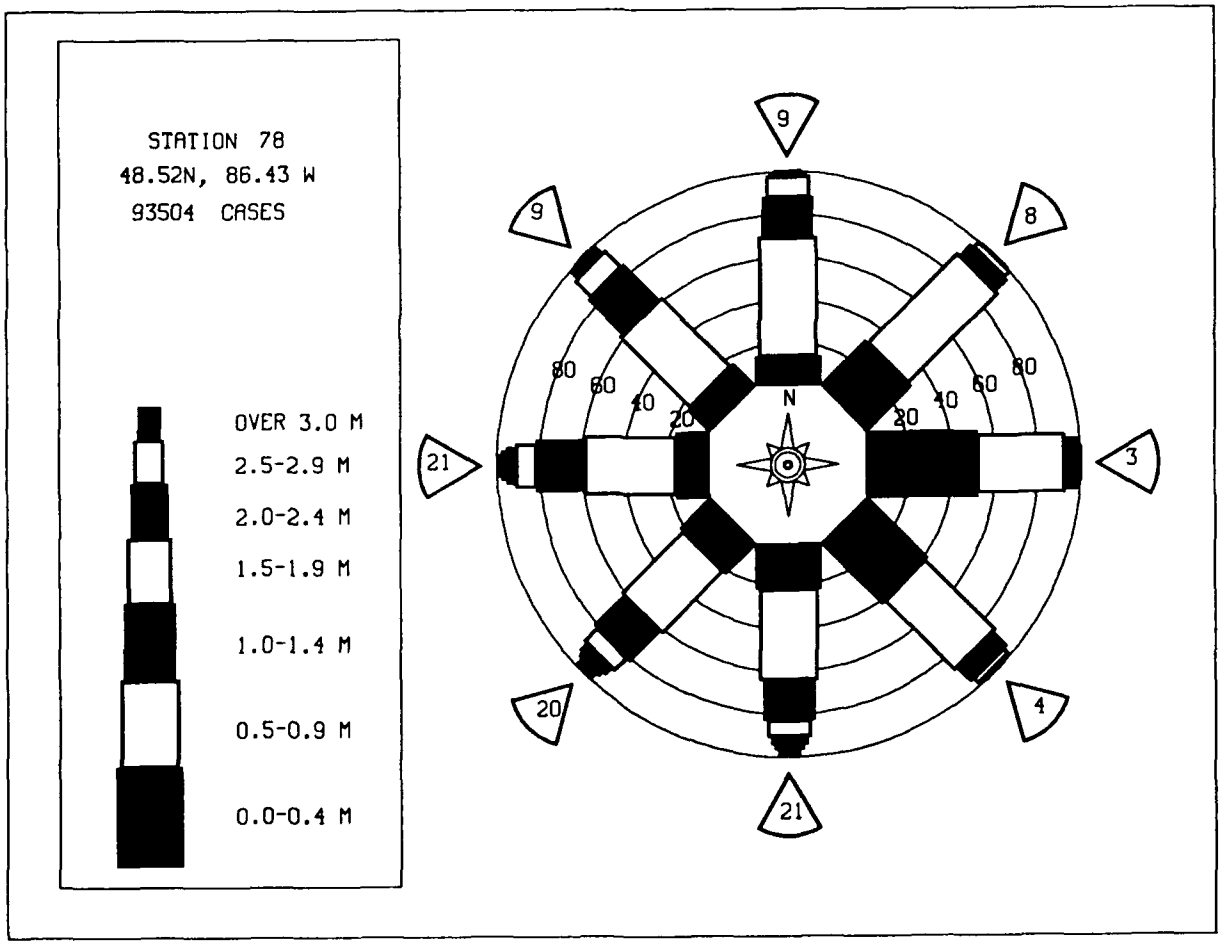
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 149 | 279 | 2 | . | . | . | . | . | . | . | 430 |
| 0.50-0.99 | . | 858 | 988 | . | . | . | . | . | . | . | 1846 |
| 1.00-1.49 | . | . | 788 | 2 | . | . | . | . | . | . | 790 |
| 1.50-1.99 | . | . | 150 | 236 | . | . | . | . | . | . | 386 |
| 2.00-2.49 | . | . | . | 146 | . | . | . | . | . | . | 146 |
| 2.50-2.99 | . | . | . | 10 | 7 | . | . | . | . | . | 17 |
| 3.00-3.49 | . | . | . | . | 3 | . | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 149 | 1137 | 1928 | 394 | 10 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 3388.

STATION S78 48.52N 86.43W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 462 | 1262 | 313 | 49 | 12 | . | . | . | . | . | 2098 |
| 0.50-0.99 | . | 1607 | 2492 | 335 | 70 | 39 | 1 | . | . | . | 4544 |
| 1.00-1.49 | . | . | 1068 | 570 | 136 | 52 | 12 | 1 | . | . | 1839 |
| 1.50-1.99 | . | . | 164 | 398 | 171 | 54 | 10 | 7 | . | . | 804 |
| 2.00-2.49 | . | . | . | 152 | 83 | 71 | 7 | 5 | 1 | . | 319 |
| 2.50-2.99 | . | . | . | 11 | 87 | 48 | 11 | 3 | 1 | . | 161 |
| 3.00-3.49 | . | . | . | . | 9 | 63 | 10 | 4 | . | . | 86 |
| 3.50-3.99 | . | . | . | . | . | 37 | 14 | 4 | . | . | 55 |
| 4.00-4.49 | . | . | . | . | . | 2 | 23 | 5 | . | . | 30 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 9 | 1 | . | 16 |
| 5.00-5.49 | . | . | . | . | . | . | . | 6 | 2 | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 2 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 462 | 2869 | 4037 | 1515 | 568 | 366 | 94 | 47 | 9 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.3 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S78 (48.52N 86.43W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 0.9 | 0.7 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.5 | 0.9 | 0.7 | 0.7 | 0.6 |
| 1957 | 0.9 | 1.0 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.6 | 0.9 | 0.9 | 0.7 |
| 1958 | 0.6 | 0.8 | 0.5 | 0.6 | 0.7 | 0.7 | 0.5 | 0.5 | 0.7 | 0.7 | 1.2 | 0.9 | 0.7 |
| 1959 | 0.9 | 0.9 | 0.8 | 0.6 | 0.7 | 0.5 | 0.7 | 0.4 | 0.7 | 0.6 | 0.9 | 0.8 | 0.7 |
| 1960 | 0.7 | 0.7 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 1.0 | 1.0 | 0.7 |
| 1961 | 0.7 | 0.7 | 0.8 | 0.6 | 0.7 | 0.6 | 0.4 | 0.6 | 0.7 | 0.7 | 1.0 | 0.8 | 0.7 |
| 1962 | 1.0 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 1.1 | 1.1 | 0.7 |
| 1963 | 1.0 | 1.1 | 1.1 | 0.9 | 0.9 | 0.7 | 0.8 | 0.6 | 0.9 | 1.1 | 1.0 | 1.2 | 1.0 |
| 1964 | 1.3 | 1.3 | 1.2 | 1.1 | 1.0 | 0.9 | 0.7 | 0.9 | 1.0 | 1.3 | 1.0 | 1.1 | 1.1 |
| 1965 | 1.4 | 1.5 | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.7 | 1.0 | 1.2 | 1.3 | 1.2 | 1.1 |
| 1966 | 1.1 | 1.5 | 1.4 | 0.9 | 1.0 | 0.9 | 0.9 | 0.8 | 1.2 | 1.4 | 1.4 | 1.3 | 1.1 |
| 1967 | 1.3 | 1.5 | 1.6 | 1.1 | 1.1 | 0.9 | 0.8 | 0.9 | 1.3 | 1.6 | 1.5 | 1.6 | 1.3 |
| 1968 | 1.3 | 1.4 | 1.6 | 1.2 | 1.0 | 0.8 | 1.0 | 0.8 | 1.0 | 1.4 | 1.3 | 1.3 | 1.2 |
| 1969 | 1.4 | 1.1 | 1.2 | 0.9 | 0.9 | 0.9 | 0.7 | 0.9 | 1.1 | 1.4 | 1.4 | 1.0 | 1.1 |
| 1970 | 1.1 | 1.4 | 1.2 | 1.1 | 0.9 | 0.8 | 0.7 | 0.7 | 1.2 | 1.5 | 1.3 | 1.0 | 1.1 |
| 1971 | 1.2 | 1.2 | 1.2 | 1.0 | 0.8 | 0.7 | 0.8 | 0.7 | 1.0 | 1.3 | 1.3 | 1.1 | 1.0 |
| 1972 | 1.4 | 1.1 | 1.0 | 0.8 | 0.6 | 0.7 | 0.6 | 0.6 | 1.1 | 1.4 | 1.2 | 0.9 | 1.0 |
| 1973 | 1.2 | 1.2 | 1.0 | 0.9 | 0.7 | 0.6 | 0.7 | 0.6 | 1.0 | 1.2 | 1.3 | 1.0 | 1.0 |
| 1974 | 1.1 | 0.9 | 1.1 | 0.9 | 0.7 | 0.8 | 0.7 | 0.9 | 1.1 | 1.3 | 1.3 | 1.0 | 1.0 |
| 1975 | 1.1 | 0.9 | 0.9 | 0.6 | 0.6 | 0.7 | 0.7 | 0.9 | 1.0 | 1.5 | 1.4 | 1.2 | 1.0 |
| 1976 | 1.2 | 1.2 | 1.2 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.7 | 0.8 | 1.2 | 1.1 | 0.8 |
| 1977 | 1.1 | 1.0 | 0.8 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1978 | 0.9 | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.8 | 0.7 | 1.0 | 1.1 | 1.2 | 0.8 |
| 1979 | 0.9 | 0.6 | 0.8 | 0.5 | 0.7 | 0.8 | 0.5 | 0.8 | 1.1 | 1.3 | 1.7 | 1.3 | 0.9 |
| 1980 | 1.0 | 0.7 | 0.9 | 0.5 | 0.6 | 0.6 | 0.5 | 0.8 | 1.5 | 1.7 | 1.3 | 1.1 | 0.9 |
| 1981 | 0.8 | 0.9 | 0.8 | 0.7 | 0.6 | 0.7 | 0.5 | 0.5 | 1.1 | 1.6 | 1.4 | 0.9 | 0.9 |
| 1982 | 1.2 | 1.1 | 1.2 | 0.6 | 0.8 | 0.6 | 0.6 | 0.6 | 1.0 | 1.6 | 1.7 | 1.2 | 1.0 |
| 1983 | 1.0 | 0.9 | 0.9 | 0.5 | 0.7 | 0.7 | 0.6 | 0.6 | 1.3 | 1.5 | 1.7 | 1.3 | 1.0 |
| 1984 | 1.2 | 0.9 | 0.9 | 0.7 | 0.7 | 0.8 | 0.5 | 0.6 | 1.4 | 1.8 | 2.0 | 1.3 | 1.1 |
| 1985 | 1.1 | 1.0 | 1.1 | 0.7 | 0.7 | 0.9 | 0.6 | 0.8 | 1.5 | 2.0 | 1.3 | 1.2 | 1.1 |
| 1986 | 1.2 | 0.7 | 1.1 | 0.8 | 0.7 | 0.7 | 0.5 | 0.6 | 1.1 | 1.3 | 1.8 | 1.3 | 1.0 |
| 1987 | 1.0 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.9 | 1.0 | 1.1 | 0.7 |
| MEAN | 1.1 | 1.0 | 1.0 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 1.0 | 1.2 | 1.3 | 1.1 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S78 (48.52N 86.43W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.7 | 2.7 | 2.9 | 1.9 | 1.9 | 1.9 | 1.2 | 1.3 | 1.7 | 3.3 | 2.1 | 2.2 |
| 1957 | 2.9 | 3.0 | 2.9 | 2.1 | 2.5 | 3.0 | 1.4 | 1.6 | 1.9 | 1.7 | 2.3 | 2.9 |
| 1958 | 2.4 | 2.0 | 1.3 | 4.2 | 2.1 | 2.0 | 1.4 | 1.6 | 1.9 | 2.3 | 7.2 | 2.8 |
| 1959 | 3.8 | 4.9 | 2.8 | 2.1 | 3.4 | 1.9 | 1.8 | 1.6 | 2.2 | 1.8 | 2.7 | 3.0 |
| 1960 | 2.0 | 2.0 | 1.9 | 2.5 | 1.2 | 1.4 | 1.7 | 2.7 | 1.8 | 2.0 | 2.8 | 3.7 |
| 1961 | 2.3 | 2.2 | 2.8 | 2.3 | 1.7 | 2.3 | 1.2 | 2.3 | 1.8 | 2.2 | 4.6 | 2.7 |
| 1962 | 2.4 | 2.5 | 1.9 | 1.7 | 1.6 | 1.5 | 1.2 | 1.2 | 1.7 | 3.8 | 3.2 | 4.9 |
| 1963 | 2.7 | 3.5 | 3.1 | 2.2 | 2.7 | 2.8 | 2.6 | 1.2 | 2.7 | 4.3 | 2.6 | 4.0 |
| 1964 | 5.0 | 4.4 | 4.7 | 4.4 | 3.5 | 2.4 | 2.1 | 3.3 | 4.3 | 6.0 | 4.6 | 3.7 |
| 1965 | 3.9 | 3.9 | 2.4 | 3.1 | 2.9 | 3.2 | 1.9 | 2.0 | 3.3 | 3.7 | 4.7 | 3.1 |
| 1966 | 3.6 | 4.7 | 4.6 | 4.0 | 2.9 | 2.7 | 3.1 | 2.7 | 3.1 | 5.6 | 5.2 | 4.5 |
| 1967 | 4.0 | 5.0 | 4.7 | 3.4 | 3.5 | 2.7 | 1.6 | 2.3 | 3.8 | 5.7 | 4.2 | 4.8 |
| 1968 | 4.9 | 4.0 | 4.9 | 3.6 | 3.0 | 2.9 | 3.5 | 2.5 | 3.2 | 4.3 | 4.6 | 4.2 |
| 1969 | 4.6 | 4.0 | 3.7 | 2.8 | 2.3 | 2.7 | 1.6 | 2.7 | 4.0 | 5.3 | 5.4 | 2.8 |
| 1970 | 3.7 | 4.0 | 3.4 | 3.5 | 3.1 | 2.2 | 1.7 | 2.0 | 4.1 | 5.5 | 5.1 | 4.0 |
| 1971 | 3.5 | 4.7 | 3.8 | 2.8 | 3.0 | 1.7 | 2.2 | 1.9 | 4.5 | 5.7 | 5.8 | 4.6 |
| 1972 | 4.0 | 4.7 | 3.1 | 2.6 | 1.6 | 2.1 | 1.6 | 2.0 | 4.8 | 4.5 | 5.2 | 3.1 |
| 1973 | 2.8 | 3.7 | 4.2 | 2.6 | 1.6 | 1.3 | 1.8 | 1.9 | 3.7 | 4.3 | 4.6 | 5.3 |
| 1974 | 4.5 | 3.1 | 3.3 | 2.7 | 2.0 | 2.0 | 1.6 | 3.1 | 3.0 | 4.0 | 3.6 | 4.0 |
| 1975 | 3.8 | 2.4 | 2.6 | 1.5 | 2.8 | 2.6 | 2.3 | 3.7 | 3.1 | 7.0 | 5.1 | 3.5 |
| 1976 | 4.7 | 4.0 | 4.1 | 3.6 | 1.9 | 1.9 | 1.2 | 2.1 | 3.1 | 3.4 | 4.2 | 5.1 |
| 1977 | 4.0 | 3.7 | 3.1 | 1.4 | 1.5 | 1.3 | 1.8 | 2.0 | 5.4 | 3.6 | 7.1 | 3.1 |
| 1978 | 2.7 | 1.8 | 3.7 | 2.5 | 1.7 | 1.6 | 1.5 | 2.3 | 2.7 | 3.9 | 4.0 | 4.1 |
| 1979 | 3.2 | 2.3 | 2.1 | 1.7 | 3.9 | 3.8 | 1.3 | 3.0 | 2.8 | 4.5 | 6.1 | 3.8 |
| 1980 | 5.3 | 3.6 | 3.3 | 1.5 | 2.5 | 2.0 | 2.0 | 3.5 | 6.6 | 5.8 | 4.9 | 4.3 |
| 1981 | 2.7 | 2.8 | 2.9 | 2.3 | 1.4 | 3.5 | 1.2 | 1.4 | 5.9 | 5.7 | 5.5 | 4.4 |
| 1982 | 4.4 | 3.7 | 7.0 | 4.6 | 4.0 | 3.4 | 2.0 | 2.6 | 3.1 | 6.4 | 7.3 | 4.7 |
| 1983 | 4.2 | 5.5 | 2.4 | 2.4 | 1.8 | 2.2 | 3.1 | 2.8 | 4.4 | 5.6 | 5.4 | 3.6 |
| 1984 | 5.0 | 2.6 | 3.7 | 4.1 | 2.6 | 3.4 | 1.8 | 3.2 | 5.7 | 6.6 | 7.3 | 5.3 |
| 1985 | 4.2 | 3.9 | 4.3 | 2.1 | 2.3 | 3.5 | 2.2 | 2.8 | 6.6 | 5.8 | 3.8 | 5.0 |
| 1986 | 4.6 | 1.7 | 4.5 | 2.4 | 2.1 | 1.5 | 1.2 | 3.2 | 4.1 | 6.7 | 6.6 | 4.1 |
| 1987 | 3.1 | 3.6 | 2.9 | 2.8 | 2.9 | 1.3 | 1.9 | 1.7 | 1.7 | 3.2 | 3.8 | 3.9 |

32 YR. STATISTICS FOR WIS STATION S78

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.3 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 247.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 7.3 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 231.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 82112106 |

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 447 | 1189 | 9 | . | . | . | . | . | . | . | 1645 |
| 0.50-0.99 | . | 2116 | 132 | . | . | . | . | . | . | . | 2248 |
| 1.00-1.49 | . | . | 616 | . | . | . | . | . | . | . | 616 |
| 1.50-1.99 | . | . | 91 | . | . | . | . | . | . | . | 91 |
| 2.00-2.49 | . | . | 4 | 2 | . | . | . | . | . | . | 6 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 447 | 3305 | 852 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 4310.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 389 | 823 | 5 | . | . | . | . | . | . | . | 1217 |
| 0.50-0.99 | . | 1810 | 347 | . | . | 1 | . | . | . | . | 2158 |
| 1.00-1.49 | . | . | 510 | . | . | . | . | . | . | . | 510 |
| 1.50-1.99 | . | . | 196 | 10 | . | . | . | . | . | . | 206 |
| 2.00-2.49 | . | . | . | 6 | . | . | . | . | . | . | 6 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 389 | 2633 | 1058 | 16 | 0 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 3835.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 563 | 1115 | 9 | . | . | . | . | . | . | . | 1687 |
| 0.50-0.99 | . | 2252 | 388 | . | . | 1 | . | . | . | . | 2641 |
| 1.00-1.49 | . | . | 253 | . | . | . | . | . | . | . | 253 |
| 1.50-1.99 | . | . | 114 | 13 | . | . | . | . | . | . | 127 |
| 2.00-2.49 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 563 | 3367 | 764 | 17 | 0 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 4410.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 321 | 730 | 5 | . | 1 | . | . | . | . | . | 1057 |
| 0.50-0.99 | . | 1803 | 258 | . | . | 1 | . | . | . | . | 2062 |
| 1.00-1.49 | . | . | 280 | . | . | . | . | . | . | . | 280 |
| 1.50-1.99 | . | . | 109 | 5 | . | . | . | . | . | . | 114 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 321 | 2533 | 652 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 3289.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 365 | 735 | 5 | . | . | . | . | . | . | . | 1105 |
| 0.50-0.99 | . | 722 | 29 | . | . | . | . | . | . | . | 751 |
| 1.00-1.49 | . | . | 125 | . | . | . | . | . | . | . | 125 |
| 1.50-1.99 | . | . | 9 | 1 | . | . | . | . | . | . | 10 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 365 | 1457 | 168 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.9 NO. OF CASES= 1866.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 244 | 426 | 3 | . | . | . | . | . | . | . | 673 |
| 0.50-0.99 | . | 421 | 20 | . | . | . | . | . | . | . | 441 |
| 1.00-1.49 | . | . | 55 | . | . | . | . | . | . | . | 55 |
| 1.50-1.99 | . | . | 6 | . | . | . | . | . | . | . | 6 |
| 2.00-2.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 244 | 847 | 84 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.9 NO. OF CASES= 1102.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 244 | 405 | 18 | 2 | 3 | . | . | . | . | . | 672 |
| 0.50-0.99 | . | 630 | 44 | 1 | 1 | 19 | . | . | . | . | 695 |
| 1.00-1.49 | . | . | 63 | . | . | 1 | 1 | . | . | . | 65 |
| 1.50-1.99 | . | . | 17 | 2 | . | . | . | . | . | . | 19 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 244 | 1035 | 142 | 7 | 4 | 20 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 1363.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 420 | 885 | 309 | 176 | 116 | 22 | . | . | . | . | 1928 |
| 0.50-0.99 | . | 1180 | 590 | 77 | 79 | 112 | 9 | . | . | . | 2047 |
| 1.00-1.49 | . | . | 187 | 68 | 17 | 33 | 6 | . | . | . | 311 |
| 1.50-1.99 | . | . | 41 | 39 | 7 | 6 | 3 | 7 | . | . | 103 |
| 2.00-2.49 | . | . | 2 | 25 | 4 | 6 | 3 | 6 | . | . | 46 |
| 2.50-2.99 | . | . | . | 2 | 17 | . | . | . | . | . | 19 |
| 3.00-3.49 | . | . | . | . | 5 | 7 | . | 1 | . | . | 13 |
| 3.50-3.99 | . | . | . | . | . | 13 | . | . | . | . | 13 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 420 | 2065 | 1129 | 387 | 245 | 201 | 23 | 14 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 4205.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 458 | 1223 | 1209 | 53 | 4 | 2 | . | . | . | . | 2949 |
| 0.50-0.99 | . | 1147 | 3228 | 1629 | 158 | 17 | . | . | . | . | 6180 |
| 1.00-1.49 | . | . | 717 | 1007 | 716 | 102 | 5 | 1 | . | . | 2548 |
| 1.50-1.99 | . | . | 82 | 383 | 302 | 187 | 7 | 6 | . | . | 967 |
| 2.00-2.49 | . | . | . | 164 | 109 | 139 | 34 | 5 | . | . | 451 |
| 2.50-2.99 | . | . | . | 10 | 141 | 65 | 20 | 17 | . | . | 253 |
| 3.00-3.49 | . | . | . | . | 28 | 117 | 13 | 7 | 3 | . | 168 |
| 3.50-3.99 | . | . | . | . | . | 62 | 22 | 10 | 1 | . | 95 |
| 4.00-4.49 | . | . | . | . | . | 3 | 54 | 10 | 2 | . | 69 |
| 4.50-4.99 | . | . | . | . | . | 1 | 14 | 19 | 1 | . | 35 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 17 | 2 | . | 22 |
| 5.50-5.99 | . | . | . | . | . | . | . | 10 | 6 | . | 16 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 6 | . | 6 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 458 | 2370 | 5236 | 3246 | 1459 | 695 | 172 | 102 | 24 | 3 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.8 NO. OF CASES= 12893.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 430 | 1153 | 567 | 60 | 3 | 3 | . | . | . | . | 2216 |
| 0.50-0.99 | . | 924 | 2483 | 758 | 101 | 19 | 1 | . | . | . | 4286 |
| 1.00-1.49 | . | . | 699 | 848 | 365 | 62 | 2 | . | . | . | 1976 |
| 1.50-1.99 | . | . | 68 | 330 | 349 | 155 | 13 | . | . | . | 915 |
| 2.00-2.49 | . | . | 1 | 119 | 126 | 179 | 29 | 3 | . | . | 457 |
| 2.50-2.99 | . | . | . | 6 | 142 | 97 | 45 | 10 | . | . | 300 |
| 3.00-3.49 | . | . | . | . | 13 | 120 | 29 | 23 | 1 | . | 186 |
| 3.50-3.99 | . | . | . | . | . | 65 | 40 | 6 | 3 | . | 114 |
| 4.00-4.49 | . | . | . | . | . | 5 | 50 | 23 | 3 | . | 81 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 40 | 4 | . | 49 |
| 5.00-5.49 | . | . | . | . | . | . | . | 14 | 8 | . | 22 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 5 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 5 | 1 | 6 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 430 | 2077 | 3818 | 2121 | 1099 | 705 | 214 | 121 | 34 | 1 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.8 NO. OF CASES= 9954.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 381 | 1412 | 741 | 173 | 38 | 5 | . | . | . | . | 2750 |
| 0.50-0.99 | . | 1034 | 2908 | 681 | 301 | 167 | 20 | 1 | . | . | 5112 |
| 1.00-1.49 | . | . | 854 | 895 | 245 | 214 | 59 | 11 | . | . | 2278 |
| 1.50-1.99 | . | . | 49 | 391 | 330 | 121 | 41 | 11 | . | . | 943 |
| 2.00-2.49 | . | . | . | 118 | 127 | 129 | 12 | 8 | 1 | . | 395 |
| 2.50-2.99 | . | . | . | 1 | 105 | 84 | 32 | 6 | 4 | . | 232 |
| 3.00-3.49 | . | . | . | . | 11 | 97 | 25 | 14 | 3 | . | 150 |
| 3.50-3.99 | . | . | . | . | . | 60 | 37 | 12 | 1 | . | 110 |
| 4.00-4.49 | . | . | . | . | . | 1 | 42 | 16 | 1 | . | 60 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 19 | 1 | . | 27 |
| 5.00-5.49 | . | . | . | . | . | . | . | 20 | 2 | . | 22 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 4 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 7 | . | 7 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 381 | 2446 | 4552 | 2259 | 1157 | 878 | 275 | 121 | 25 | 1 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 4.8 NO. OF CASES= 11335.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 370 | 1853 | 697 | 83 | 27 | 11 | 1 | . | . | . | 3042 |
| 0.50-0.99 | . | 1579 | 3825 | 748 | 199 | 235 | 28 | 3 | . | . | 6617 |
| 1.00-1.49 | . | . | 1142 | 1220 | 252 | 193 | 137 | 39 | 2 | . | 2985 |
| 1.50-1.99 | . | . | 68 | 536 | 344 | 86 | 50 | 38 | 8 | . | 1130 |
| 2.00-2.49 | . | . | . | 134 | 192 | 159 | 12 | 22 | 4 | 1 | 524 |
| 2.50-2.99 | . | . | . | 2 | 192 | 119 | 11 | 5 | 3 | . | 332 |
| 3.00-3.49 | . | . | . | . | 11 | 166 | 21 | 10 | . | . | 208 |
| 3.50-3.99 | . | . | . | . | . | 51 | 41 | 7 | 3 | 1 | 103 |
| 4.00-4.49 | . | . | . | . | . | 5 | 50 | 22 | 5 | . | 82 |
| 4.50-4.99 | . | . | . | . | . | . | 10 | 25 | 2 | . | 37 |
| 5.00-5.49 | . | . | . | . | . | . | . | 28 | 6 | 2 | 36 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 11 | 3 | 17 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 8 | 4 | 13 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 7 | 3 | 10 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 4 | 5 |
| TOTAL | 370 | 3432 | 5732 | 2723 | 1217 | 1025 | 361 | 203 | 60 | 18 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.7 NO. OF CASES= 14187.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 375 | 1549 | 161 | 2 | 4 | 1 | . | . | . | . | 2092 |
| 0.50-0.99 | . | 2217 | 3015 | 97 | 22 | 16 | 2 | . | . | . | 5369 |
| 1.00-1.49 | . | . | 1317 | 773 | 67 | 47 | 11 | . | . | . | 2215 |
| 1.50-1.99 | . | . | 160 | 542 | 203 | 34 | 10 | 7 | 2 | . | 958 |
| 2.00-2.49 | . | . | 2 | 161 | 161 | 71 | 7 | 3 | 3 | 1 | 409 |
| 2.50-2.99 | . | . | . | 4 | 133 | 69 | 4 | . | 1 | 1 | 212 |
| 3.00-3.49 | . | . | . | . | 6 | 115 | 2 | 1 | . | . | 124 |
| 3.50-3.99 | . | . | . | . | . | 57 | 7 | 1 | . | . | 65 |
| 4.00-4.49 | . | . | . | . | . | 1 | 19 | 2 | . | . | 22 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 3 | 1 | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 1 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 375 | 3766 | 4655 | 1579 | 596 | 411 | 67 | 23 | 10 | 2 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.2 NO. OF CASES= 10754.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 250 | 1011 | 29 | . | . | . | . | . | . | . | 1290 |
| 0.50-0.99 | . | 2171 | 624 | . | . | . | . | . | . | . | 2795 |
| 1.00-1.49 | . | . | 524 | 18 | . | . | . | . | . | . | 542 |
| 1.50-1.99 | . | . | 168 | 42 | 8 | 1 | . | . | . | . | 219 |
| 2.00-2.49 | . | . | 4 | 23 | 3 | 3 | . | . | . | . | 33 |
| 2.50-2.99 | . | . | . | 1 | 7 | . | . | . | . | . | 8 |
| 3.00-3.49 | . | . | . | . | . | 8 | . | . | . | . | 8 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 250 | 3182 | 1349 | 84 | 18 | 14 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 4587.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 171 | 481 | 3 | . | . | . | . | . | . | . | 655 |
| 0.50-0.99 | . | 1467 | 250 | . | . | . | . | . | . | . | 1717 |
| 1.00-1.49 | . | . | 344 | 12 | . | . | . | . | . | . | 356 |
| 1.50-1.99 | . | . | 129 | 11 | . | . | . | . | . | . | 140 |
| 2.00-2.49 | . | . | . | 8 | . | . | . | . | . | . | 8 |
| 2.50-2.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 171 | 1948 | 726 | 31 | 1 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 2694.

STATION S79 48.67N 86.43W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

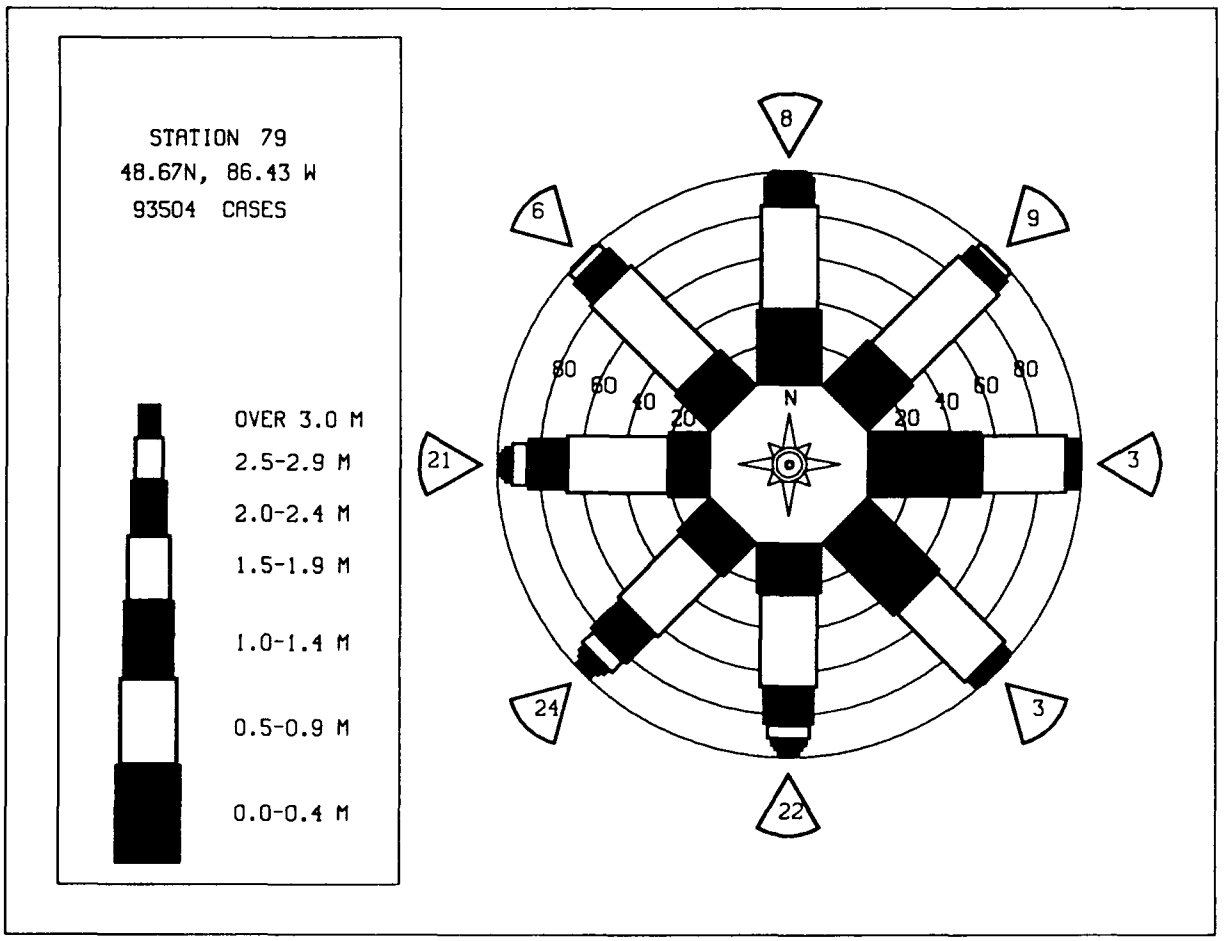
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 204 | 664 | 5 | . | . | . | . | . | . | . | 873 |
| 0.50-0.99 | . | 1342 | 194 | . | . | . | . | . | . | . | 1536 |
| 1.00-1.49 | . | . | 361 | . | . | . | . | . | . | . | 361 |
| 1.50-1.99 | . | . | 119 | 11 | . | . | . | . | . | . | 130 |
| 2.00-2.49 | . | . | . | 5 | . | . | . | . | . | . | 5 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 204 | 2006 | 679 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 2720.

STATION S79 48.67N 86.43W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 564 | 1566 | 378 | 55 | 19 | 4 | . | . | . | . | 2586 |
| 0.50-0.99 | . | 2282 | 1834 | 399 | 86 | 59 | 6 | . | . | . | 4666 |
| 1.00-1.49 | . | . | 805 | 484 | 166 | 65 | 22 | 5 | . | . | 1547 |
| 1.50-1.99 | . | . | 143 | 232 | 154 | 59 | 12 | 7 | 1 | . | 608 |
| 2.00-2.49 | . | . | 1 | 77 | 72 | 68 | 10 | 4 | . | . | 232 |
| 2.50-2.99 | . | . | . | 2 | 74 | 43 | 11 | 3 | . | . | 133 |
| 3.00-3.49 | . | . | . | . | 7 | 63 | 9 | 5 | . | . | 84 |
| 3.50-3.99 | . | . | . | . | . | 31 | 14 | 3 | . | . | 48 |
| 4.00-4.49 | . | . | . | . | . | 1 | 21 | 7 | 1 | . | 30 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 10 | . | . | 14 |
| 5.00-5.49 | . | . | . | . | . | . | . | 8 | 1 | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 2 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 564 | 3848 | 3161 | 1249 | 578 | 393 | 109 | 54 | 8 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S79 (48.67N 86.43W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.9 | 0.7 | 0.6 | 0.6 |
| 1957 | 0.8 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.7 | 0.6 | 0.8 | 0.8 | 0.7 |
| 1958 | 0.6 | 0.6 | 0.4 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 1.1 | 0.8 | 0.6 |
| 1959 | 0.8 | 0.8 | 0.7 | 0.6 | 0.7 | 0.5 | 0.6 | 0.4 | 0.7 | 0.6 | 0.8 | 0.7 | 0.6 |
| 1960 | 0.7 | 0.6 | 0.6 | 0.6 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | 0.9 | 0.9 | 0.6 |
| 1961 | 0.7 | 0.7 | 0.7 | 0.5 | 0.6 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 | 0.9 | 0.7 | 0.6 |
| 1962 | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 1.0 | 1.0 | 0.6 |
| 1963 | 0.9 | 1.0 | 1.0 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.9 | 1.1 | 0.9 | 1.1 | 0.9 |
| 1964 | 1.2 | 1.2 | 1.1 | 1.0 | 0.9 | 0.8 | 0.7 | 0.9 | 1.0 | 1.2 | 0.9 | 1.0 | 1.0 |
| 1965 | 1.3 | 1.3 | 0.9 | 0.8 | 0.9 | 0.9 | 0.8 | 0.7 | 0.9 | 1.0 | 1.2 | 1.1 | 1.0 |
| 1966 | 1.0 | 1.3 | 1.2 | 0.8 | 0.9 | 0.9 | 0.9 | 0.7 | 1.1 | 1.4 | 1.2 | 1.2 | 1.0 |
| 1967 | 1.2 | 1.4 | 1.5 | 1.0 | 1.0 | 0.8 | 0.7 | 0.8 | 1.3 | 1.6 | 1.4 | 1.5 | 1.2 |
| 1968 | 1.2 | 1.2 | 1.5 | 1.1 | 0.9 | 0.7 | 0.9 | 0.8 | 0.9 | 1.4 | 1.2 | 1.2 | 1.1 |
| 1969 | 1.3 | 1.0 | 1.0 | 0.8 | 0.8 | 0.8 | 0.7 | 0.9 | 1.0 | 1.4 | 1.3 | 0.9 | 1.0 |
| 1970 | 1.0 | 1.3 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.7 | 1.1 | 1.4 | 1.2 | 0.9 | 1.0 |
| 1971 | 1.1 | 1.1 | 1.0 | 0.9 | 0.7 | 0.6 | 0.8 | 0.6 | 1.0 | 1.3 | 1.3 | 1.0 | 1.0 |
| 1972 | 1.3 | 1.0 | 0.9 | 0.8 | 0.5 | 0.6 | 0.6 | 0.6 | 1.1 | 1.3 | 1.1 | 0.8 | 0.9 |
| 1973 | 1.1 | 1.1 | 0.9 | 0.9 | 0.6 | 0.5 | 0.6 | 0.6 | 1.0 | 1.1 | 1.2 | 0.9 | 0.9 |
| 1974 | 1.0 | 0.8 | 1.0 | 0.8 | 0.7 | 0.7 | 0.6 | 0.8 | 1.0 | 1.3 | 1.2 | 1.0 | 0.9 |
| 1975 | 1.0 | 0.8 | 0.8 | 0.5 | 0.6 | 0.7 | 0.7 | 0.8 | 0.9 | 1.4 | 1.3 | 1.1 | 0.9 |
| 1976 | 1.1 | 1.1 | 1.0 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 | 1.1 | 1.0 | 0.8 |
| 1977 | 1.0 | 0.9 | 0.8 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.7 | 0.9 | 0.8 | 0.7 |
| 1978 | 0.8 | 0.7 | 0.8 | 0.6 | 0.4 | 0.5 | 0.4 | 0.8 | 0.7 | 0.9 | 1.0 | 1.2 | 0.7 |
| 1979 | 0.8 | 0.5 | 0.8 | 0.4 | 0.7 | 0.7 | 0.4 | 0.8 | 1.0 | 1.3 | 1.6 | 1.2 | 0.8 |
| 1980 | 0.9 | 0.7 | 0.8 | 0.4 | 0.6 | 0.6 | 0.5 | 0.8 | 1.4 | 1.5 | 1.2 | 1.0 | 0.9 |
| 1981 | 0.7 | 0.8 | 0.7 | 0.6 | 0.6 | 0.7 | 0.4 | 0.5 | 1.0 | 1.5 | 1.3 | 0.8 | 0.8 |
| 1982 | 1.1 | 1.0 | 1.1 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 1.0 | 1.5 | 1.7 | 1.1 | 1.0 |
| 1983 | 0.9 | 0.9 | 0.8 | 0.5 | 0.7 | 0.6 | 0.5 | 0.6 | 1.2 | 1.4 | 1.7 | 1.2 | 0.9 |
| 1984 | 1.1 | 0.8 | 0.8 | 0.6 | 0.7 | 0.7 | 0.5 | 0.6 | 1.3 | 1.8 | 1.9 | 1.2 | 1.0 |
| 1985 | 1.0 | 0.8 | 1.0 | 0.6 | 0.7 | 0.9 | 0.5 | 0.8 | 1.6 | 2.0 | 1.2 | 1.1 | 1.0 |
| 1986 | 1.1 | 0.6 | 1.0 | 0.7 | 0.6 | 0.6 | 0.5 | 0.7 | 1.0 | 1.3 | 1.7 | 1.2 | 0.9 |
| 1987 | 0.9 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.8 | 0.9 | 1.0 | 0.7 |
| MEAN | 1.0 | 0.9 | 0.9 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.9 | 1.2 | 1.2 | 1.0 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S79 (48.67N 86.43W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.5 | 2.7 | 3.0 | 1.6 | 1.9 | 1.9 | 1.1 | 1.3 | 1.7 | 3.2 | 2.0 | 1.8 |
| 1957 | 2.9 | 3.0 | 2.9 | 2.1 | 2.4 | 3.0 | 1.2 | 1.6 | 1.8 | 1.8 | 2.3 | 2.6 |
| 1958 | 2.4 | 1.9 | 1.0 | 3.8 | 1.7 | 2.0 | 1.2 | 1.4 | 1.8 | 2.3 | 7.0 | 2.7 |
| 1959 | 3.8 | 4.7 | 2.8 | 2.0 | 3.3 | 1.9 | 1.8 | 1.6 | 2.2 | 1.7 | 2.7 | 2.7 |
| 1960 | 1.8 | 1.9 | 1.8 | 2.3 | 1.2 | 1.3 | 1.7 | 2.7 | 1.8 | 1.9 | 2.8 | 3.7 |
| 1961 | 2.3 | 2.2 | 2.6 | 2.1 | 1.5 | 2.3 | 1.2 | 2.3 | 1.8 | 2.2 | 4.6 | 2.5 |
| 1962 | 2.4 | 2.5 | 1.9 | 1.5 | 1.5 | 1.5 | 1.1 | 1.2 | 1.6 | 3.9 | 3.4 | 5.0 |
| 1963 | 2.7 | 3.5 | 3.1 | 2.2 | 2.7 | 2.7 | 2.6 | 1.2 | 2.7 | 4.1 | 2.5 | 4.1 |
| 1964 | 5.3 | 4.4 | 4.7 | 4.4 | 3.3 | 2.4 | 1.7 | 3.2 | 4.3 | 5.8 | 4.4 | 3.7 |
| 1965 | 3.9 | 3.8 | 2.3 | 3.0 | 2.9 | 3.1 | 1.8 | 2.0 | 3.2 | 3.2 | 4.7 | 3.0 |
| 1966 | 3.5 | 4.7 | 4.7 | 4.0 | 2.9 | 2.7 | 3.1 | 2.7 | 3.2 | 5.6 | 5.2 | 4.5 |
| 1967 | 4.0 | 5.0 | 4.7 | 3.2 | 3.3 | 2.6 | 1.6 | 2.2 | 4.0 | 6.1 | 4.2 | 5.0 |
| 1968 | 4.9 | 3.7 | 4.9 | 3.6 | 2.8 | 2.9 | 3.4 | 2.4 | 3.3 | 4.4 | 4.7 | 4.3 |
| 1969 | 4.5 | 4.0 | 3.8 | 2.8 | 2.7 | 2.7 | 1.6 | 2.6 | 4.0 | 5.8 | 5.6 | 2.6 |
| 1970 | 3.7 | 4.2 | 3.4 | 3.5 | 3.0 | 2.0 | 1.6 | 2.0 | 4.0 | 6.0 | 5.2 | 3.9 |
| 1971 | 3.4 | 4.7 | 3.8 | 2.8 | 2.7 | 1.6 | 2.2 | 1.6 | 4.5 | 6.3 | 6.2 | 4.3 |
| 1972 | 4.0 | 4.7 | 3.1 | 2.5 | 1.3 | 1.6 | 1.4 | 1.9 | 4.6 | 4.9 | 5.4 | 3.0 |
| 1973 | 2.8 | 3.8 | 4.3 | 2.6 | 1.6 | 1.3 | 1.7 | 1.8 | 3.8 | 4.5 | 5.1 | 5.3 |
| 1974 | 4.5 | 3.2 | 3.2 | 2.7 | 2.0 | 2.0 | 1.6 | 3.3 | 3.1 | 4.1 | 4.0 | 3.8 |
| 1975 | 3.8 | 2.1 | 2.6 | 1.2 | 2.8 | 2.7 | 2.1 | 3.5 | 3.2 | 7.2 | 5.2 | 3.6 |
| 1976 | 4.6 | 3.8 | 4.1 | 3.5 | 1.8 | 1.9 | 1.1 | 2.0 | 3.0 | 3.4 | 3.9 | 4.9 |
| 1977 | 3.9 | 3.5 | 3.0 | 1.1 | 1.5 | 1.2 | 1.6 | 2.0 | 5.3 | 3.7 | 7.4 | 3.0 |
| 1978 | 2.7 | 1.7 | 3.7 | 2.3 | 1.4 | 1.6 | 1.5 | 2.2 | 2.7 | 3.8 | 4.1 | 4.4 |
| 1979 | 3.1 | 2.1 | 1.7 | 1.3 | 3.8 | 3.4 | 1.1 | 3.2 | 2.9 | 4.8 | 6.5 | 3.9 |
| 1980 | 4.9 | 3.3 | 3.2 | 1.5 | 2.3 | 1.9 | 1.7 | 3.1 | 7.2 | 5.3 | 5.0 | 4.3 |
| 1981 | 2.7 | 2.7 | 2.8 | 2.3 | 1.3 | 3.7 | 1.1 | 1.2 | 6.2 | 6.2 | 5.9 | 4.4 |
| 1982 | 4.3 | 3.5 | 6.9 | 4.4 | 3.4 | 2.9 | 1.8 | 2.6 | 3.0 | 6.7 | 7.5 | 4.6 |
| 1983 | 4.2 | 5.3 | 2.2 | 2.4 | 1.6 | 2.0 | 3.1 | 2.8 | 4.7 | 5.8 | 5.7 | 3.7 |
| 1984 | 4.9 | 2.6 | 3.8 | 4.0 | 2.5 | 3.4 | 1.3 | 3.2 | 6.0 | 6.8 | 7.7 | 5.2 |
| 1985 | 3.9 | 3.7 | 4.2 | 1.7 | 1.9 | 3.0 | 2.4 | 2.8 | 6.8 | 6.2 | 3.7 | 4.9 |
| 1986 | 4.7 | 1.6 | 4.5 | 2.3 | 1.7 | 1.4 | 1.2 | 3.3 | 4.1 | 6.8 | 7.2 | 4.3 |
| 1987 | 3.2 | 3.6 | 2.6 | 2.5 | 2.9 | 1.3 | 1.9 | 1.7 | 1.6 | 3.2 | 3.6 | 3.8 |

32 YR. STATISTICS FOR WIS STATION S79

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.1 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 247.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.5 |
| LARGEST WAVE HS | (METERS) | 7.7 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 174.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 84110400 |

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 416 | 1222 | 9 | . | . | . | . | . | . | . | 1647 |
| 0.50-0.99 | . | 2045 | 177 | . | 1 | . | . | . | . | . | 2223 |
| 1.00-1.49 | . | . | 612 | 1 | . | . | 1 | . | . | . | 614 |
| 1.50-1.99 | . | . | 86 | 2 | . | . | . | . | . | . | 88 |
| 2.00-2.49 | . | . | 5 | 2 | 2 | . | . | . | . | . | 9 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 416 | 3267 | 899 | 5 | 3 | 0 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 4297.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 296 | 748 | 3 | . | . | . | . | . | . | . | 1047 |
| 0.50-0.99 | . | 1460 | 312 | . | . | 1 | . | . | . | . | 1773 |
| 1.00-1.49 | . | . | 440 | 1 | 1 | . | 1 | . | . | . | 443 |
| 1.50-1.99 | . | . | 158 | 17 | . | . | 1 | . | . | . | 176 |
| 2.00-2.49 | . | . | . | 10 | . | . | . | . | . | . | 10 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 296 | 2208 | 913 | 29 | 1 | 1 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 3230.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 542 | 1140 | 14 | . | . | . | . | . | . | . | 1696 |
| 0.50-0.99 | . | 2181 | 413 | . | 1 | . | . | . | . | . | 2595 |
| 1.00-1.49 | . | . | 295 | 1 | . | . | . | . | . | . | 296 |
| 1.50-1.99 | . | . | 118 | 14 | . | . | . | . | . | . | 132 |
| 2.00-2.49 | . | . | 1 | 3 | . | . | . | . | . | . | 4 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 542 | 3321 | 841 | 18 | 1 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 4421.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 241 | 476 | 3 | . | . | . | . | . | . | . | 720 |
| 0.50-0.99 | . | 1874 | 583 | 1 | . | . | . | . | . | . | 2458 |
| 1.00-1.49 | . | . | 452 | . | . | 1 | 1 | . | . | . | 454 |
| 1.50-1.99 | . | . | 160 | 43 | 1 | 1 | 1 | . | . | . | 206 |
| 2.00-2.49 | . | . | 1 | 19 | . | . | . | . | . | . | 20 |
| 2.50-2.99 | . | . | . | 1 | 1 | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 241 | 2350 | 1199 | 64 | 2 | 2 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 3615.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 303 | 376 | 9 | . | . | . | . | . | . | . | 688 |
| 0.50-0.99 | . | 826 | 555 | . | . | . | . | . | . | . | 1381 |
| 1.00-1.49 | . | . | 214 | 1 | . | 1 | . | . | . | . | 216 |
| 1.50-1.99 | . | . | 58 | 48 | . | . | . | . | . | . | 106 |
| 2.00-2.49 | . | . | . | 10 | . | . | . | . | . | . | 10 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 303 | 1202 | 836 | 59 | 0 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 2250.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 190 | 226 | 8 | . | . | . | . | . | . | . | 424 |
| 0.50-0.99 | . | 509 | 372 | . | . | . | . | . | . | . | 881 |
| 1.00-1.49 | . | . | 121 | 1 | . | . | . | . | . | . | 122 |
| 1.50-1.99 | . | . | 28 | 25 | . | . | . | . | . | . | 53 |
| 2.00-2.49 | . | . | . | 16 | . | . | . | . | . | . | 16 |
| 2.50-2.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 190 | 735 | 529 | 42 | 1 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 1404.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 235 | 353 | 25 | 8 | 5 | . | . | . | . | . | 626 |
| 0.50-0.99 | . | 458 | 553 | 8 | 25 | 17 | . | . | . | . | 1061 |
| 1.00-1.49 | . | . | 237 | 14 | . | 14 | 1 | . | . | . | 266 |
| 1.50-1.99 | . | . | 20 | 56 | 2 | 6 | 2 | . | . | . | 86 |
| 2.00-2.49 | . | . | . | 29 | 5 | . | . | 2 | . | . | 36 |
| 2.50-2.99 | . | . | . | 4 | 11 | . | 1 | . | . | . | 16 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 235 | 811 | 835 | 119 | 50 | 37 | 4 | 2 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 1969.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 386 | 845 | 475 | 264 | 82 | 1 | . | . | . | . | 2053 |
| 0.50-0.99 | . | 841 | 1723 | 268 | 233 | 119 | 1 | . | . | . | 3185 |
| 1.00-1.49 | . | . | 653 | 254 | 77 | 89 | 10 | . | . | . | 1083 |
| 1.50-1.99 | . | . | 68 | 282 | 60 | 36 | 7 | 2 | . | . | 455 |
| 2.00-2.49 | . | . | . | 157 | 49 | 23 | 3 | 3 | . | . | 235 |
| 2.50-2.99 | . | . | . | 14 | 113 | 16 | 4 | 2 | . | . | 149 |
| 3.00-3.49 | . | . | . | 1 | 45 | 52 | 8 | 9 | . | . | 115 |
| 3.50-3.99 | . | . | . | . | . | 49 | 7 | 5 | . | . | 61 |
| 4.00-4.49 | . | . | . | . | . | 19 | 18 | 1 | . | . | 38 |
| 4.50-4.99 | . | . | . | . | . | . | 20 | 9 | . | . | 29 |
| 5.00-5.49 | . | . | . | . | . | . | 4 | 13 | 2 | . | 19 |
| 5.50-5.99 | . | . | . | . | . | . | 2 | 9 | 5 | . | 16 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 7 | . | 7 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 4 | 4 |
| TOTAL | 386 | 1686 | 2919 | 1240 | 659 | 404 | 84 | 53 | 17 | 4 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 6989.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 399 | 1146 | 1255 | 108 | 4 | 4 | . | . | . | . | 2916 |
| 0.50-0.99 | . | 805 | 3112 | 2152 | 155 | 21 | . | . | . | . | 6245 |
| 1.00-1.49 | . | . | 630 | 1018 | 864 | 79 | 2 | . | . | . | 2593 |
| 1.50-1.99 | . | . | 53 | 325 | 325 | 250 | 1 | . | . | . | 954 |
| 2.00-2.49 | . | . | . | 170 | 88 | 166 | 26 | 1 | . | . | 451 |
| 2.50-2.99 | . | . | . | 10 | 174 | 65 | 28 | 9 | . | . | 286 |
| 3.00-3.49 | . | . | . | 1 | 21 | 125 | 19 | 11 | 3 | . | 180 |
| 3.50-3.99 | . | . | . | . | 3 | 89 | 27 | 12 | 2 | . | 133 |
| 4.00-4.49 | . | . | . | . | . | 9 | 41 | 14 | 2 | . | 66 |
| 4.50-4.99 | . | . | . | . | . | 1 | 16 | 26 | 2 | . | 45 |
| 5.00-5.49 | . | . | . | . | . | . | . | 17 | 5 | . | 22 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 8 | . | 8 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 5 | . | 6 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| TOTAL | 399 | 1951 | 5050 | 3784 | 1634 | 809 | 160 | 91 | 30 | 1 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 13026.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 375 | 1080 | 529 | 68 | 6 | 2 | . | . | . | . | 2060 |
| 0.50-0.99 | . | 775 | 1932 | 587 | 103 | 23 | 1 | . | . | . | 3421 |
| 1.00-1.49 | . | . | 514 | 667 | 282 | 77 | 1 | . | . | . | 1541 |
| 1.50-1.99 | . | . | 33 | 281 | 280 | 152 | 3 | . | . | . | 749 |
| 2.00-2.49 | . | . | . | 128 | 106 | 159 | 17 | 1 | . | . | 411 |
| 2.50-2.99 | . | . | . | 2 | 136 | 90 | 26 | 7 | . | . | 261 |
| 3.00-3.49 | . | . | . | . | 12 | 126 | 18 | 22 | . | . | 178 |
| 3.50-3.99 | . | . | . | . | 1 | 65 | 31 | 9 | 2 | . | 108 |
| 4.00-4.49 | . | . | . | . | . | 8 | 47 | 19 | 3 | . | 77 |
| 4.50-4.99 | . | . | . | . | . | 1 | 6 | 23 | 3 | . | 38 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 24 | 3 | . | 29 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 7 | . | 11 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 7 | . | 7 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 375 | 1855 | 3008 | 1733 | 926 | 703 | 152 | 114 | 29 | 2 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 4.8 NO. OF CASES= 8338.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 366 | 1505 | 839 | 166 | 44 | 10 | 2 | . | . | . | 2932 |
| 0.50-0.99 | . | 816 | 2714 | 612 | 285 | 201 | 23 | 1 | . | . | 4652 |
| 1.00-1.49 | . | . | 736 | 816 | 207 | 199 | 60 | 12 | . | . | 2030 |
| 1.50-1.99 | . | . | 42 | 361 | 258 | 127 | 39 | 7 | . | . | 834 |
| 2.00-2.49 | . | . | . | 104 | 114 | 103 | 14 | 8 | 1 | . | 344 |
| 2.50-2.99 | . | . | . | 2 | 106 | 77 | 27 | 7 | 4 | . | 223 |
| 3.00-3.49 | . | . | . | . | 11 | 104 | 26 | 14 | 4 | . | 159 |
| 3.50-3.99 | . | . | . | . | . | 77 | 38 | 8 | . | . | 123 |
| 4.00-4.49 | . | . | . | . | . | 1 | 41 | 18 | 4 | . | 64 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 26 | 2 | . | 36 |
| 5.00-5.49 | . | . | . | . | . | . | . | 17 | 2 | . | 19 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | 4 | . | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 9 | . | 9 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | 2 | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| TOTAL | 366 | 2321 | 4331 | 2061 | 1025 | 899 | 278 | 123 | 33 | 4 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.8 NO. OF CASES= 10726.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 393 | 1910 | 599 | 84 | 25 | 10 | 1 | . | . | . | 3022 |
| 0.50-0.99 | . | 1343 | 3640 | 633 | 139 | 194 | 23 | 2 | . | . | 5974 |
| 1.00-1.49 | . | . | 1161 | 1118 | 193 | 162 | 124 | 32 | 1 | . | 2791 |
| 1.50-1.99 | . | . | 64 | 562 | 293 | 77 | 44 | 22 | 5 | . | 1067 |
| 2.00-2.49 | . | . | . | 158 | 188 | 91 | 13 | 22 | 2 | 1 | 475 |
| 2.50-2.99 | . | . | . | 2 | 211 | 82 | 7 | 6 | 4 | . | 312 |
| 3.00-3.49 | . | . | . | . | 16 | 157 | 9 | 8 | . | . | 190 |
| 3.50-3.99 | . | . | . | . | . | 66 | 18 | 8 | 3 | . | 95 |
| 4.00-4.49 | . | . | . | . | . | 7 | 39 | 16 | 5 | . | 67 |
| 4.50-4.99 | . | . | . | . | . | . | 17 | 22 | 3 | . | 42 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 20 | 9 | 1 | 31 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | 5 | 2 | 12 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 10 | 2 | 12 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 6 | 5 | 11 |
| 7.00+ | . | . | . | . | . | . | . | . | 2 | 4 | 6 |
| TOTAL | 393 | 3253 | 5464 | 2557 | 1065 | 846 | 296 | 163 | 55 | 15 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 13214.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 366 | 1502 | 117 | 1 | 1 | . | . | . | . | . | 1987 |
| 0.50-0.99 | . | 2077 | 2876 | 67 | 10 | 10 | 1 | . | . | . | 5041 |
| 1.00-1.49 | . | . | 1273 | 694 | 48 | 23 | 10 | 2 | 1 | . | 2051 |
| 1.50-1.99 | . | . | 150 | 552 | 167 | 18 | 16 | 3 | 1 | . | 907 |
| 2.00-2.49 | . | . | 1 | 172 | 175 | 39 | 4 | 2 | 2 | 2 | 397 |
| 2.50-2.99 | . | . | . | 4 | 164 | 55 | 2 | 1 | 1 | . | 227 |
| 3.00-3.49 | . | . | . | . | 9 | 124 | 1 | 1 | . | . | 135 |
| 3.50-3.99 | . | . | . | . | . | 50 | 5 | 2 | . | . | 57 |
| 4.00-4.49 | . | . | . | . | . | 4 | 11 | . | . | . | 15 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 2 | 1 | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 366 | 3579 | 4417 | 1490 | 574 | 323 | 52 | 19 | 6 | 2 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 10142.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 236 | 1014 | 23 | 1 | . | . | . | . | . | . | 1274 |
| 0.50-0.99 | . | 1964 | 608 | 2 | . | . | . | . | . | . | 2574 |
| 1.00-1.49 | . | . | 513 | 18 | . | . | . | . | . | . | 531 |
| 1.50-1.99 | . | . | 208 | 36 | 6 | . | 1 | . | . | . | 251 |
| 2.00-2.49 | . | . | 4 | 32 | 6 | . | . | . | . | . | 42 |
| 2.50-2.99 | . | . | . | 3 | 4 | 1 | . | . | . | . | 8 |
| 3.00-3.49 | . | . | . | . | . | 7 | . | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 236 | 2978 | 1356 | 92 | 16 | 11 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 4392.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 175 | 472 | 9 | . | . | . | . | . | . | . | 656 |
| 0.50-0.99 | . | 1356 | 262 | . | . | . | . | . | . | . | 1618 |
| 1.00-1.49 | . | . | 381 | 4 | . | . | . | . | . | . | 385 |
| 1.50-1.99 | . | . | 140 | 12 | . | . | . | . | . | . | 152 |
| 2.00-2.49 | . | . | . | 9 | . | . | . | . | . | . | 9 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 175 | 1828 | 792 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 2641.

STATION S80 48.67N 86.65W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

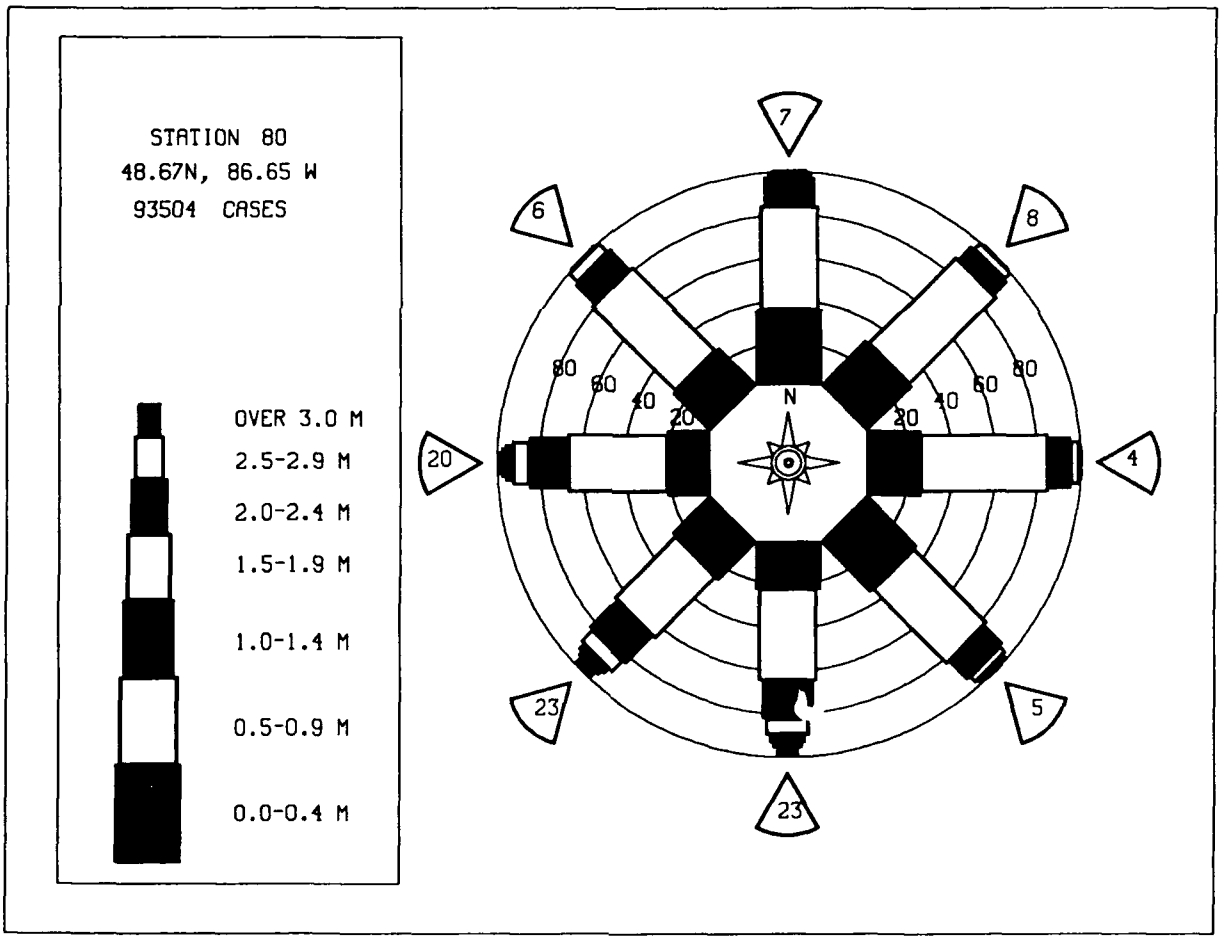
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 225 | 667 | 4 | . | . | . | . | . | . | . | 896 |
| 0.50-0.99 | . | 1366 | 229 | . | . | . | . | . | . | . | 1595 |
| 1.00-1.49 | . | . | 382 | . | . | . | . | . | . | . | 382 |
| 1.50-1.99 | . | . | 137 | 22 | . | . | . | . | . | . | 159 |
| 2.00-2.49 | . | . | 2 | 7 | . | . | . | . | . | . | 9 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 225 | 2033 | 754 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 2850.

STATION S80 48.67N 86.65W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 515 | 1469 | 393 | 70 | 17 | 2 | . | . | . | . | 2466 |
| 0.50-0.99 | . | 2070 | 2006 | 433 | 95 | 58 | 5 | . | . | . | 4667 |
| 1.00-1.49 | . | . | 862 | 461 | 167 | 64 | 21 | 4 | . | . | 1579 |
| 1.50-1.99 | . | . | 154 | 264 | 139 | 66 | 11 | 3 | . | . | 637 |
| 2.00-2.49 | . | . | 1 | 103 | 73 | 58 | 8 | 4 | . | . | 247 |
| 2.50-2.99 | . | . | . | 4 | 92 | 38 | 9 | 3 | . | . | 146 |
| 3.00-3.49 | . | . | . | . | 11 | 69 | 8 | 6 | . | . | 94 |
| 3.50-3.99 | . | . | . | . | . | 40 | 12 | 4 | . | . | 56 |
| 4.00-4.49 | . | . | . | . | . | 5 | 19 | 6 | 1 | . | 31 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 11 | 1 | . | 19 |
| 5.00-5.49 | . | . | . | . | . | . | . | 9 | 2 | . | 11 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 3 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 515 | 3539 | 3416 | 1335 | 594 | 400 | 100 | 52 | 12 | 1 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 4.2 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S80 (48.67N 86.65W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.9 | 0.7 | 0.6 | 0.6 |
| 1957 | 0.8 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.7 | 0.6 | 0.8 | 0.8 | 0.7 |
| 1958 | 0.6 | 0.7 | 0.4 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 1.1 | 0.9 | 0.7 |
| 1959 | 0.8 | 0.8 | 0.7 | 0.6 | 0.7 | 0.5 | 0.6 | 0.4 | 0.7 | 0.6 | 0.8 | 0.7 | 0.7 |
| 1960 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | 0.9 | 0.9 | 0.6 |
| 1961 | 0.7 | 0.7 | 0.7 | 0.5 | 0.6 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 | 1.0 | 0.8 | 0.6 |
| 1962 | 1.0 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 1.0 | 1.0 | 0.7 |
| 1963 | 1.0 | 1.0 | 1.1 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.9 | 1.1 | 1.0 | 1.2 | 0.9 |
| 1964 | 1.2 | 1.2 | 1.1 | 1.0 | 0.9 | 0.8 | 0.7 | 0.9 | 1.0 | 1.2 | 1.0 | 1.1 | 1.0 |
| 1965 | 1.3 | 1.4 | 0.9 | 0.8 | 0.9 | 0.9 | 0.8 | 0.7 | 0.9 | 1.0 | 1.2 | 1.1 | 1.0 |
| 1966 | 1.0 | 1.4 | 1.3 | 0.9 | 0.9 | 0.9 | 0.8 | 0.7 | 1.1 | 1.4 | 1.2 | 1.2 | 1.1 |
| 1967 | 1.3 | 1.4 | 1.5 | 1.0 | 1.0 | 0.8 | 0.6 | 0.7 | 1.4 | 1.8 | 1.4 | 1.6 | 1.2 |
| 1968 | 1.3 | 1.2 | 1.5 | 1.1 | 0.9 | 0.7 | 0.8 | 0.7 | 1.0 | 1.6 | 1.4 | 1.2 | 1.1 |
| 1969 | 1.4 | 1.0 | 1.1 | 0.8 | 0.8 | 0.7 | 0.5 | 0.8 | 1.1 | 1.5 | 1.4 | 0.9 | 1.0 |
| 1970 | 1.1 | 1.3 | 1.1 | 1.1 | 0.9 | 0.6 | 0.5 | 0.6 | 1.2 | 1.7 | 1.3 | 1.0 | 1.0 |
| 1971 | 1.1 | 1.2 | 1.0 | 0.9 | 0.6 | 0.5 | 0.6 | 0.6 | 1.0 | 1.4 | 1.4 | 1.1 | 1.0 |
| 1972 | 1.3 | 1.0 | 1.0 | 0.8 | 0.4 | 0.4 | 0.5 | 0.6 | 1.2 | 1.5 | 1.2 | 0.9 | 0.9 |
| 1973 | 1.1 | 1.2 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.5 | 1.0 | 1.2 | 1.4 | 0.9 | 0.9 |
| 1974 | 1.0 | 0.9 | 1.1 | 0.8 | 0.7 | 0.7 | 0.6 | 0.8 | 1.0 | 1.4 | 1.3 | 1.0 | 0.9 |
| 1975 | 0.8 | 0.5 | 0.6 | 0.3 | 0.5 | 0.6 | 0.6 | 0.7 | 0.9 | 1.5 | 1.3 | 1.2 | 0.8 |
| 1976 | 1.1 | 1.1 | 1.1 | 0.7 | 0.5 | 0.5 | 0.4 | 0.5 | 0.7 | 0.8 | 1.1 | 1.0 | 0.8 |
| 1977 | 1.0 | 1.0 | 0.8 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1978 | 0.8 | 0.7 | 0.8 | 0.6 | 0.4 | 0.5 | 0.4 | 0.7 | 0.7 | 0.9 | 1.0 | 1.2 | 0.7 |
| 1979 | 0.8 | 0.6 | 0.8 | 0.4 | 0.8 | 0.8 | 0.5 | 0.8 | 1.1 | 1.4 | 1.7 | 1.2 | 0.9 |
| 1980 | 0.9 | 0.6 | 0.9 | 0.5 | 0.6 | 0.6 | 0.5 | 0.8 | 1.5 | 1.6 | 1.2 | 1.0 | 0.9 |
| 1981 | 0.7 | 0.9 | 0.7 | 0.6 | 0.6 | 0.7 | 0.5 | 0.5 | 1.1 | 1.6 | 1.4 | 0.8 | 0.8 |
| 1982 | 1.1 | 1.0 | 1.2 | 0.7 | 0.8 | 0.6 | 0.6 | 0.6 | 1.1 | 1.6 | 1.7 | 1.2 | 1.0 |
| 1983 | 1.0 | 0.9 | 0.8 | 0.5 | 0.7 | 0.7 | 0.6 | 0.6 | 1.3 | 1.5 | 1.7 | 1.2 | 1.0 |
| 1984 | 1.1 | 0.8 | 0.8 | 0.7 | 0.7 | 0.8 | 0.5 | 0.6 | 1.4 | 1.9 | 2.0 | 1.2 | 1.0 |
| 1985 | 1.0 | 0.8 | 1.0 | 0.6 | 0.7 | 0.9 | 0.6 | 0.8 | 1.6 | 2.1 | 1.3 | 1.1 | 1.0 |
| 1986 | 1.1 | 0.6 | 1.0 | 0.8 | 0.7 | 0.7 | 0.5 | 0.8 | 1.1 | 1.3 | 1.7 | 1.2 | 1.0 |
| 1987 | 0.9 | 0.8 | 0.8 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.8 | 0.9 | 1.0 | 0.7 |
| MEAN | 1.0 | 0.9 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.6 | 1.0 | 1.2 | 1.2 | 1.0 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S80 (48.67N 86.65W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.4 | 2.7 | 3.1 | 1.6 | 1.9 | 1.9 | 1.1 | 1.3 | 1.7 | 3.3 | 2.0 | 1.8 |
| 1957 | 2.9 | 2.9 | 2.5 | 2.1 | 2.4 | 3.0 | 1.2 | 1.6 | 1.9 | 1.7 | 2.4 | 2.6 |
| 1958 | 2.4 | 2.0 | 1.1 | 3.7 | 1.8 | 2.0 | 1.3 | 1.5 | 2.1 | 2.3 | 6.4 | 2.7 |
| 1959 | 3.5 | 4.5 | 2.3 | 2.1 | 3.4 | 1.9 | 1.8 | 1.6 | 2.2 | 1.9 | 2.6 | 2.7 |
| 1960 | 1.9 | 2.0 | 1.8 | 2.2 | 1.2 | 1.4 | 1.6 | 2.7 | 1.8 | 2.0 | 2.8 | 3.7 |
| 1961 | 2.3 | 2.1 | 2.4 | 1.9 | 1.7 | 2.3 | 1.2 | 2.3 | 1.8 | 2.2 | 4.5 | 2.6 |
| 1962 | 2.4 | 2.4 | 1.8 | 1.5 | 1.5 | 1.5 | 1.1 | 1.2 | 1.7 | 4.0 | 3.3 | 4.8 |
| 1963 | 2.7 | 3.5 | 3.1 | 2.2 | 2.7 | 2.8 | 2.6 | 1.2 | 2.7 | 4.3 | 2.8 | 4.0 |
| 1964 | 5.3 | 4.4 | 4.6 | 4.4 | 3.5 | 2.4 | 1.7 | 3.3 | 4.4 | 6.0 | 4.2 | 3.7 |
| 1965 | 3.9 | 3.7 | 2.2 | 3.0 | 2.7 | 3.0 | 1.8 | 2.0 | 3.2 | 3.1 | 4.4 | 3.0 |
| 1966 | 3.6 | 4.7 | 4.6 | 4.1 | 2.8 | 2.7 | 2.9 | 2.7 | 3.1 | 5.1 | 5.2 | 4.5 |
| 1967 | 4.0 | 4.9 | 4.7 | 3.2 | 4.0 | 3.8 | 1.5 | 2.5 | 4.4 | 7.5 | 4.4 | 4.6 |
| 1968 | 4.9 | 3.7 | 4.8 | 3.6 | 3.0 | 2.0 | 2.8 | 2.5 | 3.5 | 4.8 | 5.4 | 4.4 |
| 1969 | 4.4 | 3.9 | 3.5 | 2.7 | 3.0 | 2.4 | 1.4 | 2.8 | 4.3 | 6.3 | 6.0 | 2.5 |
| 1970 | 3.7 | 4.0 | 3.4 | 3.3 | 3.8 | 2.2 | 1.2 | 2.0 | 4.9 | 6.7 | 5.8 | 3.7 |
| 1971 | 3.2 | 4.7 | 3.7 | 2.8 | 1.8 | 1.8 | 2.3 | 1.2 | 4.9 | 6.9 | 6.3 | 4.3 |
| 1972 | 4.0 | 4.7 | 2.9 | 2.3 | 0.9 | 1.2 | 1.4 | 1.7 | 4.7 | 5.2 | 5.9 | 2.9 |
| 1973 | 2.8 | 3.8 | 4.4 | 2.6 | 2.3 | 2.2 | 1.3 | 1.6 | 3.8 | 4.6 | 5.4 | 5.3 |
| 1974 | 4.5 | 3.0 | 3.0 | 2.8 | 2.7 | 3.0 | 1.3 | 3.6 | 3.1 | 4.7 | 4.5 | 3.9 |
| 1975 | 3.4 | 1.6 | 1.6 | 1.0 | 1.7 | 2.9 | 1.6 | 3.6 | 3.4 | 6.7 | 6.0 | 3.8 |
| 1976 | 4.3 | 3.9 | 3.9 | 3.2 | 1.9 | 2.0 | 1.1 | 2.2 | 3.0 | 3.4 | 3.7 | 4.6 |
| 1977 | 4.0 | 3.5 | 3.4 | 1.1 | 1.5 | 1.3 | 1.7 | 2.2 | 5.1 | 3.3 | 7.3 | 3.0 |
| 1978 | 2.6 | 1.8 | 3.7 | 2.5 | 1.4 | 1.6 | 1.3 | 2.0 | 2.7 | 3.9 | 3.8 | 4.7 |
| 1979 | 2.8 | 2.2 | 1.8 | 1.6 | 4.9 | 4.4 | 1.2 | 3.4 | 3.1 | 5.1 | 6.8 | 3.9 |
| 1980 | 4.6 | 3.0 | 3.4 | 1.5 | 2.9 | 2.4 | 2.1 | 3.9 | 7.7 | 6.6 | 5.2 | 4.1 |
| 1981 | 2.7 | 2.4 | 2.8 | 2.5 | 1.9 | 3.8 | 1.2 | 1.7 | 6.6 | 6.2 | 5.8 | 3.9 |
| 1982 | 4.0 | 3.2 | 6.3 | 4.1 | 4.5 | 3.8 | 2.3 | 2.7 | 3.4 | 6.5 | 7.4 | 4.7 |
| 1983 | 4.2 | 5.1 | 2.2 | 2.4 | 2.0 | 2.5 | 3.4 | 2.8 | 4.7 | 6.1 | 5.6 | 3.6 |
| 1984 | 4.9 | 2.4 | 3.9 | 4.4 | 2.8 | 3.5 | 1.4 | 3.2 | 6.4 | 7.1 | 8.2 | 4.9 |
| 1985 | 3.7 | 3.4 | 4.1 | 1.8 | 2.5 | 3.8 | 2.7 | 3.0 | 6.6 | 6.6 | 4.3 | 4.5 |
| 1986 | 4.4 | 1.6 | 4.2 | 2.3 | 1.7 | 1.5 | 1.4 | 3.3 | 4.2 | 7.2 | 7.4 | 4.4 |
| 1987 | 3.2 | 3.4 | 2.7 | 2.6 | 2.8 | 1.3 | 1.9 | 1.7 | 1.6 | 3.2 | 3.5 | 3.6 |

32 YR. STATISTICS FOR WIS STATION S80

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 4.2 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 247.5 |
| STANDARD DFVIATION OF WAVE HS . . . . . | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.5 |
| LARGEST WAVE HS . . . . . | (METERS) | 8.2 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 166.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 84110400 |

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 401 | 1361 | 29 | . | 1 | . | . | . | . | . | 1792 |
| 0.50-0.99 | . | 2050 | 229 | . | 3 | . | . | . | . | . | 2282 |
| 1.00-1.49 | . | . | 672 | . | 1 | . | . | . | . | . | 673 |
| 1.50-1.99 | . | . | 106 | . | . | . | . | . | . | . | 106 |
| 2.00-2.49 | . | . | 4 | 7 | . | . | . | . | . | . | 11 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 401 | 3411 | 1040 | 8 | 5 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 4554.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 236 | 602 | . | 1 | . | . | . | . | . | . | 839 |
| 0.50-0.99 | . | 1254 | 278 | . | . | 2 | . | . | . | . | 1534 |
| 1.00-1.49 | . | . | 396 | 1 | 3 | 1 | . | . | . | . | 401 |
| 1.50-1.99 | . | . | 147 | 17 | 1 | 1 | 1 | . | . | . | 167 |
| 2.00-2.49 | . | . | . | 8 | 3 | 1 | . | . | . | . | 12 |
| 2.50-2.99 | . | . | . | 2 | 1 | . | . | . | . | . | 3 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 236 | 1856 | 821 | 29 | 8 | 5 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 2768.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 471 | 1072 | 8 | . | . | . | . | . | . | . | 1551 |
| 0.50-0.99 | . | 1941 | 327 | . | . | 2 | . | . | . | . | 2270 |
| 1.00-1.49 | . | . | 266 | 2 | . | 1 | . | . | . | . | 269 |
| 1.50-1.99 | . | . | 91 | 12 | . | . | 1 | . | . | . | 104 |
| 2.00-2.49 | . | . | 3 | 4 | . | . | . | . | . | . | 7 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 471 | 3013 | 695 | 18 | 0 | 3 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 3933.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 245 | 574 | 5 | . | . | . | . | . | . | . | 824 |
| 0.50-0.99 | . | 1898 | 748 | 1 | 2 | 1 | . | . | . | . | 2650 |
| 1.00-1.49 | . | . | 651 | 2 | 1 | 2 | . | . | . | . | 656 |
| 1.50-1.99 | . | . | 209 | 68 | 3 | 1 | . | . | . | . | 281 |
| 2.00-2.49 | . | . | 1 | 42 | . | 1 | . | . | . | . | 44 |
| 2.50-2.99 | . | . | . | 3 | 2 | . | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 245 | 2472 | 1614 | 116 | 8 | 5 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 4176.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 274 | 451 | 5 | . | . | . | . | . | . | . | 730 |
| 0.50-0.99 | . | 448 | 696 | . | 1 | . | . | . | . | . | 1145 |
| 1.00-1.49 | . | . | 464 | 3 | . | 2 | . | . | . | . | 469 |
| 1.50-1.99 | . | . | 37 | 79 | 1 | . | 1 | . | . | . | 118 |
| 2.00-2.49 | . | . | . | 74 | 1 | . | . | . | . | . | 75 |
| 2.50-2.99 | . | . | . | 6 | 6 | . | . | . | . | . | 12 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 274 | 899 | 1202 | 162 | 10 | 2 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 2389.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 194 | 313 | 8 | . | . | . | . | . | . | . | 515 |
| 0.50-0.99 | . | 345 | 540 | . | . | . | . | . | . | . | 885 |
| 1.00-1.49 | . | . | 294 | 36 | . | . | . | . | . | . | 330 |
| 1.50-1.99 | . | . | 12 | 93 | 1 | 3 | . | . | . | . | 109 |
| 2.00-2.49 | . | . | . | 32 | 11 | . | . | . | . | . | 43 |
| 2.50-2.99 | . | . | . | 4 | 8 | . | . | . | . | . | 12 |
| 3.00-3.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | 1 | 2 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 194 | 658 | 854 | 165 | 21 | 7 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 1782.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 221 | 407 | 49 | 16 | 5 | . | . | . | . | . | 698 |
| 0.50-0.99 | . | 444 | 632 | 28 | 47 | 8 | . | . | . | . | 1159 |
| 1.00-1.49 | . | . | 273 | 69 | 11 | 27 | 3 | . | . | . | 383 |
| 1.50-1.99 | . | . | 24 | 75 | 10 | 14 | 4 | . | . | . | 127 |
| 2.00-2.49 | . | . | . | 37 | 10 | 5 | 1 | 1 | . | . | 54 |
| 2.50-2.99 | . | . | . | 2 | 22 | 1 | . | 2 | . | . | 27 |
| 3.00-3.49 | . | . | . | . | 5 | 5 | . | 2 | . | . | 12 |
| 3.50-3.99 | . | . | . | . | 1 | 1 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 221 | 851 | 978 | 227 | 111 | 62 | 10 | 5 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 2318.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 341 | 929 | 553 | 241 | 48 | . | . | . | . | . | 2112 |
| 0.50-0.99 | . | 870 | 1932 | 478 | 262 | 90 | . | . | . | . | 3632 |
| 1.00-1.49 | . | . | 663 | 428 | 126 | 105 | 10 | . | . | . | 1332 |
| 1.50-1.99 | . | . | 62 | 334 | 121 | 54 | 7 | . | . | . | 578 |
| 2.00-2.49 | . | . | . | 269 | 82 | 53 | 5 | 2 | . | . | 411 |
| 2.50-2.99 | . | . | . | 31 | 195 | 29 | 5 | 6 | . | . | 266 |
| 3.00-3.49 | . | . | . | . | 40 | 117 | 6 | 3 | . | . | 166 |
| 3.50-3.99 | . | . | . | . | 3 | 82 | 16 | 1 | . | . | 102 |
| 4.00-4.49 | . | . | . | . | 1 | 39 | 36 | 6 | . | . | 82 |
| 4.50-4.99 | . | . | . | . | . | 1 | 36 | 18 | . | . | 55 |
| 5.00-5.49 | . | . | . | . | . | . | 6 | 26 | 1 | . | 33 |
| 5.50-5.99 | . | . | . | . | . | . | . | 12 | 7 | . | 19 |
| 6.00-6.49 | . | . | . | . | . | . | . | 6 | 7 | . | 13 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 6 | 1 | 7 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 4 | 5 |
| TOTAL | 341 | 1799 | 3210 | 1781 | 878 | 570 | 127 | 80 | 22 | 5 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 4.7 NO. OF CASES= 8262.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 389 | 1012 | 1225 | 145 | 12 | 1 | . | . | . | . | 2784 |
| 0.50-0.99 | . | 859 | 2778 | 2501 | 269 | 17 | . | . | . | . | 6424 |
| 1.00-1.49 | . | 1 | 498 | 987 | 1299 | 109 | . | . | . | . | 2894 |
| 1.50-1.99 | . | . | 37 | 248 | 473 | 548 | 2 | . | . | . | 1308 |
| 2.00-2.49 | . | . | . | 119 | 71 | 314 | 40 | . | . | . | 544 |
| 2.50-2.99 | . | . | . | 6 | 151 | 82 | 63 | 16 | . | . | 318 |
| 3.00-3.49 | . | . | . | . | 13 | 148 | 23 | 25 | 3 | . | 212 |
| 3.50-3.99 | . | . | . | . | . | 110 | 32 | 17 | 5 | . | 164 |
| 4.00-4.49 | . | . | . | . | . | 11 | 58 | 13 | 7 | . | 89 |
| 4.50-4.99 | . | . | . | . | . | . | 25 | 37 | 4 | . | 66 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 32 | 3 | . | 38 |
| 5.50-5.99 | . | . | . | . | . | . | . | 6 | 12 | 1 | 19 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 17 | . | 18 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 9 | 1 | 10 |
| 7.00+ | . | . | . | . | . | . | . | . | 3 | 5 | 8 |
| TOTAL | 389 | 1872 | 4538 | 4006 | 2288 | 1340 | 246 | 147 | 63 | 7 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 9.6 MEAN TP(SEC)= 5.2 NO. OF CASES= 13951.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 334 | 1018 | 478 | 52 | 10 | 4 | . | . | . | . | 1896 |
| 0.50-0.99 | . | 797 | 1720 | 456 | 112 | 25 | . | . | . | . | 3110 |
| 1.00-1.49 | . | . | 451 | 550 | 253 | 66 | . | . | . | . | 1320 |
| 1.50-1.99 | . | . | 40 | 283 | 237 | 132 | 5 | . | . | . | 697 |
| 2.00-2.49 | . | . | 1 | 121 | 89 | 140 | 16 | . | . | . | 367 |
| 2.50-2.99 | . | . | . | 5 | 143 | 65 | 23 | 7 | . | . | 243 |
| 3.00-3.49 | . | . | . | . | 16 | 121 | 20 | 19 | 1 | . | 177 |
| 3.50-3.99 | . | . | . | . | 1 | 84 | 13 | 8 | 1 | . | 107 |
| 4.00-4.49 | . | . | . | . | . | 10 | 43 | 10 | 1 | . | 64 |
| 4.50-4.99 | . | . | . | . | . | . | 24 | 13 | 2 | . | 39 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 21 | 5 | . | 27 |
| 5.50-5.99 | . | . | . | . | . | . | . | 8 | 4 | . | 12 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 10 | . | 11 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 5 | 1 | 6 |
| 7.00+ | . | . | . | . | . | . | . | . | 3 | 4 | 7 |
| TOTAL | 334 | 1815 | 2690 | 1467 | 861 | 647 | 145 | 87 | 32 | 5 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 9.3 MEAN TP(SEC)= 4.8 NO. OF CASES= 7581.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 362 | 1465 | 753 | 164 | 54 | 17 | 1 | . | . | . | 2816 |
| 0.50-0.99 | . | 843 | 2527 | 516 | 276 | 202 | 20 | 2 | . | . | 4386 |
| 1.00-1.49 | . | . | 706 | 664 | 186 | 186 | 50 | 12 | . | . | 1804 |
| 1.50-1.99 | . | . | 47 | 336 | 207 | 112 | 28 | 7 | 1 | . | 738 |
| 2.00-2.49 | . | . | . | 127 | 105 | 98 | 16 | 4 | . | . | 340 |
| 2.50-2.99 | . | . | . | 6 | 142 | 63 | 13 | 6 | 7 | . | 237 |
| 3.00-3.49 | . | . | . | . | 17 | 127 | 23 | 11 | 2 | . | 180 |
| 3.50-3.99 | . | . | . | . | . | 77 | 28 | 6 | 1 | . | 112 |
| 4.00-4.49 | . | . | . | . | . | 7 | 54 | 20 | 3 | . | 84 |
| 4.50-4.99 | . | . | . | . | . | . | 23 | 23 | 2 | 1 | 49 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 36 | 3 | . | 40 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 7 | . | 10 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 11 | 1 | 12 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 7 | 3 | 10 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 6 | 7 |
| TOTAL | 362 | 2308 | 4033 | 1803 | 987 | 889 | 257 | 130 | 45 | 11 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.6 MEAN TP(SEC)= 4.8 NO. OF CASES= 10146.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 399 | 1840 | 433 | 58 | 11 | 3 | 1 | . | . | . | 2745 |
| 0.50-0.99 | . | 1363 | 3495 | 454 | 101 | 143 | 22 | 2 | . | . | 5580 |
| 1.00-1.49 | . | . | 1222 | 974 | 134 | 109 | 102 | 22 | . | . | 2563 |
| 1.50-1.99 | . | . | 67 | 627 | 231 | 43 | 31 | 18 | 2 | . | 1019 |
| 2.00-2.49 | . | . | 1 | 177 | 185 | 47 | 9 | 11 | 3 | . | 433 |
| 2.50-2.99 | . | . | . | 4 | 232 | 44 | 7 | 5 | . | . | 292 |
| 3.00-3.49 | . | . | . | . | 19 | 121 | 4 | 3 | 1 | . | 148 |
| 3.50-3.99 | . | . | . | . | . | 60 | 11 | 3 | 2 | . | 76 |
| 4.00-4.49 | . | . | . | . | . | 6 | 26 | 9 | 2 | 1 | 44 |
| 4.50-4.99 | . | . | . | . | . | . | 11 | 13 | 4 | 2 | 30 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 5 | 5 | 2 | 14 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 2 | . | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | 3 | 6 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 7.00+ | . | . | . | . | . | . | . | . | 2 | 6 | 8 |
| TOTAL | 399 | 3203 | 5218 | 2294 | 913 | 576 | 226 | 95 | 31 | 14 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 12151.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 332 | 1410 | 68 | | | | | | | | 1810 |
| 0.50-0.99 | . | 1990 | 2718 | 32 | 3 | 6 | 2 | . | . | . | 4751 |
| 1.00-1.49 | . | . | 1311 | 579 | 13 | 9 | 8 | 1 | . | . | 1921 |
| 1.50-1.99 | . | . | 162 | 572 | 110 | 7 | 4 | 2 | . | . | 857 |
| 2.00-2.49 | . | . | 9 | 195 | 176 | 10 | 3 | 4 | 1 | 2 | 400 |
| 2.50-2.99 | . | . | . | 3 | 204 | 28 | . | . | . | . | 235 |
| 3.00-3.49 | . | . | . | . | 8 | 115 | . | . | . | . | 123 |
| 3.50-3.99 | . | . | . | . | . | 47 | 1 | . | . | . | 48 |
| 4.00-4.49 | . | . | . | . | . | 5 | 3 | . | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | . | 2 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 1 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 332 | 3400 | 4268 | 1381 | 514 | 227 | 28 | 9 | 3 | 2 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 9518.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 203 | 909 | 18 | | | | | | | | 1130 |
| 0.50-0.99 | . | 1938 | 566 | . | . | 1 | . | . | . | . | 2505 |
| 1.00-1.49 | . | . | 549 | 20 | . | . | . | . | . | . | 569 |
| 1.50-1.99 | . | . | 208 | 48 | 2 | . | 2 | . | . | . | 260 |
| 2.00-2.49 | . | . | 3 | 41 | 4 | . | . | . | . | . | 48 |
| 2.50-2.99 | . | . | . | 3 | 14 | . | . | . | . | . | 17 |
| 3.00-3.49 | . | . | . | . | 2 | 3 | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 203 | 2847 | 1344 | 112 | 22 | 6 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 4249.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 171 | 443 | 9 | | | | | | | | 623 |
| 0.50-0.99 | . | 1276 | 220 | . | . | . | . | . | . | . | 1496 |
| 1.00-1.49 | . | . | 355 | . | . | . | . | . | . | . | 355 |
| 1.50-1.99 | . | . | 170 | 19 | . | . | . | . | . | . | 189 |
| 2.00-2.49 | . | . | . | 9 | . | . | . | . | . | . | 9 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 171 | 1719 | 754 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 2502.

STATION S81 48.67N 86.85W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

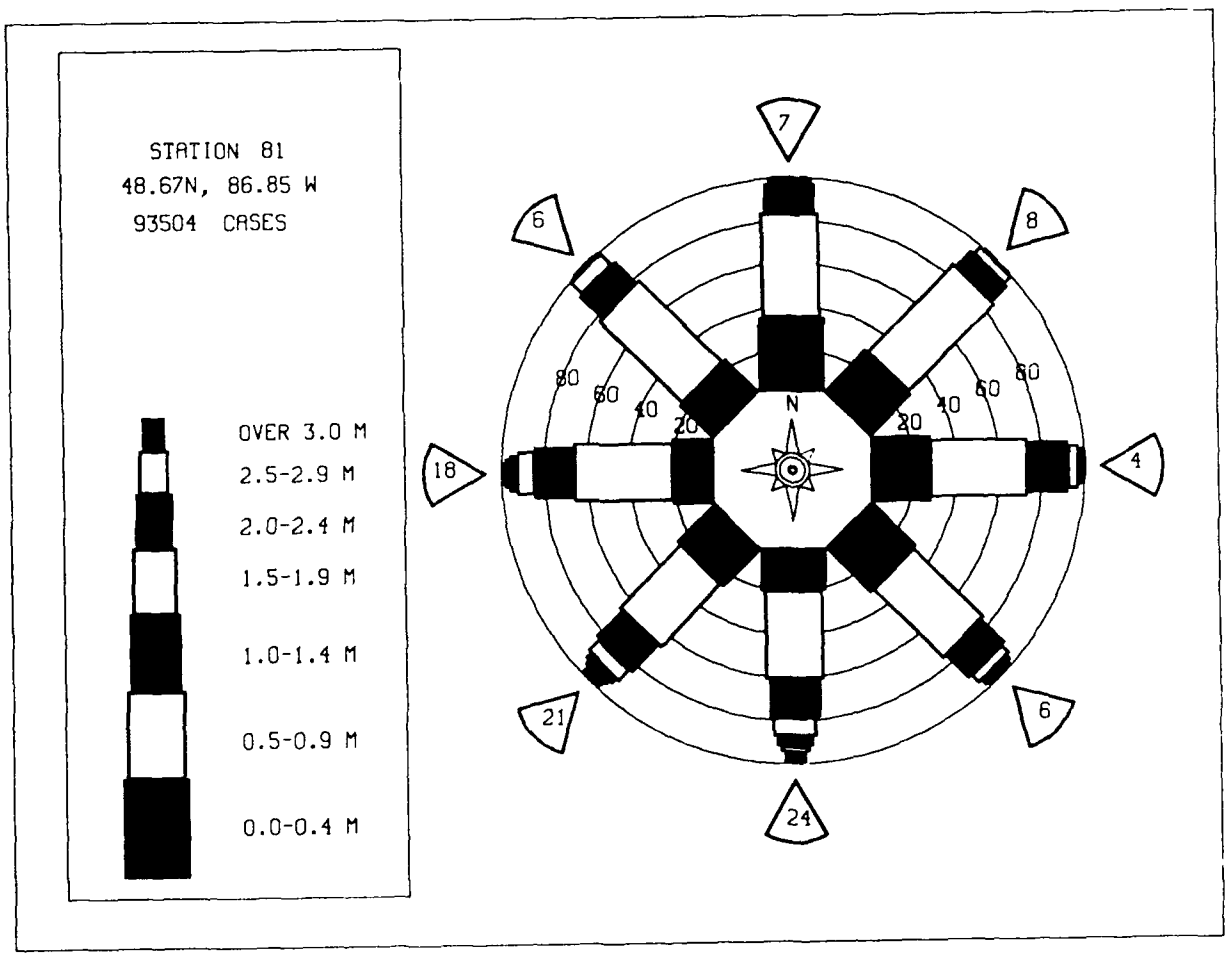
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 176 | 662 | 6 | | | | | | | | 844 |
| 0.50-0.99 | . | 1512 | 289 | . | . | . | . | . | . | . | 1801 |
| 1.00-1.49 | . | . | 515 | . | . | . | . | . | . | . | 515 |
| 1.50-1.99 | . | . | 212 | 38 | . | . | . | . | . | . | 250 |
| 2.00-2.49 | . | . | 2 | 27 | . | . | . | . | . | . | 29 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 176 | 2174 | 1024 | 69 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 3224.

STATION S81 48.67N 86.85W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 475 | 1447 | 365 | 68 | 14 | 2 | . | . | . | . | 2371 |
| 0.50-0.99 | . | 1983 | 1970 | 446 | 107 | 50 | 4 | . | . | . | 4560 |
| 1.00-1.49 | . | . | 929 | 431 | 203 | 62 | 17 | 3 | . | . | 1645 |
| 1.50-1.99 | . | . | 163 | 285 | 140 | 91 | 8 | 2 | . | . | 689 |
| 2.00-2.49 | . | . | 2 | 128 | 74 | 67 | 9 | 2 | . | . | 282 |
| 2.50-2.99 | . | . | . | 8 | 112 | 31 | 11 | 4 | . | . | 166 |
| 3.00-3.49 | . | . | . | . | 12 | 76 | 7 | 6 | . | . | 101 |
| 3.50-3.99 | . | . | . | . | . | 46 | 10 | 3 | . | . | 59 |
| 4.00-4.49 | . | . | . | . | . | 8 | 22 | 6 | 1 | . | 37 |
| 4.50-4.99 | . | . | . | . | . | . | 12 | 10 | 1 | . | 23 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 12 | 1 | . | 14 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 3 | . | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| TOTAL | 475 | 3430 | 3429 | 1366 | 662 | 433 | 101 | 51 | 15 | 2 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 9.6 MEAN TP(SEC)= 4.2 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S81 (48.67N 86.85W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.9 | 0.7 | 0.6 | 0.6 |
| 1957 | 0.8 | 0.9 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.6 | 0.8 | 0.9 | 0.7 |
| 1958 | 0.6 | 0.7 | 0.4 | 0.6 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.1 | 0.9 | 0.7 |
| 1959 | 0.8 | 0.8 | 0.7 | 0.6 | 0.7 | 0.5 | 0.6 | 0.4 | 0.7 | 0.6 | 0.8 | 0.8 | 0.7 |
| 1960 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | 0.9 | 0.9 | 0.6 |
| 1961 | 0.7 | 0.7 | 0.7 | 0.5 | 0.6 | 0.5 | 0.4 | 0.5 | 0.7 | 0.8 | 1.0 | 0.8 | 0.7 |
| 1962 | 0.9 | 0.7 | 0.5 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 1.0 | 1.0 | 0.7 |
| 1963 | 1.0 | 1.0 | 1.1 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.9 | 1.0 | 1.0 | 1.2 | 0.9 |
| 1964 | 1.2 | 1.2 | 1.1 | 1.1 | 0.9 | 0.8 | 0.7 | 0.9 | 1.0 | 1.2 | 1.0 | 1.1 | 1.0 |
| 1965 | 1.3 | 1.4 | 0.9 | 0.8 | 0.9 | 0.9 | 0.8 | 0.7 | 0.9 | 1.1 | 1.2 | 1.2 | 1.0 |
| 1966 | 1.0 | 1.4 | 1.4 | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 | 1.1 | 1.3 | 1.3 | 1.2 | 1.1 |
| 1967 | 1.3 | 1.4 | 1.5 | 1.0 | 1.2 | 0.9 | 0.7 | 0.8 | 1.6 | 2.1 | 1.4 | 1.6 | 1.3 |
| 1968 | 1.3 | 1.2 | 1.5 | 1.2 | 1.1 | 0.8 | 0.8 | 0.8 | 1.2 | 2.0 | 1.6 | 1.3 | 1.2 |
| 1969 | 1.5 | 1.0 | 1.1 | 0.9 | 0.9 | 0.8 | 0.6 | 0.9 | 1.3 | 1.7 | 1.6 | 1.0 | 1.1 |
| 1970 | 1.1 | 1.3 | 1.1 | 1.1 | 1.0 | 0.7 | 0.5 | 0.7 | 1.4 | 2.2 | 1.6 | 1.0 | 1.1 |
| 1971 | 1.1 | 1.2 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 1.1 | 1.7 | 1.6 | 1.1 | 1.0 |
| 1972 | 1.3 | 1.0 | 1.0 | 0.8 | 0.5 | 0.4 | 0.5 | 0.6 | 1.4 | 1.7 | 1.4 | 0.9 | 1.0 |
| 1973 | 1.1 | 1.2 | 1.0 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 1.2 | 1.4 | 1.6 | 1.0 | 1.0 |
| 1974 | 1.0 | 0.9 | 1.1 | 0.8 | 0.8 | 0.8 | 0.6 | 1.0 | 1.1 | 1.5 | 1.5 | 1.0 | 1.0 |
| 1975 | 0.8 | 0.5 | 0.5 | 0.3 | 0.6 | 0.7 | 0.6 | 0.8 | 1.0 | 1.8 | 1.5 | 1.2 | 0.9 |
| 1976 | 1.1 | 1.1 | 1.1 | 0.7 | 0.5 | 0.6 | 0.4 | 0.6 | 0.7 | 0.8 | 1.1 | 1.0 | 0.8 |
| 1977 | 1.0 | 1.0 | 0.9 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.7 | 1.0 | 1.0 | 0.7 |
| 1978 | 0.8 | 0.6 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 0.9 | 1.0 | 1.1 | 0.7 |
| 1979 | 0.8 | 0.6 | 0.9 | 0.5 | 0.8 | 0.9 | 0.5 | 0.9 | 1.1 | 1.4 | 1.7 | 1.2 | 0.9 |
| 1980 | 0.9 | 0.6 | 0.9 | 0.5 | 0.7 | 0.7 | 0.6 | 0.9 | 1.6 | 1.6 | 1.3 | 1.0 | 0.9 |
| 1981 | 0.8 | 0.9 | 0.7 | 0.7 | 0.7 | 0.8 | 0.5 | 0.5 | 1.1 | 1.7 | 1.4 | 0.8 | 0.9 |
| 1982 | 1.2 | 0.9 | 1.2 | 0.8 | 0.9 | 0.6 | 0.6 | 0.6 | 1.1 | 1.7 | 1.7 | 1.2 | 1.0 |
| 1983 | 1.0 | 0.9 | 0.9 | 0.5 | 0.7 | 0.7 | 0.6 | 0.6 | 1.3 | 1.5 | 1.8 | 1.2 | 1.0 |
| 1984 | 1.1 | 0.9 | 0.8 | 0.7 | 0.7 | 0.8 | 0.5 | 0.6 | 1.4 | 2.0 | 2.0 | 1.2 | 1.1 |
| 1985 | 1.0 | 0.9 | 1.1 | 0.6 | 0.8 | 1.0 | 0.6 | 0.9 | 1.6 | 2.1 | 1.3 | 1.1 | 1.1 |
| 1986 | 1.1 | 0.7 | 1.0 | 0.8 | 0.7 | 0.7 | 0.6 | 0.8 | 1.1 | 1.3 | 1.8 | 1.2 | 1.0 |
| 1987 | 0.9 | 0.8 | 0.9 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.8 | 0.9 | 1.0 | 0.7 |
| MEAN | 1.0 | 0.9 | 0.9 | 0.7 | 0.7 | 0.7 | 0.6 | 0.7 | 1.0 | 1.3 | 1.3 | 1.1 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S81 (48.67N 86.85W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.4 | 2.7 | 3.3 | 1.6 | 1.9 | 1.8 | 1.1 | 1.3 | 1.7 | 3.3 | 2.0 | 1.8 |
| 1957 | 2.9 | 3.6 | 2.3 | 2.0 | 2.5 | 3.0 | 1.3 | 1.7 | 1.9 | 1.7 | 2.4 | 2.9 |
| 1958 | 2.5 | 2.0 | 1.2 | 3.5 | 2.0 | 2.1 | 1.3 | 1.6 | 2.2 | 2.5 | 5.7 | 2.6 |
| 1959 | 3.2 | 4.3 | 2.4 | 2.1 | 3.5 | 1.8 | 1.8 | 1.6 | 2.4 | 1.8 | 2.5 | 2.7 |
| 1960 | 1.9 | 2.3 | 1.8 | 2.2 | 1.2 | 1.4 | 1.6 | 2.7 | 1.8 | 2.0 | 3.2 | 3.7 |
| 1961 | 2.3 | 2.1 | 2.5 | 2.0 | 2.1 | 2.2 | 1.0 | 2.3 | 2.2 | 2.4 | 4.5 | 2.5 |
| 1962 | 2.6 | 2.3 | 1.8 | 1.5 | 1.4 | 1.5 | 1.0 | 1.3 | 1.8 | 4.2 | 3.3 | 5.0 |
| 1963 | 2.7 | 3.6 | 3.1 | 2.4 | 2.6 | 2.8 | 2.6 | 1.2 | 2.7 | 4.1 | 2.7 | 3.7 |
| 1964 | 5.4 | 4.4 | 4.4 | 4.4 | 3.4 | 2.2 | 1.7 | 2.8 | 3.7 | 6.0 | 3.9 | 3.6 |
| 1965 | 3.9 | 3.7 | 2.1 | 3.1 | 2.5 | 2.8 | 1.8 | 1.8 | 3.0 | 3.1 | 4.2 | 3.3 |
| 1966 | 3.7 | 4.7 | 4.7 | 4.3 | 2.8 | 2.7 | 2.7 | 2.5 | 2.9 | 4.5 | 5.2 | 4.5 |
| 1967 | 4.0 | 5.0 | 4.5 | 3.2 | 5.0 | 5.1 | 1.7 | 3.6 | 5.3 | 9.6 | 4.3 | 5.0 |
| 1968 | 4.9 | 3.5 | 4.6 | 3.7 | 3.4 | 2.5 | 3.0 | 3.0 | 4.3 | 5.3 | 5.9 | 4.3 |
| 1969 | 4.1 | 3.7 | 3.1 | 2.7 | 4.1 | 3.6 | 2.1 | 3.5 | 4.5 | 7.0 | 6.7 | 2.9 |
| 1970 | 3.7 | 3.7 | 3.3 | 3.2 | 4.5 | 2.9 | 1.7 | 2.4 | 5.7 | 7.3 | 7.4 | 3.4 |
| 1971 | 3.2 | 4.7 | 3.6 | 2.7 | 2.0 | 2.7 | 2.8 | 1.6 | 5.0 | 7.9 | 7.2 | 4.0 |
| 1972 | 4.0 | 4.6 | 2.6 | 2.3 | 1.2 | 1.2 | 1.8 | 2.3 | 5.7 | 5.6 | 6.7 | 2.7 |
| 1973 | 2.8 | 3.7 | 4.6 | 2.6 | 2.7 | 2.9 | 2.1 | 2.1 | 4.0 | 4.7 | 5.9 | 5.3 |
| 1974 | 3.9 | 2.7 | 2.9 | 2.7 | 3.6 | 3.9 | 1.8 | 4.0 | 3.7 | 5.4 | 6.6 | 3.6 |
| 1975 | 4.2 | 2.1 | 2.0 | 0.9 | 1.9 | 3.0 | 1.7 | 4.0 | 5.2 | 7.3 | 7.3 | 3.6 |
| 1976 | 4.0 | 3.8 | 3.3 | 3.0 | 2.1 | 2.1 | 1.2 | 2.3 | 2.8 | 3.2 | 3.6 | 4.5 |
| 1977 | 3.9 | 3.4 | 3.3 | 1.3 | 1.6 | 1.3 | 1.7 | 2.2 | 4.9 | 3.2 | 7.5 | 2.9 |
| 1978 | 2.6 | 1.8 | 3.6 | 2.6 | 1.8 | 1.8 | 1.5 | 2.0 | 2.9 | 4.0 | 3.9 | 4.8 |
| 1979 | 2.8 | 2.3 | 2.4 | 2.0 | 5.0 | 4.5 | 1.2 | 3.4 | 3.3 | 5.2 | 6.9 | 3.9 |
| 1980 | 4.4 | 2.8 | 3.3 | 1.4 | 3.0 | 2.7 | 2.3 | 4.1 | 7.5 | 6.9 | 5.3 | 4.0 |
| 1981 | 2.5 | 2.2 | 3.1 | 2.6 | 2.0 | 3.8 | 1.2 | 1.7 | 6.6 | 5.7 | 5.7 | 3.6 |
| 1982 | 4.0 | 3.0 | 6.2 | 3.9 | 4.5 | 3.9 | 2.4 | 2.8 | 4.0 | 6.4 | 7.7 | 4.6 |
| 1983 | 4.3 | 5.0 | 2.3 | 2.4 | 2.2 | 2.6 | 3.4 | 2.7 | 4.6 | 6.2 | 5.7 | 3.7 |
| 1984 | 4.6 | 2.4 | 3.8 | 4.3 | 2.8 | 3.6 | 1.4 | 3.2 | 6.5 | 7.0 | 8.3 | 4.6 |
| 1985 | 3.5 | 3.5 | 4.1 | 1.9 | 2.6 | 3.9 | 2.7 | 3.1 | 6.5 | 6.7 | 4.6 | 4.0 |
| 1986 | 4.2 | 1.7 | 4.2 | 2.4 | 1.7 | 1.6 | 1.7 | 3.3 | 4.2 | 7.3 | 7.6 | 3.7 |
| 1987 | 3.3 | 3.2 | 2.6 | 2.9 | 2.8 | 1.3 | 1.9 | 1.7 | 1.6 | 3.1 | 3.5 | 3.6 |

32 YR. STATISTICS FOR WIS STATION S81

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.2 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 180.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.5 |
| LARGEST WAVE HS | (METERS) | 9.6 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 184.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 67102300 |

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 382 | 1382 | 39 | 4 | 1 | . | . | . | . | . | 1808 |
| 0.50-0.99 | . | 1987 | 221 | . | 9 | 1 | . | . | . | . | 2218 |
| 1.00-1.49 | . | . | 640 | 1 | 1 | 1 | . | . | . | . | 643 |
| 1.50-1.99 | . | . | 101 | 1 | . | . | 1 | . | . | . | 103 |
| 2.00-2.49 | . | . | 3 | 7 | . | . | . | . | . | . | 10 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 382 | 3369 | 1004 | 14 | 11 | 2 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 4478.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 278 | 632 | 11 | . | . | . | . | . | . | . | 921 |
| 0.50-0.99 | . | 1199 | 248 | 2 | 1 | 4 | . | . | . | . | 1454 |
| 1.00-1.49 | . | . | 390 | 4 | 3 | 1 | . | . | . | . | 398 |
| 1.50-1.99 | . | . | 98 | 9 | 1 | 2 | . | . | . | . | 110 |
| 2.00-2.49 | . | . | 1 | 10 | . | . | . | . | . | . | 11 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 278 | 1831 | 748 | 27 | 5 | 7 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 2713.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 375 | 974 | 18 | . | 1 | . | . | . | . | . | 1368 |
| 0.50-0.99 | . | 1629 | 352 | 11 | 8 | 4 | . | . | . | . | 2004 |
| 1.00-1.49 | . | . | 263 | 9 | 4 | 4 | . | . | . | . | 280 |
| 1.50-1.99 | . | . | 86 | 11 | . | 1 | 1 | . | . | . | 99 |
| 2.00-2.49 | . | . | 2 | 6 | 1 | 2 | . | . | . | . | 11 |
| 2.50-2.99 | . | . | . | 1 | 1 | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 375 | 2603 | 721 | 38 | 15 | 11 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 3527.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 271 | 755 | 12 | 1 | . | . | . | . | . | . | 1039 |
| 0.50-0.99 | . | 2007 | 820 | 6 | 2 | 1 | . | . | . | . | 2836 |
| 1.00-1.49 | . | . | 587 | 36 | 4 | 6 | . | . | . | . | 633 |
| 1.50-1.99 | . | . | 196 | 89 | 1 | 3 | 1 | . | . | . | 290 |
| 2.00-2.49 | . | . | 1 | 41 | 7 | . | . | . | . | . | 49 |
| 2.50-2.99 | . | . | . | . | 23 | . | . | . | . | . | 23 |
| 3.00-3.49 | . | . | . | . | 4 | 4 | . | . | . | . | 8 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 271 | 2762 | 1616 | 173 | 41 | 14 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 4569.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 238 | 525 | 7 | . | . | . | . | . | . | . | 770 |
| 0.50-0.99 | . | 536 | 921 | 3 | 4 | . | . | . | . | . | 1464 |
| 1.00-1.49 | . | . | 386 | 122 | 3 | 4 | . | . | . | . | 515 |
| 1.50-1.99 | . | . | 17 | 207 | 9 | 4 | 1 | . | . | . | 238 |
| 2.00-2.49 | . | . | . | 75 | 16 | 1 | 1 | . | . | . | 93 |
| 2.50-2.99 | . | . | . | 2 | 57 | . | . | . | . | . | 59 |
| 3.00-3.49 | . | . | . | . | 9 | 7 | . | . | . | . | 16 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 238 | 1061 | 1331 | 409 | 98 | 20 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 2963.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 217 | 387 | 8 | . | . | . | . | . | . | . | 612 |
| 0.50-0.99 | . | 393 | 730 | 2 | 1 | . | . | . | . | . | 1126 |
| 1.00-1.49 | . | . | 283 | 135 | 2 | . | . | . | . | . | 420 |
| 1.50-1.99 | . | . | 9 | 131 | 11 | 7 | . | . | . | . | 158 |
| 2.00-2.49 | . | . | . | 51 | 17 | 13 | . | . | . | . | 81 |
| 2.50-2.99 | . | . | . | 2 | 37 | 5 | . | 1 | . | . | 45 |
| 3.00-3.49 | . | . | . | . | 7 | 9 | . | . | . | . | 16 |
| 3.50-3.99 | . | . | . | . | . | 2 | 1 | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 217 | 780 | 1030 | 321 | 75 | 37 | 3 | 5 | 2 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 2319.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 193 | 478 | 120 | 67 | 10 | . | . | . | . | . | 868 |
| 0.50-0.99 | . | 435 | 919 | 109 | 98 | 16 | . | . | . | . | 1577 |
| 1.00-1.49 | . | . | 267 | 198 | 29 | 39 | 5 | . | . | . | 538 |
| 1.50-1.99 | . | . | 18 | 99 | 25 | 13 | . | . | . | . | 155 |
| 2.00-2.49 | . | . | . | 50 | 17 | 10 | 1 | . | 1 | . | 79 |
| 2.50-2.99 | . | . | . | . | 24 | 6 | 1 | 3 | . | . | 34 |
| 3.00-3.49 | . | . | . | . | 5 | 9 | 1 | 3 | . | . | 18 |
| 3.50-3.99 | . | . | . | . | . | 7 | 1 | . | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | 1 | 3 | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 193 | 913 | 1324 | 523 | 208 | 102 | 13 | 7 | 2 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 3085.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 327 | 1203 | 790 | 158 | 5 | . | . | . | . | . | 2483 |
| 0.50-0.99 | . | 804 | 2614 | 808 | 217 | 38 | 1 | . | . | . | 4482 |
| 1.00-1.49 | . | . | 529 | 702 | 259 | 105 | 8 | . | . | . | 1603 |
| 1.50-1.99 | . | . | 44 | 337 | 231 | 97 | 9 | 1 | . | . | 719 |
| 2.00-2.49 | . | . | . | 163 | 115 | 104 | 9 | 1 | . | . | 392 |
| 2.50-2.99 | . | . | . | 5 | 240 | 56 | 12 | 7 | . | . | 320 |
| 3.00-3.49 | . | . | . | . | 33 | 210 | 9 | . | . | . | 252 |
| 3.50-3.99 | . | . | . | . | . | 152 | 22 | 3 | . | . | 177 |
| 4.00-4.49 | . | . | . | . | . | 26 | 96 | 8 | 1 | . | 131 |
| 4.50-4.99 | . | . | . | . | . | . | 60 | 42 | 1 | . | 103 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 54 | 2 | . | 59 |
| 5.50-5.99 | . | . | . | . | . | . | . | 32 | 14 | 1 | 47 |
| 6.00-6.49 | . | . | . | . | . | . | . | 4 | 17 | . | 21 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 28 | 3 | 31 |
| 7.00+ | | | | | | | | | 10 | 11 | 21 |
| TOTAL | 327 | 2007 | 3977 | 2173 | 1100 | 788 | 229 | 152 | 73 | 15 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 8.5 MEAN TP(SEC)= 4.9 NO. OF CASES= 10162.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 423 | 1208 | 1157 | 115 | 6 | . | . | . | . | . | 2909 |
| 0.50-0.99 | . | 807 | 2730 | 2084 | 87 | 8 | . | . | . | . | 5716 |
| 1.00-1.49 | . | . | 376 | 1027 | 847 | 37 | . | . | . | . | 2287 |
| 1.50-1.99 | . | . | 36 | 192 | 385 | 225 | . | . | . | . | 838 |
| 2.00-2.49 | . | . | . | 90 | 70 | 202 | 17 | . | . | . | 379 |
| 2.50-2.99 | . | . | . | 4 | 126 | 66 | 31 | 8 | . | . | 235 |
| 3.00-3.49 | . | . | . | . | 7 | 127 | 24 | 14 | 1 | . | 173 |
| 3.50-3.99 | . | . | . | . | . | 81 | 24 | 9 | 1 | . | 115 |
| 4.00-4.49 | . | . | . | . | . | 8 | 62 | 12 | 3 | . | 85 |
| 4.50-4.99 | . | . | . | . | . | . | 13 | 32 | 4 | . | 49 |
| 5.00-5.49 | . | . | . | . | . | . | . | 28 | 3 | . | 31 |
| 5.50-5.99 | . | . | . | . | . | . | . | 9 | 5 | . | 14 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 13 | . | 14 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 9 | . | 9 |
| 7.00+ | . | . | . | . | . | . | . | . | 3 | 8 | 11 |
| TOTAL | 423 | 2015 | 4299 | 3512 | 1528 | 754 | 171 | 113 | 42 | 8 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 9.9 MEAN TP(SEC)= 4.9 NO. OF CASES= 12050.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 386 | 1143 | 560 | 73 | 8 | . | . | . | . | . | 2170 |
| 0.50-0.99 | . | 817 | 1563 | 481 | 101 | 21 | 1 | . | . | . | 2984 |
| 1.00-1.49 | . | . | 454 | 424 | 196 | 31 | 1 | . | . | . | 1106 |
| 1.50-1.99 | . | . | 39 | 253 | 182 | 53 | 1 | . | . | . | 528 |
| 2.00-2.49 | . | . | . | 88 | 71 | 81 | 8 | . | . | . | 248 |
| 2.50-2.99 | . | . | . | 2 | 111 | 45 | 9 | 3 | . | . | 170 |
| 3.00-3.49 | . | . | . | . | 10 | 72 | 11 | 12 | . | . | 105 |
| 3.50-3.99 | . | . | . | . | . | 53 | 17 | 5 | . | . | 75 |
| 4.00-4.49 | . | . | . | . | . | 5 | 23 | 10 | 1 | . | 39 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 11 | 3 | . | 22 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 12 | 1 | . | 15 |
| 5.50-5.99 | . | . | . | . | . | . | . | 6 | 2 | . | 8 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 4 | . | 5 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| TOTAL | 386 | 1960 | 2616 | 1321 | 679 | 361 | 81 | 60 | 15 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 7015.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 466 | 1778 | 740 | 145 | 68 | 18 | 1 | . | . | . | 3216 |
| 0.50-0.99 | . | 1069 | 2602 | 444 | 179 | 170 | 21 | 4 | . | . | 4489 |
| 1.00-1.49 | . | . | 763 | 629 | 120 | 111 | 45 | 3 | . | . | 1671 |
| 1.50-1.99 | . | . | 51 | 393 | 137 | 65 | 6 | 3 | . | . | 655 |
| 2.00-2.49 | . | . | . | 152 | 113 | 71 | 6 | 4 | 2 | . | 348 |
| 2.50-2.99 | . | . | . | 4 | 156 | 39 | 13 | 7 | 3 | . | 222 |
| 3.00-3.49 | . | . | . | . | 20 | 113 | 8 | 10 | 2 | 1 | 154 |
| 3.50-3.99 | . | . | . | . | 1 | 83 | 17 | 9 | . | . | 110 |
| 4.00-4.49 | . | . | . | . | . | 7 | 42 | 16 | 3 | . | 68 |
| 4.50-4.99 | . | . | . | . | . | . | 21 | 17 | 3 | 1 | 42 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 19 | 6 | . | 27 |
| 5.50-5.99 | . | . | . | . | . | . | . | 9 | 6 | . | 15 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 11 | 3 | 14 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 4 | 3 | 7 |
| 7.00+ | . | . | . | . | . | . | . | . | 2 | 11 | 13 |
| TOTAL | 466 | 2847 | 4156 | 1767 | 794 | 677 | 182 | 101 | 42 | 19 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 10358.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 505 | 1977 | 251 | 31 | 2 | 3 | . | . | . | . | 2769 |
| 0.50-0.99 | . | 1564 | 3231 | 191 | 24 | 57 | 25 | . | . | . | 5092 |
| 1.00-1.49 | . | . | 1564 | 474 | 28 | 23 | 28 | 5 | . | . | 2122 |
| 1.50-1.99 | . | . | 96 | 712 | 52 | 20 | 6 | 4 | 1 | . | 891 |
| 2.00-2.49 | . | . | . | 332 | 86 | 14 | 2 | 4 | 1 | . | 439 |
| 2.50-2.99 | . | . | . | 6 | 174 | 4 | 1 | . | . | . | 185 |
| 3.00-3.49 | . | . | . | . | 34 | 39 | 1 | 4 | . | . | 78 |
| 3.50-3.99 | . | . | . | . | . | 22 | 2 | 1 | 1 | 2 | 28 |
| 4.00-4.49 | . | . | . | . | . | 7 | 5 | 3 | 2 | 1 | 18 |
| 4.50-4.99 | . | . | . | . | . | 1 | 1 | 2 | 1 | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | 1 | 1 | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 505 | 3541 | 5142 | 1746 | 400 | 190 | 71 | 28 | 11 | 6 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 10903.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 396 | 1424 | 19 | . | . | . | . | . | . | . | 1839 |
| 0.50-0.99 | . | 1852 | 2325 | 3 | 3 | 1 | 2 | . | . | . | 4186 |
| 1.00-1.49 | . | . | 1542 | 226 | 4 | 2 | 3 | . | . | . | 1777 |
| 1.50-1.99 | . | . | 175 | 656 | 5 | . | 2 | 1 | . | . | 839 |
| 2.00-2.49 | . | . | 1 | 350 | 86 | 1 | . | . | . | . | 438 |
| 2.50-2.99 | . | . | . | 6 | 192 | 1 | . | . | . | . | 199 |
| 3.00-3.49 | . | . | . | . | 37 | 28 | . | . | . | . | 65 |
| 3.50-3.99 | . | . | . | . | . | 8 | . | . | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 396 | 3276 | 4062 | 1241 | 327 | 44 | 7 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 8756.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 276 | 935 | 6 | . | . | . | . | . | . | . | 1217 |
| 0.50-0.99 | . | 1874 | 599 | . | . | . | . | . | . | . | 2473 |
| 1.00-1.49 | . | . | 597 | 10 | . | . | . | . | . | . | 607 |
| 1.50-1.99 | . | . | 249 | 47 | . | . | . | . | . | . | 296 |
| 2.00-2.49 | . | . | 3 | 49 | 4 | . | . | . | . | . | 56 |
| 2.50-2.99 | . | . | . | 1 | 9 | . | . | . | . | . | 10 |
| 3.00-3.49 | . | . | . | . | 2 | 2 | . | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 276 | 2809 | 1454 | 107 | 15 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 4367.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 186 | 491 | 9 | 1 | . | . | . | . | . | . | 687 |
| 0.50-0.99 | . | 1131 | 259 | . | . | . | . | . | . | . | 1390 |
| 1.00-1.49 | . | . | 373 | 1 | . | . | . | . | . | . | 374 |
| 1.50-1.99 | . | . | 216 | 20 | . | . | . | . | . | . | 236 |
| 2.00-2.49 | . | . | . | 17 | . | . | . | . | . | . | 17 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 186 | 1622 | 857 | 41 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 2534.

STATION S82 48.67N 87.28W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

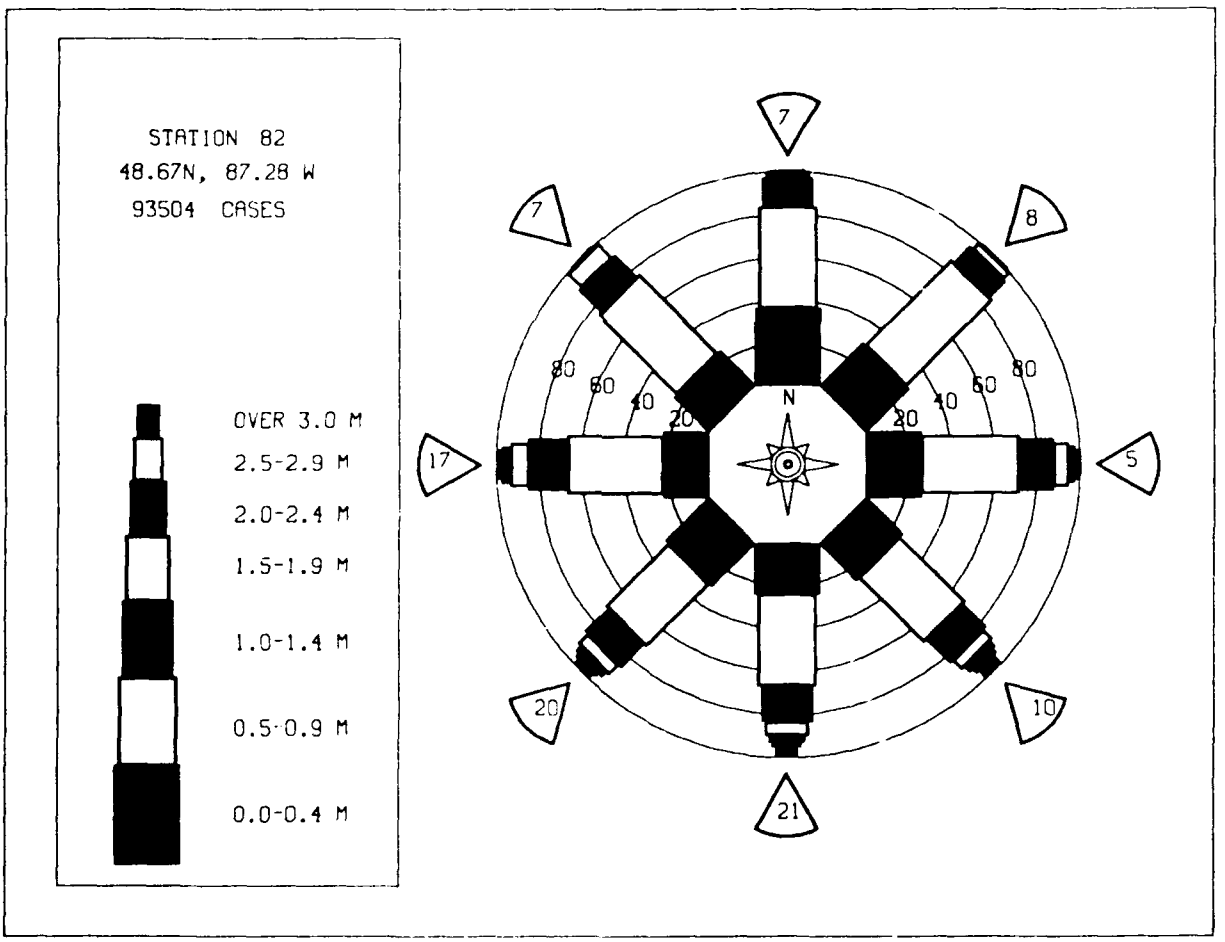
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 227 | 700 | 10 | 1 | . | . | . | . | . | . | 938 |
| 0.50-0.99 | . | 1640 | 370 | . | . | . | . | . | . | . | 2010 |
| 1.00-1.49 | . | . | 634 | 1 | 1 | . | . | . | . | . | 636 |
| 1.50-1.99 | . | . | 295 | 41 | . | . | . | . | . | . | 336 |
| 2.00-2.49 | . | . | 1 | 32 | . | . | . | . | . | . | 33 |
| 2.50-2.99 | . | . | . | 5 | . | . | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 227 | 2340 | 1310 | 80 | 1 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 3705.

STATION S82 48.67N 87.28W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 515 | 1599 | 376 | 59 | 10 | 2 | . | . | . | . | 2561 |
| 0.50-0.99 | . | 1975 | 2051 | 414 | 73 | 32 | 5 | . | . | . | 4550 |
| 1.00-1.49 | . | . | 965 | 400 | 150 | 36 | 9 | . | . | . | 1560 |
| 1.50-1.99 | . | . | 173 | 320 | 104 | 49 | 2 | . | . | . | 648 |
| 2.00-2.49 | . | . | 1 | 152 | 60 | 50 | 4 | . | . | . | 267 |
| 2.50-2.99 | . | . | . | 4 | 115 | 22 | 6 | 3 | . | . | 150 |
| 3.00-3.49 | . | . | . | . | 17 | 62 | 5 | 4 | . | . | 88 |
| 3.50-3.99 | . | . | . | . | . | 41 | 8 | 2 | . | . | 51 |
| 4.00-4.49 | . | . | . | . | . | 6 | 23 | 5 | 1 | . | 35 |
| 4.50-4.99 | . | . | . | . | . | . | 10 | 10 | 1 | . | 21 |
| 5.00-5.49 | . | . | . | . | . | . | . | 11 | 1 | . | 12 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | 2 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 3 | 4 |
| TOTAL | 515 | 3574 | 3566 | 1349 | 529 | 300 | 72 | 40 | 15 | 3 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 9.9 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S82 (48.67N 87.28W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 0.7 | 0.6 | 0.6 |
| 1957 | 0.8 | 0.9 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.6 | 0.8 | 0.9 | 0.7 |
| 1958 | 0.6 | 0.7 | 0.4 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 0.6 | 1.1 | 0.8 | 0.6 |
| 1959 | 0.8 | 0.8 | 0.7 | 0.5 | 0.6 | 0.4 | 0.5 | 0.4 | 0.7 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1960 | 0.7 | 0.6 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.7 | 0.9 | 0.9 | 0.6 |
| 1961 | 0.7 | 0.6 | 0.7 | 0.5 | 0.5 | 0.4 | 0.3 | 0.4 | 0.7 | 0.7 | 0.9 | 0.7 | 0.6 |
| 1962 | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 1.0 | 0.9 | 0.6 |
| 1963 | 0.9 | 0.9 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 0.9 | 1.1 | 0.8 |
| 1964 | 1.2 | 1.1 | 1.0 | 1.0 | 0.8 | 0.6 | 0.6 | 0.7 | 0.9 | 1.0 | 0.9 | 1.0 | 0.9 |
| 1965 | 1.3 | 1.3 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.8 | 1.0 | 1.2 | 1.2 | 0.9 |
| 1966 | 1.1 | 1.3 | 1.4 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 1.0 | 1.3 | 1.2 | 1.2 | 1.0 |
| 1967 | 1.2 | 1.3 | 1.4 | 0.9 | 1.2 | 0.9 | 0.7 | 0.9 | 1.6 | 2.2 | 1.4 | 1.6 | 1.3 |
| 1968 | 1.2 | 1.2 | 1.3 | 1.1 | 1.1 | 0.8 | 0.9 | 0.8 | 1.3 | 2.0 | 1.6 | 1.3 | 1.2 |
| 1969 | 1.4 | 0.9 | 1.0 | 0.8 | 0.9 | 0.8 | 0.6 | 0.8 | 1.3 | 1.7 | 1.6 | 0.9 | 1.1 |
| 1970 | 1.0 | 1.2 | 1.0 | 1.0 | 1.0 | 0.7 | 0.6 | 0.7 | 1.4 | 2.4 | 1.7 | 1.0 | 1.1 |
| 1971 | 1.0 | 1.1 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 1.2 | 1.8 | 1.7 | 1.0 | 1.0 |
| 1972 | 1.2 | 0.9 | 0.9 | 0.7 | 0.5 | 0.4 | 0.5 | 0.7 | 1.4 | 1.7 | 1.4 | 0.9 | 0.9 |
| 1973 | 1.0 | 1.0 | 0.9 | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 1.2 | 1.4 | 1.6 | 0.9 | 1.0 |
| 1974 | 0.9 | 0.8 | 1.0 | 0.7 | 0.8 | 0.8 | 0.6 | 1.0 | 1.1 | 1.5 | 1.5 | 0.9 | 1.0 |
| 1975 | 0.7 | 0.4 | 0.5 | 0.2 | 0.6 | 0.8 | 0.6 | 0.8 | 1.1 | 1.8 | 1.5 | 1.1 | 0.8 |
| 1976 | 1.1 | 1.1 | 1.2 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.7 | 0.8 | 1.1 | 1.0 | 0.8 |
| 1977 | 1.1 | 1.1 | 1.0 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.7 | 1.0 | 1.1 | 0.7 |
| 1978 | 0.8 | 0.6 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.7 | 0.8 | 0.8 | 1.0 | 1.1 | 0.7 |
| 1979 | 0.8 | 0.6 | 0.8 | 0.5 | 0.8 | 0.9 | 0.5 | 0.8 | 1.1 | 1.4 | 1.7 | 1.1 | 0.9 |
| 1980 | 0.9 | 0.6 | 0.8 | 0.5 | 0.7 | 0.7 | 0.6 | 0.9 | 1.5 | 1.6 | 1.3 | 1.1 | 0.9 |
| 1981 | 0.8 | 0.9 | 0.8 | 0.7 | 0.6 | 0.8 | 0.5 | 0.5 | 1.1 | 1.7 | 1.4 | 0.8 | 0.9 |
| 1982 | 1.2 | 0.9 | 1.1 | 0.8 | 0.9 | 0.6 | 0.6 | 0.6 | 1.1 | 1.6 | 1.7 | 1.2 | 1.0 |
| 1983 | 1.0 | 0.9 | 0.9 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 | 1.3 | 1.5 | 1.7 | 1.2 | 1.0 |
| 1984 | 1.0 | 0.9 | 0.8 | 0.7 | 0.7 | 0.8 | 0.5 | 0.6 | 1.4 | 1.9 | 2.0 | 1.2 | 1.1 |
| 1985 | 1.0 | 0.9 | 1.1 | 0.7 | 0.8 | 1.0 | 0.6 | 0.8 | 1.5 | 2.0 | 1.3 | 1.1 | 1.1 |
| 1986 | 1.1 | 0.7 | 1.0 | 0.8 | 0.7 | 0.7 | 0.5 | 0.8 | 1.1 | 1.3 | 1.7 | 1.1 | 1.0 |
| 1987 | 0.9 | 0.8 | 0.9 | 0.5 | 0.5 | 0.3 | 0.4 | 0.5 | 0.5 | 0.8 | 0.9 | 0.9 | 0.7 |
| MEAN | 1.0 | 0.9 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.6 | 1.0 | 1.3 | 1.3 | 1.0 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S82 (48.67N 87.28W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.6 | 3.1 | 3.4 | 1.6 | 2.3 | 1.6 | 1.1 | 1.2 | 1.4 | 3.1 | 2.2 | 1.9 |
| 1957 | 2.8 | 3.2 | 1.9 | 1.8 | 2.6 | 2.6 | 1.3 | 1.6 | 1.7 | 1.6 | 2.2 | 2.7 |
| 1958 | 2.6 | 1.9 | 1.2 | 3.0 | 2.0 | 2.3 | 1.4 | 1.8 | 2.0 | 2.0 | 5.0 | 2.4 |
| 1959 | 2.8 | 3.9 | 2.2 | 2.2 | 3.3 | 1.7 | 1.8 | 1.6 | 2.5 | 1.6 | 2.2 | 3.1 |
| 1960 | 1.8 | 2.0 | 1.5 | 2.3 | 1.2 | 1.3 | 1.6 | 2.7 | 1.6 | 1.9 | 2.8 | 3.6 |
| 1961 | 1.8 | 2.0 | 2.2 | 2.0 | 2.0 | 2.0 | 0.9 | 1.9 | 2.0 | 2.3 | 4.1 | 2.3 |
| 1962 | 2.4 | 1.7 | 1.7 | 1.4 | 1.2 | 1.3 | 0.9 | 1.2 | 1.8 | 4.1 | 3.1 | 4.2 |
| 1963 | 2.7 | 3.0 | 2.9 | 2.3 | 2.6 | 2.0 | 2.1 | 1.2 | 2.4 | 3.7 | 2.1 | 3.5 |
| 1964 | 5.4 | 4.1 | 4.0 | 4.2 | 3.4 | 2.0 | 1.5 | 2.7 | 3.5 | 5.4 | 3.2 | 3.0 |
| 1965 | 4.0 | 3.6 | 2.2 | 2.9 | 2.5 | 2.3 | 1.5 | 1.5 | 3.0 | 2.9 | 4.2 | 3.4 |
| 1966 | 3.3 | 3.8 | 4.6 | 4.4 | 2.4 | 2.3 | 2.3 | 2.1 | 2.6 | 4.9 | 4.7 | 4.2 |
| 1967 | 3.8 | 4.3 | 4.1 | 3.1 | 5.6 | 5.6 | 2.1 | 4.0 | 5.5 | 9.9 | 4.5 | 5.1 |
| 1968 | 5.0 | 3.2 | 4.0 | 3.2 | 3.6 | 2.7 | 3.5 | 3.0 | 4.6 | 7.6 | 6.5 | 4.0 |
| 1969 | 4.0 | 2.9 | 2.6 | 2.3 | 4.2 | 3.8 | 2.4 | 3.8 | 4.4 | 6.9 | 6.9 | 2.8 |
| 1970 | 2.8 | 3.0 | 4.2 | 3.1 | 4.9 | 3.1 | 1.8 | 2.9 | 6.1 | 7.5 | 7.8 | 2.9 |
| 1971 | 2.6 | 4.0 | 3.2 | 2.3 | 1.9 | 2.7 | 3.3 | 2.1 | 4.9 | 8.2 | 8.2 | 3.2 |
| 1972 | 3.6 | 4.0 | 2.7 | 2.5 | 1.2 | 1.2 | 1.8 | 2.6 | 6.1 | 5.3 | 5.6 | 2.5 |
| 1973 | 2.5 | 3.4 | 3.9 | 2.6 | 3.3 | 3.6 | 2.4 | 2.8 | 5.1 | 4.9 | 5.6 | 4.7 |
| 1974 | 3.7 | 2.1 | 2.7 | 2.2 | 3.9 | 4.3 | 1.9 | 4.0 | 3.9 | 5.3 | 7.3 | 3.0 |
| 1975 | 3.6 | 1.8 | 1.9 | 0.6 | 1.9 | 2.6 | 1.6 | 3.6 | 5.5 | 6.8 | 7.5 | 3.3 |
| 1976 | 3.4 | 2.9 | 3.0 | 2.6 | 1.9 | 2.0 | 1.4 | 2.2 | 2.7 | 3.3 | 3.0 | 3.9 |
| 1977 | 3.4 | 3.0 | 2.9 | 1.4 | 1.9 | 1.4 | 2.2 | 2.1 | 5.1 | 2.9 | 7.8 | 3.3 |
| 1978 | 2.3 | 1.9 | 3.4 | 2.5 | 1.7 | 1.8 | 1.3 | 1.7 | 2.5 | 3.7 | 3.9 | 4.4 |
| 1979 | 2.7 | 2.3 | 1.8 | 2.8 | 5.1 | 5.4 | 1.2 | 3.6 | 3.9 | 5.6 | 7.5 | 3.7 |
| 1980 | 3.8 | 2.3 | 3.6 | 1.4 | 3.2 | 2.9 | 2.3 | 4.5 | 6.8 | 7.5 | 5.4 | 3.9 |
| 1981 | 2.4 | 2.1 | 2.6 | 2.4 | 2.2 | 3.8 | 1.2 | 1.7 | 6.4 | 6.0 | 5.7 | 2.9 |
| 1982 | 3.3 | 2.5 | 6.8 | 3.3 | 4.7 | 4.3 | 2.4 | 2.8 | 4.5 | 6.1 | 7.3 | 4.1 |
| 1983 | 4.4 | 4.7 | 3.2 | 2.2 | 2.2 | 3.1 | 3.3 | 2.9 | 4.6 | 6.5 | 5.8 | 4.2 |
| 1984 | 4.2 | 2.7 | 3.8 | 4.3 | 3.0 | 3.5 | 1.4 | 3.2 | 6.8 | 7.3 | 8.5 | 3.8 |
| 1985 | 2.9 | 3.2 | 4.1 | 2.0 | 3.0 | 4.2 | 2.7 | 3.5 | 6.2 | 6.9 | 5.5 | 3.5 |
| 1986 | 4.0 | 2.4 | 4.1 | 2.4 | 1.7 | 1.8 | 1.7 | 3.2 | 4.4 | 7.3 | 7.8 | 3.5 |
| 1987 | 3.0 | 2.9 | 2.7 | 2.4 | 2.7 | 1.3 | 1.7 | 1.8 | 1.6 | 2.9 | 3.6 | 3.3 |

32 YR. STATISTICS FOR WIS STATION S82

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.1 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 180.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.4 |
| LARGEST WAVE HS | (METERS) | 9.9 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 12.5 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 176.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 67102300 |

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 381 | 1352 | 58 | 4 | 3 | . | . | . | . | . | 1798 |
| 0.50-0.99 | . | 1887 | 236 | 6 | 6 | 2 | . | . | . | . | 2137 |
| 1.00-1.49 | . | . | 625 | 3 | 1 | 3 | . | . | . | . | 632 |
| 1.50-1.99 | . | . | 118 | 4 | . | 1 | 1 | . | . | . | 124 |
| 2.00-2.49 | . | . | 3 | 7 | 1 | . | . | . | . | . | 11 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 381 | 3239 | 1040 | 24 | 11 | 6 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 4404.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 273 | 696 | 23 | . | . | . | . | . | . | . | 992 |
| 0.50-0.99 | . | 1118 | 300 | 10 | 14 | 5 | . | . | . | . | 1447 |
| 1.00-1.49 | . | . | 336 | 10 | 8 | 3 | . | . | . | . | 357 |
| 1.50-1.99 | . | . | 81 | 7 | 1 | . | 1 | . | . | . | 90 |
| 2.00-2.49 | . | . | 2 | 7 | . | 1 | . | . | . | . | 10 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 273 | 1814 | 742 | 36 | 23 | 9 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 2718.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 375 | 887 | 28 | 3 | 2 | . | . | . | . | . | 1295 |
| 0.50-0.99 | . | 1436 | 347 | 14 | 14 | 3 | . | . | . | . | 1814 |
| 1.00-1.49 | . | . | 223 | 29 | 4 | 6 | . | . | . | . | 262 |
| 1.50-1.99 | . | . | 81 | 17 | 1 | 3 | . | . | . | . | 102 |
| 2.00-2.49 | . | . | 2 | 5 | 3 | . | . | . | . | . | 10 |
| 2.50-2.99 | . | . | . | . | 3 | 2 | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 375 | 2323 | 681 | 68 | 27 | 14 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 3270.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 301 | 851 | 18 | 1 | . | . | . | . | . | . | 1171 |
| 0.50-0.99 | . | 2073 | 886 | 10 | 9 | . | . | . | . | . | 2978 |
| 1.00-1.49 | . | . | 588 | 55 | 5 | 3 | 1 | . | . | . | 652 |
| 1.50-1.99 | . | . | 183 | 90 | 8 | 6 | . | . | . | . | 287 |
| 2.00-2.49 | . | . | 1 | 37 | 14 | 1 | . | . | . | . | 53 |
| 2.50-2.99 | . | . | . | . | 27 | 1 | . | . | . | . | 28 |
| 3.00-3.49 | . | . | . | . | 2 | 9 | . | . | . | . | 11 |
| 3.50-3.99 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 301 | 2924 | 1676 | 193 | 65 | 24 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 4858.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 262 | 602 | 12 | . | . | . | . | . | . | . | 876 |
| 0.50-0.99 | . | 588 | 1056 | 12 | 3 | . | . | . | . | . | 1659 |
| 1.00-1.49 | . | . | 366 | 202 | 6 | 4 | . | . | . | . | 578 |
| 1.50-1.99 | . | . | 23 | 204 | 12 | 4 | . | . | . | . | 243 |
| 2.00-2.49 | . | . | . | 97 | 23 | 2 | 2 | . | . | . | 124 |
| 2.50-2.99 | . | . | . | . | 67 | 6 | . | . | . | . | 73 |
| 3.00-3.49 | . | . | . | . | 5 | 26 | . | . | . | . | 31 |
| 3.50-3.99 | . | . | . | . | . | 12 | . | . | . | . | 12 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 262 | 1190 | 1457 | 515 | 116 | 55 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 3375.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 206 | 471 | 14 | . | . | . | . | . | . | . | 691 |
| 0.50-0.99 | . | 439 | 795 | 4 | 1 | . | . | . | . | . | 1239 |
| 1.00-1.49 | . | . | 252 | 174 | 6 | 2 | . | . | . | . | 434 |
| 1.50-1.99 | . | . | 10 | 131 | 20 | 12 | . | . | . | . | 173 |
| 2.00-2.49 | . | . | . | 51 | 26 | 13 | . | . | . | . | 90 |
| 2.50-2.99 | . | . | . | 1 | 43 | 7 | . | 2 | . | . | 53 |
| 3.00-3.49 | . | . | . | . | 2 | 19 | . | 1 | . | . | 22 |
| 3.50-3.99 | . | . | . | . | . | 9 | 3 | . | . | . | 12 |
| 4.00-4.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 206 | 910 | 1071 | 361 | 98 | 62 | 4 | 7 | 4 | 2 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 2560.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 204 | 645 | 251 | 105 | 7 | . | . | . | . | . | 1212 |
| 0.50-0.99 | . | 452 | 1238 | 244 | 144 | 22 | . | . | . | . | 2100 |
| 1.00-1.49 | . | . | 304 | 239 | 35 | 66 | 4 | . | . | . | 648 |
| 1.50-1.99 | . | . | 27 | 144 | 41 | 21 | . | . | . | . | 233 |
| 2.00-2.49 | . | . | . | 49 | 28 | 13 | 5 | 1 | . | . | 96 |
| 2.50-2.99 | . | . | . | 1 | 26 | 10 | 2 | 6 | . | . | 45 |
| 3.00-3.49 | . | . | . | . | 2 | 13 | 1 | 3 | . | . | 19 |
| 3.50-3.99 | . | . | . | . | . | 5 | 2 | . | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | 3 | 1 | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | 1 | 2 | 1 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 204 | 1097 | 1820 | 782 | 283 | 154 | 17 | 12 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 4101.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 368 | 1538 | 1084 | 93 | 1 | . | . | . | . | . | 3084 |
| 0.50-0.99 | . | 855 | 3253 | 996 | 141 | 6 | . | . | . | . | 5251 |
| 1.00-1.49 | . | . | 472 | 853 | 326 | 85 | 7 | 1 | . | . | 1744 |
| 1.50-1.99 | . | . | 39 | 311 | 279 | 106 | 6 | . | . | . | 741 |
| 2.00-2.49 | . | . | . | 155 | 104 | 126 | 8 | 1 | . | . | 394 |
| 2.50-2.99 | . | . | . | 4 | 219 | 63 | 17 | 1 | . | . | 304 |
| 3.00-3.49 | . | . | . | . | 23 | 220 | 12 | 2 | . | . | 257 |
| 3.50-3.99 | . | . | . | . | . | 155 | 34 | 7 | . | . | 196 |
| 4.00-4.49 | . | . | . | . | . | 17 | 116 | 10 | 1 | . | 144 |
| 4.50-4.99 | . | . | . | . | . | . | 44 | 53 | 1 | . | 98 |
| 5.00-5.49 | . | . | . | . | . | . | 4 | 65 | 3 | . | 72 |
| 5.50-5.99 | . | . | . | . | . | . | . | 22 | 18 | 1 | 41 |
| 6.00-6.49 | . | . | . | . | . | . | . | 4 | 33 | . | 37 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 24 | 3 | 27 |
| 7.00+ | . | . | . | . | . | . | . | . | 6 | 22 | 28 |
| TOTAL | 368 | 2393 | 4848 | 2412 | 1093 | 778 | 248 | 166 | 86 | 26 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 8.4 MEAN TP(SEC)= 4.8 NO. OF CASES= 11631.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 468 | 1328 | 916 | 72 | 4 | . | . | . | . | . | 2788 |
| 0.50-0.99 | . | 740 | 2184 | 1049 | 51 | 3 | 1 | . | . | . | 4028 |
| 1.00-1.49 | . | . | 348 | 787 | 353 | 24 | 3 | . | . | . | 1515 |
| 1.50-1.99 | . | . | 32 | 165 | 253 | 109 | 1 | . | . | . | 560 |
| 2.00-2.49 | . | . | . | 73 | 72 | 116 | 10 | 1 | . | . | 272 |
| 2.50-2.99 | . | . | . | 5 | 119 | 31 | 18 | 9 | . | . | 182 |
| 3.00-3.49 | . | . | . | . | 12 | 117 | 13 | 8 | . | . | 150 |
| 3.50-3.99 | . | . | . | . | . | 64 | 17 | 9 | 1 | . | 91 |
| 4.00-4.49 | . | . | . | . | . | 9 | 43 | 9 | . | . | 61 |
| 4.50-4.99 | . | . | . | . | . | 1 | 18 | 25 | . | . | 44 |
| 5.00-5.49 | . | . | . | . | . | . | . | 27 | . | . | 27 |
| 5.50-5.99 | . | . | . | . | . | . | . | 10 | 5 | . | 15 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 10 | . | 11 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 5 | 1 | 6 |
| 7.00+ | . | . | . | . | . | . | . | . | 3 | 7 | 10 |
| TOTAL | 468 | 2068 | 3480 | 2151 | 864 | 474 | 124 | 99 | 24 | 8 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 9.5 MEAN TP(SEC)= 4.6 NO. OF CASES= 9148.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 426 | 1309 | 588 | 124 | 14 | 4 | . | . | . | . | 2465 |
| 0.50-0.99 | . | 735 | 1534 | 428 | 115 | 20 | 3 | 1 | . | . | 2836 |
| 1.00-1.49 | . | . | 460 | 393 | 129 | 27 | 3 | 1 | . | . | 1013 |
| 1.50-1.99 | . | . | 34 | 254 | 115 | 35 | . | . | . | . | 438 |
| 2.00-2.49 | . | . | 1 | 88 | 52 | 56 | 3 | . | . | . | 200 |
| 2.50-2.99 | . | . | . | 5 | 97 | 41 | 7 | 4 | . | . | 154 |
| 3.00-3.49 | . | . | . | . | 10 | 59 | 5 | 3 | 1 | . | 78 |
| 3.50-3.99 | . | . | . | . | . | 49 | 11 | 5 | . | . | 65 |
| 4.00-4.49 | . | . | . | . | . | 3 | 24 | 12 | . | . | 39 |
| 4.50-4.99 | . | . | . | . | . | . | 11 | 5 | 1 | . | 17 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | . | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 2 | . | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 426 | 2044 | 2617 | 1292 | 532 | 294 | 67 | 41 | 8 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 6867.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 609 | 2169 | 843 | 118 | 68 | 18 | 2 | . | . | . | 3827 |
| 0.50-0.99 | . | 1057 | 2766 | 361 | 119 | 135 | 34 | 2 | . | . | 4474 |
| 1.00-1.49 | . | . | 934 | 472 | 79 | 68 | 26 | 2 | . | . | 1581 |
| 1.50-1.99 | . | . | 98 | 397 | 105 | 50 | 6 | 4 | 1 | . | 661 |
| 2.00-2.49 | . | . | . | 183 | 89 | 40 | 10 | 5 | 3 | . | 330 |
| 2.50-2.99 | . | . | . | 6 | 155 | 25 | 7 | 10 | 2 | . | 205 |
| 3.00-3.49 | . | . | . | . | 26 | 94 | 5 | 4 | 1 | . | 130 |
| 3.50-3.99 | . | . | . | . | 1 | 51 | 12 | 5 | 1 | 1 | 71 |
| 4.00-4.49 | . | . | . | . | . | 10 | 27 | 13 | 3 | . | 53 |
| 4.50-4.99 | . | . | . | . | . | . | 20 | 14 | 2 | . | 36 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 17 | 6 | . | 24 |
| 5.50-5.99 | . | . | . | . | . | . | . | 8 | 7 | 1 | 16 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 7 | 4 | 12 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 5 | 5 | 10 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 7 | 8 |
| TOTAL | 609 | 3226 | 4641 | 1537 | 642 | 491 | 150 | 85 | 39 | 18 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 8.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 10724.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 627 | 1988 | 155 | 32 | 2 | 3 | . | . | . | . | 2807 |
| 0.50-0.99 | . | 1713 | 2854 | 91 | 8 | 18 | 10 | . | . | . | 4694 |
| 1.00-1.49 | . | 1 | 1919 | 150 | 12 | 10 | 5 | 3 | . | . | 2100 |
| 1.50-1.99 | . | . | 182 | 586 | 17 | 4 | . | . | . | . | 789 |
| 2.00-2.49 | . | . | 2 | 353 | 19 | 13 | 1 | 1 | . | . | 389 |
| 2.50-2.99 | . | . | . | 32 | 79 | 2 | 3 | 1 | 1 | . | 118 |
| 3.00-3.49 | . | . | . | . | 22 | 9 | 2 | 1 | . | . | 34 |
| 3.50-3.99 | . | . | . | . | 2 | 13 | . | . | . | . | 15 |
| 4.00-4.49 | . | . | . | . | . | 3 | 2 | 2 | 1 | . | 8 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 627 | 3702 | 5112 | 1244 | 161 | 76 | 23 | 8 | 2 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 10259.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 529 | 1332 | 19 | . | . | . | . | . | . | . | 1880 |
| 0.50-0.99 | . | 1872 | 1858 | . | 1 | . | . | . | . | . | 3731 |
| 1.00-1.49 | . | . | 1489 | 36 | . | 1 | . | . | . | . | 1526 |
| 1.50-1.99 | . | . | 205 | 599 | 2 | . | . | . | . | . | 806 |
| 2.00-2.49 | . | . | 11 | 419 | 1 | 2 | . | . | . | . | 433 |
| 2.50-2.99 | . | . | . | 26 | 84 | . | . | . | . | . | 110 |
| 3.00-3.49 | . | . | . | . | 25 | . | . | . | . | . | 25 |
| 3.50-3.99 | . | . | . | . | 1 | 1 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 529 | 3204 | 3582 | 1080 | 114 | 4 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 7968.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 314 | 913 | 9 | . | . | . | . | . | . | . | 1236 |
| 0.50-0.99 | . | 1839 | 624 | . | 1 | . | . | . | . | . | 2464 |
| 1.00-1.49 | . | . | 741 | 3 | . | . | . | . | . | . | 744 |
| 1.50-1.99 | . | . | 311 | 77 | . | . | . | . | . | . | 388 |
| 2.00-2.49 | . | . | 4 | 72 | 2 | . | . | . | . | . | 78 |
| 2.50-2.99 | . | . | . | 7 | 2 | . | . | . | . | . | 9 |
| 3.00-3.49 | . | . | . | . | 4 | 1 | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 314 | 2752 | 1689 | 159 | 9 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 4609.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 206 | 544 | 5 | . | . | . | . | . | . | . | 755 |
| 0.50-0.99 | . | 1099 | 315 | . | . | . | . | . | . | . | 1414 |
| 1.00-1.49 | . | . | 438 | 1 | . | 1 | . | . | . | . | 440 |
| 1.50-1.99 | . | . | 270 | 32 | . | . | . | . | . | . | 302 |
| 2.00-2.49 | . | . | . | 17 | . | . | . | . | . | . | 17 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 206 | 1643 | 1028 | 51 | 0 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 2742.

STATION S83 48.67N 87.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

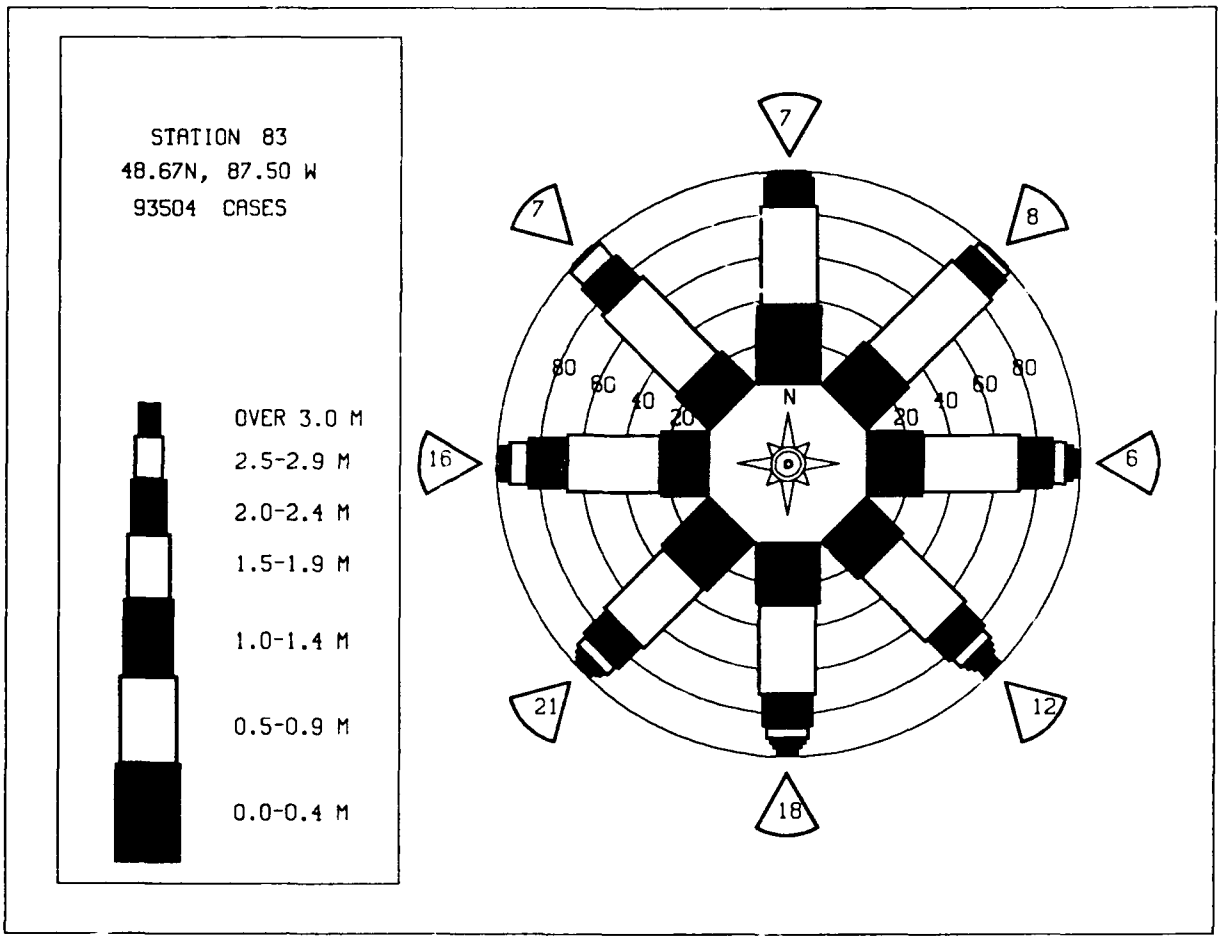
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 265 | 793 | 16 | 1 | 1 | . | . | . | . | . | 1076 |
| 0.50-0.99 | . | 1856 | 503 | 1 | 3 | 1 | . | . | . | . | 2364 |
| 1.00-1.49 | . | . | 733 | 2 | 3 | . | . | . | . | . | 738 |
| 1.50-1.99 | . | . | 308 | 37 | . | . | . | . | . | . | 345 |
| 2.00-2.49 | . | . | 3 | 31 | . | . | . | . | . | . | 34 |
| 2.50-2.99 | . | . | . | 5 | . | . | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 265 | 2649 | 1563 | 77 | 7 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 4270.

STATION S83 48.67N 87.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 582 | 1742 | 404 | 55 | 10 | 2 | . | . | . | . | 2795 |
| 0.50-0.99 | . | 1976 | 2075 | 323 | 63 | 21 | 4 | . | . | . | 4462 |
| 1.00-1.49 | . | . | 1023 | 341 | 97 | 30 | 5 | . | . | . | 1496 |
| 1.50-1.99 | . | . | 200 | 306 | 85 | 35 | 1 | . | . | . | 627 |
| 2.00-2.49 | . | . | 3 | 165 | 44 | 38 | 4 | . | . | . | 254 |
| 2.50-2.99 | . | . | . | 9 | 92 | 19 | 5 | 3 | . | . | 128 |
| 3.00-3.49 | . | . | . | . | 13 | 57 | 4 | 2 | . | . | 76 |
| 3.50-3.99 | . | . | . | . | . | 36 | 8 | 2 | . | . | 46 |
| 4.00-4.49 | . | . | . | . | . | 4 | 21 | 5 | . | . | 30 |
| 4.50-4.99 | . | . | . | . | . | . | 10 | 10 | . | . | 20 |
| 5.00-5.49 | . | . | . | . | . | . | . | 11 | . | . | 11 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 3 | . | 7 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | 1 | 4 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 4 | 5 |
| TOTAL | 582 | 3718 | 3705 | 1199 | 404 | 242 | 62 | 37 | 12 | 5 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 9.5 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S83 (48.67N 87.50W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 0.7 | 0.6 | 0.6 |
| 1957 | 0.8 | 0.8 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 0.8 | 0.9 | 0.6 |
| 1958 | 0.6 | 0.7 | 0.4 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 1.1 | 0.8 | 0.6 |
| 1959 | 0.7 | 0.7 | 0.7 | 0.5 | 0.6 | 0.4 | 0.5 | 0.4 | 0.7 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1960 | 0.7 | 0.6 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.7 | 0.9 | 0.8 | 0.6 |
| 1961 | 0.6 | 0.6 | 0.7 | 0.5 | 0.5 | 0.4 | 0.3 | 0.4 | 0.7 | 0.7 | 0.8 | 0.7 | 0.6 |
| 1962 | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 0.9 | 0.6 |
| 1963 | 0.9 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 1.1 | 0.7 |
| 1964 | 1.1 | 1.0 | 0.9 | 0.9 | 0.7 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 0.9 | 0.9 | 0.8 |
| 1965 | 1.2 | 1.2 | 0.8 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.8 | 0.9 | 1.2 | 1.1 | 0.9 |
| 1966 | 1.1 | 1.2 | 1.4 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.9 | 1.2 | 1.2 | 1.1 | 1.0 |
| 1967 | 1.2 | 1.2 | 1.3 | 0.9 | 1.2 | 0.9 | 0.7 | 0.8 | 1.5 | 2.1 | 1.3 | 1.5 | 1.2 |
| 1968 | 1.2 | 1.2 | 1.3 | 1.1 | 1.1 | 0.8 | 0.8 | 0.8 | 1.3 | 2.0 | 1.6 | 1.2 | 1.2 |
| 1969 | 1.3 | 0.9 | 0.9 | 0.7 | 0.9 | 0.8 | 0.6 | 0.8 | 1.3 | 1.6 | 1.5 | 0.9 | 1.0 |
| 1970 | 0.9 | 1.1 | 0.9 | 1.0 | 1.0 | 0.6 | 0.5 | 0.7 | 1.4 | 2.3 | 1.6 | 0.9 | 1.1 |
| 1971 | 1.0 | 1.0 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 1.1 | 1.7 | 1.6 | 0.9 | 1.0 |
| 1972 | 1.1 | 0.9 | 0.9 | 0.6 | 0.5 | 0.4 | 0.5 | 0.6 | 1.4 | 1.6 | 1.3 | 0.9 | 0.9 |
| 1973 | 1.0 | 1.0 | 0.8 | 0.7 | 0.8 | 0.8 | 0.6 | 0.6 | 1.2 | 1.4 | 1.6 | 0.9 | 0.9 |
| 1974 | 0.9 | 0.7 | 1.0 | 0.7 | 0.8 | 0.8 | 0.6 | 0.9 | 1.1 | 1.4 | 1.4 | 0.9 | 0.9 |
| 1975 | 0.6 | 0.4 | 0.4 | 0.2 | 0.6 | 0.7 | 0.6 | 0.8 | 1.0 | 1.7 | 1.4 | 1.0 | 0.8 |
| 1976 | 1.1 | 1.0 | 1.1 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.7 | 0.8 | 1.0 | 1.0 | 0.8 |
| 1977 | 1.0 | 1.1 | 1.0 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.7 | 1.0 | 1.1 | 0.7 |
| 1978 | 0.8 | 0.6 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.8 | 0.8 | 1.0 | 1.0 | 0.7 |
| 1979 | 0.8 | 0.6 | 0.8 | 0.5 | 0.8 | 0.9 | 0.5 | 0.8 | 1.0 | 1.4 | 1.6 | 1.1 | 0.9 |
| 1980 | 0.9 | 0.6 | 0.8 | 0.5 | 0.6 | 0.6 | 0.5 | 0.9 | 1.5 | 1.6 | 1.2 | 1.1 | 0.9 |
| 1981 | 0.8 | 0.9 | 0.8 | 0.7 | 0.6 | 0.7 | 0.5 | 0.5 | 1.1 | 1.6 | 1.3 | 0.8 | 0.9 |
| 1982 | 1.1 | 0.9 | 1.1 | 0.8 | 0.9 | 0.6 | 0.6 | 0.6 | 1.0 | 1.6 | 1.6 | 1.2 | 1.0 |
| 1983 | 1.0 | 0.9 | 1.0 | 0.6 | 0.7 | 0.7 | 0.5 | 0.6 | 1.2 | 1.4 | 1.7 | 1.2 | 1.0 |
| 1984 | 1.0 | 0.9 | 0.8 | 0.8 | 0.7 | 0.8 | 0.5 | 0.6 | 1.3 | 1.9 | 1.9 | 1.1 | 1.0 |
| 1985 | 1.0 | 0.9 | 1.1 | 0.7 | 0.7 | 0.9 | 0.5 | 0.8 | 1.5 | 1.9 | 1.3 | 1.1 | 1.0 |
| 1986 | 1.0 | 0.7 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.7 | 1.1 | 1.2 | 1.5 | 1.0 | 0.9 |
| 1987 | 0.9 | 0.8 | 0.9 | 0.5 | 0.5 | 0.3 | 0.4 | 0.5 | 0.5 | 0.8 | 0.9 | 0.9 | 0.7 |
| MEAN | 0.9 | 0.9 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.6 | 1.0 | 1.2 | 1.2 | 1.0 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S83 (48.67N 87.50W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.5 | 2.4 | 3.5 | 1.8 | 2.3 | 1.3 | 1.2 | 1.1 | 1.4 | 2.5 | 2.3 | 1.9 |
| 1957 | 2.7 | 3.0 | 1.8 | 1.7 | 2.3 | 2.3 | 1.5 | 1.5 | 1.6 | 1.5 | 2.0 | 2.5 |
| 1958 | 2.6 | 2.0 | 1.3 | 2.7 | 2.1 | 2.3 | 1.5 | 1.7 | 2.1 | 2.0 | 5.2 | 2.4 |
| 1959 | 2.3 | 3.8 | 2.1 | 2.3 | 2.7 | 1.5 | 1.9 | 1.7 | 2.5 | 1.7 | 2.3 | 3.0 |
| 1960 | 2.0 | 1.8 | 1.4 | 2.3 | 1.2 | 1.3 | 1.5 | 2.6 | 1.7 | 2.2 | 2.8 | 3.7 |
| 1961 | 1.6 | 1.8 | 2.1 | 2.0 | 1.9 | 1.9 | 1.1 | 1.8 | 1.9 | 2.1 | 4.1 | 2.1 |
| 1962 | 2.5 | 1.5 | 1.7 | 1.6 | 1.3 | 1.3 | 1.1 | 1.3 | 2.0 | 4.3 | 3.1 | 3.8 |
| 1963 | 2.6 | 2.9 | 2.6 | 2.2 | 2.4 | 1.8 | 1.8 | 1.2 | 2.2 | 3.4 | 2.4 | 3.4 |
| 1964 | 4.9 | 4.0 | 3.4 | 4.1 | 3.5 | 1.7 | 1.3 | 2.9 | 3.2 | 4.5 | 2.9 | 2.7 |
| 1965 | 3.9 | 3.7 | 2.5 | 2.4 | 2.5 | 2.1 | 1.3 | 1.5 | 2.9 | 2.9 | 4.2 | 3.2 |
| 1966 | 3.2 | 4.0 | 4.8 | 4.2 | 2.3 | 2.2 | 2.4 | 2.0 | 2.3 | 5.3 | 4.3 | 4.2 |
| 1967 | 3.6 | 3.8 | 4.1 | 3.2 | 5.7 | 5.8 | 1.9 | 3.8 | 5.5 | 9.5 | 4.5 | 4.7 |
| 1968 | 5.0 | 3.0 | 3.4 | 2.9 | 3.6 | 2.5 | 3.5 | 2.9 | 4.5 | 8.0 | 6.4 | 3.8 |
| 1969 | 3.5 | 2.6 | 2.4 | 2.2 | 4.3 | 3.8 | 2.5 | 3.6 | 4.3 | 6.7 | 6.7 | 3.0 |
| 1970 | 2.4 | 2.4 | 4.7 | 3.1 | 4.9 | 3.0 | 1.7 | 3.1 | 6.2 | 7.6 | 7.4 | 2.7 |
| 1971 | 2.5 | 3.5 | 2.8 | 2.5 | 2.0 | 2.8 | 3.1 | 2.1 | 4.8 | 8.1 | 7.9 | 2.9 |
| 1972 | 3.8 | 3.6 | 2.7 | 2.5 | 1.2 | 1.2 | 1.8 | 2.5 | 6.2 | 5.0 | 4.9 | 2.7 |
| 1973 | 2.3 | 3.2 | 3.2 | 2.2 | 3.3 | 3.7 | 2.3 | 2.6 | 5.4 | 5.3 | 5.7 | 4.4 |
| 1974 | 3.7 | 1.9 | 2.9 | 1.9 | 4.0 | 4.1 | 1.8 | 3.6 | 3.6 | 5.1 | 7.4 | 2.5 |
| 1975 | 3.2 | 1.5 | 1.7 | 0.6 | 1.8 | 2.5 | 1.4 | 3.6 | 5.5 | 6.7 | 7.5 | 2.8 |
| 1976 | 3.1 | 3.0 | 3.2 | 2.3 | 2.1 | 1.8 | 1.4 | 1.7 | 2.7 | 3.3 | 2.6 | 3.5 |
| 1977 | 3.1 | 3.4 | 3.1 | 1.7 | 1.8 | 1.5 | 2.0 | 1.9 | 5.1 | 2.5 | 7.5 | 3.7 |
| 1978 | 2.3 | 1.8 | 3.4 | 2.2 | 1.5 | 2.0 | 1.1 | 1.6 | 2.4 | 3.5 | 3.9 | 4.5 |
| 1979 | 2.6 | 2.4 | 1.9 | 3.1 | 5.1 | 5.4 | 1.2 | 3.7 | 3.8 | 5.6 | 8.1 | 3.7 |
| 1980 | 3.3 | 2.0 | 3.6 | 1.5 | 3.3 | 2.8 | 2.1 | 4.4 | 6.5 | 7.9 | 5.3 | 4.1 |
| 1981 | 2.2 | 2.1 | 2.7 | 2.3 | 2.2 | 3.8 | 1.2 | 1.7 | 6.4 | 6.1 | 5.5 | 2.8 |
| 1982 | 3.7 | 2.3 | 6.9 | 2.9 | 4.7 | 4.4 | 2.3 | 2.7 | 4.6 | 6.1 | 7.2 | 4.1 |
| 1983 | 4.4 | 4.7 | 3.6 | 2.0 | 2.2 | 3.0 | 3.3 | 2.5 | 4.4 | 6.4 | 6.1 | 3.5 |
| 1984 | 4.1 | 3.0 | 3.9 | 4.3 | 3.0 | 3.5 | 1.4 | 3.2 | 6.9 | 7.6 | 8.4 | 3.6 |
| 1985 | 2.5 | 3.2 | 4.5 | 2.0 | 3.0 | 4.1 | 2.6 | 3.5 | 5.8 | 7.0 | 5.7 | 3.2 |
| 1986 | 4.3 | 2.8 | 4.4 | 2.4 | 1.7 | 1.8 | 1.6 | 3.1 | 4.3 | 7.1 | 7.7 | 3.5 |
| 1987 | 2.9 | 3.2 | 3.0 | 2.0 | 2.7 | 1.2 | 1.7 | 1.7 | 1.6 | 2.9 | 3.6 | 3.3 |

32 YR. STATISTICS FOR WIS STATION S83

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 4.0 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 157.5 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.3 |
| LARGEST WAVE HS . . . . . | (METERS) | 9.5 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 170.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 67102300 |

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 346 | 1193 | 55 | 6 | 5 | . | . | . | . | . | 1605 |
| 0.50-0.99 | . | 1727 | 274 | 20 | 12 | 3 | . | . | . | . | 2036 |
| 1.00-1.49 | . | . | 587 | 6 | 4 | 6 | . | . | . | . | 603 |
| 1.50-1.99 | . | . | 117 | 4 | . | 4 | . | . | . | . | 125 |
| 2.00-2.49 | . | . | 2 | 8 | . | 1 | . | . | . | . | 11 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 346 | 2920 | 1035 | 44 | 21 | 14 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 4103.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 274 | 720 | 49 | 6 | . | . | . | . | . | . | 1049 |
| 0.50-0.99 | . | 1055 | 309 | 12 | 21 | 3 | . | . | . | . | 1400 |
| 1.00-1.49 | . | . | 320 | 20 | 10 | 9 | . | . | . | . | 359 |
| 1.50-1.99 | . | . | 84 | 10 | 1 | 6 | . | . | . | . | 101 |
| 2.00-2.49 | . | . | 3 | 8 | 1 | 2 | . | . | . | . | 14 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 274 | 1775 | 765 | 58 | 33 | 20 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 2744.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 420 | 849 | 54 | 5 | . | . | . | . | . | . | 1328 |
| 0.50-0.99 | . | 1241 | 377 | 22 | 8 | 3 | . | . | . | . | 1651 |
| 1.00-1.49 | . | . | 228 | 45 | 10 | 5 | . | . | . | . | 288 |
| 1.50-1.99 | . | . | 82 | 13 | 5 | 4 | 1 | . | . | . | 105 |
| 2.00-2.49 | . | . | 3 | 7 | 8 | . | 1 | . | . | . | 19 |
| 2.50-2.99 | . | . | . | 2 | 2 | 3 | . | . | . | . | 7 |
| 3.00-3.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 420 | 2090 | 744 | 94 | 33 | 17 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 3189.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 344 | 797 | 34 | 4 | . | . | . | . | . | . | 1179 |
| 0.50-0.99 | . | 2071 | 868 | 23 | 12 | 1 | . | . | . | . | 2975 |
| 1.00-1.49 | . | . | 599 | 52 | 4 | 5 | . | . | . | . | 660 |
| 1.50-1.99 | . | . | 167 | 91 | 13 | 5 | . | . | . | . | 276 |
| 2.00-2.49 | . | . | . | 36 | 8 | 5 | . | . | . | . | 49 |
| 2.50-2.99 | . | . | . | 1 | 31 | 4 | . | . | . | . | 36 |
| 3.00-3.49 | . | . | . | . | 2 | 13 | . | . | . | . | 15 |
| 3.50-3.99 | . | . | . | . | . | 6 | . | . | . | . | 6 |
| 4.00-4.49 | . | . | . | . | . | 2 | 1 | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 344 | 2868 | 1668 | 207 | 70 | 41 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 4873.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 342 | 792 | 28 | 2 | . | . | . | . | . | . | 1164 |
| 0.50-0.99 | . | 667 | 1225 | 13 | 6 | . | . | . | . | . | 1911 |
| 1.00-1.49 | . | . | 425 | 226 | 16 | 5 | . | . | . | . | 672 |
| 1.50-1.99 | . | . | 21 | 248 | 19 | 4 | . | . | . | . | 292 |
| 2.00-2.49 | . | . | . | 104 | 43 | 6 | . | . | . | . | 153 |
| 2.50-2.99 | . | . | . | 1 | 71 | 7 | 1 | 1 | . | . | 81 |
| 3.00-3.49 | . | . | . | . | 7 | 49 | . | . | . | . | 56 |
| 3.50-3.99 | . | . | . | . | . | 18 | . | . | . | . | 18 |
| 4.00-4.49 | . | . | . | . | . | 7 | . | . | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 342 | 1459 | 1699 | 594 | 162 | 96 | 4 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 4085.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 271 | 560 | 22 | 1 | 1 | . | . | . | . | . | 855 |
| 0.50-0.99 | . | 470 | 838 | 5 | 2 | . | . | . | . | . | 1315 |
| 1.00-1.49 | . | . | 280 | 175 | 9 | 1 | . | . | . | . | 465 |
| 1.50-1.99 | . | . | 13 | 145 | 26 | 10 | . | . | . | . | 194 |
| 2.00-2.49 | . | . | . | 53 | 25 | 13 | . | . | . | . | 91 |
| 2.50-2.99 | . | . | . | 2 | 57 | 13 | 2 | 2 | . | . | 76 |
| 3.00-3.49 | . | . | . | . | 4 | 31 | 1 | . | . | . | 36 |
| 3.50-3.99 | . | . | . | . | . | 13 | 2 | . | . | . | 15 |
| 4.00-4.49 | . | . | . | . | . | 4 | 3 | 1 | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 4 | . | 4 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 271 | 1030 | 1153 | 381 | 124 | 85 | 9 | 6 | 5 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 2878.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 270 | 911 | 490 | 120 | 3 | . | . | . | . | . | 1794 |
| 0.50-0.99 | . | 539 | 1819 | 504 | 161 | 8 | . | . | . | . | 3031 |
| 1.00-1.49 | . | . | 377 | 381 | 142 | 77 | 1 | . | . | . | 978 |
| 1.50-1.99 | . | . | 24 | 247 | 103 | 50 | 2 | . | . | . | 426 |
| 2.00-2.49 | . | . | . | 95 | 53 | 33 | 6 | 1 | . | . | 188 |
| 2.50-2.99 | . | . | . | 2 | 86 | 37 | 2 | 4 | . | . | 131 |
| 3.00-3.49 | . | . | . | . | 13 | 42 | 6 | 2 | . | . | 63 |
| 3.50-3.99 | . | . | . | . | . | 32 | 10 | 2 | . | . | 44 |
| 4.00-4.49 | . | . | . | . | . | 4 | 11 | 2 | . | . | 17 |
| 4.50-4.99 | . | . | . | . | . | 1 | 9 | 4 | . | . | 14 |
| 5.00-5.49 | . | . | . | . | . | . | . | 7 | . | . | 7 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 1 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 270 | 1450 | 2710 | 1349 | 561 | 284 | 47 | 25 | 2 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 6279.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 474 | 1602 | 1491 | 238 | 18 | . | . | . | . | . | 3823 |
| 0.50-0.99 | . | 895 | 2611 | 1299 | 411 | 47 | . | . | . | . | 5263 |
| 1.00-1.49 | . | 1 | 426 | 505 | 486 | 159 | 12 | . | . | . | 1589 |
| 1.50-1.99 | . | . | 28 | 194 | 180 | 143 | 13 | 2 | . | . | 560 |
| 2.00-2.49 | . | . | . | 91 | 67 | 111 | 10 | 6 | . | . | 285 |
| 2.50-2.99 | . | . | . | 5 | 146 | 60 | 21 | 6 | . | . | 238 |
| 3.00-3.49 | . | . | . | . | 23 | 147 | 6 | 10 | . | . | 186 |
| 3.50-3.99 | . | . | . | . | . | 106 | 34 | 8 | 2 | . | 150 |
| 4.00-4.49 | . | . | . | . | . | 14 | 95 | 16 | 1 | . | 126 |
| 4.50-4.99 | . | . | . | . | . | . | 33 | 44 | 3 | . | 80 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 39 | 10 | . | 51 |
| 5.50-5.99 | . | . | . | . | . | . | . | 26 | 14 | 1 | 41 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | 32 | . | 33 |
| 6.50-6.99 | . | . | . | . | . | . | . | 1 | 18 | 5 | 24 |
| 7.00+ | | | | | | | | | 8 | 19 | 27 |
| TOTAL | 474 | 2498 | 4556 | 2332 | 1331 | 787 | 226 | 159 | 88 | 25 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 4.8 NO. OF CASES= 11692.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 505 | 1348 | 502 | 64 | 16 | | | | | | 2435 |
| 0.50-0.99 | . | 774 | 1379 | 227 | 133 | 49 | 1 | . | . | . | 2563 |
| 1.00-1.49 | . | 2 | 365 | 274 | 103 | 71 | 10 | . | . | . | 825 |
| 1.50-1.99 | . | . | 27 | 171 | 74 | 49 | 9 | 3 | . | . | 333 |
| 2.00-2.49 | . | . | . | 74 | 66 | 49 | 6 | 5 | . | . | 200 |
| 2.50-2.99 | . | . | . | 4 | 116 | 16 | 11 | 10 | 1 | . | 158 |
| 3.00-3.49 | . | . | . | . | 10 | 90 | 4 | 2 | . | . | 106 |
| 3.50-3.99 | . | . | . | . | . | 64 | 3 | 3 | 1 | . | 71 |
| 4.00-4.49 | . | . | . | . | . | 22 | 21 | 4 | 1 | . | 48 |
| 4.50-4.99 | . | . | . | . | . | . | 21 | 3 | . | . | 24 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 8 | 1 | . | 12 |
| 5.50-5.99 | . | . | . | . | . | . | . | 7 | 1 | . | 8 |
| 6.00-6.49 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| TOTAL | 505 | 2124 | 2273 | 814 | 518 | 410 | 89 | 47 | 8 | 2 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.3 NO. OF CASES= 6370.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 501 | 1509 | 704 | 166 | 34 | 9 | | | | | 2923 |
| 0.50-0.99 | . | 735 | 1436 | 305 | 144 | 48 | 5 | 2 | . | . | 2675 |
| 1.00-1.49 | . | . | 561 | 218 | 89 | 53 | 5 | . | . | . | 926 |
| 1.50-1.99 | . | . | 79 | 214 | 59 | 21 | 11 | 2 | 3 | . | 389 |
| 2.00-2.49 | . | . | 1 | 108 | 42 | 32 | 10 | 3 | 1 | . | 197 |
| 2.50-2.99 | . | . | . | 8 | 64 | 28 | 6 | 7 | . | . | 113 |
| 3.00-3.49 | . | . | . | . | 10 | 50 | 7 | 6 | 4 | . | 77 |
| 3.50-3.99 | . | . | . | . | 2 | 17 | 18 | 13 | . | . | 50 |
| 4.00-4.49 | . | . | . | . | . | 3 | 8 | 4 | 2 | . | 17 |
| 4.50-4.99 | . | . | . | . | . | 1 | 5 | 3 | 2 | . | 11 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 501 | 2244 | 2781 | 1019 | 444 | 262 | 75 | 44 | 15 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.2 NO. OF CASES= 6926.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 778 | 2484 | 852 | 114 | 42 | 17 | 4 | | | | 4291 |
| 0.50-0.99 | . | 1432 | 2907 | 267 | 86 | 102 | 26 | 2 | . | . | 4822 |
| 1.00-1.49 | . | 2 | 1208 | 196 | 56 | 41 | 19 | 5 | . | . | 1527 |
| 1.50-1.99 | . | . | 136 | 380 | 53 | 41 | 11 | 5 | . | . | 626 |
| 2.00-2.49 | . | . | . | 225 | 48 | 24 | 11 | 7 | 1 | . | 316 |
| 2.50-2.99 | . | . | . | 25 | 139 | 28 | 6 | 11 | 2 | . | 211 |
| 3.00-3.49 | . | . | . | . | 39 | 38 | 11 | 13 | 2 | . | 103 |
| 3.50-3.99 | . | . | . | . | 3 | 19 | 12 | 12 | 7 | . | 53 |
| 4.00-4.49 | . | . | . | . | . | 12 | 4 | 3 | 9 | 2 | 30 |
| 4.50-4.99 | . | . | . | . | . | 2 | . | . | 7 | 3 | 12 |
| 5.00-5.49 | . | . | . | . | . | 3 | . | . | 3 | 1 | 7 |
| 5.50-5.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 778 | 3918 | 5103 | 1207 | 466 | 328 | 104 | 58 | 31 | 6 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 11246.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 796 | 1741 | 99 | 29 | 1 | 2 | | | | | 2668 |
| 0.50-0.99 | . | 2573 | 2128 | 19 | 6 | 3 | 4 | . | . | . | 4733 |
| 1.00-1.49 | . | . | 1379 | 39 | 2 | 1 | 2 | . | . | . | 1423 |
| 1.50-1.99 | . | . | 397 | 287 | 2 | 3 | 2 | . | . | . | 691 |
| 2.00-2.49 | . | . | . | 190 | 7 | 2 | . | 2 | 1 | . | 202 |
| 2.50-2.99 | . | . | . | 18 | 20 | 2 | 2 | . | . | . | 42 |
| 3.00-3.49 | . | . | . | . | 6 | 4 | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | 2 | 4 | . | . | . | . | 6 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | 1 | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 796 | 4314 | 4003 | 582 | 46 | 22 | 12 | 3 | 1 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 9155.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 618 | 1109 | 23 | . | . | . | . | . | . | . | 1750 |
| 0.50-0.99 | . | 2285 | 1158 | . | 1 | . | . | . | . | . | 3444 |
| 1.00-1.49 | . | . | 1011 | 1 | 1 | 1 | . | . | . | . | 1014 |
| 1.50-1.99 | . | . | 447 | 403 | . | . | . | . | . | . | 850 |
| 2.00-2.49 | . | . | 6 | 172 | . | . | . | . | . | . | 178 |
| 2.50-2.99 | . | . | . | 33 | 3 | . | . | . | . | . | 36 |
| 3.00-3.49 | . | . | . | . | 7 | . | . | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 618 | 3394 | 2645 | 609 | 12 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 6810.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 372 | 951 | 22 | . | . | . | . | . | . | . | 1345 |
| 0.50-0.99 | . | 1749 | 657 | . | . | . | . | . | . | . | 2406 |
| 1.00-1.49 | . | . | 860 | 1 | 1 | . | . | . | . | . | 862 |
| 1.50-1.99 | . | . | 406 | 115 | . | . | . | . | . | . | 521 |
| 2.00-2.49 | . | . | 4 | 117 | . | . | . | . | . | . | 121 |
| 2.50-2.99 | . | . | . | 7 | 5 | . | . | . | . | . | 12 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 372 | 2700 | 1949 | 240 | 6 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 4931.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 305 | 679 | 29 | 3 | . | . | . | . | . | . | 1016 |
| 0.50-0.99 | . | 1491 | 539 | 5 | 1 | 1 | . | . | . | . | 2037 |
| 1.00-1.49 | . | . | 634 | 4 | . | . | . | . | . | . | 638 |
| 1.50-1.99 | . | . | 406 | 50 | 1 | . | . | . | . | . | 457 |
| 2.00-2.49 | . | . | . | 22 | . | . | 1 | . | . | . | 23 |
| 2.50-2.99 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 305 | 2170 | 1608 | 86 | 2 | 1 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 3907.

STATION S84 48.67N 87.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

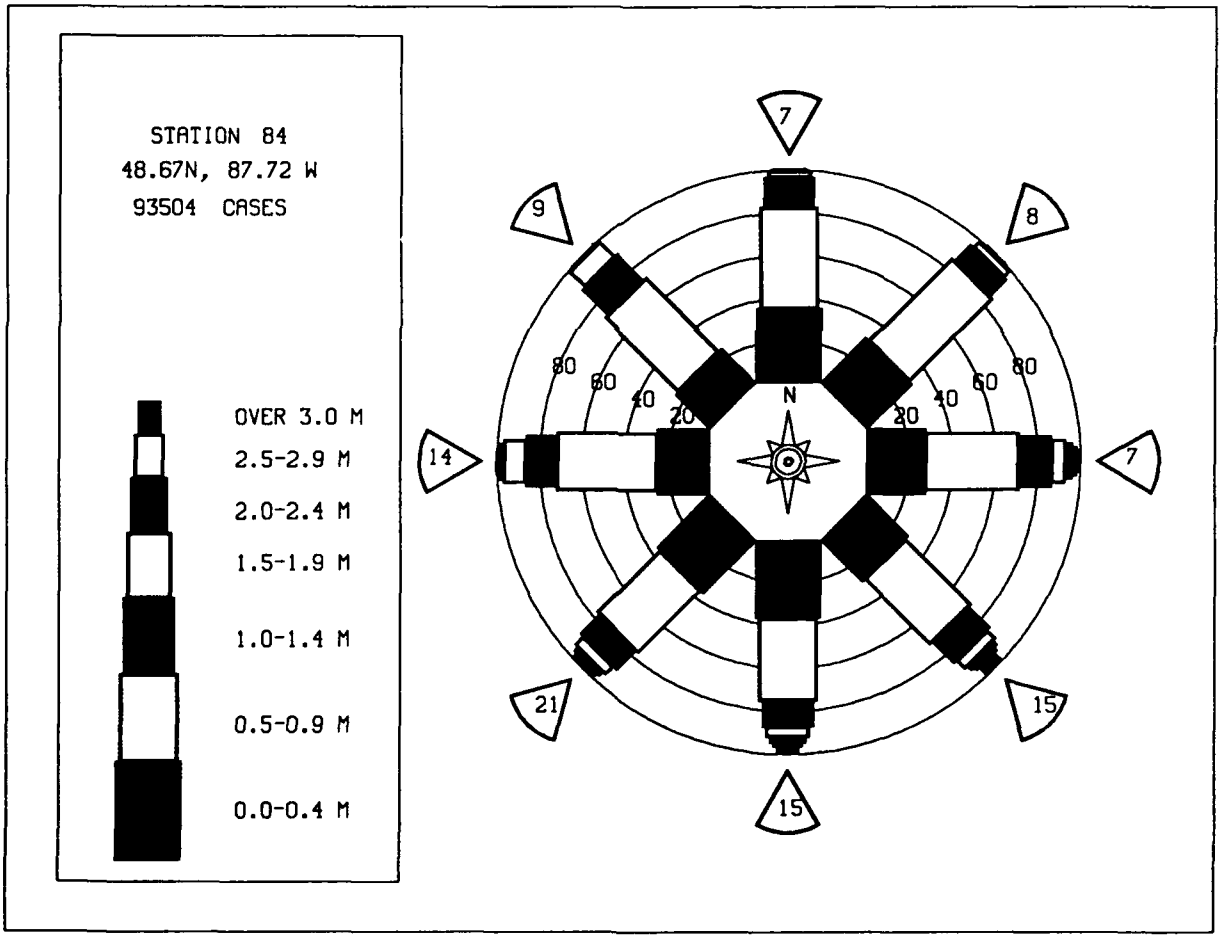
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 255 | 797 | 24 | . | . | . | . | . | . | . | 1076 |
| 0.50-0.99 | . | 1772 | 545 | 5 | 7 | 4 | . | . | . | . | 2333 |
| 1.00-1.49 | . | . | 781 | 4 | 3 | 2 | . | . | . | . | 790 |
| 1.50-1.99 | . | . | 328 | 44 | 1 | . | . | . | . | . | 373 |
| 2.00-2.49 | . | . | 3 | 32 | . | 1 | . | . | . | . | 36 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 255 | 2569 | 1681 | 86 | 11 | 7 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 4316.

STATION S84 48.67N 87.72W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 687 | 1804 | 448 | 76 | 12 | 2 | . | . | . | . | 3029 |
| 0.50-0.99 | . | 2148 | 1907 | 273 | 101 | 27 | 3 | . | . | . | 4459 |
| 1.00-1.49 | . | . | 1005 | 215 | 94 | 44 | 5 | . | . | . | 1363 |
| 1.50-1.99 | . | . | 277 | 262 | 54 | 34 | 5 | 1 | . | . | 633 |
| 2.00-2.49 | . | . | 2 | 134 | 37 | 28 | 4 | 2 | . | . | 207 |
| 2.50-2.99 | . | . | . | 11 | 74 | 20 | 5 | 4 | . | . | 114 |
| 3.00-3.49 | . | . | . | . | 12 | 47 | 3 | 3 | . | . | 65 |
| 3.50-3.99 | . | . | . | . | . | 28 | 8 | 4 | 1 | . | 41 |
| 4.00-4.49 | . | . | . | . | . | 7 | 14 | 3 | 1 | . | 25 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 5 | 1 | . | 13 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 1 | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 1 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 687 | 3952 | 3639 | 971 | 384 | 237 | 54 | 31 | 10 | 2 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 8.3 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S84 (48.67N 87.72W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.5 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 0.7 | 0.7 | 0.6 |
| 1957 | 0.7 | 0.8 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.4 | 0.6 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1958 | 0.6 | 0.7 | 0.4 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 1.0 | 0.8 | 0.6 |
| 1959 | 0.7 | 0.7 | 0.7 | 0.6 | 0.7 | 0.4 | 0.5 | 0.4 | 0.7 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1960 | 0.7 | 0.6 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.9 | 0.8 | 0.6 |
| 1961 | 0.6 | 0.6 | 0.7 | 0.5 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.7 | 0.8 | 0.7 | 0.6 |
| 1962 | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 0.9 | 0.6 |
| 1963 | 0.8 | 0.9 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 | 0.9 | 1.0 | 0.7 |
| 1964 | 1.0 | 0.9 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.6 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 1965 | 1.1 | 1.1 | 0.8 | 0.6 | 0.6 | 0.6 | 0.5 | 0.4 | 0.7 | 0.8 | 1.1 | 1.1 | 0.8 |
| 1966 | 1.1 | 1.2 | 1.4 | 0.9 | 0.8 | 0.6 | 0.6 | 0.6 | 0.9 | 1.1 | 1.1 | 1.1 | 0.9 |
| 1967 | 1.1 | 1.1 | 1.2 | 0.9 | 1.1 | 0.9 | 0.6 | 0.8 | 1.4 | 2.0 | 1.2 | 1.5 | 1.1 |
| 1968 | 1.1 | 1.2 | 1.2 | 1.0 | 1.1 | 0.8 | 0.8 | 0.7 | 1.2 | 1.8 | 1.5 | 1.2 | 1.1 |
| 1969 | 1.3 | 0.8 | 0.8 | 0.6 | 0.8 | 0.7 | 0.5 | 0.7 | 1.2 | 1.5 | 1.4 | 0.9 | 0.9 |
| 1970 | 0.8 | 0.9 | 0.9 | 0.9 | 0.9 | 0.6 | 0.5 | 0.6 | 1.3 | 2.1 | 1.5 | 0.9 | 1.0 |
| 1971 | 0.9 | 1.0 | 0.8 | 0.7 | 0.7 | 0.5 | 0.6 | 0.5 | 1.1 | 1.6 | 1.5 | 0.8 | 0.9 |
| 1972 | 1.0 | 0.8 | 0.8 | 0.6 | 0.5 | 0.3 | 0.5 | 0.6 | 1.3 | 1.4 | 1.2 | 0.8 | 0.8 |
| 1973 | 0.9 | 0.9 | 0.8 | 0.7 | 0.8 | 0.7 | 0.6 | 0.5 | 1.1 | 1.3 | 1.5 | 0.8 | 0.9 |
| 1974 | 0.8 | 0.6 | 0.9 | 0.6 | 0.8 | 0.7 | 0.5 | 0.9 | 1.0 | 1.3 | 1.3 | 0.8 | 0.9 |
| 1975 | 0.5 | 0.4 | 0.4 | 0.2 | 0.5 | 0.7 | 0.5 | 0.7 | 1.0 | 1.6 | 1.3 | 0.9 | 0.7 |
| 1976 | 1.0 | 1.0 | 1.1 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.7 | 0.8 | 1.0 | 0.9 | 0.8 |
| 1977 | 1.0 | 1.0 | 1.1 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.7 | 0.9 | 1.1 | 0.7 |
| 1978 | 0.8 | 0.6 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.6 | 0.8 | 0.8 | 0.9 | 1.0 | 0.7 |
| 1979 | 0.7 | 0.7 | 0.8 | 0.6 | 0.8 | 0.8 | 0.5 | 0.7 | 0.9 | 1.3 | 1.4 | 1.0 | 0.8 |
| 1980 | 0.9 | 0.6 | 0.8 | 0.5 | 0.6 | 0.6 | 0.5 | 0.8 | 1.3 | 1.5 | 1.1 | 1.0 | 0.9 |
| 1981 | 0.8 | 0.9 | 0.8 | 0.7 | 0.6 | 0.7 | 0.4 | 0.5 | 1.0 | 1.5 | 1.2 | 0.7 | 0.8 |
| 1982 | 1.1 | 0.8 | 1.1 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 1.0 | 1.4 | 1.5 | 1.1 | 0.9 |
| 1983 | 1.0 | 0.9 | 1.0 | 0.6 | 0.7 | 0.6 | 0.5 | 0.5 | 1.1 | 1.3 | 1.5 | 1.1 | 0.9 |
| 1984 | 1.0 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 0.5 | 0.6 | 1.2 | 1.7 | 1.8 | 1.1 | 1.0 |
| 1985 | 1.0 | 0.9 | 1.1 | 0.7 | 0.7 | 0.9 | 0.5 | 0.8 | 1.3 | 1.8 | 1.2 | 1.0 | 1.0 |
| 1986 | 1.0 | 0.8 | 1.0 | 0.9 | 0.7 | 0.6 | 0.5 | 0.7 | 1.0 | 1.1 | 1.4 | 1.0 | 0.9 |
| 1987 | 0.8 | 0.8 | 0.9 | 0.5 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.7 | 0.8 | 0.8 | 0.6 |
| MEAN | 0.9 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.6 | 0.9 | 1.2 | 1.2 | 0.9 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S84 (48.67N 87.72W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.7 | 2.2 | 3.5 | 1.8 | 1.7 | 1.0 | 1.1 | 1.2 | 1.6 | 2.4 | 2.2 | 2.0 |
| 1957 | 2.3 | 2.6 | 1.9 | 1.8 | 2.1 | 1.9 | 1.4 | 1.6 | 1.8 | 1.4 | 2.0 | 2.5 |
| 1958 | 2.6 | 2.2 | 1.5 | 2.3 | 1.9 | 2.5 | 1.5 | 1.8 | 2.3 | 2.0 | 4.3 | 2.1 |
| 1959 | 2.1 | 3.2 | 2.1 | 2.2 | 2.8 | 1.6 | 1.8 | 1.9 | 2.6 | 1.8 | 2.2 | 2.6 |
| 1960 | 2.0 | 2.1 | 1.6 | 2.2 | 1.4 | 1.4 | 1.4 | 2.1 | 1.7 | 2.4 | 2.8 | 3.3 |
| 1961 | 1.6 | 1.7 | 2.0 | 2.2 | 1.6 | 1.5 | 1.1 | 1.6 | 1.9 | 2.0 | 4.0 | 2.1 |
| 1962 | 2.3 | 1.6 | 1.7 | 1.4 | 1.3 | 1.1 | 1.0 | 1.3 | 1.7 | 4.6 | 3.3 | 3.5 |
| 1963 | 2.1 | 2.5 | 2.3 | 1.9 | 2.1 | 1.9 | 1.6 | 1.3 | 1.9 | 2.9 | 2.3 | 3.6 |
| 1964 | 3.7 | 3.5 | 3.0 | 3.8 | 3.1 | 1.5 | 1.1 | 2.7 | 3.0 | 3.8 | 2.6 | 2.6 |
| 1965 | 3.4 | 3.3 | 2.8 | 2.5 | 2.0 | 1.7 | 1.1 | 1.5 | 2.5 | 2.9 | 4.2 | 3.6 |
| 1966 | 3.1 | 3.6 | 4.6 | 4.2 | 2.4 | 2.1 | 2.5 | 1.8 | 2.2 | 4.4 | 4.0 | 4.0 |
| 1967 | 3.6 | 3.3 | 3.6 | 3.2 | 5.6 | 5.7 | 1.7 | 3.7 | 5.3 | 8.1 | 3.9 | 4.4 |
| 1968 | 3.9 | 2.9 | 3.6 | 2.9 | 3.5 | 2.4 | 3.5 | 2.5 | 4.5 | 7.3 | 6.3 | 4.0 |
| 1969 | 3.4 | 2.2 | 2.0 | 2.1 | 4.1 | 3.5 | 1.9 | 3.2 | 4.0 | 5.7 | 5.8 | 3.4 |
| 1970 | 1.9 | 2.2 | 4.6 | 3.3 | 4.7 | 2.8 | 1.7 | 3.0 | 6.2 | 7.7 | 6.1 | 3.0 |
| 1971 | 2.4 | 2.9 | 2.2 | 2.9 | 2.0 | 2.8 | 2.9 | 1.7 | 4.1 | 7.7 | 7.4 | 3.1 |
| 1972 | 3.4 | 3.7 | 2.6 | 2.1 | 1.2 | 1.2 | 1.8 | 2.6 | 5.8 | 4.4 | 4.5 | 2.9 |
| 1973 | 2.5 | 3.1 | 2.8 | 2.2 | 3.0 | 3.8 | 2.2 | 2.4 | 5.4 | 5.2 | 5.6 | 3.8 |
| 1974 | 3.3 | 1.7 | 3.2 | 1.8 | 3.9 | 4.2 | 1.8 | 3.6 | 3.3 | 4.5 | 7.5 | 2.7 |
| 1975 | 2.5 | 1.3 | 1.6 | 0.6 | 1.7 | 2.3 | 1.2 | 3.7 | 5.4 | 6.6 | 7.4 | 2.8 |
| 1976 | 3.0 | 2.5 | 3.2 | 1.9 | 1.8 | 1.7 | 1.4 | 1.6 | 2.5 | 2.9 | 2.2 | 3.4 |
| 1977 | 2.7 | 3.7 | 3.5 | 1.7 | 1.8 | 1.6 | 1.8 | 1.6 | 4.5 | 2.4 | 5.5 | 4.1 |
| 1978 | 2.0 | 1.6 | 2.9 | 2.3 | 1.5 | 2.0 | 1.0 | 1.6 | 2.6 | 2.8 | 3.4 | 4.6 |
| 1979 | 2.3 | 2.7 | 2.1 | 3.3 | 4.9 | 5.2 | 1.1 | 3.5 | 3.6 | 5.4 | 7.6 | 3.0 |
| 1980 | 2.9 | 1.7 | 3.9 | 1.5 | 2.8 | 2.8 | 2.1 | 4.3 | 5.5 | 7.8 | 4.9 | 3.6 |
| 1981 | 1.9 | 2.0 | 2.7 | 2.9 | 1.8 | 3.6 | 1.1 | 1.5 | 5.7 | 6.6 | 5.1 | 2.4 |
| 1982 | 4.2 | 2.0 | 4.2 | 3.0 | 4.7 | 3.9 | 2.3 | 2.6 | 4.5 | 6.1 | 6.6 | 3.4 |
| 1983 | 3.7 | 3.8 | 3.9 | 2.2 | 2.1 | 2.8 | 2.9 | 2.3 | 4.4 | 6.3 | 5.6 | 3.3 |
| 1984 | 3.6 | 3.2 | 3.4 | 3.8 | 2.6 | 3.1 | 1.3 | 2.7 | 6.7 | 7.3 | 8.3 | 3.5 |
| 1985 | 2.3 | 3.1 | 5.0 | 1.9 | 2.9 | 3.9 | 2.3 | 3.6 | 4.9 | 7.0 | 5.4 | 3.2 |
| 1986 | 4.5 | 3.0 | 3.2 | 2.5 | 1.8 | 1.5 | 1.6 | 2.6 | 3.9 | 6.5 | 7.1 | 3.2 |
| 1987 | 2.4 | 3.5 | 3.3 | 1.7 | 2.3 | 1.1 | 1.7 | 1.4 | 1.6 | 2.8 | 3.4 | 3.3 |

32 YR. STATISTICS FOR WIS STATION S84

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 3.9 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 157.5 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.3 |
| LARGEST WAVE HS . . . . . | (METERS) | 8.3 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 148.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 84110400 |

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 364 | 1007 | 70 | 8 | 2 | . | . | . | . | . | 1451 |
| 0.50-0.99 | . | 1519 | 205 | 33 | 16 | 3 | . | . | . | . | 1776 |
| 1.00-1.49 | . | . | 603 | 9 | 10 | 7 | . | . | . | . | 629 |
| 1.50-1.99 | . | . | 116 | 1 | 4 | 6 | . | . | . | . | 127 |
| 2.00-2.49 | . | . | 3 | 5 | . | 2 | . | . | . | . | 10 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 364 | 2526 | 997 | 57 | 32 | 18 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 3742.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 310 | 630 | 58 | 4 | . | . | . | . | . | . | 1002 |
| 0.50-0.99 | . | 1124 | 322 | 19 | 17 | 6 | . | . | . | . | 1488 |
| 1.00-1.49 | . | . | 352 | 31 | 10 | 10 | . | . | . | . | 403 |
| 1.50-1.99 | . | . | 100 | 13 | 3 | 9 | 1 | . | . | . | 126 |
| 2.00-2.49 | . | . | 2 | 10 | 4 | 1 | . | . | . | . | 17 |
| 2.50-2.99 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 310 | 1754 | 834 | 77 | 34 | 31 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 2853.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 576 | 900 | 70 | 6 | . | . | . | . | . | . | 1552 |
| 0.50-0.99 | . | 1161 | 407 | 35 | 14 | . | . | . | . | . | 1617 |
| 1.00-1.49 | . | . | 318 | 35 | 10 | 9 | . | . | . | . | 372 |
| 1.50-1.99 | . | . | 125 | 23 | 5 | 3 | 1 | . | . | . | 157 |
| 2.00-2.49 | . | . | 2 | 9 | 7 | 3 | 1 | . | . | . | 22 |
| 2.50-2.99 | . | . | . | 2 | 4 | 2 | . | . | . | . | 8 |
| 3.00-3.49 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 576 | 2061 | 922 | 110 | 40 | 21 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 3499.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 370 | 789 | 44 | 5 | 1 | . | . | . | . | . | 1209 |
| 0.50-0.99 | . | 1703 | 875 | 28 | 9 | . | . | . | . | . | 2615 |
| 1.00-1.49 | . | . | 507 | 64 | 7 | 4 | . | . | . | . | 582 |
| 1.50-1.99 | . | . | 122 | 101 | 19 | 5 | . | . | . | . | 247 |
| 2.00-2.49 | . | . | 1 | 47 | 12 | 7 | . | . | . | . | 67 |
| 2.50-2.99 | . | . | . | 3 | 25 | 6 | . | . | . | . | 34 |
| 3.00-3.49 | . | . | . | . | 3 | 21 | . | . | . | . | 24 |
| 3.50-3.99 | . | . | . | . | . | 14 | . | . | . | . | 14 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 370 | 2492 | 1548 | 248 | 76 | 58 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 4498.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 423 | 873 | 58 | 2 | . | . | . | . | . | . | 1356 |
| 0.50-0.99 | . | 849 | 1498 | 31 | 3 | . | . | . | . | . | 2381 |
| 1.00-1.49 | . | . | 565 | 291 | 16 | 4 | . | . | . | . | 876 |
| 1.50-1.99 | . | . | 36 | 276 | 33 | 7 | 1 | . | . | . | 353 |
| 2.00-2.49 | . | . | . | 119 | 59 | 7 | . | . | . | . | 185 |
| 2.50-2.99 | . | . | . | . | 98 | 11 | . | 2 | . | . | 111 |
| 3.00-3.49 | . | . | . | . | 11 | 45 | . | . | . | . | 56 |
| 3.50-3.99 | . | . | . | . | . | 43 | . | . | . | . | 43 |
| 4.00-4.49 | . | . | . | . | . | 8 | 6 | . | . | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | . | . | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 2 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 423 | 1722 | 2157 | 719 | 220 | 125 | 14 | 4 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.0 NO. OF CASES= 5048.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 282 | 606 | 37 | 3 | . | . | . | . | . | . | 928 |
| 0.50-0.99 | . | 505 | 903 | 6 | 1 | . | . | . | . | . | 1415 |
| 1.00-1.49 | . | . | 297 | 178 | 11 | 1 | . | . | . | . | 487 |
| 1.50-1.99 | . | . | 18 | 142 | 40 | 9 | . | . | . | . | 209 |
| 2.00-2.49 | . | . | . | 58 | 34 | 16 | . | . | . | . | 108 |
| 2.50-2.99 | . | . | . | 1 | 55 | 20 | 2 | 2 | . | . | 80 |
| 3.00-3.49 | . | . | . | . | 11 | 37 | 1 | 1 | . | . | 50 |
| 3.50-3.99 | . | . | . | . | . | 19 | 3 | . | . | . | 22 |
| 4.00-4.49 | . | . | . | . | . | 2 | 6 | 2 | . | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 1 | . | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 282 | 1111 | 1255 | 388 | 152 | 104 | 17 | 7 | 2 | 4 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 3118.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 332 | 1007 | 660 | 116 | 4 | . | . | . | . | . | 2119 |
| 0.50-0.99 | . | 652 | 2028 | 707 | 150 | 8 | . | . | . | . | 3545 |
| 1.00-1.49 | . | . | 391 | 534 | 232 | 67 | . | . | . | . | 1224 |
| 1.50-1.99 | . | . | 41 | 241 | 189 | 86 | . | . | . | . | 557 |
| 2.00-2.49 | . | . | 1 | 104 | 75 | 103 | 6 | . | . | . | 289 |
| 2.50-2.99 | . | . | . | 6 | 116 | 81 | 16 | 5 | . | . | 224 |
| 3.00-3.49 | . | . | . | . | 16 | 91 | 17 | 5 | . | . | 129 |
| 3.50-3.99 | . | . | . | . | . | 49 | 32 | 8 | 1 | . | 90 |
| 4.00-4.49 | . | . | . | . | . | 10 | 35 | 9 | 1 | . | 55 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 29 | . | . | 34 |
| 5.00-5.49 | . | . | . | . | . | . | . | 17 | 10 | 1 | 28 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 6 | 1 | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 7 | 2 | 9 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 6 | 1 | 7 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 11 | 11 |
| TOTAL | 332 | 1659 | 3121 | 1708 | 782 | 495 | 111 | 75 | 31 | 16 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 8.0 MEAN TP(SEC)= 4.7 NO. OF CASES= 7811.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 479 | 1515 | 1656 | 399 | 36 | 1 | . | . | . | . | 4086 |
| 0.50-0.99 | . | 880 | 2115 | 1435 | 607 | 82 | 1 | . | . | . | 5120 |
| 1.00-1.49 | . | 2 | 316 | 340 | 560 | 219 | 16 | 1 | . | . | 1454 |
| 1.50-1.99 | . | . | 21 | 144 | 143 | 174 | 21 | 1 | . | . | 504 |
| 2.00-2.49 | . | . | . | 56 | 35 | 91 | 22 | 9 | . | . | 213 |
| 2.50-2.99 | . | . | . | 4 | 55 | 40 | 17 | 14 | . | . | 130 |
| 3.00-3.49 | . | . | . | . | 11 | 58 | 16 | 13 | 1 | . | 99 |
| 3.50-3.99 | . | . | . | . | 1 | 34 | 25 | 9 | 1 | . | 70 |
| 4.00-4.49 | . | . | . | . | . | 5 | 22 | 24 | 4 | . | 55 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 18 | 8 | . | 33 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 14 | 13 | 2 | 30 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 9 | 2 | 14 |
| 6.00-6.49 | . | . | . | . | . | . | . | 2 | 8 | 1 | 11 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 6 | 4 | 10 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 10 | 11 |
| TOTAL | 479 | 2397 | 4108 | 2378 | 1448 | 704 | 148 | 108 | 51 | 19 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 4.8 NO. OF CASES= 11095.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 648 | 1479 | 528 | 100 | 34 | 8 | . | . | . | . | 2797 |
| 0.50-0.99 | . | 858 | 1193 | 248 | 132 | 89 | 1 | 1 | . | . | 2522 |
| 1.00-1.49 | . | . | 442 | 217 | 111 | 113 | 20 | 1 | . | . | 904 |
| 1.50-1.99 | . | . | 51 | 179 | 71 | 66 | 25 | 5 | . | . | 397 |
| 2.00-2.49 | . | . | . | 87 | 45 | 45 | 17 | 8 | . | . | 202 |
| 2.50-2.99 | . | . | . | 6 | 97 | 21 | 11 | 8 | 2 | . | 145 |
| 3.00-3.49 | . | . | . | . | 10 | 64 | 6 | 6 | . | . | 86 |
| 3.50-3.99 | . | . | . | . | . | 63 | 5 | 1 | . | . | 69 |
| 4.00-4.49 | . | . | . | . | . | 10 | 20 | 2 | . | . | 32 |
| 4.50-4.99 | . | . | . | . | . | 1 | 8 | 5 | 1 | . | 15 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 3 | 1 | . | 7 |
| 5.50-5.99 | . | . | . | . | . | . | 1 | 3 | . | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 648 | 2337 | 2214 | 837 | 500 | 480 | 117 | 44 | 5 | 1 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.3 NO. OF CASES= 6736.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 623 | 1808 | 772 | 216 | 57 | 21 | 1 | . | . | . | 3498 |
| 0.50-0.99 | . | 942 | 1349 | 265 | 146 | 100 | 11 | 4 | . | . | 2817 |
| 1.00-1.49 | . | . | 518 | 170 | 75 | 47 | 12 | 5 | 5 | . | 832 |
| 1.50-1.99 | . | . | 71 | 220 | 55 | 39 | 17 | 4 | 1 | . | 407 |
| 2.00-2.49 | . | . | . | 100 | 42 | 20 | 7 | 9 | 1 | . | 179 |
| 2.50-2.99 | . | . | . | 11 | 75 | 8 | 2 | 2 | 2 | . | 100 |
| 3.00-3.49 | . | . | . | . | 31 | 41 | 3 | 3 | . | . | 78 |
| 3.50-3.99 | . | . | . | . | 1 | 21 | 3 | 5 | 2 | . | 32 |
| 4.00-4.49 | . | . | . | . | . | 9 | 4 | 1 | . | . | 14 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | 2 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | 5 | 1 | . | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 623 | 2750 | 2710 | 982 | 482 | 307 | 65 | 37 | 11 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 7469.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1017 | 2730 | 884 | 121 | 24 | 24 | 5 | . | . | . | 4805 |
| 0.50-0.99 | . | 2502 | 1763 | 183 | 55 | 51 | 33 | 7 | . | . | 4594 |
| 1.00-1.49 | . | . | 867 | 216 | 33 | 24 | 1 | 5 | 1 | . | 1147 |
| 1.50-1.99 | . | . | 173 | 281 | 34 | 14 | 6 | 3 | 2 | . | 513 |
| 2.00-2.49 | . | . | 3 | 145 | 52 | 10 | 6 | 8 | . | 2 | 226 |
| 2.50-2.99 | . | . | . | 12 | 94 | 11 | 2 | . | 2 | . | 121 |
| 3.00-3.49 | . | . | . | . | 25 | 47 | 2 | 1 | 2 | . | 77 |
| 3.50-3.99 | . | . | . | . | . | 39 | 1 | . | 1 | . | 41 |
| 4.00-4.49 | . | . | . | . | . | 10 | 13 | 1 | . | . | 24 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 1 | . | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1017 | 5232 | 3690 | 958 | 317 | 230 | 76 | 27 | 8 | 2 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 10825.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1145 | 2480 | 79 | 13 | . | . | . | . | . | . | 3717 |
| 0.50-0.99 | . | 2713 | 312 | 7 | 5 | . | . | . | . | . | 3037 |
| 1.00-1.49 | . | . | 776 | 3 | . | 4 | . | . | . | . | 783 |
| 1.50-1.99 | . | . | 222 | 26 | 3 | 3 | . | 1 | . | . | 255 |
| 2.00-2.49 | . | . | 11 | 10 | . | 1 | . | 1 | . | 1 | 24 |
| 2.50-2.99 | . | . | . | 2 | 2 | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1145 | 5193 | 1400 | 61 | 10 | 8 | 0 | 2 | 1 | 1 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 7320.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 850 | 1533 | 62 | 5 | 3 | . | . | . | . | . | 2453 |
| 0.50-0.99 | . | 1720 | 329 | 10 | 1 | . | . | . | . | . | 2060 |
| 1.00-1.49 | . | . | 829 | 1 | 1 | 1 | . | . | . | . | 832 |
| 1.50-1.99 | . | . | 199 | 2 | . | . | . | . | . | . | 201 |
| 2.00-2.49 | . | . | 10 | 17 | . | . | . | . | . | . | 27 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 850 | 3253 | 1429 | 35 | 5 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 5217.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 458 | 1020 | 36 | 5 | . | . | . | . | . | . | 1519 |
| 0.50-0.99 | . | 1537 | 525 | 4 | 1 | 2 | . | . | . | . | 2069 |
| 1.00-1.49 | . | . | 656 | 3 | 2 | . | . | . | . | . | 661 |
| 1.50-1.99 | . | . | 407 | 42 | 1 | . | . | . | . | . | 450 |
| 2.00-2.49 | . | . | 3 | 50 | . | . | . | . | . | . | 53 |
| 2.50-2.99 | . | . | . | 8 | . | . | 1 | . | . | . | 9 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 458 | 2557 | 1627 | 112 | 4 | 2 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 4458.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 347 | 830 | 47 | 2 | 1 | 1 | . | . | . | . | 1228 |
| 0.50-0.99 | . | 1837 | 887 | 10 | 6 | 4 | . | . | . | . | 2744 |
| 1.00-1.49 | . | . | 739 | 4 | 2 | 2 | . | . | . | . | 747 |
| 1.50-1.99 | . | . | 614 | 83 | 1 | 1 | . | . | . | . | 699 |
| 2.00-2.49 | . | . | . | 60 | 1 | 1 | . | . | . | . | 62 |
| 2.50-2.99 | . | . | . | 7 | . | 1 | . | . | . | . | 8 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 347 | 2667 | 2287 | 166 | 11 | 10 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 5139.

STATION S85 48.67N 87.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

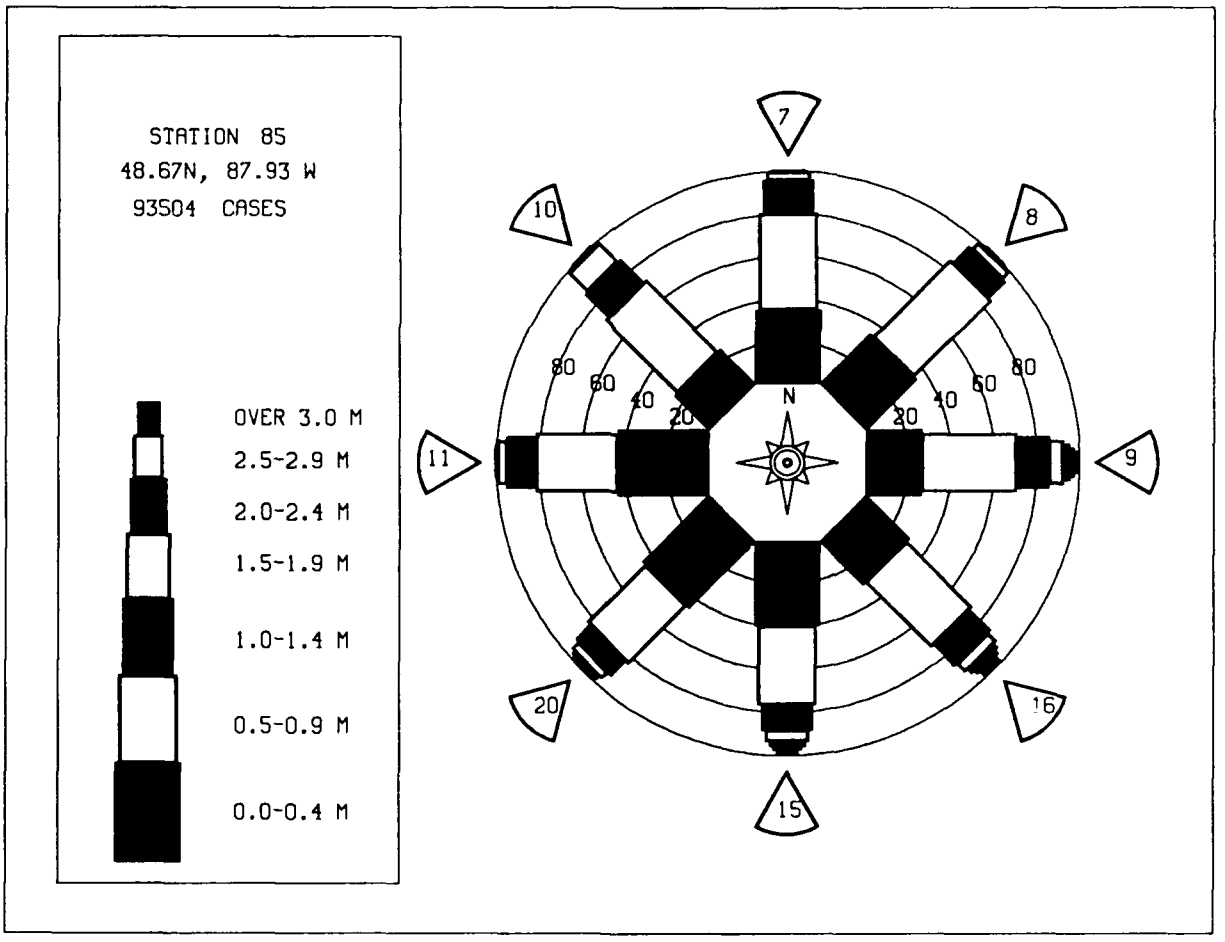
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 329 | 824 | 48 | 2 | 2 | . | . | . | . | . | 1205 |
| 0.50-0.99 | . | 1786 | 532 | 14 | 13 | 3 | . | . | . | . | 2348 |
| 1.00-1.49 | . | . | 888 | 14 | 7 | 9 | . | . | . | . | 918 |
| 1.50-1.99 | . | . | 436 | 49 | . | 3 | . | . | . | . | 488 |
| 2.00-2.49 | . | . | 2 | 29 | . | 1 | . | . | . | . | 32 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 329 | 2610 | 1906 | 109 | 22 | 16 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.5 NO. OF CASES= 4676.

STATION S85 48.67N 87.93W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 855 | 2003 | 511 | 101 | 16 | 5 | . | . | . | . | 3491 |
| 0.50-0.99 | . | 2229 | 1525 | 304 | 118 | 35 | 4 | 1 | . | . | 4216 |
| 1.00-1.49 | . | . | 907 | 211 | 109 | 52 | 5 | 1 | . | . | 1285 |
| 1.50-1.99 | . | . | 276 | 183 | 60 | 43 | 7 | 1 | . | . | 570 |
| 2.00-2.49 | . | . | 4 | 91 | 37 | 31 | 6 | 3 | . | . | 172 |
| 2.50-2.99 | . | . | . | 6 | 62 | 20 | 5 | 3 | . | . | 96 |
| 3.00-3.49 | . | . | . | . | 12 | 41 | 4 | 3 | . | . | 60 |
| 3.50-3.99 | . | . | . | . | . | 28 | 7 | 2 | . | . | 37 |
| 4.00-4.49 | . | . | . | . | . | 5 | 11 | 4 | . | . | 20 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 5 | . | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 4 | 2 | . | 7 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 855 | 4232 | 3223 | 896 | 414 | 260 | 54 | 27 | 5 | 2 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 8.2 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



## MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S85 (48.67N 87.93W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.6 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.8 | 0.8 | 0.7 | 0.6 |
| 1957 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.3 | 0.4 | 0.6 | 0.6 | 0.9 | 0.8 | 0.6 |
| 1958 | 0.6 | 0.7 | 0.5 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 1.0 | 0.7 | 0.6 |
| 1959 | 0.7 | 0.7 | 0.7 | 0.6 | 0.7 | 0.4 | 0.4 | 0.4 | 0.7 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1960 | 0.7 | 0.6 | 0.5 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.9 | 0.8 | 0.6 |
| 1961 | 0.6 | 0.6 | 0.7 | 0.5 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.7 | 0.8 | 0.7 | 0.6 |
| 1962 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 0.9 | 0.6 |
| 1963 | 0.8 | 0.9 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 0.9 | 1.0 | 0.7 |
| 1964 | 1.0 | 0.8 | 0.8 | 0.8 | 0.6 | 0.4 | 0.4 | 0.6 | 0.7 | 0.7 | 0.8 | 0.8 | 0.7 |
| 1965 | 1.0 | 1.1 | 0.8 | 0.6 | 0.6 | 0.6 | 0.4 | 0.4 | 0.6 | 0.8 | 1.1 | 1.1 | 0.8 |
| 1966 | 1.0 | 1.1 | 1.5 | 0.9 | 0.9 | 0.6 | 0.6 | 0.6 | 0.8 | 1.1 | 1.1 | 1.0 | 0.9 |
| 1967 | 1.1 | 1.1 | 1.2 | 0.9 | 1.0 | 0.8 | 0.6 | 0.7 | 1.2 | 1.8 | 1.1 | 1.4 | 1.1 |
| 1968 | 1.1 | 1.2 | 1.2 | 1.1 | 1.0 | 0.7 | 0.7 | 0.7 | 1.1 | 1.6 | 1.4 | 1.2 | 1.1 |
| 1969 | 1.2 | 0.8 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.6 | 1.0 | 1.3 | 1.2 | 0.8 | 0.8 |
| 1970 | 0.7 | 0.9 | 0.8 | 0.9 | 0.8 | 0.5 | 0.5 | 0.5 | 1.1 | 2.0 | 1.3 | 0.9 | 0.9 |
| 1971 | 0.9 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.9 | 1.4 | 1.3 | 0.8 | 0.8 |
| 1972 | 0.9 | 0.8 | 0.8 | 0.6 | 0.4 | 0.3 | 0.4 | 0.5 | 1.1 | 1.3 | 1.1 | 0.8 | 0.7 |
| 1973 | 0.8 | 0.9 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.9 | 1.1 | 1.3 | 0.8 | 0.8 |
| 1974 | 0.8 | 0.6 | 0.9 | 0.6 | 0.7 | 0.6 | 0.5 | 0.8 | 0.8 | 1.1 | 1.2 | 0.8 | 0.8 |
| 1975 | 0.5 | 0.3 | 0.4 | 0.2 | 0.5 | 0.6 | 0.5 | 0.6 | 0.9 | 1.4 | 1.2 | 0.8 | 0.7 |
| 1976 | 0.9 | 0.9 | 1.1 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1977 | 0.9 | 1.0 | 1.1 | 0.5 | 0.6 | 0.4 | 0.4 | 0.5 | 0.7 | 0.7 | 0.9 | 1.1 | 0.7 |
| 1978 | 0.7 | 0.5 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.6 | 0.8 | 0.7 | 0.8 | 0.9 | 0.7 |
| 1979 | 0.7 | 0.7 | 0.8 | 0.6 | 0.7 | 0.7 | 0.4 | 0.6 | 0.8 | 1.2 | 1.3 | 0.9 | 0.8 |
| 1980 | 0.8 | 0.6 | 0.8 | 0.5 | 0.5 | 0.5 | 0.4 | 0.7 | 1.2 | 1.3 | 0.9 | 1.0 | 0.8 |
| 1981 | 0.7 | 0.9 | 0.8 | 0.7 | 0.5 | 0.6 | 0.4 | 0.4 | 0.9 | 1.4 | 1.1 | 0.7 | 0.8 |
| 1982 | 1.0 | 0.7 | 1.0 | 0.8 | 0.8 | 0.5 | 0.4 | 0.5 | 0.9 | 1.3 | 1.3 | 1.1 | 0.9 |
| 1983 | 0.9 | 0.9 | 1.1 | 0.6 | 0.6 | 0.6 | 0.4 | 0.5 | 1.0 | 1.2 | 1.4 | 1.0 | 0.8 |
| 1984 | 0.9 | 0.9 | 0.9 | 0.8 | 0.6 | 0.7 | 0.4 | 0.5 | 1.1 | 1.5 | 1.6 | 1.0 | 0.9 |
| 1985 | 0.9 | 0.8 | 1.1 | 0.7 | 0.6 | 0.8 | 0.4 | 0.7 | 1.2 | 1.5 | 1.1 | 0.9 | 0.9 |
| 1986 | 1.0 | 0.8 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.6 | 0.9 | 1.0 | 1.2 | 0.9 | 0.8 |
| 1987 | 0.7 | 0.8 | 0.9 | 0.5 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.7 | 0.8 | 0.8 | 0.6 |
| MEAN | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.8 | 1.1 | 1.1 | 0.9 | |

## LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S85 (48.67N 87.93W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.3 | 2.6 | 2.7 | 1.3 | 1.8 | 1.2 | 1.0 | 1.2 | 2.0 | 2.2 | 2.4 | 2.2 |
| 1957 | 2.3 | 2.7 | 1.8 | 2.3 | 1.7 | 2.0 | 1.5 | 1.6 | 1.8 | 1.6 | 2.1 | 2.3 |
| 1958 | 2.6 | 2.2 | 1.4 | 2.3 | 1.5 | 2.4 | 1.4 | 2.1 | 2.6 | 2.1 | 4.7 | 1.8 |
| 1959 | 1.7 | 3.2 | 2.3 | 1.9 | 2.9 | 1.5 | 2.0 | 1.6 | 2.9 | 2.0 | 1.9 | 2.5 |
| 1960 | 1.9 | 2.5 | 1.9 | 2.0 | 1.5 | 1.7 | 1.4 | 2.4 | 1.6 | 2.6 | 3.1 | 3.5 |
| 1961 | 1.8 | 1.7 | 1.8 | 1.9 | 1.7 | 1.5 | 0.9 | 1.6 | 2.1 | 1.9 | 4.2 | 2.2 |
| 1962 | 2.2 | 1.9 | 1.9 | 1.5 | 1.5 | 1.3 | 1.3 | 1.5 | 1.7 | 5.3 | 3.4 | 3.6 |
| 1963 | 2.0 | 2.8 | 2.3 | 2.1 | 1.9 | 2.4 | 1.5 | 1.3 | 1.7 | 2.8 | 2.7 | 3.8 |
| 1964 | 3.3 | 3.2 | 2.5 | 3.6 | 3.1 | 1.6 | 1.1 | 2.8 | 2.7 | 3.4 | 2.8 | 2.9 |
| 1965 | 3.7 | 3.3 | 3.1 | 2.7 | 1.9 | 1.5 | 1.0 | 1.3 | 2.6 | 3.0 | 4.9 | 3.1 |
| 1966 | 3.0 | 3.6 | 5.2 | 4.7 | 2.5 | 2.1 | 2.5 | 2.2 | 2.1 | 4.4 | 3.6 | 4.4 |
| 1967 | 4.1 | 2.8 | 4.0 | 3.4 | 5.3 | 5.3 | 1.5 | 3.2 | 4.8 | 7.2 | 3.7 | 4.3 |
| 1968 | 3.9 | 2.7 | 3.7 | 3.1 | 3.5 | 1.9 | 3.3 | 2.2 | 4.0 | 8.2 | 5.5 | 4.4 |
| 1969 | 3.5 | 2.6 | 1.9 | 2.0 | 3.4 | 3.1 | 1.6 | 2.8 | 3.9 | 4.8 | 5.2 | 3.5 |
| 1970 | 1.8 | 2.2 | 4.8 | 3.6 | 4.2 | 2.5 | 1.4 | 2.8 | 6.0 | 7.5 | 5.5 | 3.3 |
| 1971 | 2.1 | 3.1 | 2.3 | 2.7 | 2.2 | 2.2 | 2.4 | 1.5 | 3.9 | 6.9 | 6.7 | 3.2 |
| 1972 | 3.5 | 4.0 | 2.9 | 2.1 | 0.9 | 1.2 | 1.5 | 1.9 | 5.3 | 4.3 | 4.0 | 3.1 |
| 1973 | 2.8 | 3.1 | 2.5 | 2.0 | 2.9 | 3.4 | 1.8 | 2.0 | 5.5 | 4.7 | 5.2 | 3.6 |
| 1974 | 2.8 | 1.6 | 3.6 | 1.8 | 3.4 | 3.6 | 1.4 | 3.4 | 2.9 | 4.0 | 7.0 | 3.1 |
| 1975 | 2.5 | 1.2 | 1.7 | 0.6 | 1.6 | 1.8 | 1.2 | 3.2 | 5.0 | 6.5 | 7.3 | 3.0 |
| 1976 | 3.3 | 2.5 | 3.5 | 1.7 | 1.6 | 1.6 | 1.6 | 1.6 | 2.6 | 3.3 | 1.9 | 3.6 |
| 1977 | 2.0 | 4.0 | 3.8 | 1.7 | 2.1 | 1.7 | 1.7 | 1.2 | 4.2 | 2.7 | 5.4 | 4.6 |
| 1978 | 2.0 | 1.5 | 3.1 | 2.3 | 1.5 | 2.0 | 1.2 | 1.6 | 2.7 | 3.0 | 3.3 | 4.8 |
| 1979 | 2.4 | 2.9 | 2.3 | 3.6 | 4.3 | 4.9 | 0.9 | 2.8 | 3.3 | 5.3 | 8.1 | 2.9 |
| 1980 | 3.3 | 1.7 | 4.0 | 1.6 | 2.4 | 2.4 | 1.7 | 3.8 | 4.8 | 7.7 | 4.4 | 3.8 |
| 1981 | 1.8 | 2.2 | 2.8 | 3.1 | 1.6 | 3.1 | 0.9 | 1.3 | 5.6 | 6.3 | 4.9 | 2.4 |
| 1982 | 4.7 | 2.1 | 3.9 | 3.3 | 4.3 | 3.6 | 1.9 | 2.2 | 4.1 | 5.4 | 6.8 | 3.3 |
| 1983 | 4.0 | 3.6 | 4.4 | 2.4 | 1.7 | 2.5 | 2.6 | 2.1 | 4.1 | 5.8 | 5.5 | 3.3 |
| 1984 | 3.4 | 3.5 | 3.5 | 3.6 | 2.3 | 3.0 | 1.2 | 2.2 | 6.1 | 6.9 | 8.0 | 2.9 |
| 1985 | 2.6 | 3.0 | 5.4 | 2.1 | 2.5 | 3.6 | 1.8 | 3.5 | 4.2 | 6.8 | 5.1 | 3.4 |
| 1986 | 5.1 | 3.4 | 2.9 | 2.6 | 1.8 | 1.5 | 1.5 | 2.1 | 3.9 | 5.9 | 6.7 | 2.9 |
| 1987 | 2.5 | 3.7 | 3.5 | 1.8 | 2.1 | 0.8 | 1.7 | 1.1 | 1.6 | 2.8 | 3.0 | 3.3 |

## 32 YR. STATISTICS FOR WIS STATION S85

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.8 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 157.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 8.2 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 147.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 68101000 |

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 183 | 649 | 131 | 6 | . | . | . | . | . | . | 969 |
| 0.50-0.99 | . | 1083 | 460 | 72 | 11 | 2 | . | . | . | . | 1628 |
| 1.00-1.49 | . | . | 558 | 93 | 21 | 10 | . | . | . | . | 682 |
| 1.50-1.99 | . | . | 176 | 23 | 10 | 14 | 1 | . | . | . | 224 |
| 2.00-2.49 | . | . | 3 | 10 | 3 | 3 | . | . | . | . | 19 |
| 2.50-2.99 | . | . | . | 2 | 2 | 1 | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 183 | 1732 | 1328 | 206 | 47 | 30 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 3309.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 260 | 585 | 121 | 2 | . | . | . | . | . | . | 968 |
| 0.50-0.99 | . | 636 | 608 | 44 | 14 | 2 | . | . | . | . | 1304 |
| 1.00-1.49 | . | . | 437 | 67 | 14 | 12 | . | . | . | . | 530 |
| 1.50-1.99 | . | . | 58 | 126 | 7 | 5 | . | . | . | . | 196 |
| 2.00-2.49 | . | . | 1 | 68 | 3 | 4 | 2 | . | . | . | 78 |
| 2.50-2.99 | . | . | . | 9 | 8 | 1 | . | . | . | . | 18 |
| 3.00-3.49 | . | . | . | 1 | 1 | 1 | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 260 | 1221 | 1225 | 317 | 47 | 26 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 2909.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 396 | 782 | 145 | 11 | . | . | . | . | . | . | 1334 |
| 0.50-0.99 | . | 524 | 909 | 48 | 9 | . | . | . | . | . | 1490 |
| 1.00-1.49 | . | . | 571 | 100 | 10 | 4 | . | . | . | . | 685 |
| 1.50-1.99 | . | . | 66 | 248 | 9 | 8 | . | . | . | . | 331 |
| 2.00-2.49 | . | . | . | 128 | 8 | 3 | 1 | . | . | . | 140 |
| 2.50-2.99 | . | . | . | 20 | 9 | 1 | . | . | . | . | 30 |
| 3.00-3.49 | . | . | . | . | 6 | 4 | 2 | . | . | . | 12 |
| 3.50-3.99 | . | . | . | . | 1 | 1 | 2 | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | 2 | 2 | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 396 | 1306 | 1691 | 555 | 52 | 23 | 7 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 3778.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 370 | 684 | 136 | 2 | . | . | . | . | . | . | 1192 |
| 0.50-0.99 | . | 572 | 1315 | 45 | 7 | . | . | . | . | . | 1939 |
| 1.00-1.49 | . | . | 566 | 142 | 18 | 1 | . | . | . | . | 727 |
| 1.50-1.99 | . | . | 51 | 243 | 24 | 11 | . | . | . | . | 329 |
| 2.00-2.49 | . | . | . | 120 | 25 | 6 | . | . | . | . | 151 |
| 2.50-2.99 | . | . | . | 8 | 77 | 5 | 1 | . | . | . | 91 |
| 3.00-3.49 | . | . | . | . | 10 | 42 | . | . | . | . | 52 |
| 3.50-3.99 | . | . | . | . | . | 24 | 1 | . | . | . | 25 |
| 4.00-4.49 | . | . | . | . | . | 6 | 10 | . | . | . | 16 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 2 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 1 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 370 | 1256 | 2068 | 560 | 161 | 95 | 16 | 4 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 4249.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 376 | 943 | 125 | 2 | . | . | . | . | . | . | 1446 |
| 0.50-0.99 | . | 918 | 2128 | 70 | 3 | . | . | . | . | . | 3119 |
| 1.00-1.49 | . | . | 713 | 406 | 23 | 2 | . | . | . | . | 1144 |
| 1.50-1.99 | . | . | 26 | 386 | 65 | 12 | . | . | . | . | 489 |
| 2.00-2.49 | . | . | . | 135 | 82 | 22 | 2 | . | . | . | 241 |
| 2.50-2.99 | . | . | . | 2 | 124 | 19 | 2 | 2 | . | . | 149 |
| 3.00-3.49 | . | . | . | . | 18 | 65 | . | 1 | . | . | 84 |
| 3.50-3.99 | . | . | . | . | . | 50 | 3 | . | . | . | 53 |
| 4.00-4.49 | . | . | . | . | . | 7 | 16 | . | . | . | 23 |
| 4.50-4.99 | . | . | . | . | . | 3 | 6 | 1 | . | . | 10 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | . | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 376 | 1861 | 2992 | 1001 | 315 | 180 | 32 | 9 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 6337.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 233 | 682 | 89 | 2 | . | . | . | . | . | . | 1006 |
| 0.50-0.99 | . | 513 | 1315 | 45 | 2 | . | . | . | . | . | 1875 |
| 1.00-1.49 | . | . | 379 | 250 | 17 | . | . | . | . | . | 646 |
| 1.50-1.99 | . | . | 13 | 161 | 56 | 8 | . | . | . | . | 238 |
| 2.00-2.49 | . | . | . | 71 | 24 | 20 | 1 | . | . | . | 116 |
| 2.50-2.99 | . | . | . | 2 | 68 | 17 | 1 | 2 | . | . | 90 |
| 3.00-3.49 | . | . | . | . | 8 | 47 | 1 | 1 | 1 | . | 58 |
| 3.50-3.99 | . | . | . | . | . | 32 | 5 | . | 1 | . | 38 |
| 4.00-4.49 | . | . | . | . | . | 1 | 17 | 2 | . | . | 20 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 1 | . | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 3 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 233 | 1195 | 1796 | 531 | 175 | 125 | 32 | 9 | 5 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 3846.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 205 | 795 | 619 | 80 | . | . | . | . | . | . | 1699 |
| 0.50-0.99 | . | 555 | 1821 | 888 | 99 | 2 | . | . | . | . | 3365 |
| 1.00-1.49 | . | . | 312 | 483 | 382 | 56 | . | . | . | . | 1233 |
| 1.50-1.99 | . | . | 14 | 193 | 203 | 133 | 2 | . | . | . | 545 |
| 2.00-2.49 | . | . | 1 | 48 | 95 | 162 | 9 | . | . | . | 315 |
| 2.50-2.99 | . | . | . | 2 | 63 | 115 | 45 | 4 | . | . | 229 |
| 3.00-3.49 | . | . | . | . | 9 | 73 | 39 | 17 | . | . | 138 |
| 3.50-3.99 | . | . | . | . | . | 18 | 34 | 20 | 3 | . | 75 |
| 4.00-4.49 | . | . | . | . | . | 1 | 22 | 27 | 7 | . | 57 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 11 | 13 | 1 | 28 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 10 | 4 | 19 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 6 | 1 | 11 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 7 | 5 | 12 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 3 | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 205 | 1350 | 2767 | 1694 | 851 | 560 | 154 | 88 | 46 | 15 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.9 NO. OF CASES= 7248.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 393 | 1260 | 1186 | 362 | 32 | 3 | . | . | . | . | 3236 |
| 0.50-0.99 | . | 826 | 1723 | 1303 | 634 | 90 | . | . | . | . | 4576 |
| 1.00-1.49 | . | . | 317 | 291 | 525 | 225 | 14 | . | . | . | 1372 |
| 1.50-1.99 | . | . | 37 | 95 | 127 | 216 | 25 | 1 | . | . | 501 |
| 2.00-2.49 | . | . | . | 44 | 41 | 70 | 32 | 8 | . | . | 195 |
| 2.50-2.99 | . | . | . | 5 | 34 | 34 | 29 | 13 | . | . | 115 |
| 3.00-3.49 | . | . | . | . | 8 | 19 | 10 | 6 | 1 | . | 44 |
| 3.50-3.99 | . | . | . | . | . | 13 | 7 | 10 | 2 | . | 32 |
| 4.00-4.49 | . | . | . | . | . | 4 | 2 | 10 | 1 | . | 17 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | 3 | 2 | 1 | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | 7 | 2 | 12 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 393 | 2086 | 3263 | 2100 | 1401 | 675 | 119 | 54 | 15 | 3 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 9474.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 515 | 1322 | 496 | 90 | 27 | 4 | | . | . | . | 2454 |
| 0.50-0.99 | . | 893 | 1383 | 213 | 135 | 79 | 2 | . | . | . | 2705 |
| 1.00-1.49 | . | . | 486 | 217 | 99 | 93 | 3 | . | . | . | 898 |
| 1.50-1.99 | . | . | 71 | 137 | 78 | 70 | 14 | 4 | . | . | 374 |
| 2.00-2.49 | . | . | . | 94 | 28 | 38 | 17 | 4 | . | . | 181 |
| 2.50-2.99 | . | . | . | 10 | 50 | 31 | 10 | 5 | . | . | 106 |
| 3.00-3.49 | . | . | . | . | 11 | 51 | 3 | 3 | . | . | 68 |
| 3.50-3.99 | . | . | . | . | . | 22 | 6 | 3 | . | . | 31 |
| 4.00-4.49 | . | . | . | . | . | 2 | 7 | . | 1 | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 1 | 1 | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 515 | 2215 | 2436 | 761 | 428 | 390 | 64 | 20 | 4 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 6407.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 532 | 1491 | 581 | 141 | 36 | 11 | 1 | . | . | . | 2793 |
| 0.50-0.99 | . | 930 | 1273 | 192 | 112 | 78 | 7 | 1 | . | . | 2593 |
| 1.00-1.49 | . | . | 578 | 116 | 54 | 41 | 7 | 2 | . | . | 798 |
| 1.50-1.99 | . | . | 86 | 168 | 28 | 34 | 14 | 3 | 4 | . | 337 |
| 2.00-2.49 | . | . | 2 | 118 | 29 | 14 | 8 | 6 | . | . | 177 |
| 2.50-2.99 | . | . | . | 7 | 70 | 12 | 14 | 7 | 1 | . | 111 |
| 3.00-3.49 | . | . | . | 1 | 27 | 9 | 11 | 8 | 1 | . | 57 |
| 3.50-3.99 | . | . | . | . | . | 8 | 2 | 1 | 1 | . | 12 |
| 4.00-4.49 | . | . | . | . | . | 2 | 1 | 3 | 1 | . | 7 |
| 4.50-4.99 | . | . | . | . | . | 3 | 2 | . | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 532 | 2421 | 2520 | 743 | 356 | 212 | 67 | 32 | 8 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.0 NO. OF CASES= 6467.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 922 | 2652 | 687 | 65 | 23 | 16 | 1 | . | . | . | 4366 |
| 0.50-0.99 | . | 2574 | 2086 | 224 | 50 | 35 | 17 | . | . | . | 4986 |
| 1.00-1.49 | . | . | 936 | 162 | 51 | 21 | 5 | 5 | . | . | 1180 |
| 1.50-1.99 | . | . | 161 | 245 | 18 | 17 | 6 | 3 | . | . | 450 |
| 2.00-2.49 | . | . | 6 | 148 | 47 | 9 | 4 | 4 | 2 | 1 | 221 |
| 2.50-2.99 | . | . | . | 11 | 68 | 8 | . | 1 | 5 | 2 | 95 |
| 3.00-3.49 | . | . | . | 1 | 21 | 31 | . | . | 1 | . | 54 |
| 3.50-3.99 | . | . | . | . | 1 | 19 | 2 | . | . | . | 22 |
| 4.00-4.49 | . | . | . | . | . | 7 | 2 | . | . | . | 9 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 1 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 922 | 5226 | 3876 | 856 | 279 | 163 | 39 | 14 | 8 | 3 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 3.7 NO. OF CASES= 10662.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1085 | 2654 | 199 | 13 | . | 1 | . | . | . | . | 3952 |
| 0.50-0.99 | . | 3209 | 518 | 42 | 9 | 2 | 1 | . | . | . | 3781 |
| 1.00-1.49 | . | . | 1006 | 11 | 2 | 2 | . | . | . | . | 1021 |
| 1.50-1.99 | . | . | 294 | 39 | 5 | 3 | . | . | . | . | 341 |
| 2.00-2.49 | . | . | 24 | 27 | 3 | 1 | 1 | 1 | . | . | 57 |
| 2.50-2.99 | . | . | . | 7 | 6 | . | 1 | . | . | . | 14 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1085 | 5863 | 2041 | 139 | 26 | 9 | 3 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 8582.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 751 | 1363 | 159 | 12 | 2 | . | . | . | . | . | 2287 |
| 0.50-0.99 | . | 1879 | 403 | 35 | 5 | 2 | . | 1 | . | . | 2325 |
| 1.00-1.49 | . | . | 1078 | 8 | 2 | 3 | 1 | . | . | . | 1092 |
| 1.50-1.99 | . | . | 359 | 2 | 1 | 1 | . | 1 | . | . | 364 |
| 2.00-2.49 | . | . | 26 | 42 | . | . | . | . | . | . | 68 |
| 2.50-2.99 | . | . | . | 9 | . | . | . | 1 | . | . | 10 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 751 | 3242 | 2025 | 108 | 10 | 6 | 1 | 3 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 5754.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 436 | 963 | 113 | 4 | . | . | . | . | . | . | 1516 |
| 0.50-0.99 | . | 1530 | 566 | 25 | 12 | 1 | . | . | . | . | 2134 |
| 1.00-1.49 | . | . | 784 | 8 | 4 | 8 | . | . | . | . | 804 |
| 1.50-1.99 | . | . | 539 | 69 | 2 | 1 | . | . | . | . | 611 |
| 2.00-2.49 | . | . | 17 | 90 | 1 | . | 1 | . | . | . | 109 |
| 2.50-2.99 | . | . | . | 16 | . | 1 | . | 2 | . | . | 19 |
| 3.00-3.49 | . | . | . | 1 | 1 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 436 | 2493 | 2019 | 213 | 20 | 11 | 1 | 2 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 4866.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 249 | 733 | 154 | 4 | 1 | . | . | . | . | . | 1141 |
| 0.50-0.99 | . | 1633 | 937 | 40 | 9 | 3 | . | . | . | . | 2622 |
| 1.00-1.49 | . | . | 901 | 18 | 14 | 2 | . | . | . | . | 935 |
| 1.50-1.99 | . | . | 803 | 140 | 3 | 8 | . | . | . | . | 954 |
| 2.00-2.49 | . | . | 1 | 124 | . | 1 | 1 | . | . | . | 127 |
| 2.50-2.99 | . | . | . | 21 | 1 | . | . | . | . | . | 22 |
| 3.00-3.49 | . | . | . | 1 | 2 | . | . | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 249 | 2366 | 2796 | 348 | 30 | 14 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 5434.

STATION S86 48.52N 88.13W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

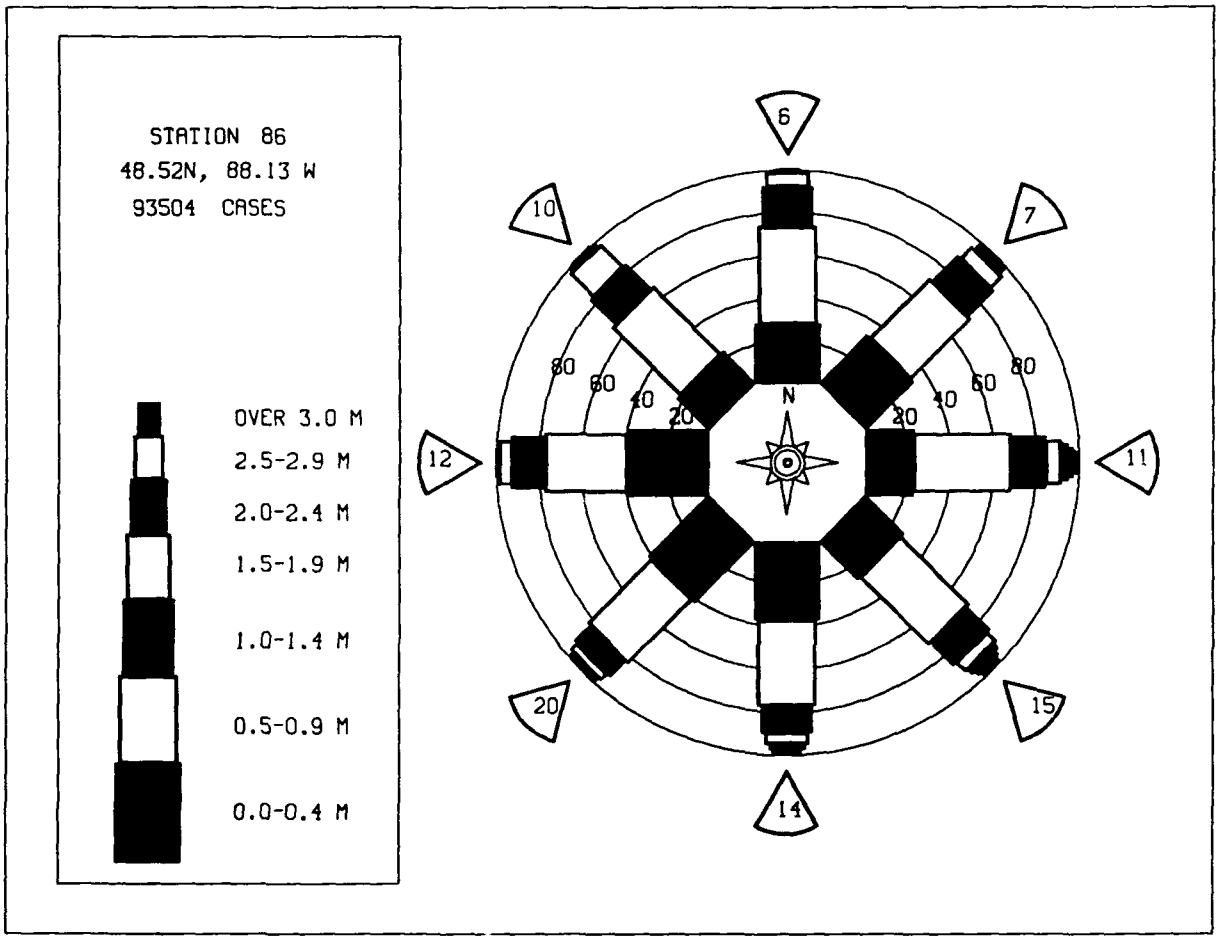
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 193 | 549 | 135 | 4 | . | . | . | . | . | . | 881 |
| 0.50-0.99 | . | 1461 | 591 | 65 | 26 | 1 | . | . | . | . | 2144 |
| 1.00-1.49 | . | . | 828 | 32 | 9 | 9 | 1 | . | . | . | 879 |
| 1.50-1.99 | . | . | 448 | 58 | 1 | 2 | 3 | . | . | . | 512 |
| 2.00-2.49 | . | . | 3 | 42 | . | 2 | . | . | . | . | 47 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 193 | 2010 | 2005 | 201 | 36 | 14 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 4182.

STATION S86 48.52N 88.13W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 710 | 1811 | 508 | 80 | 12 | 3 | . | . | . | . | 3124 |
| 0.50-0.99 | . | 1974 | 1804 | 336 | 114 | 29 | 2 | . | . | . | 4259 |
| 1.00-1.49 | . | . | 1045 | 241 | 125 | 49 | 3 | . | . | . | 1463 |
| 1.50-1.99 | . | . | 320 | 234 | 64 | 54 | 6 | 1 | . | . | 679 |
| 2.00-2.49 | . | . | 8 | 131 | 39 | 36 | 8 | 2 | . | . | 224 |
| 2.50-2.99 | . | . | . | 13 | 58 | 24 | 10 | 3 | . | . | 108 |
| 3.00-3.49 | . | . | . | . | 12 | 34 | 6 | 3 | . | . | 55 |
| 3.50-3.99 | . | . | . | . | . | 19 | 6 | 3 | . | . | 28 |
| 4.00-4.49 | . | . | . | . | . | 3 | 8 | 4 | 1 | . | 16 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 2 | 1 | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 710 | 3785 | 3685 | 1035 | 424 | 251 | 51 | 19 | 5 | 0 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S86 (48.52N 88.13W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.7 | 0.9 | 1.0 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.9 | 0.9 | 0.8 | 0.7 |
| 1957 | 0.8 | 0.9 | 0.7 | 0.7 | 0.7 | 0.6 | 0.4 | 0.5 | 0.7 | 0.7 | 1.0 | 1.0 | 0.7 |
| 1958 | 0.7 | 0.9 | 0.6 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.2 | 0.8 | 0.7 |
| 1959 | 0.8 | 0.8 | 0.8 | 0.7 | 0.8 | 0.5 | 0.5 | 0.5 | 0.8 | 0.8 | 0.9 | 1.0 | 0.7 |
| 1960 | 0.8 | 0.7 | 0.7 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.7 | 1.0 | 0.9 | 0.7 |
| 1961 | 0.7 | 0.8 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 0.9 | 0.9 | 0.7 |
| 1962 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1963 | 0.9 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.9 | 1.1 | 0.7 |
| 1964 | 1.0 | 0.9 | 0.9 | 0.9 | 0.7 | 0.5 | 0.4 | 0.6 | 0.7 | 0.7 | 0.9 | 0.9 | 0.8 |
| 1965 | 1.1 | 1.1 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 1.3 | 1.3 | 0.9 |
| 1966 | 1.2 | 1.3 | 1.7 | 1.1 | 1.0 | 0.7 | 0.7 | 0.7 | 0.9 | 1.2 | 1.2 | 1.2 | 1.1 |
| 1967 | 1.3 | 1.2 | 1.4 | 1.1 | 1.0 | 0.8 | 0.6 | 0.7 | 1.0 | 1.7 | 1.1 | 1.6 | 1.1 |
| 1968 | 1.2 | 1.3 | 1.3 | 1.2 | 1.0 | 0.8 | 0.7 | 0.7 | 1.0 | 1.5 | 1.4 | 1.4 | 1.1 |
| 1969 | 1.4 | 0.8 | 0.9 | 0.8 | 0.7 | 0.6 | 0.4 | 0.6 | 0.9 | 1.1 | 1.1 | 0.9 | 0.8 |
| 1970 | 0.8 | 0.9 | 0.9 | 1.0 | 0.9 | 0.5 | 0.5 | 0.5 | 0.9 | 1.7 | 1.2 | 1.0 | 0.9 |
| 1971 | 0.9 | 1.0 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.8 | 1.3 | 1.2 | 0.8 | 0.8 |
| 1972 | 1.0 | 0.9 | 0.9 | 0.7 | 0.4 | 0.4 | 0.4 | 0.5 | 1.0 | 1.1 | 0.9 | 0.9 | 0.8 |
| 1973 | 0.9 | 0.9 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 1.0 | 1.2 | 0.9 | 0.8 |
| 1974 | 0.9 | 0.7 | 1.0 | 0.7 | 0.7 | 0.6 | 0.4 | 0.7 | 0.7 | 1.0 | 1.1 | 0.8 | 0.8 |
| 1975 | 0.6 | 0.5 | 0.6 | 0.3 | 0.5 | 0.6 | 0.4 | 0.6 | 0.8 | 1.2 | 1.2 | 0.8 | 0.7 |
| 1976 | 1.0 | 1.0 | 1.2 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 0.9 | 0.8 |
| 1977 | 0.9 | 1.1 | 1.2 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 0.9 | 1.2 | 0.8 |
| 1978 | 0.7 | 0.6 | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.8 | 0.8 | 0.9 | 0.9 | 0.7 |
| 1979 | 0.7 | 0.8 | 0.9 | 0.6 | 0.6 | 0.6 | 0.4 | 0.6 | 0.7 | 1.0 | 1.1 | 0.9 | 0.7 |
| 1980 | 0.9 | 0.6 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.6 | 1.0 | 1.2 | 0.8 | 1.0 | 0.7 |
| 1981 | 0.8 | 0.9 | 0.9 | 0.8 | 0.5 | 0.6 | 0.4 | 0.4 | 0.8 | 1.2 | 0.9 | 0.7 | 0.7 |
| 1982 | 1.1 | 0.8 | 1.1 | 0.8 | 0.8 | 0.5 | 0.4 | 0.4 | 0.8 | 1.2 | 1.1 | 1.1 | 0.8 |
| 1983 | 1.0 | 1.0 | 1.2 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.8 | 1.0 | 1.4 | 1.1 | 0.9 |
| 1984 | 1.0 | 1.0 | 1.0 | 0.9 | 0.6 | 0.6 | 0.4 | 0.4 | 0.9 | 1.3 | 1.4 | 1.0 | 0.9 |
| 1985 | 1.0 | 0.9 | 1.2 | 0.8 | 0.6 | 0.7 | 0.4 | 0.6 | 1.0 | 1.3 | 1.0 | 1.0 | 0.9 |
| 1986 | 1.0 | 0.8 | 1.0 | 0.9 | 0.6 | 0.5 | 0.4 | 0.5 | 0.9 | 0.9 | 1.1 | 0.9 | 0.8 |
| 1987 | 0.7 | 0.8 | 1.0 | 0.5 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.7 | 0.8 | 0.8 | 0.6 |
| MEAN | 0.9 | 0.9 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 1.0 | 1.1 | 1.0 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S86 (48 52N 88.13W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.1 | 3.2 | 4.5 | 2.4 | 2.1 | 1.3 | 1.4 | 1.4 | 2.4 | 2.7 | 2.6 | 2.8 |
| 1957 | 2.7 | 2.9 | 2.8 | 2.8 | 2.0 | 2.4 | 1.6 | 2.0 | 1.9 | 1.9 | 3.0 | 2.4 |
| 1958 | 2.7 | 2.7 | 1.5 | 2.8 | 1.7 | 2.7 | 1.5 | 2.1 | 2.6 | 2.3 | 5.2 | 2.1 |
| 1959 | 1.9 | 3.0 | 2.8 | 2.2 | 2.7 | 1.5 | 2.3 | 1.8 | 2.6 | 2.3 | 2.5 | 3.3 |
| 1960 | 2.2 | 2.5 | 2.3 | 2.2 | 2.2 | 1.6 | 1.5 | 2.7 | 1.8 | 2.3 | 3.2 | 3.2 |
| 1961 | 1.9 | 2.6 | 2.3 | 2.2 | 1.7 | 1.4 | 1.4 | 1.7 | 2.4 | 2.2 | 4.0 | 2.5 |
| 1962 | 2.5 | 2.6 | 2.5 | 1.8 | 2.0 | 1.3 | 1.6 | 1.5 | 1.9 | 4.8 | 2.9 | 3.6 |
| 1963 | 2.2 | 2.8 | 2.5 | 2.3 | 2.0 | 2.8 | 1.5 | 1.6 | 1.9 | 2.4 | 2.8 | 4.2 |
| 1964 | 3.6 | 3.1 | 2.5 | 3.2 | 2.9 | 1.7 | 1.1 | 2.7 | 2.6 | 2.9 | 3.1 | 3.2 |
| 1965 | 3.8 | 3.6 | 3.5 | 2.9 | 2.2 | 1.6 | 1.2 | 1.5 | 2.4 | 2.7 | 5.7 | 4.8 |
| 1966 | 3.7 | 3.4 | 6.0 | 4.9 | 2.8 | 2.4 | 2.6 | 2.6 | 2.2 | 4.3 | 4.0 | 4.3 |
| 1967 | 4.7 | 2.8 | 4.5 | 3.4 | 4.3 | 4.2 | 1.8 | 2.3 | 3.9 | 6.2 | 3.6 | 4.5 |
| 1968 | 3.8 | 3.4 | 3.8 | 3.4 | 3.4 | 2.2 | 3.1 | 1.8 | 3.1 | 7.1 | 4.2 | 5.1 |
| 1969 | 4.1 | 2.9 | 2.6 | 2.1 | 2.8 | 3.2 | 1.3 | 2.4 | 3.2 | 3.9 | 4.1 | 3.9 |
| 1970 | 1.9 | 2.2 | 5.1 | 3.9 | 3.5 | 1.9 | 1.3 | 2.3 | 4.8 | 6.4 | 4.5 | 3.7 |
| 1971 | 2.3 | 3.3 | 3.1 | 2.3 | 2.8 | 2.2 | 2.0 | 1.2 | 3.0 | 6.3 | 5.6 | 3.4 |
| 1972 | 3.3 | 4.3 | 3.4 | 2.2 | 1.1 | 0.9 | 1.3 | 1.5 | 4.4 | 3.6 | 3.1 | 4.0 |
| 1973 | 3.2 | 2.9 | 2.6 | 2.0 | 2.2 | 2.6 | 1.4 | 1.6 | 4.7 | 3.8 | 4.2 | 3.3 |
| 1974 | 2.8 | 2.0 | 3.7 | 2.3 | 2.9 | 2.8 | 1.1 | 2.8 | 2.1 | 3.1 | 5.8 | 3.5 |
| 1975 | 3.2 | 1.4 | 1.9 | 0.7 | 1.5 | 1.5 | 1.4 | 2.7 | 3.8 | 5.5 | 6.2 | 3.3 |
| 1976 | 3.5 | 2.6 | 3.7 | 1.9 | 1.7 | 1.9 | 1.6 | 1.6 | 2.4 | 2.7 | 2.1 | 3.2 |
| 1977 | 2.2 | 4.3 | 4.2 | 2.0 | 2.3 | 2.1 | 1.8 | 1.4 | 3.9 | 2.9 | 4.8 | 5.0 |
| 1978 | 2.1 | 1.7 | 3.2 | 2.6 | 1.8 | 2.1 | 1.2 | 1.6 | 3.0 | 2.8 | 3.2 | 5.0 |
| 1979 | 2.1 | 3.2 | 2.5 | 3.7 | 3.2 | 4.1 | 1.3 | 2.2 | 2.7 | 4.3 | 6.9 | 2.7 |
| 1980 | 3.6 | 1.8 | 4.0 | 1.9 | 2.0 | 1.9 | 1.5 | 3.1 | 4.1 | 6.1 | 3.5 | 3.6 |
| 1981 | 1.7 | 2.5 | 2.8 | 3.2 | 1.6 | 2.6 | 1.0 | 1.1 | 4.3 | 4.8 | 4.1 | 2.4 |
| 1982 | 5.0 | 2.3 | 3.6 | 3.7 | 3.3 | 2.8 | 1.5 | 1.8 | 3.5 | 4.3 | 5.4 | 3.1 |
| 1983 | 3.5 | 3.3 | 4.9 | 2.7 | 1.6 | 1.8 | 2.0 | 1.9 | 3.2 | 4.9 | 4.9 | 3.5 |
| 1984 | 3.0 | 3.7 | 3.0 | 3.3 | 2.0 | 2.6 | 0.9 | 1.4 | 4.9 | 5.6 | 6.4 | 3.1 |
| 1985 | 3.0 | 2.9 | 5.7 | 2.5 | 2.2 | 3.1 | 1.3 | 2.9 | 3.4 | 5.5 | 3.9 | 2.8 |
| 1986 | 5.4 | 3.7 | 2.8 | 3.0 | 1.9 | 1.4 | 1.5 | 1.7 | 3.1 | 4.9 | 6.3 | 2.7 |
| 1987 | 2.4 | 4.1 | 3.8 | 1.8 | 1.8 | 0.8 | 1.5 | 1.1 | 1.6 | 2.7 | 2.8 | 3.1 |

32 YR. STATISTICS FOR WIS STATION S86

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.9 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 225.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 7.1 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 138.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 68101000 |

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 157 | 464 | 122 | 5 | . | . | . | . | . | . | 748 |
| 0.50-0.99 | . | 1009 | 449 | 159 | 10 | 2 | . | . | . | . | 1629 |
| 1.00-1.49 | . | . | 521 | 157 | 57 | 19 | . | . | . | . | 754 |
| 1.50-1.99 | . | . | 201 | 25 | 43 | 20 | 3 | . | . | . | 292 |
| 2.00-2.49 | . | . | 19 | 8 | 20 | 10 | 2 | . | . | . | 59 |
| 2.50-2.99 | . | . | . | 2 | 2 | 5 | 1 | . | . | . | 10 |
| 3.00-3.49 | . | . | . | 2 | . | 2 | 1 | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 157 | 1473 | 1312 | 358 | 132 | 58 | 7 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 3281.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 222 | 491 | 110 | 4 | . | . | . | . | . | . | 827 |
| 0.50-0.99 | . | 623 | 621 | 90 | 11 | 1 | . | . | . | . | 1346 |
| 1.00-1.49 | . | . | 355 | 150 | 21 | 10 | . | . | . | . | 536 |
| 1.50-1.99 | . | . | 60 | 162 | 26 | 10 | . | . | . | . | 258 |
| 2.00-2.49 | . | . | 2 | 86 | 25 | 4 | 1 | . | . | . | 118 |
| 2.50-2.99 | . | . | . | 7 | 47 | 3 | . | . | . | . | 57 |
| 3.00-3.49 | . | . | . | . | 12 | 3 | . | . | . | . | 15 |
| 3.50-3.99 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 222 | 1114 | 1148 | 499 | 142 | 35 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.0 NO. OF CASES= 2969.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 348 | 658 | 119 | 7 | . | . | . | . | . | . | 1132 |
| 0.50-0.99 | . | 635 | 818 | 89 | 7 | 2 | . | . | . | . | 1551 |
| 1.00-1.49 | . | . | 414 | 156 | 12 | 4 | . | . | . | . | 586 |
| 1.50-1.99 | . | . | 31 | 251 | 24 | 6 | 1 | . | . | . | 313 |
| 2.00-2.49 | . | . | . | 127 | 35 | 7 | 1 | . | . | . | 170 |
| 2.50-2.99 | . | . | . | 3 | 93 | 5 | . | . | . | . | 101 |
| 3.00-3.49 | . | . | . | . | 31 | 10 | . | . | . | . | 41 |
| 3.50-3.99 | . | . | . | . | 2 | 4 | 3 | . | . | . | 9 |
| 4.00-4.49 | . | . | . | . | . | 3 | 2 | 1 | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | 1 | 2 | . | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 348 | 1293 | 1382 | 633 | 204 | 43 | 9 | 2 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.0 NO. OF CASES= 3671.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 298 | 741 | 98 | 3 | . | . | . | . | . | . | 1140 |
| 0.50-0.99 | . | 712 | 1280 | 98 | 6 | . | . | . | . | . | 2096 |
| 1.00-1.49 | . | . | 445 | 212 | 25 | 2 | . | . | . | . | 684 |
| 1.50-1.99 | . | . | 29 | 229 | 36 | 11 | . | . | . | . | 305 |
| 2.00-2.49 | . | . | . | 140 | 51 | 12 | 2 | . | . | . | 205 |
| 2.50-2.99 | . | . | . | 2 | 98 | 11 | . | . | . | . | 111 |
| 3.00-3.49 | . | . | . | . | 12 | 60 | . | . | . | . | 72 |
| 3.50-3.99 | . | . | . | . | . | 37 | 6 | . | . | . | 43 |
| 4.00-4.49 | . | . | . | . | . | 7 | 18 | . | . | . | 25 |
| 4.50-4.99 | . | . | . | . | . | . | 14 | 2 | . | . | 16 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 1 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | . | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 0 | 0 |
| TOTAL | 298 | 1453 | 1852 | 684 | 228 | 140 | 43 | 8 | 3 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 4418.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 308 | 893 | 111 | 1 | . | . | . | . | . | . | 1313 |
| 0.50-0.99 | . | 1140 | 2874 | 147 | 7 | . | . | . | . | . | 4168 |
| 1.00-1.49 | . | . | 943 | 568 | 47 | 4 | . | . | . | . | 1562 |
| 1.50-1.99 | . | . | 62 | 495 | 96 | 24 | . | . | . | . | 677 |
| 2.00-2.49 | . | . | . | 177 | 104 | 35 | 1 | . | . | . | 317 |
| 2.50-2.99 | . | . | . | 6 | 150 | 31 | 3 | 2 | . | . | 192 |
| 3.00-3.49 | . | . | . | . | 19 | 104 | . | 1 | . | . | 124 |
| 3.50-3.99 | . | . | . | . | . | 54 | 6 | . | . | . | 60 |
| 4.00-4.49 | . | . | . | . | . | 17 | 31 | 1 | . | . | 49 |
| 4.50-4.99 | . | . | . | . | . | 1 | 18 | 7 | . | . | 26 |
| 5.00-5.49 | . | . | . | . | . | . | 4 | 6 | . | . | 10 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | 3 | 2 | . | 5 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 308 | 2033 | 3990 | 1394 | 423 | 270 | 63 | 22 | 3 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 7965.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 159 | 443 | 66 | 1 | . | . | . | . | . | . | 669 |
| 0.50-0.99 | . | 551 | 1384 | 82 | 4 | . | . | . | . | . | 2021 |
| 1.00-1.49 | . | . | 458 | 362 | 86 | 1 | . | . | . | . | 907 |
| 1.50-1.99 | . | . | 26 | 198 | 115 | 28 | . | . | . | . | 367 |
| 2.00-2.49 | . | . | . | 68 | 67 | 52 | 3 | . | . | . | 190 |
| 2.50-2.99 | . | . | . | 1 | 64 | 34 | 10 | 4 | . | . | 113 |
| 3.00-3.49 | . | . | . | . | 7 | 54 | 12 | 2 | . | . | 75 |
| 3.50-3.99 | . | . | . | . | . | 33 | 7 | 5 | . | . | 45 |
| 4.00-4.49 | . | . | . | . | . | 4 | 13 | 3 | 1 | . | 21 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 3 | . | . | 11 |
| 5.00-5.49 | . | . | . | . | . | . | . | 9 | 1 | . | 10 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 159 | 994 | 1934 | 712 | 343 | 206 | 53 | 27 | 2 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.5 NO. OF CASES= 4159.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 167 | 587 | 472 | 62 | . | . | . | . | . | . | 1288 |
| 0.50-0.99 | . | 634 | 1408 | 853 | 106 | 4 | . | . | . | . | 3005 |
| 1.00-1.49 | . | . | 262 | 273 | 356 | 66 | . | . | . | . | 957 |
| 1.50-1.99 | . | . | 18 | 97 | 106 | 155 | 2 | . | . | . | 378 |
| 2.00-2.49 | . | . | . | 31 | 40 | 128 | 19 | . | . | . | 218 |
| 2.50-2.99 | . | . | . | 2 | 38 | 48 | 32 | 6 | . | . | 126 |
| 3.00-3.49 | . | . | . | . | 1 | 29 | 27 | 22 | 1 | . | 80 |
| 3.50-3.99 | . | . | . | . | . | 18 | 9 | 17 | 4 | . | 48 |
| 4.00-4.49 | . | . | . | . | . | . | 7 | 12 | 8 | . | 27 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 6 | 6 | 1 | 15 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 9 | . | 14 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 5 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 167 | 1221 | 2160 | 1318 | 647 | 448 | 98 | 68 | 35 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.8 NO. OF CASES= 5779.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 317 | 1060 | 813 | 337 | 35 | 2 | . | . | . | . | 2564 |
| 0.50-0.99 | . | 1009 | 1389 | 992 | 632 | 93 | 2 | . | . | . | 4117 |
| 1.00-1.49 | . | 1 | 286 | 256 | 378 | 229 | 9 | . | . | . | 1159 |
| 1.50-1.99 | . | . | 19 | 109 | 103 | 177 | 27 | 5 | . | . | 440 |
| 2.00-2.49 | . | . | 2 | 9 | 38 | 68 | 36 | 4 | . | . | 157 |
| 2.50-2.99 | . | . | . | . | 10 | 42 | 19 | 10 | . | . | 81 |
| 3.00-3.49 | . | . | . | . | . | 7 | 4 | 10 | 3 | . | 24 |
| 3.50-3.99 | . | . | . | . | . | 3 | 3 | 6 | . | . | 12 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | 1 | 3 | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 317 | 2070 | 2509 | 1703 | 1196 | 622 | 101 | 38 | 8 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.7 NO. OF CASES= 8026.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 388 | 1241 | 418 | 71 | 18 | 4 | . | . | . | . | 2140 |
| 0.50-0.99 | . | 972 | 1187 | 218 | 136 | 66 | 1 | . | . | . | 2580 |
| 1.00-1.49 | . | 1 | 337 | 254 | 74 | 68 | 5 | . | . | . | 739 |
| 1.50-1.99 | . | . | 52 | 83 | 75 | 55 | 7 | 3 | . | . | 275 |
| 2.00-2.49 | . | . | 1 | 4 | 50 | 47 | 10 | . | . | . | 112 |
| 2.50-2.99 | . | . | . | 2 | . | 24 | 14 | 5 | . | . | 45 |
| 3.00-3.49 | . | . | . | . | . | 7 | 6 | 1 | . | . | 14 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 388 | 2214 | 1995 | 632 | 353 | 271 | 43 | 9 | 3 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 5538.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 432 | 1268 | 357 | 71 | 23 | 8 | . | . | . | . | 2159 |
| 0.50-0.99 | . | 1208 | 1119 | 174 | 73 | 50 | 4 | . | . | . | 2628 |
| 1.00-1.49 | . | . | 578 | 96 | 58 | 28 | 6 | . | . | . | 766 |
| 1.50-1.99 | . | . | 102 | 111 | 43 | 45 | 14 | 1 | . | . | 316 |
| 2.00-2.49 | . | . | 2 | 102 | 6 | 23 | 19 | 6 | . | . | 158 |
| 2.50-2.99 | . | . | . | 26 | 4 | 16 | 16 | 9 | . | . | 71 |
| 3.00-3.49 | . | . | . | 1 | 6 | 1 | 2 | 10 | . | . | 20 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | 4 | 1 | . | 6 |
| 4.00-4.49 | . | . | . | . | . | 5 | . | . | 1 | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 432 | 2476 | 2158 | 581 | 214 | 176 | 61 | 30 | 2 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 5749.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 789 | 2255 | 542 | 27 | 11 | 3 | . | . | . | . | 3627 |
| 0.50-0.99 | . | 2522 | 2364 | 291 | 33 | 13 | 5 | 1 | . | . | 5229 |
| 1.00-1.49 | . | . | 1072 | 171 | 54 | 13 | 3 | 3 | . | . | 1316 |
| 1.50-1.99 | . | . | 192 | 226 | 36 | 32 | 8 | 8 | 3 | . | 505 |
| 2.00-2.49 | . | . | 7 | 146 | 10 | 16 | 8 | 5 | 3 | 1 | 196 |
| 2.50-2.99 | . | . | . | 29 | 25 | 5 | 3 | 4 | 4 | 1 | 71 |
| 3.00-3.49 | . | . | . | 1 | 19 | 13 | . | 2 | 2 | . | 37 |
| 3.50-3.99 | . | . | . | . | 1 | 7 | 1 | . | . | . | 9 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | 1 | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 789 | 4777 | 4177 | 891 | 189 | 103 | 29 | 24 | 13 | 2 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.7 NO. OF CASES= 10299.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1021 | 2844 | 463 | 9 | 2 | . | . | . | . | . | 4339 |
| 0.50-0.99 | . | 3938 | 833 | 387 | 18 | . | . | . | . | . | 5176 |
| 1.00-1.49 | . | . | 1303 | 70 | 24 | 2 | . | . | . | . | 1399 |
| 1.50-1.99 | . | . | 419 | 41 | 34 | 11 | . | 1 | . | . | 506 |
| 2.00-2.49 | . | . | 38 | 28 | 4 | 6 | 2 | . | 1 | . | 79 |
| 2.50-2.99 | . | . | . | 4 | 8 | . | 1 | . | . | . | 13 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1021 | 6782 | 3056 | 539 | 90 | 20 | 4 | 2 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 10777.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 681 | 1492 | 264 | 18 | 1 | . | . | . | . | . | 2456 |
| 0.50-0.99 | . | 1900 | 533 | 84 | 11 | 2 | . | . | . | . | 2530 |
| 1.00-1.49 | . | . | 1237 | 18 | 21 | 5 | 1 | . | . | . | 1282 |
| 1.50-1.99 | . | . | 587 | 2 | 5 | 7 | . | . | . | . | 601 |
| 2.00-2.49 | . | . | 49 | 59 | . | 2 | . | . | . | . | 110 |
| 2.50-2.99 | . | . | . | 17 | . | . | . | 1 | . | . | 18 |
| 3.00-3.49 | . | . | . | 1 | . | . | 1 | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 681 | 3392 | 2670 | 199 | 38 | 16 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 6552.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 308 | 781 | 146 | 5 | 1 | . | . | . | . | . | 1241 |
| 0.50-0.99 | . | 1482 | 595 | 63 | 18 | 1 | . | . | . | . | 2159 |
| 1.00-1.49 | . | . | 835 | 21 | 13 | 11 | . | . | . | . | 880 |
| 1.50-1.99 | . | . | 649 | 83 | 4 | 5 | . | . | . | . | 741 |
| 2.00-2.49 | . | . | 20 | 151 | . | 3 | 4 | 1 | . | . | 179 |
| 2.50-2.99 | . | . | . | 32 | . | . | . | 2 | . | . | 34 |
| 3.00-3.49 | . | . | . | 4 | 1 | . | . | 2 | . | . | 7 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 308 | 2263 | 2245 | 359 | 37 | 20 | 4 | 5 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.7 NO. OF CASES= 4909.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 166 | 527 | 132 | 4 | 1 | . | . | . | . | . | 830 |
| 0.50-0.99 | . | 1536 | 980 | 88 | 18 | 1 | . | . | . | . | 2623 |
| 1.00-1.49 | . | . | 938 | 24 | 37 | 6 | . | . | . | . | 1005 |
| 1.50-1.99 | . | . | 978 | 181 | 7 | 12 | 3 | . | . | . | 1181 |
| 2.00-2.49 | . | . | . | 185 | 1 | 3 | . | . | . | . | 189 |
| 2.50-2.99 | . | . | . | 43 | . | . | . | . | . | . | 43 |
| 3.00-3.49 | . | . | . | 3 | 3 | . | . | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 166 | 2063 | 3028 | 528 | 69 | 22 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 5508.

STATION S87 48.38N 88.35W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

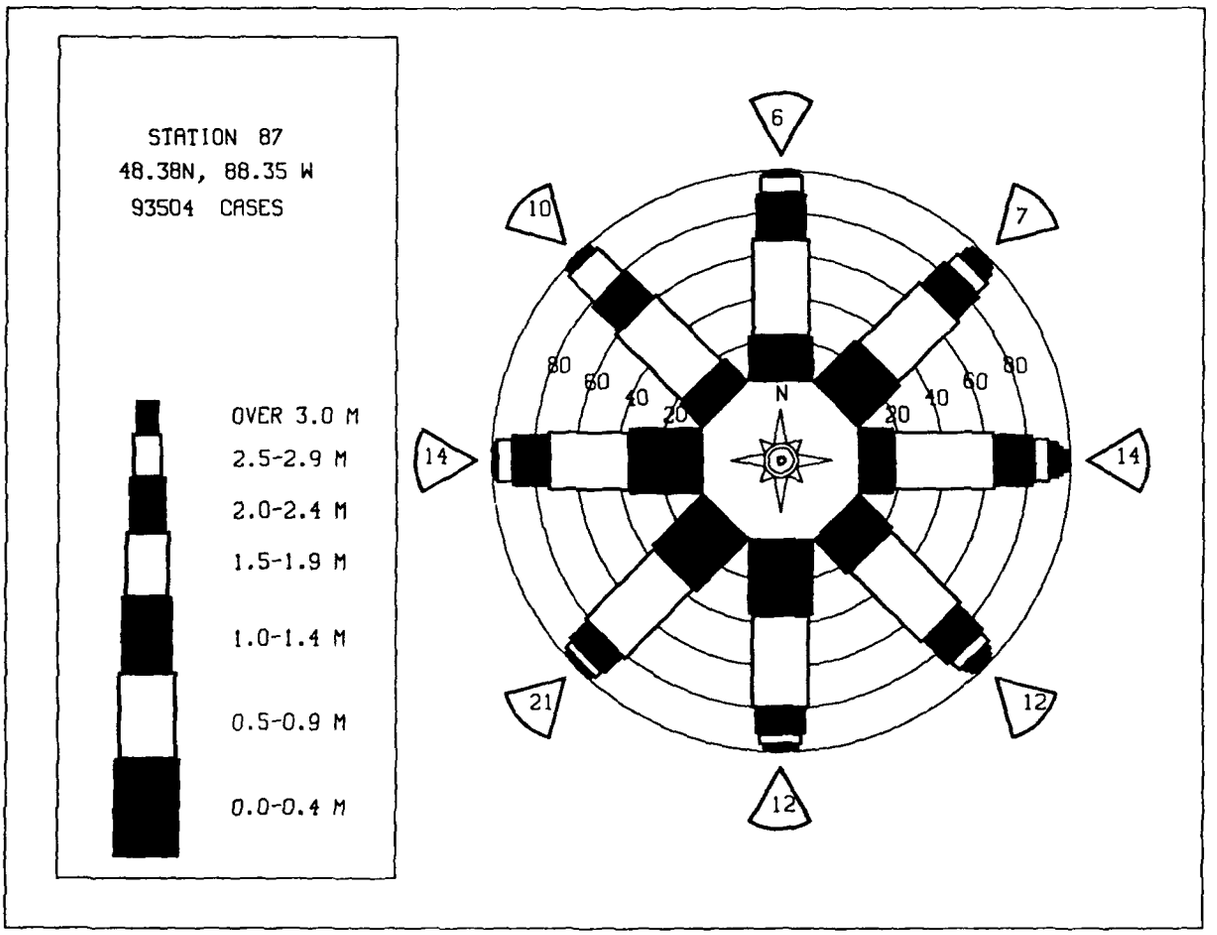
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 133 | 410 | 73 | 2 | . | . | . | . | . | . | 618 |
| 0.50-0.99 | . | 1281 | 582 | 131 | 16 | 2 | . | . | . | . | 2012 |
| 1.00-1.49 | . | . | 820 | 56 | 32 | 6 | 2 | . | . | . | 916 |
| 1.50-1.99 | . | . | 464 | 57 | 10 | 11 | 1 | . | . | . | 543 |
| 2.00-2.49 | . | . | 6 | 60 | 2 | 1 | . | . | . | . | 69 |
| 2.50-2.99 | . | . | . | 6 | . | 1 | . | . | . | . | 7 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 133 | 1691 | 1945 | 312 | 60 | 21 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 3904.

STATION S87 48.38N 88.35W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 590 | 1616 | 431 | 63 | 9 | 1 | . | . | . | . | 2710 |
| 0.50-0.99 | . | 2115 | 1842 | 395 | 111 | 23 | 1 | . | . | . | 4487 |
| 1.00-1.49 | . | . | 1081 | 285 | 130 | 48 | 2 | . | . | . | 1546 |
| 1.50-1.99 | . | . | 389 | 235 | 77 | 61 | 6 | 1 | . | . | 769 |
| 2.00-2.49 | . | . | 14 | 138 | 45 | 42 | 11 | 1 | . | . | 251 |
| 2.50-2.99 | . | . | . | 18 | 54 | 22 | 10 | 4 | . | . | 108 |
| 3.00-3.49 | . | . | . | 1 | 11 | 29 | 5 | 5 | . | . | 51 |
| 3.50-3.99 | . | . | . | . | . | 16 | 3 | 3 | . | . | 22 |
| 4.00-4.49 | . | . | . | . | . | 4 | 7 | 1 | 1 | . | 13 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 2 | . | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 590 | 3731 | 3757 | 1135 | 437 | 246 | 49 | 19 | 2 | 0 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S87 (48.38N 88.35W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.9 | 1.0 | 1.0 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 1.0 | 1.0 | 0.9 | 0.8 |
| 1957 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.1 | 1.0 | 0.8 |
| 1958 | 0.8 | 1.0 | 0.7 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 | 1.2 | 0.9 | 0.8 |
| 1959 | 0.9 | 0.9 | 0.9 | 0.8 | 0.9 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 | 1.0 | 1.1 | 0.8 |
| 1960 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1961 | 0.7 | 0.9 | 0.9 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.7 | 0.8 | 0.9 | 0.9 | 0.7 |
| 1962 | 1.1 | 0.9 | 0.8 | 0.7 | 0.8 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 1.0 | 1.0 | 0.8 |
| 1963 | 0.9 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.0 | 1.2 | 0.8 |
| 1964 | 1.1 | 0.9 | 1.0 | 0.9 | 0.7 | 0.5 | 0.5 | 0.6 | 0.7 | 0.7 | 1.0 | 0.9 | 0.8 |
| 1965 | 1.2 | 1.2 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 1.0 | 1.4 | 1.3 | 0.9 |
| 1966 | 1.3 | 1.3 | 1.9 | 1.2 | 1.1 | 0.8 | 0.7 | 0.8 | 1.0 | 1.3 | 1.3 | 1.3 | 1.2 |
| 1967 | 1.4 | 1.3 | 1.5 | 1.2 | 1.1 | 0.9 | 0.7 | 0.7 | 1.0 | 1.6 | 1.1 | 1.7 | 1.2 |
| 1968 | 1.3 | 1.4 | 1.4 | 1.3 | 1.1 | 0.9 | 0.8 | 0.8 | 1.0 | 1.4 | 1.5 | 1.5 | 1.2 |
| 1969 | 1.5 | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 | 0.5 | 0.6 | 0.8 | 1.0 | 1.0 | 0.9 | 0.9 |
| 1970 | 0.9 | 0.9 | 1.0 | 1.0 | 0.9 | 0.6 | 0.5 | 0.5 | 0.9 | 1.4 | 1.1 | 1.0 | 0.9 |
| 1971 | 1.0 | 1.1 | 0.9 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.7 | 1.2 | 1.0 | 0.9 | 0.8 |
| 1972 | 1.0 | 0.9 | 1.0 | 0.7 | 0.5 | 0.5 | 0.4 | 0.5 | 0.9 | 1.0 | 0.9 | 1.0 | 0.8 |
| 1973 | 0.9 | 0.9 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.8 | 0.9 | 1.1 | 0.9 | 0.8 |
| 1974 | 0.9 | 0.8 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.7 | 0.6 | 0.9 | 1.1 | 0.9 | 0.8 |
| 1975 | 0.8 | 0.7 | 0.8 | 0.5 | 0.6 | 0.6 | 0.5 | 0.6 | 0.7 | 1.1 | 1.1 | 0.9 | 0.7 |
| 1976 | 1.0 | 1.0 | 1.2 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 0.9 | 0.8 |
| 1977 | 1.0 | 1.1 | 1.3 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 0.9 | 1.3 | 0.8 |
| 1978 | 0.8 | 0.6 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.9 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1979 | 0.7 | 0.8 | 0.9 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 0.7 | 0.9 | 1.0 | 0.9 | 0.7 |
| 1980 | 0.9 | 0.7 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.6 | 0.9 | 1.0 | 0.7 | 1.0 | 0.7 |
| 1981 | 0.8 | 0.9 | 0.9 | 0.8 | 0.6 | 0.6 | 0.4 | 0.4 | 0.8 | 1.1 | 0.9 | 0.7 | 0.7 |
| 1982 | 1.1 | 0.8 | 1.1 | 0.9 | 0.8 | 0.5 | 0.5 | 0.5 | 0.8 | 1.1 | 1.1 | 1.1 | 0.9 |
| 1983 | 1.0 | 1.0 | 1.3 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.8 | 0.9 | 1.4 | 1.2 | 0.9 |
| 1984 | 1.0 | 1.0 | 1.0 | 1.0 | 0.6 | 0.6 | 0.5 | 0.5 | 0.9 | 1.2 | 1.3 | 1.0 | 0.9 |
| 1985 | 1.0 | 0.9 | 1.3 | 0.9 | 0.7 | 0.7 | 0.5 | 0.6 | 0.9 | 1.1 | 1.0 | 1.0 | 0.9 |
| 1986 | 1.1 | 0.9 | 1.0 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.9 | 0.8 | 1.1 | 0.9 | 0.8 |
| 1987 | 0.7 | 0.8 | 1.0 | 0.5 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.7 | 0.8 | 0.7 | 0.6 |
| MEAN | 1.0 | 0.9 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 1.0 | 1.1 | 1.0 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S87 (48.38N 88.35W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 4.0 | 3.7 | 5.3 | 3.0 | 2.4 | 1.6 | 1.8 | 1.8 | 2.2 | 3.2 | 3.3 | 3.4 |
| 1957 | 2.3 | 2.4 | 3.1 | 3.3 | 2.5 | 2.2 | 1.6 | 1.8 | 2.3 | 2.2 | 3.1 | 2.5 |
| 1958 | 2.5 | 3.1 | 1.8 | 3.3 | 2.2 | 2.4 | 1.7 | 1.9 | 2.2 | 2.4 | 4.3 | 2.2 |
| 1959 | 2.1 | 2.7 | 2.9 | 2.4 | 2.5 | 1.4 | 2.1 | 1.6 | 2.4 | 2.4 | 2.6 | 4.2 |
| 1960 | 2.5 | 2.3 | 2.6 | 2.4 | 2.7 | 1.5 | 1.6 | 2.0 | 1.9 | 2.6 | 4.0 | 2.8 |
| 1961 | 1.9 | 3.2 | 2.7 | 2.6 | 2.1 | 1.6 | 1.5 | 1.6 | 2.5 | 2.1 | 3.7 | 2.7 |
| 1962 | 2.8 | 3.4 | 3.0 | 2.0 | 2.4 | 1.3 | 1.7 | 1.5 | 2.0 | 4.6 | 3.0 | 3.2 |
| 1963 | 2.3 | 2.9 | 3.3 | 2.4 | 2.3 | 3.3 | 1.5 | 1.9 | 2.2 | 1.9 | 3.2 | 4.7 |
| 1964 | 4.0 | 2.9 | 2.9 | 3.3 | 2.7 | 1.7 | 1.3 | 2.5 | 2.4 | 2.5 | 3.6 | 3.5 |
| 1965 | 4.0 | 4.1 | 3.9 | 3.2 | 1.8 | 1.6 | 1.3 | 1.6 | 2.7 | 2.6 | 6.4 | 5.5 |
| 1966 | 4.3 | 3.2 | 6.8 | 5.1 | 3.0 | 2.3 | 2.2 | 2.9 | 2.3 | 3.9 | 4.7 | 4.2 |
| 1967 | 5.5 | 3.3 | 5.1 | 3.1 | 4.2 | 3.1 | 2.1 | 2.3 | 3.1 | 5.3 | 3.4 | 3.6 |
| 1968 | 3.5 | 3.7 | 4.1 | 3.9 | 3.5 | 2.5 | 2.8 | 2.4 | 2.6 | 6.3 | 4.9 | 5.7 |
| 1969 | 4.8 | 3.3 | 3.0 | 2.3 | 2.9 | 3.4 | 1.2 | 2.5 | 2.4 | 3.0 | 3.3 | 4.4 |
| 1970 | 2.1 | 2.2 | 6.0 | 4.0 | 2.6 | 1.6 | 1.4 | 1.8 | 3.9 | 5.5 | 3.2 | 4.0 |
| 1971 | 2.1 | 3.6 | 3.9 | 2.4 | 3.7 | 2.2 | 1.7 | 1.3 | 2.5 | 4.8 | 4.5 | 3.6 |
| 1972 | 2.5 | 4.6 | 3.6 | 2.5 | 1.4 | 1.2 | 1.3 | 1.8 | 3.5 | 2.7 | 2.8 | 4.5 |
| 1973 | 3.3 | 2.5 | 2.8 | 2.2 | 2.6 | 2.0 | 1.3 | 1.3 | 3.7 | 2.9 | 3.4 | 3.0 |
| 1974 | 2.8 | 2.2 | 3.9 | 2.5 | 2.8 | 2.1 | 1.5 | 2.2 | 1.7 | 2.4 | 4.8 | 3.9 |
| 1975 | 3.9 | 1.9 | 2.8 | 1.3 | 1.9 | 1.4 | 1.5 | 2.3 | 3.0 | 4.3 | 5.2 | 3.5 |
| 1976 | 3.9 | 2.9 | 4.0 | 2.1 | 1.7 | 2.1 | 1.7 | 1.6 | 2.3 | 2.2 | 2.2 | 2.9 |
| 1977 | 2.3 | 4.7 | 4.5 | 2.2 | 2.3 | 1.5 | 1.8 | 1.5 | 4.4 | 3.1 | 4.4 | 5.5 |
| 1978 | 2.5 | 1.8 | 3.6 | 2.9 | 2.2 | 2.0 | 1.2 | 1.6 | 3.2 | 2.5 | 2.9 | 5.0 |
| 1979 | 2.2 | 3.2 | 2.7 | 4.1 | 2.7 | 3.2 | 1.5 | 1.6 | 2.2 | 3.6 | 5.7 | 2.4 |
| 1980 | 3.8 | 2.4 | 3.7 | 2.2 | 1.5 | 1.5 | 1.2 | 2.5 | 3.5 | 4.8 | 2.9 | 2.9 |
| 1981 | 1.7 | 2.8 | 2.9 | 3.2 | 1.9 | 2.5 | 0.9 | 1.4 | 3.2 | 4.0 | 3.5 | 2.1 |
| 1982 | 5.6 | 2.4 | 3.4 | 4.0 | 2.6 | 2.2 | 1.5 | 1.5 | 2.9 | 3.6 | 4.3 | 3.3 |
| 1983 | 2.8 | 3.2 | 5.2 | 3.0 | 1.9 | 1.5 | 1.7 | 1.7 | 2.5 | 4.0 | 5.2 | 3.7 |
| 1984 | 2.8 | 3.8 | 3.3 | 3.2 | 2.2 | 2.2 | 1.3 | 1.7 | 3.8 | 5.2 | 5.1 | 2.9 |
| 1985 | 4.3 | 2.9 | 6.3 | 3.0 | 2.3 | 2.4 | 1.3 | 3.1 | 2.8 | 4.6 | 3.2 | 3.0 |
| 1986 | 5.8 | 3.9 | 3.1 | 3.0 | 2.3 | 1.4 | 1.5 | 1.5 | 3.5 | 3.7 | 5.8 | 2.2 |
| 1987 | 2.1 | 4.5 | 4.2 | 2.4 | 1.8 | 0.8 | 1.4 | 1.0 | 1.6 | 1.9 | 2.6 | 2.3 |

32 YR. STATISTICS FOR WIS STATION S87

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.0 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 247.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 6.8 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 80.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66030418 |

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 143 | 520 | 112 | 9 | . | . | . | . | . | . | 784 |
| 0.50-0.99 | . | 1043 | 435 | 205 | 35 | 2 | . | . | . | . | 1720 |
| 1.00-1.49 | . | . | 481 | 162 | 57 | 19 | . | . | . | . | 719 |
| 1.50-1.99 | . | . | 185 | 23 | 52 | 38 | . | . | . | . | 298 |
| 2.00-2.49 | . | . | 16 | 8 | 13 | 23 | . | . | . | . | 60 |
| 2.50-2.99 | . | . | . | 2 | 1 | 5 | 1 | . | . | . | 9 |
| 3.00-3.49 | . | . | . | 1 | . | 4 | 1 | 2 | . | . | 8 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 143 | 1563 | 1229 | 410 | 158 | 91 | 3 | 2 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.9 NO. OF CASES= 3375.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 220 | 485 | 113 | 4 | . | . | . | . | . | . | 822 |
| 0.50-0.99 | . | 852 | 567 | 145 | 19 | 1 | . | . | . | . | 1584 |
| 1.00-1.49 | . | . | 310 | 189 | 44 | 8 | . | . | . | . | 551 |
| 1.50-1.99 | . | . | 59 | 154 | 50 | 12 | 1 | . | . | . | 276 |
| 2.00-2.49 | . | . | 1 | 80 | 53 | 12 | . | . | . | . | 146 |
| 2.50-2.99 | . | . | . | 3 | 56 | 6 | 1 | . | . | . | 66 |
| 3.00-3.49 | . | . | . | . | 6 | 26 | . | . | . | . | 32 |
| 3.50-3.99 | . | . | . | . | . | 13 | 1 | . | . | . | 14 |
| 4.00-4.49 | . | . | . | . | . | 1 | 2 | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 220 | 1337 | 1050 | 575 | 228 | 79 | 7 | 2 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 3283.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 334 | 767 | 130 | 9 | . | . | . | . | . | . | 1240 |
| 0.50-0.99 | . | 950 | 829 | 149 | 23 | 3 | . | . | . | . | 1954 |
| 1.00-1.49 | . | . | 333 | 187 | 27 | 7 | 1 | . | . | . | 555 |
| 1.50-1.99 | . | . | 31 | 196 | 45 | 4 | . | . | . | . | 276 |
| 2.00-2.49 | . | . | . | 74 | 51 | 10 | 1 | 1 | . | . | 137 |
| 2.50-2.99 | . | . | . | 2 | 86 | 10 | . | . | . | . | 98 |
| 3.00-3.49 | . | . | . | . | 4 | 57 | 3 | . | . | . | 64 |
| 3.50-3.99 | . | . | . | . | . | 23 | 3 | 1 | . | . | 27 |
| 4.00-4.49 | . | . | . | . | . | 2 | 2 | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | 1 | 1 | 1 | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 334 | 1717 | 1323 | 617 | 236 | 117 | 13 | 5 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.0 NO. OF CASES= 4094.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 352 | 1136 | 154 | 4 | . | . | . | . | . | . | 1646 |
| 0.50-0.99 | . | 1122 | 1281 | 217 | 33 | 3 | . | . | . | . | 2656 |
| 1.00-1.49 | . | . | 432 | 397 | 51 | 26 | 2 | . | . | . | 908 |
| 1.50-1.99 | . | . | 40 | 220 | 91 | 18 | 2 | . | . | . | 371 |
| 2.00-2.49 | . | . | 5 | 56 | 154 | 28 | 4 | 2 | . | . | 249 |
| 2.50-2.99 | . | . | . | 1 | 47 | 77 | . | . | . | . | 125 |
| 3.00-3.49 | . | . | . | . | 7 | 56 | 11 | . | . | . | 74 |
| 3.50-3.99 | . | . | . | . | 1 | 20 | 26 | 1 | . | . | 48 |
| 4.00-4.49 | . | . | . | . | . | 2 | 5 | 5 | . | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 3 | 2 | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 352 | 2258 | 1912 | 895 | 384 | 230 | 53 | 13 | 3 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.1 NO. OF CASES= 5718.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 378 | 1661 | 235 | 12 | . | . | . | . | . | . | 2286 |
| 0.50-0.99 | . | 2007 | 2389 | 365 | 45 | 6 | . | . | . | . | 4812 |
| 1.00-1.49 | . | . | 589 | 730 | 133 | 42 | 1 | . | . | . | 1495 |
| 1.50-1.99 | . | . | 24 | 247 | 126 | 58 | 7 | . | . | . | 462 |
| 2.00-2.49 | . | . | 2 | 16 | 132 | 59 | 11 | 4 | . | . | 224 |
| 2.50-2.99 | . | . | . | 1 | 11 | 88 | 6 | 4 | . | . | 110 |
| 3.00-3.49 | . | . | . | . | . | 33 | 19 | 2 | . | . | 54 |
| 3.50-3.99 | . | . | . | . | . | 2 | 19 | 4 | . | . | 25 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | 3 | 1 | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 378 | 3668 | 3239 | 1371 | 447 | 289 | 64 | 19 | 1 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 8876.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 203 | 572 | 97 | 2 | . | . | . | . | . | . | 874 |
| 0.50-0.99 | . | 768 | 978 | 116 | 24 | . | . | . | . | . | 1886 |
| 1.00-1.49 | . | . | 268 | 214 | 67 | 18 | . | . | . | . | 567 |
| 1.50-1.99 | . | . | 19 | 88 | 48 | 45 | 2 | . | . | . | 202 |
| 2.00-2.49 | . | . | . | 25 | 38 | 33 | 8 | 2 | . | . | 106 |
| 2.50-2.99 | . | . | . | 1 | 14 | 25 | 4 | 3 | . | . | 47 |
| 3.00-3.49 | . | . | . | . | 1 | 8 | 3 | 1 | 1 | . | 14 |
| 3.50-3.99 | . | . | . | . | . | . | 5 | 3 | 1 | . | 9 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 203 | 1340 | 1362 | 446 | 192 | 129 | 23 | 9 | 7 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 3483.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 168 | 511 | 367 | 168 | 16 | 1 | . | . | . | . | 1231 |
| 0.50-0.99 | . | 928 | 624 | 409 | 271 | 93 | 3 | . | . | . | 2328 |
| 1.00-1.49 | . | . | 186 | 74 | 79 | 86 | 17 | 2 | . | . | 444 |
| 1.50-1.99 | . | . | 23 | 58 | 20 | 39 | 8 | 1 | 1 | . | 150 |
| 2.00-2.49 | . | . | . | 21 | 8 | 13 | 6 | 9 | . | . | 57 |
| 2.50-2.99 | . | . | . | 4 | 11 | 9 | 4 | 5 | 1 | . | 34 |
| 3.00-3.49 | . | . | . | . | 3 | 7 | 1 | . | 1 | . | 12 |
| 3.50-3.99 | . | . | . | . | . | 8 | 3 | 4 | 4 | . | 19 |
| 4.00-4.49 | . | . | . | . | . | . | 3 | 2 | 2 | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 1 | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 168 | 1439 | 1200 | 734 | 408 | 256 | 48 | 24 | 10 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 4026.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 258 | 920 | 250 | 159 | 79 | 10 | . | . | . | . | 1676 |
| 0.50-0.99 | . | 1205 | 440 | 188 | 179 | 124 | 7 | . | . | . | 2143 |
| 1.00-1.49 | . | . | 233 | 50 | 51 | 57 | 17 | 4 | 2 | . | 414 |
| 1.50-1.99 | . | . | 29 | 11 | 12 | 27 | 9 | 2 | . | . | 90 |
| 2.00-2.49 | . | . | 1 | 8 | 4 | 7 | 7 | 8 | . | . | 35 |
| 2.50-2.99 | . | . | . | . | 5 | 5 | 1 | 3 | 7 | . | 21 |
| 3.00-3.49 | . | . | . | . | . | 1 | . | 1 | 5 | . | 7 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 258 | 2125 | 953 | 416 | 330 | 231 | 42 | 19 | 16 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.0 NO. OF CASES= 4120.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 250 | 826 | 73 | 2 | 2 | 2 | . | . | . | . | 1155 |
| 0.50-0.99 | . | 996 | 360 | 66 | 34 | 18 | . | . | . | . | 1474 |
| 1.00-1.49 | . | . | 206 | 19 | 38 | 42 | 3 | . | . | . | 308 |
| 1.50-1.99 | . | . | 43 | 2 | 3 | 12 | 11 | 3 | . | . | 74 |
| 2.00-2.49 | . | . | 3 | 2 | . | 3 | 7 | 9 | 3 | . | 27 |
| 2.50-2.99 | . | . | . | . | . | . | . | 4 | 1 | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 250 | 1822 | 685 | 91 | 77 | 77 | 21 | 18 | 6 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 2860.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 223 | 826 | 97 | 3 | . | . | . | . | . | . | 1149 |
| 0.50-0.99 | . | 1073 | 448 | 62 | 16 | 3 | 1 | . | . | . | 1603 |
| 1.00-1.49 | . | . | 243 | 27 | 14 | 20 | 4 | 2 | . | . | 310 |
| 1.50-1.99 | . | . | 67 | 12 | 2 | 13 | 9 | 2 | . | . | 105 |
| 2.00-2.49 | . | . | 2 | 12 | . | . | 2 | 8 | 1 | . | 25 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | 1 | . | 2 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | 1 | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 223 | 1899 | 857 | 117 | 33 | 36 | 16 | 13 | 2 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 2999.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 305 | 1409 | 167 | 8 | . | . | . | . | . | . | 1889 |
| 0.50-0.99 | . | 1531 | 1593 | 74 | 17 | 1 | 1 | . | . | . | 3217 |
| 1.00-1.49 | . | . | 505 | 103 | 27 | 19 | 1 | . | . | . | 655 |
| 1.50-1.99 | . | . | 113 | 117 | 16 | 19 | 3 | 1 | . | . | 269 |
| 2.00-2.49 | . | . | 5 | 55 | 2 | 8 | 4 | 1 | . | . | 75 |
| 2.50-2.99 | . | . | . | 3 | 5 | . | . | . | 1 | . | 9 |
| 3.00-3.49 | . | . | . | 1 | 1 | . | . | . | 1 | . | 3 |
| 3.50-3.99 | . | . | . | 1 | . | 1 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 305 | 2940 | 2383 | 362 | 68 | 48 | 9 | 2 | 2 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 5733.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 445 | 2481 | 156 | 4 | . | . | . | . | . | . | 3086 |
| 0.50-0.99 | . | 2675 | 4391 | 100 | 22 | 2 | . | . | . | . | 7190 |
| 1.00-1.49 | . | . | 2199 | 244 | 48 | 10 | 1 | . | . | . | 2502 |
| 1.50-1.99 | . | . | 206 | 614 | 63 | 16 | 8 | . | . | . | 907 |
| 2.00-2.49 | . | . | 1 | 275 | 44 | 50 | 13 | 4 | . | . | 387 |
| 2.50-2.99 | . | . | . | 17 | 97 | 9 | 8 | 8 | 2 | . | 141 |
| 3.00-3.49 | . | . | . | . | 26 | 3 | 2 | 7 | 3 | . | 41 |
| 3.50-3.99 | . | . | . | . | 1 | 6 | . | 1 | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | 1 | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 445 | 5156 | 6953 | 1254 | 301 | 99 | 33 | 20 | 6 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 13356.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 526 | 1732 | 114 | 7 | . | . | . | . | . | . | 2379 |
| 0.50-0.99 | . | 1842 | 3380 | 120 | 25 | 4 | . | . | . | . | 5371 |
| 1.00-1.49 | . | . | 2869 | 55 | 17 | 19 | 1 | . | . | . | 2961 |
| 1.50-1.99 | . | . | 290 | 1395 | 4 | 3 | 1 | . | . | . | 1693 |
| 2.00-2.49 | . | . | 1 | 1300 | 4 | . | 3 | 1 | . | . | 1309 |
| 2.50-2.99 | . | . | . | 106 | 339 | . | . | . | . | . | 445 |
| 3.00-3.49 | . | . | . | . | 108 | 1 | . | 1 | . | . | 110 |
| 3.50-3.99 | . | . | . | . | 5 | 37 | . | 1 | . | . | 43 |
| 4.00-4.49 | . | . | . | . | . | 12 | . | . | 2 | . | 14 |
| 4.50-4.99 | . | . | . | . | . | 5 | . | . | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 526 | 3574 | 6654 | 2983 | 502 | 81 | 5 | 3 | 2 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 13411.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 270 | 1068 | 88 | 7 | . | . | . | . | . | . | 1433 |
| 0.50-0.99 | . | 1726 | 1530 | 71 | 18 | 1 | . | . | . | . | 3346 |
| 1.00-1.49 | . | . | 1983 | 40 | 28 | 14 | . | . | . | . | 2065 |
| 1.50-1.99 | . | . | 930 | 764 | 6 | 3 | . | 1 | . | . | 1704 |
| 2.00-2.49 | . | . | 9 | 830 | 1 | . | 1 | . | . | . | 841 |
| 2.50-2.99 | . | . | . | 116 | 231 | . | . | 1 | . | . | 348 |
| 3.00-3.49 | . | . | . | 1 | 126 | . | . | . | . | . | 127 |
| 3.50-3.99 | . | . | . | . | 1 | 54 | . | . | . | . | 55 |
| 4.00-4.49 | . | . | . | . | 2 | 13 | . | . | . | . | 15 |
| 4.50-4.99 | . | . | . | . | . | 7 | . | . | . | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 270 | 2794 | 4540 | 1829 | 413 | 92 | 4 | 2 | 0 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 9311.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 173 | 532 | 97 | 10 | 1 | . | . | . | . | . | 813 |
| 0.50-0.99 | . | 1577 | 851 | 91 | 28 | 3 | . | . | . | . | 2550 |
| 1.00-1.49 | . | . | 1093 | 34 | 28 | 18 | 1 | . | . | . | 1174 |
| 1.50-1.99 | . | . | 736 | 139 | 6 | 7 | 1 | . | . | . | 889 |
| 2.00-2.49 | . | . | . | 164 | . | 1 | . | 1 | . | . | 166 |
| 2.50-2.99 | . | . | . | 27 | . | . | . | . | . | . | 27 |
| 3.00-3.49 | . | . | . | 1 | 6 | . | . | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 173 | 2109 | 2777 | 466 | 70 | 29 | 2 | 1 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 5271.

STATION S88 48.23N 88.57W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

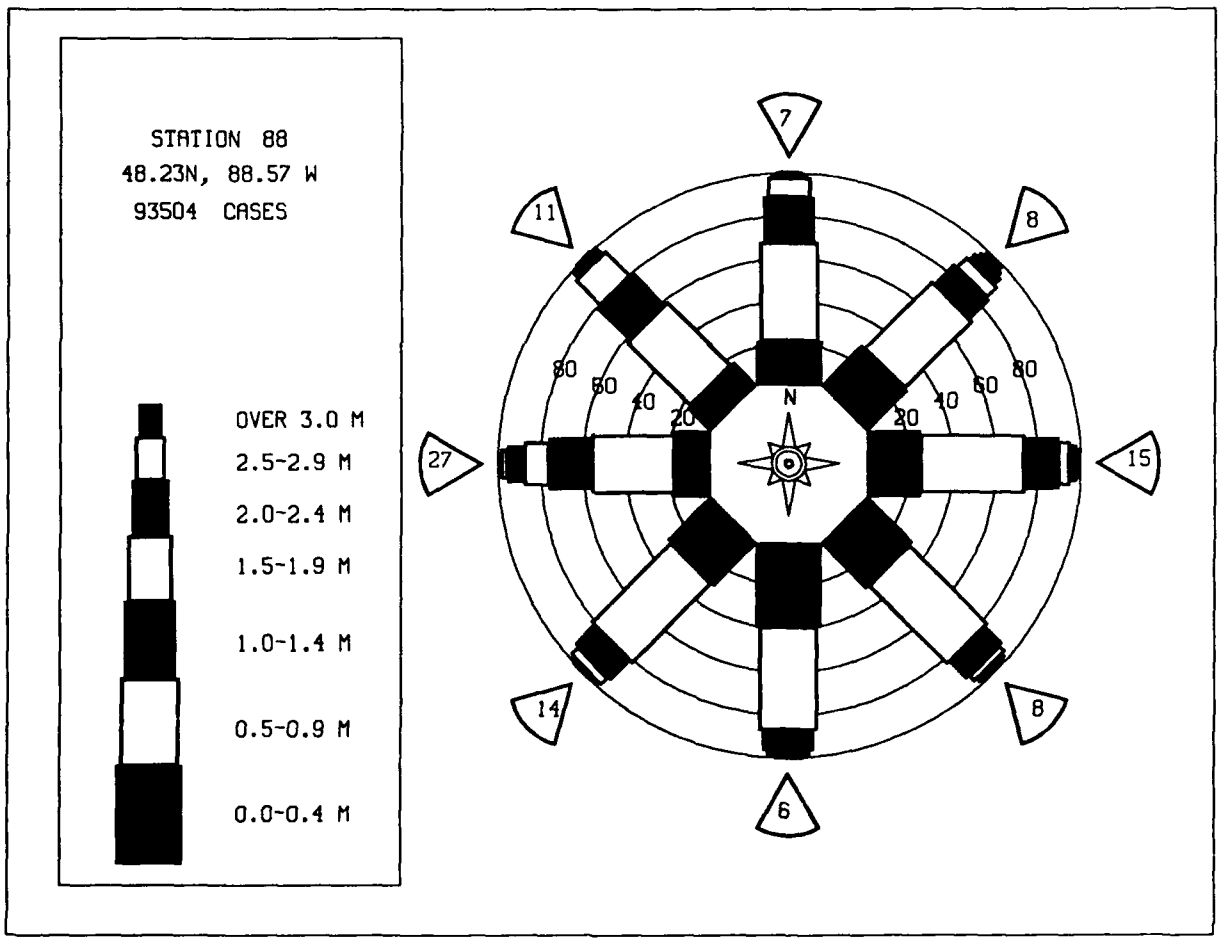
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 111 | 378 | 79 | 2 | . | . | . | . | . | . | 570 |
| 0.50-0.99 | . | 1074 | 497 | 136 | 31 | 1 | . | . | . | . | 1739 |
| 1.00-1.49 | . | . | 795 | 60 | 48 | 16 | 2 | . | . | . | 921 |
| 1.50-1.99 | . | . | 435 | 35 | 23 | 16 | 1 | 1 | . | . | 511 |
| 2.00-2.49 | . | . | 9 | 63 | . | 4 | . | . | . | . | 76 |
| 2.50-2.99 | . | . | . | 9 | . | . | 2 | . | . | . | 11 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 111 | 1452 | 1815 | 306 | 102 | 37 | 5 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 3588.

STATION S88 48.23N 88.57W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 436 | 1583 | 233 | 41 | 9 | 1 | . | . | . | . | 2303 |
| 0.50-0.99 | . | 2137 | 2060 | 252 | 82 | 26 | 1 | . | . | . | 4558 |
| 1.00-1.49 | . | . | 1273 | 259 | 76 | 42 | 5 | . | . | . | 1655 |
| 1.50-1.99 | . | . | 323 | 408 | 57 | 33 | 6 | 1 | . | . | 828 |
| 2.00-2.49 | . | . | 5 | 299 | 50 | 25 | 7 | 5 | . | . | 391 |
| 2.50-2.99 | . | . | . | 29 | 90 | 23 | 2 | 2 | 1 | . | 147 |
| 3.00-3.49 | . | . | . | . | 29 | 19 | 4 | 1 | 1 | . | 54 |
| 3.50-3.99 | . | . | . | . | . | 16 | 6 | 1 | . | . | 23 |
| 4.00-4.49 | . | . | . | . | . | 3 | 1 | 1 | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 436 | 3720 | 3894 | 1288 | 393 | 189 | 33 | 11 | 2 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S88 (48.23N 88.57W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.9 | 1.2 | 1.1 | 0.9 | 0.8 | 0.6 | 0.6 | 0.6 | 0.6 | 1.0 | 1.1 | 1.0 | 0.9 |
| 1957 | 1.1 | 1.1 | 0.9 | 0.8 | 0.8 | 0.7 | 0.5 | 0.6 | 0.8 | 0.8 | 1.2 | 1.2 | 0.9 |
| 1958 | 0.9 | 1.1 | 0.7 | 1.0 | 0.8 | 0.7 | 0.6 | 0.7 | 0.8 | 0.9 | 1.3 | 1.2 | 0.9 |
| 1959 | 1.1 | 1.1 | 1.0 | 0.9 | 0.9 | 0.6 | 0.7 | 0.6 | 0.9 | 0.9 | 1.2 | 1.3 | 0.9 |
| 1960 | 1.0 | 0.9 | 0.8 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 1.2 | 1.2 | 0.8 |
| 1961 | 0.9 | 0.9 | 0.9 | 0.8 | 0.7 | 0.6 | 0.4 | 0.5 | 0.8 | 0.8 | 1.0 | 1.1 | 0.8 |
| 1962 | 1.3 | 0.9 | 0.8 | 0.8 | 0.7 | 0.5 | 0.5 | 0.6 | 0.8 | 0.9 | 1.0 | 1.2 | 0.8 |
| 1963 | 1.2 | 1.1 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.7 | 0.8 | 1.1 | 1.4 | 0.9 |
| 1964 | 1.2 | 1.0 | 1.0 | 0.8 | 0.7 | 0.5 | 0.5 | 0.6 | 0.8 | 0.7 | 1.0 | 1.0 | 0.8 |
| 1965 | 1.3 | 1.4 | 1.0 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.8 | 1.0 | 1.5 | 1.4 | 1.0 |
| 1966 | 1.6 | 1.4 | 1.7 | 1.2 | 1.2 | 0.8 | 0.8 | 0.8 | 1.0 | 1.4 | 1.4 | 1.5 | 1.2 |
| 1967 | 1.5 | 1.3 | 1.5 | 1.2 | 1.1 | 0.9 | 0.8 | 0.8 | 1.0 | 1.5 | 1.3 | 1.8 | 1.2 |
| 1968 | 1.3 | 1.7 | 1.5 | 1.3 | 1.0 | 0.9 | 0.9 | 0.9 | 1.0 | 1.3 | 1.6 | 1.6 | 1.3 |
| 1969 | 1.5 | 1.0 | 1.1 | 0.8 | 0.8 | 0.7 | 0.5 | 0.7 | 0.8 | 1.0 | 1.1 | 0.9 | 0.9 |
| 1970 | 1.0 | 1.0 | 1.0 | 1.0 | 0.9 | 0.6 | 0.6 | 0.6 | 0.8 | 1.1 | 1.1 | 1.0 | 0.9 |
| 1971 | 1.2 | 1.1 | 1.0 | 0.9 | 0.7 | 0.5 | 0.6 | 0.5 | 0.7 | 1.1 | 1.0 | 1.0 | 0.9 |
| 1972 | 1.2 | 1.0 | 1.0 | 0.7 | 0.5 | 0.6 | 0.5 | 0.5 | 0.9 | 1.0 | 0.9 | 1.1 | 0.8 |
| 1973 | 1.0 | 0.9 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.8 | 0.9 | 1.2 | 1.0 | 0.8 |
| 1974 | 1.0 | 0.8 | 1.0 | 0.7 | 0.7 | 0.6 | 0.5 | 0.7 | 0.7 | 0.8 | 1.2 | 0.9 | 0.8 |
| 1975 | 1.0 | 0.9 | 1.0 | 0.5 | 0.6 | 0.6 | 0.5 | 0.6 | 0.7 | 1.0 | 1.1 | 0.9 | 0.8 |
| 1976 | 1.0 | 1.0 | 1.2 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.7 | 0.8 | 1.2 | 1.1 | 0.8 |
| 1977 | 1.3 | 1.2 | 1.2 | 0.6 | 0.7 | 0.5 | 0.5 | 0.6 | 0.7 | 0.7 | 0.9 | 1.4 | 0.9 |
| 1978 | 0.9 | 0.7 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.8 | 0.7 | 1.0 | 1.1 | 0.8 |
| 1979 | 0.9 | 0.8 | 0.9 | 0.7 | 0.7 | 0.6 | 0.4 | 0.5 | 0.7 | 0.8 | 1.0 | 1.0 | 0.7 |
| 1980 | 1.0 | 0.7 | 0.8 | 0.7 | 0.6 | 0.6 | 0.5 | 0.6 | 0.9 | 1.1 | 0.7 | 1.2 | 0.8 |
| 1981 | 0.9 | 0.9 | 1.0 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.8 | 0.9 | 0.9 | 0.9 | 0.8 |
| 1982 | 1.3 | 0.9 | 1.1 | 0.8 | 0.8 | 0.6 | 0.5 | 0.6 | 0.8 | 1.0 | 1.1 | 1.2 | 0.9 |
| 1983 | 1.0 | 1.0 | 1.2 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.8 | 0.9 | 1.4 | 1.4 | 0.9 |
| 1984 | 1.1 | 1.0 | 1.0 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.9 | 1.0 | 1.3 | 1.2 | 0.9 |
| 1985 | 1.3 | 1.0 | 1.2 | 0.8 | 0.7 | 0.8 | 0.5 | 0.7 | 0.8 | 1.1 | 1.1 | 1.3 | 1.0 |
| 1986 | 1.2 | 0.9 | 1.1 | 0.9 | 0.7 | 0.6 | 0.5 | 0.6 | 0.9 | 0.8 | 1.1 | 1.0 | 0.9 |
| 1987 | 0.7 | 0.8 | 0.9 | 0.5 | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.7 | 0.8 | 0.8 | 0.6 |
| MEAN | 1.1 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 1.0 | 1.1 | 1.2 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S88 (48.23N 88.57W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 3.0 | 3.0 | 3.9 | 3.2 | 2.6 | 1.8 | 2.0 | 2.1 | 2.2 | 3.8 | 3.9 | 3.9 |
| 1957 | 3.2 | 3.3 | 3.3 | 3.3 | 3.0 | 2.5 | 2.3 | 2.3 | 2.6 | 2.6 | 3.4 | 3.2 |
| 1958 | 2.8 | 2.7 | 2.3 | 3.5 | 3.1 | 2.4 | 2.5 | 2.4 | 3.0 | 2.8 | 4.0 | 3.7 |
| 1959 | 3.0 | 3.5 | 3.1 | 3.7 | 3.9 | 2.1 | 2.3 | 2.8 | 2.7 | 2.8 | 4.0 | 5.5 |
| 1960 | 3.4 | 3.4 | 2.7 | 3.8 | 3.2 | 2.4 | 1.8 | 2.6 | 2.6 | 2.8 | 3.2 | 3.1 |
| 1961 | 2.2 | 3.2 | 3.5 | 4.1 | 2.5 | 1.8 | 1.6 | 1.8 | 3.3 | 2.9 | 3.6 | 4.3 |
| 1962 | 4.0 | 2.5 | 3.5 | 2.8 | 2.3 | 1.7 | 1.7 | 2.1 | 2.9 | 4.6 | 3.6 | 4.4 |
| 1963 | 2.8 | 3.1 | 3.0 | 3.0 | 3.5 | 2.4 | 2.4 | 1.7 | 2.5 | 2.9 | 3.4 | 3.7 |
| 1964 | 3.0 | 3.5 | 2.8 | 2.5 | 2.8 | 1.8 | 1.2 | 2.2 | 2.6 | 2.7 | 3.5 | 2.6 |
| 1965 | 3.2 | 3.6 | 3.3 | 3.1 | 2.9 | 2.3 | 1.6 | 1.9 | 3.1 | 3.3 | 4.9 | 4.1 |
| 1966 | 3.3 | 3.5 | 5.9 | 4.1 | 4.3 | 3.0 | 2.4 | 2.4 | 2.5 | 4.7 | 4.2 | 4.6 |
| 1967 | 5.5 | 3.6 | 3.8 | 4.7 | 3.2 | 2.8 | 2.7 | 2.1 | 3.1 | 4.1 | 3.4 | 4.2 |
| 1968 | 3.5 | 4.3 | 4.5 | 4.6 | 2.7 | 2.6 | 3.5 | 3.5 | 3.1 | 5.5 | 4.7 | 6.3 |
| 1969 | 3.9 | 2.6 | 3.5 | 2.6 | 2.4 | 2.5 | 1.3 | 2.7 | 2.0 | 2.8 | 2.4 | 3.6 |
| 1970 | 2.5 | 2.3 | 4.3 | 3.4 | 2.7 | 1.7 | 1.8 | 2.1 | 2.6 | 4.3 | 3.8 | 3.0 |
| 1971 | 2.9 | 2.9 | 4.4 | 2.3 | 3.0 | 1.9 | 2.0 | 2.1 | 2.1 | 4.1 | 3.3 | 2.7 |
| 1972 | 3.0 | 3.5 | 3.0 | 2.4 | 1.4 | 1.8 | 2.1 | 2.1 | 2.8 | 3.2 | 3.3 | 3.8 |
| 1973 | 2.8 | 2.2 | 2.8 | 2.4 | 3.0 | 1.7 | 2.1 | 1.0 | 2.8 | 2.6 | 2.7 | 3.6 |
| 1974 | 3.0 | 2.1 | 3.1 | 2.4 | 2.3 | 2.1 | 2.4 | 2.3 | 1.9 | 2.5 | 4.0 | 3.0 |
| 1975 | 4.0 | 2.9 | 4.1 | 1.2 | 2.2 | 2.1 | 2.3 | 2.2 | 2.7 | 3.9 | 3.5 | 3.4 |
| 1976 | 3.1 | 2.6 | 4.2 | 2.3 | 2.3 | 1.7 | 1.8 | 1.9 | 2.6 | 2.3 | 2.9 | 3.9 |
| 1977 | 3.7 | 3.7 | 3.8 | 1.7 | 2.1 | 1.3 | 2.1 | 2.1 | 3.3 | 2.6 | 4.7 | 4.1 |
| 1978 | 2.9 | 1.9 | 3.3 | 2.4 | 1.9 | 1.9 | 1.4 | 2.2 | 2.6 | 3.2 | 3.3 | 4.6 |
| 1979 | 2.4 | 2.5 | 3.0 | 3.2 | 2.2 | 2.7 | 2.0 | 1.9 | 2.0 | 2.4 | 3.9 | 2.4 |
| 1980 | 3.5 | 2.1 | 2.8 | 2.6 | 1.8 | 1.4 | 1.7 | 2.0 | 3.1 | 3.6 | 2.3 | 3.0 |
| 1981 | 2.4 | 2.2 | 2.9 | 3.1 | 1.9 | 2.7 | 1.2 | 1.1 | 3.3 | 2.6 | 2.7 | 2.4 |
| 1982 | 4.9 | 2.4 | 4.6 | 3.1 | 2.0 | 2.6 | 2.5 | 2.0 | 2.1 | 2.9 | 4.0 | 3.1 |
| 1983 | 3.3 | 3.5 | 4.1 | 2.9 | 2.2 | 2.1 | 2.0 | 2.1 | 2.8 | 2.6 | 4.6 | 4.0 |
| 1984 | 3.7 | 2.8 | 2.6 | 2.8 | 2.8 | 2.4 | 2.1 | 1.9 | 2.6 | 3.6 | 3.6 | 3.2 |
| 1985 | 4.3 | 2.9 | 4.9 | 3.2 | 2.2 | 2.9 | 2.0 | 2.4 | 3.5 | 2.8 | 2.9 | 3.5 |
| 1986 | 5.7 | 3.0 | 2.6 | 2.6 | 2.6 | 1.7 | 2.2 | 1.7 | 2.7 | 3.5 | 3.9 | 2.8 |
| 1987 | 2.1 | 3.7 | 3.6 | 1.9 | 1.7 | 1.2 | 1.3 | 1.7 | 1.5 | 2.0 | 2.1 | 2.5 |

32 YR. STATISTICS FOR WIS STATION S88

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.0 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.6 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.2 |
| LARGEST WAVE HS | (METERS) | 6.3 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 9.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 35.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 68121318 |

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 206 | 587 | 104 | 29 | | | . | . | . | . | 926 |
| 0.50-0.99 | . | 1299 | 364 | 182 | 47 | 6 | . | . | . | . | 1898 |
| 1.00-1.49 | . | . | 576 | 120 | 80 | 16 | . | . | . | . | 792 |
| 1.50-1.99 | . | . | 185 | 7 | 47 | 51 | 2 | . | . | . | 292 |
| 2.00-2.49 | . | . | 10 | 10 | 7 | 27 | . | . | . | . | 54 |
| 2.50-2.99 | . | . | . | 2 | . | 2 | 3 | 1 | . | . | 8 |
| 3.00-3.49 | . | . | . | 2 | . | . | 3 | 1 | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 206 | 1886 | 1239 | 352 | 181 | 102 | 9 | 2 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 3729.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 240 | 626 | 112 | 10 | 1 | . | . | . | . | . | 989 |
| 0.50-0.99 | . | 1225 | 440 | 162 | 33 | 4 | . | . | . | . | 1864 |
| 1.00-1.49 | . | . | 303 | 213 | 56 | 6 | 1 | . | . | . | 579 |
| 1.50-1.99 | . | . | 106 | 73 | 103 | 19 | . | 1 | . | . | 302 |
| 2.00-2.49 | . | . | 3 | 16 | 49 | 52 | . | . | . | . | 120 |
| 2.50-2.99 | . | . | . | 5 | . | 36 | 2 | . | . | . | 43 |
| 3.00-3.49 | . | . | . | 1 | 1 | 4 | 4 | 3 | . | . | 13 |
| 3.50-3.99 | . | . | . | . | . | 1 | 1 | 2 | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | 3 | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 240 | 1851 | 964 | 480 | 243 | 122 | 9 | 10 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 3677.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 368 | 942 | 105 | 21 | 2 | 1 | . | . | . | . | 1439 |
| 0.50-0.99 | . | 1489 | 546 | 143 | 26 | 4 | 1 | . | . | . | 2209 |
| 1.00-1.49 | . | . | 253 | 174 | 26 | 16 | 3 | . | . | . | 472 |
| 1.50-1.99 | . | . | 39 | 96 | 54 | 6 | 2 | 1 | 1 | . | 199 |
| 2.00-2.49 | . | . | 2 | 6 | 66 | 8 | 1 | . | . | . | 83 |
| 2.50-2.99 | . | . | . | 4 | 3 | 54 | 4 | . | . | . | 65 |
| 3.00-3.49 | . | . | . | . | . | 14 | 6 | . | . | . | 20 |
| 3.50-3.99 | . | . | . | . | . | 1 | 1 | 1 | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 368 | 2431 | 945 | 444 | 177 | 104 | 18 | 3 | 1 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 4212.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 266 | 757 | 98 | 13 | 2 | . | . | . | . | . | 1136 |
| 0.50-0.99 | . | 2028 | 1181 | 155 | 41 | 14 | . | . | . | . | 3419 |
| 1.00-1.49 | . | . | 586 | 209 | 41 | 32 | 1 | . | . | . | 869 |
| 1.50-1.99 | . | . | 211 | 173 | 60 | 8 | 3 | 2 | . | . | 457 |
| 2.00-2.49 | . | . | 2 | 96 | 120 | 27 | . | . | . | . | 245 |
| 2.50-2.99 | . | . | . | 23 | 14 | 72 | 4 | . | . | . | 113 |
| 3.00-3.49 | . | . | . | 7 | 9 | 31 | 16 | 1 | . | . | 64 |
| 3.50-3.99 | . | . | . | . | 8 | 6 | 8 | . | . | . | 22 |
| 4.00-4.49 | . | . | . | . | . | . | 5 | 2 | 1 | . | 8 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | 2 | 2 | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 266 | 2785 | 2078 | 676 | 295 | 191 | 37 | 8 | 3 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 5944.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 270 | 674 | 115 | 24 | . | . | . | . | . | . | 1083 |
| 0.50-0.99 | . | 2948 | 2794 | 281 | 62 | 19 | 1 | . | . | . | 6105 |
| 1.00-1.49 | . | . | 1166 | 371 | 101 | 58 | 3 | . | . | . | 1699 |
| 1.50-1.99 | . | . | 303 | 198 | 89 | 38 | 14 | 4 | . | . | 646 |
| 2.00-2.49 | . | . | 1 | 98 | 84 | 48 | 6 | 2 | 1 | . | 240 |
| 2.50-2.99 | . | . | . | 27 | 2 | 81 | 6 | 1 | . | . | 117 |
| 3.00-3.49 | . | . | . | 2 | 4 | 25 | 13 | 1 | . | . | 45 |
| 3.50-3.99 | . | . | . | . | 1 | 2 | 10 | 5 | 1 | . | 19 |
| 4.00-4.49 | . | . | . | . | 3 | . | . | 2 | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 270 | 3622 | 4379 | 1001 | 346 | 273 | 53 | 15 | 2 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 9331.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 156 | 272 | 60 | 5 | . | . | . | . | . | . | 493 |
| 0.50-0.99 | . | 1083 | 903 | 93 | 22 | 6 | . | . | . | . | 2107 |
| 1.00-1.49 | . | . | 360 | 119 | 39 | 20 | 1 | . | . | . | 539 |
| 1.50-1.99 | . | . | 79 | 74 | 25 | 14 | 5 | 2 | . | . | 199 |
| 2.00-2.49 | . | . | . | 40 | 31 | 21 | 3 | 4 | . | . | 99 |
| 2.50-2.99 | . | . | . | 8 | 8 | 18 | 1 | 2 | 2 | . | 39 |
| 3.00-3.49 | . | . | . | 1 | 1 | . | 8 | 1 | 2 | . | 13 |
| 3.50-3.99 | . | . | . | . | . | . | 2 | 1 | 1 | . | 4 |
| 4.00-4.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 156 | 1355 | 1402 | 340 | 126 | 79 | 20 | 11 | 6 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.0 NO. OF CASES= 3281.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 147 | 465 | 137 | 98 | 43 | 8 | . | . | . | . | 898 |
| 0.50-0.99 | . | 1165 | 387 | 99 | 102 | 60 | 12 | 4 | . | . | 1829 |
| 1.00-1.49 | . | . | 199 | 49 | 33 | 24 | 5 | 1 | . | . | 311 |
| 1.50-1.99 | . | . | 41 | 22 | 16 | 14 | 6 | 1 | . | . | 100 |
| 2.00-2.49 | . | . | 2 | 6 | 12 | 5 | 6 | 4 | 1 | . | 36 |
| 2.50-2.99 | . | . | . | . | 1 | 7 | 2 | . | 2 | . | 12 |
| 3.00-3.49 | . | . | . | . | 1 | 3 | 1 | 2 | 3 | . | 10 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | 1 | 1 | . | 3 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 147 | 1630 | 766 | 274 | 208 | 121 | 33 | 13 | 7 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 3007.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 231 | 768 | 101 | 24 | 14 | 13 | . | . | . | . | 1151 |
| 0.50-0.99 | . | 1209 | 335 | 51 | 47 | 38 | 2 | 4 | . | . | 1686 |
| 1.00-1.49 | . | . | 182 | 33 | 17 | 32 | 4 | 5 | . | . | 273 |
| 1.50-1.99 | . | . | 27 | 2 | 7 | 18 | 6 | 8 | 2 | . | 70 |
| 2.00-2.49 | . | . | 1 | 2 | 3 | 7 | 2 | 7 | 4 | . | 26 |
| 2.50-2.99 | . | . | . | . | . | . | . | 1 | 4 | . | 5 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 231 | 1977 | 646 | 112 | 88 | 108 | 14 | 26 | 12 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 3018.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 242 | 729 | 73 | 6 | 2 | . | . | . | . | . | 1052 |
| 0.50-0.99 | . | 1041 | 374 | 67 | 23 | 12 | . | . | . | . | 1517 |
| 1.00-1.49 | . | . | 205 | 19 | 22 | 17 | 9 | 2 | . | . | 274 |
| 1.50-1.99 | . | . | 33 | 2 | 3 | 8 | 6 | 8 | 1 | . | 61 |
| 2.00-2.49 | . | . | 2 | 3 | . | 1 | . | 3 | 3 | . | 12 |
| 2.50-2.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 242 | 1770 | 687 | 97 | 50 | 38 | 16 | 14 | 6 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 2740.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 217 | 835 | 85 | 9 | . | . | . | . | . | . | 1146 |
| 0.50-0.99 | . | 1189 | 943 | 52 | 21 | 7 | 1 | . | . | . | 2213 |
| 1.00-1.49 | . | . | 502 | 33 | 9 | 24 | 4 | . | . | . | 572 |
| 1.50-1.99 | . | . | 78 | 57 | . | 4 | 4 | 9 | 6 | . | 158 |
| 2.00-2.49 | . | . | . | 31 | . | . | . | 2 | . | . | 33 |
| 2.50-2.99 | . | . | . | 3 | 2 | . | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | 1 | 1 | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 217 | 2024 | 1608 | 185 | 33 | 35 | 9 | 12 | 7 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 3870.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 388 | 1369 | 136 | 10 | 1 | . | . | . | . | . | 1904 |
| 0.50-0.99 | . | 1428 | 2720 | 59 | 23 | 9 | 2 | . | . | . | 4241 |
| 1.00-1.49 | . | . | 1300 | 77 | 19 | 12 | 2 | 2 | . | . | 1412 |
| 1.50-1.99 | . | . | 177 | 276 | 40 | 7 | 3 | 2 | . | . | 505 |
| 2.00-2.49 | . | . | . | 182 | 12 | 20 | 3 | 1 | . | . | 218 |
| 2.50-2.99 | . | . | . | 36 | 14 | 13 | 11 | 2 | . | . | 76 |
| 3.00-3.49 | . | . | . | . | 7 | 2 | 2 | 5 | 1 | . | 17 |
| 3.50-3.99 | . | . | . | . | 3 | . | . | 2 | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 388 | 2797 | 4333 | 640 | 119 | 65 | 23 | 14 | 1 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 7853.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 582 | 1582 | 135 | 13 | . | . | . | . | . | . | 2312 |
| 0.50-0.99 | . | 2970 | 3983 | 90 | 27 | 8 | 1 | . | . | . | 7079 |
| 1.00-1.49 | . | . | 2234 | 101 | 14 | 12 | 4 | . | . | . | 2365 |
| 1.50-1.99 | . | . | 382 | 564 | 28 | 5 | 2 | 1 | . | . | 982 |
| 2.00-2.49 | . | . | 1 | 340 | 28 | 16 | 1 | 1 | 2 | . | 389 |
| 2.50-2.99 | . | . | . | 39 | 36 | 21 | 10 | 2 | 1 | . | 109 |
| 3.00-3.49 | . | . | . | . | 22 | 9 | 8 | 3 | . | . | 42 |
| 3.50-3.99 | . | . | . | . | 5 | 6 | 1 | 3 | 4 | . | 19 |
| 4.00-4.49 | . | . | . | . | . | 3 | . | 2 | 2 | . | 7 |
| 4.50-4.99 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 582 | 4552 | 6735 | 1147 | 160 | 83 | 27 | 12 | 10 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 12463.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 626 | 1027 | 130 | 20 | | | | | | | 1803 |
| 0.50-0.99 | . | 2957 | 2549 | 108 | 38 | 8 | 1 | . | . | . | 5661 |
| 1.00-1.49 | . | . | 2071 | 20 | 11 | 17 | 2 | 1 | . | . | 2122 |
| 1.50-1.99 | . | . | 850 | 884 | 1 | 2 | 2 | 1 | . | . | 1740 |
| 2.00-2.49 | . | . | 1 | 601 | | | | | | | 602 |
| 2.50-2.99 | . | . | . | 117 | 24 | . | . | . | . | . | 141 |
| 3.00-3.49 | . | . | . | . | 39 | . | . | . | . | . | 39 |
| 3.50-3.99 | . | . | . | . | 10 | 2 | . | . | . | . | 12 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 626 | 3984 | 5601 | 1750 | 123 | 31 | 5 | 2 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 11344.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 314 | 896 | 101 | 12 | 1 | | . | . | . | . | 1324 |
| 0.50-0.99 | . | 2053 | 1541 | 71 | 33 | 9 | . | . | . | . | 3707 |
| 1.00-1.49 | . | . | 1845 | 13 | 13 | 11 | 2 | . | . | . | 1884 |
| 1.50-1.99 | . | . | 1238 | 747 | 1 | 1 | 1 | 2 | . | . | 1990 |
| 2.00-2.49 | . | . | . | 705 | . | . | . | . | . | . | 705 |
| 2.50-2.99 | . | . | . | 159 | 64 | . | . | . | . | . | 223 |
| 3.00-3.49 | . | . | . | . | 72 | . | . | . | . | . | 72 |
| 3.50-3.99 | . | . | . | . | 13 | 7 | . | . | . | . | 20 |
| 4.00-4.49 | . | . | . | . | 1 | 7 | . | . | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 314 | 2949 | 4725 | 1707 | 198 | 36 | 3 | 2 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 9301.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 217 | 607 | 87 | 8 | | | . | . | . | . | 919 |
| 0.50-0.99 | . | 1823 | 967 | 82 | 35 | 4 | . | . | . | . | 2911 |
| 1.00-1.49 | . | . | 1148 | 14 | 23 | 13 | 2 | . | . | . | 1200 |
| 1.50-1.99 | . | . | 838 | 194 | 5 | 7 | . | 1 | . | . | 1045 |
| 2.00-2.49 | . | . | . | 220 | . | 1 | . | . | . | . | 221 |
| 2.50-2.99 | . | . | . | 52 | . | . | 1 | . | . | . | 53 |
| 3.00-3.49 | . | . | . | 1 | 12 | . | . | . | . | . | 13 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 217 | 2430 | 3040 | 571 | 77 | 25 | 3 | 1 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 5961.

STATION S89 48.23N 88.78W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

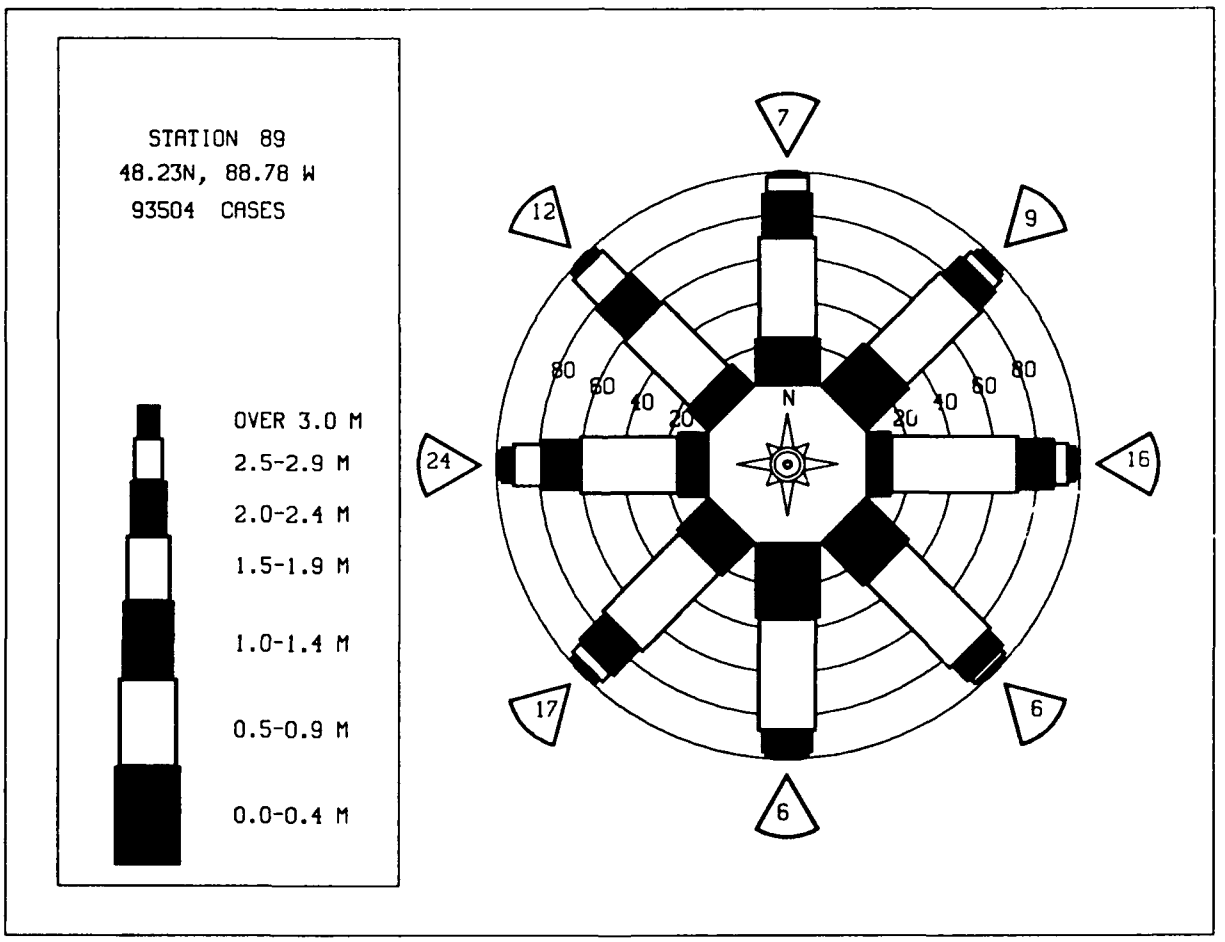
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 128 | 427 | 78 | 12 | 1 | | . | . | . | . | 646 |
| 0.50-0.99 | . | 1208 | 487 | 132 | 35 | 7 | . | . | . | . | 1869 |
| 1.00-1.49 | . | . | 845 | 32 | 37 | 14 | 3 | 1 | . | . | 932 |
| 1.50-1.99 | . | . | 417 | 36 | 13 | 17 | 1 | . | . | . | 484 |
| 2.00-2.49 | . | . | 14 | 64 | . | 3 | . | . | . | . | 81 |
| 2.50-2.99 | . | . | . | 10 | . | . | 1 | . | . | . | 11 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 128 | 1635 | 1841 | 287 | 86 | 41 | 5 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 3773.

STATION S89 48.23N 88.78W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 460 | 1257 | 166 | 32 | 6 | 2 | . | . | . | . | 1923 |
| 0.50-0.99 | . | 2712 | 2052 | 183 | 62 | 22 | 2 | . | . | . | 5033 |
| 1.00-1.49 | . | . | 1378 | 160 | 54 | 33 | 4 | 1 | . | . | 1630 |
| 1.50-1.99 | . | . | 501 | 341 | 49 | 22 | 6 | 4 | 1 | . | 924 |
| 2.00-2.49 | . | . | 4 | 242 | 41 | 24 | 2 | 2 | 1 | . | 316 |
| 2.50-2.99 | . | . | . | 49 | 17 | 30 | 4 | . | . | . | 100 |
| 3.00-3.49 | . | . | . | 1 | 17 | 9 | 6 | 2 | . | . | 35 |
| 3.50-3.99 | . | . | . | . | 4 | 2 | 2 | 1 | . | . | 9 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | 1 | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 460 | 3969 | 4101 | 1008 | 250 | 145 | 26 | 11 | 2 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S89 (48.23N 88.78W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.9 | 1.2 | 1.1 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 1.0 | 1.1 | 1.0 | 0.9 |
| 1957 | 1.0 | 1.1 | 0.9 | 0.8 | 0.9 | 0.7 | 0.6 | 0.6 | 0.7 | 0.8 | 1.2 | 1.1 | 0.9 |
| 1958 | 0.8 | 1.1 | 0.7 | 1.0 | 0.8 | 0.7 | 0.6 | 0.7 | 0.8 | 0.9 | 1.3 | 1.1 | 0.9 |
| 1959 | 1.1 | 1.0 | 1.0 | 0.9 | 1.0 | 0.7 | 0.7 | 0.6 | 0.9 | 0.9 | 1.1 | 1.2 | 0.9 |
| 1960 | 1.0 | 0.9 | 0.8 | 0.9 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 1.1 | 1.2 | 0.8 |
| 1961 | 0.9 | 0.9 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 0.9 | 1.0 | 1.1 | 0.8 |
| 1962 | 1.3 | 0.9 | 0.8 | 0.8 | 0.8 | 0.5 | 0.6 | 0.6 | 0.8 | 0.9 | 1.0 | 1.2 | 0.8 |
| 1963 | 1.1 | 1.1 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 1.1 | 1.3 | 0.9 |
| 1964 | 1.1 | 1.0 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 0.7 | 1.0 | 1.0 | 0.8 |
| 1965 | 1.2 | 1.3 | 1.0 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.7 | 1.0 | 1.5 | 1.3 | 0.9 |
| 1966 | 1.4 | 1.4 | 1.7 | 1.1 | 1.1 | 0.9 | 0.8 | 0.8 | 1.1 | 1.4 | 1.3 | 1.4 | 1.2 |
| 1967 | 1.4 | 1.3 | 1.5 | 1.2 | 1.1 | 1.0 | 0.8 | 0.8 | 1.0 | 1.4 | 1.2 | 1.6 | 1.2 |
| 1968 | 1.2 | 1.6 | 1.4 | 1.2 | 1.0 | 0.9 | 0.9 | 0.9 | 1.0 | 1.3 | 1.5 | 1.5 | 1.2 |
| 1969 | 1.4 | 1.0 | 1.0 | 0.8 | 0.8 | 0.7 | 0.6 | 0.7 | 0.8 | 1.0 | 1.0 | 0.9 | 0.9 |
| 1970 | 1.0 | 1.0 | 1.0 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 1.0 | 1.0 | 0.9 | 0.9 |
| 1971 | 1.1 | 1.0 | 0.9 | 0.9 | 0.8 | 0.5 | 0.6 | 0.6 | 0.7 | 1.0 | 1.0 | 0.9 | 0.8 |
| 1972 | 1.1 | 1.0 | 1.0 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.9 | 1.0 | 0.9 | 1.0 | 0.8 |
| 1973 | 1.0 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.8 | 0.9 | 1.1 | 0.9 | 0.8 |
| 1974 | 0.9 | 0.8 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.7 | 0.7 | 0.8 | 1.1 | 0.9 | 0.8 |
| 1975 | 1.1 | 1.0 | 1.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.9 | 1.1 | 0.9 | 0.8 |
| 1976 | 1.0 | 1.0 | 1.1 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.7 | 0.8 | 1.1 | 1.0 | 0.8 |
| 1977 | 1.2 | 1.1 | 1.2 | 0.6 | 0.7 | 0.5 | 0.5 | 0.6 | 0.7 | 0.7 | 0.8 | 1.2 | 0.8 |
| 1978 | 0.9 | 0.7 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 | 0.6 | 0.8 | 0.8 | 0.9 | 1.0 | 0.7 |
| 1979 | 0.9 | 0.8 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 0.9 | 0.7 |
| 1980 | 0.9 | 0.7 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.6 | 0.9 | 1.0 | 0.7 | 1.1 | 0.8 |
| 1981 | 0.9 | 0.9 | 1.0 | 0.8 | 0.6 | 0.7 | 0.5 | 0.5 | 0.8 | 0.9 | 0.9 | 0.8 | 0.8 |
| 1982 | 1.2 | 0.9 | 1.1 | 0.9 | 0.8 | 0.6 | 0.6 | 0.6 | 0.8 | 1.0 | 1.0 | 1.1 | 0.9 |
| 1983 | 0.9 | 1.0 | 1.2 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.8 | 0.8 | 1.4 | 1.4 | 0.9 |
| 1984 | 1.1 | 1.0 | 1.0 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.9 | 1.0 | 1.2 | 1.1 | 0.9 |
| 1985 | 1.2 | 1.0 | 1.2 | 0.8 | 0.8 | 0.8 | 0.5 | 0.7 | 0.8 | 1.0 | 1.0 | 1.2 | 0.9 |
| 1986 | 1.1 | 0.9 | 1.0 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.9 | 0.8 | 1.1 | 1.0 | 0.9 |
| 1987 | 0.7 | 0.7 | 0.9 | 0.5 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.7 | 0.8 | 0.7 | 0.6 |
| MEAN | 1.1 | 1.0 | 1.0 | 0.8 | 0.8 | 0.6 | 0.6 | 0.6 | 0.8 | 0.9 | 1.1 | 1.1 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S89 (48.23N 88.78W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.3 | 2.8 | 3.7 | 2.8 | 2.6 | 1.7 | 1.8 | 1.6 | 2.3 | 3.4 | 3.3 | 3.5 |
| 1957 | 3.0 | 2.9 | 2.8 | 2.9 | 2.9 | 2.6 | 2.1 | 2.2 | 2.3 | 2.0 | 3.2 | 2.6 |
| 1958 | 2.7 | 2.9 | 2.0 | 3.1 | 2.6 | 2.6 | 2.1 | 2.6 | 3.1 | 2.9 | 3.6 | 3.1 |
| 1959 | 2.6 | 3.1 | 2.7 | 3.2 | 3.2 | 1.9 | 2.6 | 2.4 | 2.6 | 2.5 | 3.4 | 3.7 |
| 1960 | 3.1 | 2.8 | 2.8 | 3.2 | 2.2 | 2.1 | 1.7 | 2.2 | 2.3 | 2.7 | 3.0 | 3.3 |
| 1961 | 2.1 | 2.5 | 2.9 | 3.6 | 2.3 | 1.7 | 1.6 | 1.8 | 3.0 | 2.8 | 4.1 | 3.6 |
| 1962 | 4.1 | 2.3 | 2.8 | 2.5 | 2.2 | 1.7 | 1.6 | 1.8 | 2.6 | 4.7 | 3.7 | 3.7 |
| 1963 | 2.5 | 3.2 | 2.5 | 2.6 | 2.9 | 2.5 | 2.0 | 1.8 | 2.1 | 2.7 | 3.1 | 3.4 |
| 1964 | 3.0 | 3.2 | 2.5 | 2.3 | 3.2 | 1.9 | 1.1 | 2.4 | 2.4 | 2.4 | 3.1 | 2.2 |
| 1965 | 3.6 | 3.3 | 3.0 | 2.6 | 2.5 | 2.1 | 1.8 | 1.6 | 2.7 | 2.7 | 4.8 | 4.2 |
| 1966 | 4.7 | 4.1 | 5.0 | 3.8 | 3.9 | 2.5 | 2.2 | 2.3 | 2.5 | 4.5 | 3.7 | 3.5 |
| 1967 | 4.4 | 3.3 | 3.8 | 3.9 | 3.2 | 2.6 | 2.5 | 2.0 | 3.2 | 3.8 | 3.5 | 3.6 |
| 1968 | 3.4 | 4.1 | 4.0 | 3.5 | 2.6 | 2.4 | 3.1 | 2.9 | 3.5 | 4.2 | 3.9 | 4.8 |
| 1969 | 3.4 | 2.5 | 2.4 | 2.2 | 2.3 | 2.5 | 1.3 | 2.6 | 2.2 | 2.4 | 2.2 | 3.2 |
| 1970 | 2.0 | 2.2 | 4.0 | 3.0 | 2.3 | 1.9 | 1.9 | 1.7 | 2.3 | 3.9 | 3.0 | 3.0 |
| 1971 | 2.6 | 2.6 | 3.3 | 2.1 | 2.7 | 1.8 | 1.8 | 1.8 | 2.1 | 4.2 | 3.3 | 2.6 |
| 1972 | 3.5 | 3.3 | 2.5 | 2.1 | 1.4 | 1.5 | 1.8 | 2.0 | 2.6 | 2.8 | 2.9 | 3.5 |
| 1973 | 2.4 | 2.0 | 2.2 | 2.1 | 2.4 | 1.5 | 2.0 | 1.3 | 2.4 | 3.0 | 2.3 | 2.8 |
| 1974 | 3.4 | 1.9 | 2.9 | 1.9 | 2.3 | 1.7 | 2.1 | 2.1 | 1.6 | 2.1 | 2.7 | 2.7 |
| 1975 | 3.6 | 2.5 | 2.9 | 1.7 | 2.6 | 1.9 | 1.9 | 2.3 | 2.3 | 4.3 | 3.0 | 2.7 |
| 1976 | 2.9 | 2.7 | 3.6 | 2.0 | 1.9 | 1.7 | 1.7 | 1.7 | 2.6 | 2.7 | 2.4 | 3.4 |
| 1977 | 3.2 | 3.4 | 3.5 | 1.8 | 2.5 | 1.6 | 1.9 | 1.8 | 4.0 | 2.5 | 5.3 | 3.9 |
| 1978 | 2.1 | 1.8 | 2.9 | 2.3 | 1.7 | 2.2 | 1.4 | 2.1 | 2.3 | 2.8 | 3.1 | 3.6 |
| 1979 | 2.0 | 2.4 | 2.2 | 3.0 | 2.0 | 2.6 | 1.8 | 1.8 | 2.0 | 2.1 | 3.1 | 2.7 |
| 1980 | 2.9 | 2.1 | 2.6 | 2.2 | 1.8 | 1.5 | 1.6 | 2.5 | 3.2 | 2.8 | 2.2 | 2.8 |
| 1981 | 2.1 | 2.0 | 2.4 | 2.5 | 1.7 | 2.6 | 1.4 | 1.3 | 4.0 | 2.4 | 2.4 | 2.1 |
| 1982 | 4.3 | 2.4 | 3.8 | 3.0 | 1.8 | 2.1 | 2.2 | 1.7 | 2.1 | 2.9 | 4.6 | 2.8 |
| 1983 | 2.7 | 2.9 | 4.0 | 2.5 | 1.7 | 1.9 | 1.8 | 1.7 | 2.3 | 2.4 | 4.0 | 3.5 |
| 1984 | 3.2 | 2.8 | 2.5 | 3.4 | 2.7 | 2.0 | 1.7 | 1.9 | 2.3 | 3.2 | 3.1 | 2.8 |
| 1985 | 3.5 | 2.4 | 4.6 | 2.5 | 1.9 | 2.5 | 1.8 | 2.4 | 3.3 | 3.1 | 2.9 | 2.7 |
| 1986 | 3.7 | 2.8 | 2.5 | 2.6 | 2.9 | 1.7 | 2.0 | 1.8 | 2.6 | 3.5 | 4.2 | 2.4 |
| 1987 | 1.8 | 3.6 | 3.4 | 1.6 | 1.6 | 1.1 | 1.3 | 1.4 | 1.3 | 1.8 | 2.2 | 2.2 |

32 YR. STATISTICS FOR WIS STATION S89

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.9 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 247.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.1 |
| LARGEST WAVE HS | (METERS) | 5.3 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 249.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 77112112 |

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 303 | 462 | 10 | 6 | 1 | . | . | . | . | . | 782 |
| 0.50-0.99 | . | 1249 | 888 | 8 | 13 | 1 | . | . | . | . | 2159 |
| 1.00-1.49 | . | . | 855 | 1 | 2 | 2 | . | . | . | . | 860 |
| 1.50-1.99 | . | . | 286 | 286 | . | 1 | . | . | . | . | 573 |
| 2.00-2.49 | . | . | . | 160 | . | . | . | . | . | . | 160 |
| 2.50-2.99 | . | . | . | 31 | 6 | . | . | . | . | . | 37 |
| 3.00-3.49 | . | . | . | . | 7 | . | . | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 303 | 1711 | 2039 | 492 | 31 | 5 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 4291.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 370 | 664 | 25 | 3 | . | . | . | . | . | . | 1062 |
| 0.50-0.99 | . | 1096 | 909 | 13 | 8 | . | . | . | . | . | 2026 |
| 1.00-1.49 | . | . | 879 | . | 2 | 1 | . | . | . | . | 882 |
| 1.50-1.99 | . | . | 165 | 267 | . | . | . | . | . | . | 432 |
| 2.00-2.49 | . | . | . | 183 | . | . | . | . | . | . | 183 |
| 2.50-2.99 | . | . | . | 33 | 28 | . | . | . | . | . | 61 |
| 3.00-3.49 | . | . | . | . | 13 | . | . | . | . | . | 13 |
| 3.50-3.99 | . | . | . | . | 1 | 3 | . | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | 5 | . | . | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 370 | 1760 | 1978 | 499 | 52 | 11 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 4374.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 557 | 876 | 20 | 5 | . | . | . | . | . | . | 1458 |
| 0.50-0.99 | . | 1074 | 885 | 9 | 2 | . | . | . | . | . | 1970 |
| 1.00-1.49 | . | . | 587 | . | . | 2 | . | . | . | . | 589 |
| 1.50-1.99 | . | . | 83 | 162 | . | . | . | . | . | . | 245 |
| 2.00-2.49 | . | . | . | 136 | . | . | . | . | . | . | 136 |
| 2.50-2.99 | . | . | . | 23 | 23 | . | . | . | . | . | 46 |
| 3.00-3.49 | . | . | . | . | 19 | . | . | . | . | . | 19 |
| 3.50-3.99 | . | . | . | . | 1 | 2 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 557 | 1950 | 1575 | 335 | 45 | 7 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.5 NO. OF CASES= 4186.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 660 | 1751 | 60 | 10 | 2 | . | . | . | . | . | 2483 |
| 0.50-0.99 | . | 2082 | 758 | 57 | 12 | 4 | . | . | . | . | 2913 |
| 1.00-1.49 | . | . | 768 | 25 | 8 | 6 | . | . | . | . | 807 |
| 1.50-1.99 | . | . | 206 | 93 | . | 1 | . | . | . | . | 300 |
| 2.00-2.49 | . | . | 20 | 103 | 4 | . | . | . | . | . | 127 |
| 2.50-2.99 | . | . | . | 13 | 33 | . | . | . | . | . | 46 |
| 3.00-3.49 | . | . | . | 3 | 10 | 6 | . | . | . | . | 19 |
| 3.50-3.99 | . | . | . | . | . | 14 | . | . | . | . | 14 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 660 | 3833 | 1812 | 304 | 69 | 32 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 6290.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 820 | 2480 | 88 | 25 | . | 1 | . | . | . | . | 3414 |
| 0.50-0.99 | . | 3838 | 402 | 47 | 23 | 8 | 1 | 1 | . | . | 4320 |
| 1.00-1.49 | . | . | 735 | 12 | 5 | 6 | . | . | . | . | 758 |
| 1.50-1.99 | . | . | 186 | 4 | . | . | . | . | . | . | 190 |
| 2.00-2.49 | . | . | 12 | 13 | . | . | . | . | . | . | 25 |
| 2.50-2.99 | . | . | . | 4 | . | . | . | . | . | . | 4 |
| 3.00-3.49 | . | . | . | 2 | . | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 820 | 6318 | 1423 | 107 | 28 | 15 | 1 | 1 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 8155.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 337 | 839 | 35 | 8 | . | . | . | . | . | . | 1219 |
| 0.50-0.99 | . | 1578 | 161 | 8 | 2 | 3 | . | . | . | . | 1752 |
| 1.00-1.49 | . | . | 265 | 2 | . | . | . | . | . | . | 267 |
| 1.50-1.99 | . | . | 75 | 2 | . | . | . | . | . | . | 77 |
| 2.00-2.49 | . | . | 3 | 6 | . | . | . | . | . | . | 9 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 337 | 2417 | 539 | 26 | 2 | 3 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 3114.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 242 | 403 | 19 | 4 | . | . | . | . | . | . | 668 |
| 0.50-0.99 | . | 1061 | 191 | . | 1 | . | . | . | . | . | 1253 |
| 1.00-1.49 | . | . | 157 | . | . | . | . | . | . | . | 157 |
| 1.50-1.99 | . | . | 55 | 3 | . | . | . | . | . | . | 58 |
| 2.00-2.49 | . | . | . | 12 | . | . | . | . | . | . | 12 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 242 | 1464 | 422 | 20 | 1 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.1 NO. OF CASES= 2014.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 295 | 734 | 8 | 5 | . | . | . | . | . | . | 1042 |
| 0.50-0.99 | . | 1021 | 170 | . | . | 1 | . | . | . | . | 1192 |
| 1.00-1.49 | . | . | 186 | . | . | . | . | . | . | . | 186 |
| 1.50-1.99 | . | . | 24 | 2 | . | . | . | . | . | . | 26 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 295 | 1755 | 388 | 8 | 0 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 2291.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 360 | 952 | 20 | 7 | . | . | . | . | . | . | 1339 |
| 0.50-0.99 | . | 1198 | 75 | . | . | 1 | . | . | . | . | 1274 |
| 1.00-1.49 | . | . | 228 | . | . | . | . | . | . | . | 228 |
| 1.50-1.99 | . | . | 21 | . | . | . | . | . | . | . | 21 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 360 | 2150 | 344 | 8 | 0 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 2682.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 378 | 881 | 16 | 5 | . | . | . | . | . | . | 1280 |
| 0.50-0.99 | . | 1382 | 191 | 5 | 2 | . | . | . | . | . | 1580 |
| 1.00-1.49 | . | . | 317 | . | . | . | . | . | . | . | 317 |
| 1.50-1.99 | . | . | 65 | 5 | . | . | . | . | . | . | 70 |
| 2.00-2.49 | . | . | 2 | 3 | . | . | . | . | . | . | 5 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 378 | 2263 | 591 | 18 | 2 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 3045.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 567 | 1538 | 29 | 4 | 1 | . | . | . | . | . | 2139 |
| 0.50-0.99 | . | 2656 | 851 | 53 | 1 | . | . | . | . | . | 3561 |
| 1.00-1.49 | . | . | 407 | 144 | 33 | 7 | . | . | . | . | 591 |
| 1.50-1.99 | . | . | 144 | 74 | 39 | 12 | 2 | . | . | . | 271 |
| 2.00-2.49 | . | . | 5 | 25 | 25 | 34 | 2 | . | . | . | 91 |
| 2.50-2.99 | . | . | . | 4 | . | 2 | . | . | . | . | 6 |
| 3.00-3.49 | . | . | . | 1 | . | 2 | 1 | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 567 | 4194 | 1436 | 305 | 99 | 57 | 6 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 6242.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 953 | 2298 | 36 | 8 | . | . | . | . | . | . | 3295 |
| 0.50-0.99 | . | 5083 | 2867 | 34 | 1 | . | . | . | . | . | 7985 |
| 1.00-1.49 | . | . | 1441 | 288 | 33 | 4 | . | . | . | . | 1766 |
| 1.50-1.99 | . | . | 332 | 317 | 47 | 12 | 2 | . | . | . | 710 |
| 2.00-2.49 | . | . | 3 | 145 | 52 | 37 | 16 | 1 | . | . | 254 |
| 2.50-2.99 | . | . | . | 18 | 13 | 23 | 9 | 9 | 1 | . | 73 |
| 3.00-3.49 | . | . | . | . | 3 | 6 | 5 | 4 | 2 | . | 20 |
| 3.50-3.99 | . | . | . | . | 1 | . | . | 1 | 3 | . | 5 |
| 4.00-4.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 953 | 7381 | 4679 | 810 | 150 | 82 | 32 | 16 | 7 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 13206.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 972 | 1183 | 20 | 6 | . | . | . | . | . | . | 2181 |
| 0.50-0.99 | . | 3769 | 2837 | 5 | 2 | . | . | . | . | . | 6613 |
| 1.00-1.49 | . | . | 2294 | 12 | . | . | . | . | . | . | 2306 |
| 1.50-1.99 | . | . | 837 | 814 | 2 | . | . | . | . | . | 1653 |
| 2.00-2.49 | . | . | 1 | 548 | . | . | . | . | . | . | 549 |
| 2.50-2.99 | . | . | . | 105 | 20 | . | . | . | . | . | 125 |
| 3.00-3.49 | . | . | . | . | 32 | 1 | . | . | . | . | 33 |
| 3.50-3.99 | . | . | . | . | 10 | 1 | . | 2 | . | . | 13 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 972 | 4952 | 5989 | 1490 | 66 | 4 | 0 | 2 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 12608.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 526 | 1117 | 9 | 2 | 1 | . | . | . | . | . | 1655 |
| 0.50-0.99 | . | 2488 | 1597 | 5 | 3 | . | . | . | . | . | 4093 |
| 1.00-1.49 | . | . | 1852 | . | . | . | . | . | . | . | 1852 |
| 1.50-1.99 | . | . | 1056 | 695 | . | . | . | . | . | . | 1751 |
| 2.00-2.49 | . | . | . | 659 | . | . | . | . | . | . | 659 |
| 2.50-2.99 | . | . | . | 148 | 23 | . | . | . | . | . | 171 |
| 3.00-3.49 | . | . | . | . | 37 | . | . | . | . | . | 37 |
| 3.50-3.99 | . | . | . | . | 10 | 1 | . | . | . | . | 11 |
| 4.00-4.49 | . | . | . | . | 1 | 3 | . | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 526 | 3605 | 4514 | 1509 | 75 | 4 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 9576.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 329 | 694 | 12 | 5 | . | . | . | . | . | . | 1040 |
| 0.50-0.99 | . | 2221 | 901 | 6 | 4 | . | . | . | . | . | 3132 |
| 1.00-1.49 | . | . | 1752 | . | . | . | . | . | . | . | 1752 |
| 1.50-1.99 | . | . | 1234 | 245 | . | . | . | . | . | . | 1479 |
| 2.00-2.49 | . | . | 1 | 312 | . | . | . | . | . | . | 313 |
| 2.50-2.99 | . | . | . | 59 | . | . | . | . | . | . | 59 |
| 3.00-3.49 | . | . | . | 1 | 11 | . | . | . | . | . | 12 |
| 3.50-3.99 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 329 | 2915 | 3900 | 628 | 18 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 7291.

STATION S90 48.08N 89.00W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

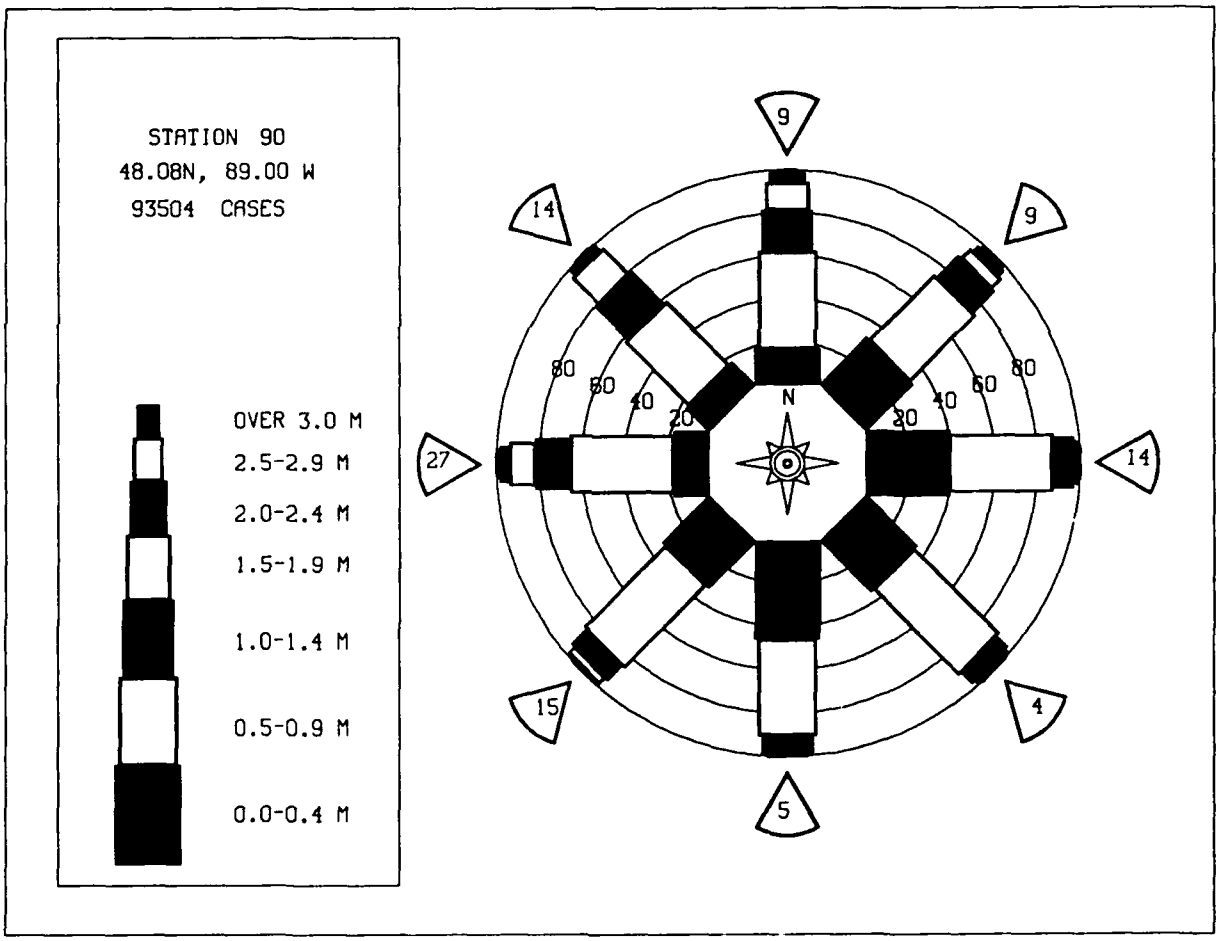
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 203 | 318 | 9 | 2 | 1 | . | . | . | . | . | 533 |
| 0.50-0.99 | . | 1132 | 713 | 4 | 3 | . | . | . | . | . | 1852 |
| 1.00-1.49 | . | . | 1013 | . | 1 | . | . | . | . | . | 1014 |
| 1.50-1.99 | . | . | 453 | 279 | . | . | . | . | . | . | 732 |
| 2.00-2.49 | . | . | . | 225 | . | . | . | . | . | . | 225 |
| 2.50-2.99 | . | . | . | 45 | 4 | . | . | . | . | . | 49 |
| 3.00-3.49 | . | . | . | . | 10 | . | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | 3 | . | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 203 | 1450 | 2188 | 555 | 22 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 4139.

STATION S90 48.08N 89.00W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 787 | 1719 | 42 | 11 | . | . | . | . | . | . | 2559 |
| 0.50-0.99 | . | 3293 | 1440 | 25 | 8 | 1 | . | . | . | . | 4767 |
| 1.00-1.49 | . | . | 1374 | 48 | 8 | 2 | . | . | . | . | 1432 |
| 1.50-1.99 | . | . | 522 | 325 | 8 | 2 | . | . | . | . | 857 |
| 2.00-2.49 | . | . | 4 | 254 | 8 | 7 | 1 | . | . | . | 274 |
| 2.50-2.99 | . | . | . | 48 | 15 | 2 | . | . | . | . | 65 |
| 3.00-3.49 | . | . | . | . | 14 | 1 | . | . | . | . | 15 |
| 3.50-3.99 | . | . | . | . | 3 | 2 | . | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 787 | 5012 | 3382 | 711 | 64 | 18 | 1 | 0 | 0 | 0 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.5 TOTAL CASES= 93504.



## MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S90 (48.08N 89.00W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.9 | 1.1 | 1.0 | 0.9 | 0.8 | 0.6 | 0.6 | 0.5 | 0.6 | 0.9 | 1.1 | 1.0 | 0.8 |
| 1957 | 1.0 | 1.0 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.7 | 0.8 | 1.2 | 1.1 | 0.8 |
| 1958 | 0.9 | 1.1 | 0.7 | 0.9 | 0.8 | 0.7 | 0.6 | 0.7 | 0.8 | 0.8 | 1.1 | 1.1 | 0.8 |
| 1959 | 1.0 | 1.0 | 0.9 | 0.8 | 0.9 | 0.6 | 0.7 | 0.6 | 0.8 | 0.9 | 1.1 | 1.0 | 0.9 |
| 1960 | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 | 0.6 | 0.6 | 0.5 | 0.6 | 0.8 | 1.1 | 1.1 | 0.8 |
| 1961 | 0.9 | 0.9 | 0.9 | 0.7 | 0.7 | 0.6 | 0.4 | 0.5 | 0.7 | 0.8 | 1.0 | 1.1 | 0.8 |
| 1962 | 1.2 | 0.9 | 0.7 | 0.8 | 0.7 | 0.5 | 0.6 | 0.6 | 0.7 | 0.8 | 0.9 | 1.1 | 0.8 |
| 1963 | 1.1 | 1.1 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 1.0 | 1.2 | 0.8 |
| 1964 | 1.0 | 1.0 | 0.9 | 0.6 | 0.7 | 0.5 | 0.4 | 0.6 | 0.7 | 0.7 | 0.9 | 0.9 | 0.8 |
| 1965 | 1.2 | 1.2 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 1.0 | 1.4 | 1.3 | 0.9 |
| 1966 | 1.4 | 1.3 | 1.5 | 1.0 | 1.1 | 0.8 | 0.7 | 0.8 | 1.0 | 1.3 | 1.3 | 1.3 | 1.1 |
| 1967 | 1.3 | 1.3 | 1.3 | 1.1 | 1.0 | 0.8 | 0.8 | 0.8 | 0.9 | 1.4 | 1.2 | 1.5 | 1.1 |
| 1968 | 1.2 | 1.6 | 1.3 | 1.1 | 0.9 | 0.8 | 0.9 | 0.9 | 0.9 | 1.1 | 1.4 | 1.4 | 1.1 |
| 1969 | 1.2 | 0.9 | 1.0 | 0.7 | 0.7 | 0.6 | 0.5 | 0.7 | 0.7 | 0.9 | 0.9 | 0.8 | 0.8 |
| 1970 | 0.9 | 1.0 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.9 | 0.8 | 0.8 |
| 1971 | 1.0 | 1.0 | 0.9 | 0.8 | 0.7 | 0.5 | 0.6 | 0.5 | 0.6 | 0.8 | 0.9 | 0.8 | 0.8 |
| 1972 | 1.1 | 0.9 | 0.9 | 0.6 | 0.5 | 0.6 | 0.5 | 0.4 | 0.8 | 0.9 | 0.8 | 0.9 | 0.7 |
| 1973 | 0.9 | 0.8 | 0.8 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.8 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1974 | 0.9 | 0.8 | 0.9 | 0.7 | 0.6 | 0.6 | 0.5 | 0.6 | 0.7 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1975 | 1.0 | 1.0 | 0.9 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0.8 | 0.7 |
| 1976 | 0.9 | 0.9 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 1.1 | 1.0 | 0.8 |
| 1977 | 1.1 | 1.1 | 1.1 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.7 | 1.1 | 0.8 |
| 1978 | 0.9 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.7 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1979 | 0.8 | 0.7 | 0.8 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.6 | 0.8 | 0.8 | 0.6 |
| 1980 | 0.9 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.8 | 0.9 | 0.7 | 1.0 | 0.7 |
| 1981 | 0.9 | 0.9 | 1.0 | 0.8 | 0.6 | 0.6 | 0.5 | 0.4 | 0.8 | 0.7 | 0.8 | 0.8 | 0.7 |
| 1982 | 1.2 | 0.8 | 0.9 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 1.1 | 0.8 |
| 1983 | 0.9 | 0.9 | 1.0 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 1.2 | 1.3 | 0.8 |
| 1984 | 1.0 | 1.0 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.8 | 0.9 | 1.0 | 1.1 | 0.8 |
| 1985 | 1.2 | 0.9 | 1.0 | 0.8 | 0.7 | 0.7 | 0.5 | 0.6 | 0.7 | 0.9 | 0.9 | 1.2 | 0.9 |
| 1986 | 1.1 | 0.8 | 1.0 | 0.8 | 0.6 | 0.6 | 0.5 | 0.6 | 0.8 | 0.8 | 1.0 | 0.9 | 0.8 |
| 1987 | 0.7 | 0.6 | 0.7 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.7 | 0.7 | 0.5 |
| MEAN | 1.0 | 1.0 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.7 | 0.8 | 1.0 | 1.0 | |

## LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S90 (48.08N 89.00W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.5 | 2.6 | 3.0 | 2.4 | 2.6 | 1.8 | 1.6 | 1.6 | 2.2 | 3.0 | 3.1 | 3.4 |
| 1957 | 2.7 | 2.8 | 2.8 | 2.9 | 2.5 | 2.4 | 2.1 | 2.0 | 2.1 | 2.0 | 4.3 | 2.9 |
| 1958 | 3.7 | 2.9 | 1.8 | 2.7 | 2.6 | 2.2 | 1.9 | 2.2 | 2.8 | 2.8 | 3.3 | 3.1 |
| 1959 | 2.3 | 2.8 | 2.9 | 2.9 | 3.1 | 2.0 | 2.3 | 2.1 | 2.3 | 2.5 | 3.4 | 3.7 |
| 1960 | 2.7 | 2.8 | 2.8 | 3.2 | 2.4 | 2.1 | 1.6 | 2.2 | 2.1 | 2.9 | 2.6 | 2.7 |
| 1961 | 2.6 | 2.5 | 2.9 | 2.6 | 2.1 | 1.6 | 1.6 | 1.8 | 2.6 | 2.8 | 3.2 | 3.6 |
| 1962 | 4.0 | 2.2 | 2.9 | 2.3 | 2.0 | 1.7 | 2.1 | 1.8 | 2.3 | 3.4 | 3.0 | 3.7 |
| 1963 | 2.3 | 3.2 | 3.2 | 2.6 | 2.9 | 1.8 | 2.1 | 1.9 | 1.9 | 2.4 | 3.1 | 3.2 |
| 1964 | 2.7 | 2.8 | 2.5 | 2.2 | 3.0 | 2.0 | 1.2 | 2.1 | 2.3 | 2.3 | 2.7 | 2.2 |
| 1965 | 3.3 | 2.9 | 2.4 | 2.6 | 2.5 | 2.1 | 1.4 | 1.6 | 2.6 | 2.7 | 4.0 | 3.2 |
| 1966 | 4.2 | 3.6 | 4.6 | 3.5 | 3.4 | 2.5 | 2.1 | 2.2 | 2.7 | 4.0 | 3.8 | 3.5 |
| 1967 | 4.7 | 3.7 | 3.1 | 3.9 | 2.6 | 2.3 | 3.4 | 2.1 | 3.4 | 3.3 | 3.0 | 3.6 |
| 1968 | 3.1 | 4.1 | 4.2 | 3.8 | 2.4 | 2.3 | 2.7 | 2.9 | 2.8 | 2.9 | 3.7 | 4.8 |
| 1969 | 3.2 | 2.7 | 2.5 | 2.2 | 2.0 | 1.8 | 1.3 | 1.9 | 1.7 | 2.2 | 2.1 | 2.7 |
| 1970 | 2.4 | 2.4 | 2.7 | 2.9 | 2.3 | 1.7 | 1.9 | 1.7 | 2.3 | 2.8 | 3.0 | 2.7 |
| 1971 | 2.3 | 2.7 | 3.4 | 2.1 | 2.1 | 1.6 | 1.6 | 1.6 | 1.9 | 3.6 | 2.7 | 2.2 |
| 1972 | 2.6 | 2.2 | 2.4 | 2.0 | 1.4 | 2.0 | 1.8 | 1.8 | 2.5 | 2.8 | 2.4 | 3.7 |
| 1973 | 2.2 | 2.2 | 2.4 | 2.2 | 2.2 | 1.4 | 2.0 | 1.0 | 2.4 | 2.6 | 2.3 | 2.6 |
| 1974 | 3.1 | 2.1 | 2.6 | 2.0 | 1.8 | 1.7 | 2.1 | 2.1 | 1.6 | 2.1 | 2.4 | 2.5 |
| 1975 | 3.4 | 2.5 | 3.4 | 1.4 | 2.4 | 1.9 | 1.9 | 2.1 | 2.1 | 2.9 | 2.5 | 2.7 |
| 1976 | 2.6 | 2.7 | 3.1 | 2.1 | 1.9 | 1.6 | 1.5 | 1.7 | 2.6 | 2.4 | 2.4 | 3.4 |
| 1977 | 3.1 | 3.2 | 3.6 | 2.0 | 2.4 | 1.4 | 1.9 | 1.8 | 3.4 | 2.2 | 5.1 | 3.6 |
| 1978 | 2.6 | 2.0 | 2.5 | 2.0 | 1.9 | 1.7 | 1.3 | 2.1 | 2.2 | 2.5 | 2.7 | 2.4 |
| 1979 | 2.0 | 2.3 | 2.4 | 1.8 | 1.6 | 2.3 | 1.7 | 1.8 | 1.8 | 2.1 | 2.8 | 2.0 |
| 1980 | 2.9 | 2.0 | 2.3 | 1.9 | 1.6 | 1.4 | 1.3 | 2.1 | 2.8 | 2.8 | 2.2 | 2.6 |
| 1981 | 2.1 | 2.1 | 2.2 | 2.5 | 1.7 | 2.4 | 1.2 | 1.1 | 3.7 | 2.4 | 2.1 | 2.0 |
| 1982 | 4.0 | 2.1 | 3.8 | 2.6 | 1.7 | 2.2 | 2.2 | 1.7 | 1.8 | 2.5 | 4.2 | 2.6 |
| 1983 | 2.7 | 2.6 | 2.4 | 2.3 | 1.9 | 1.9 | 1.8 | 1.7 | 2.3 | 2.4 | 4.2 | 3.5 |
| 1984 | 3.2 | 3.2 | 2.9 | 3.0 | 2.7 | 2.1 | 1.7 | 1.6 | 2.3 | 2.6 | 3.0 | 2.7 |
| 1985 | 3.5 | 2.4 | 3.9 | 2.5 | 1.9 | 2.5 | 1.6 | 1.9 | 2.9 | 2.7 | 2.8 | 2.7 |
| 1986 | 2.6 | 2.6 | 2.5 | 2.1 | 2.3 | 1.7 | 2.0 | 1.5 | 2.2 | 3.1 | 3.4 | 2.4 |
| 1987 | 1.8 | 2.6 | 2.2 | 1.6 | 1.4 | 1.1 | 0.9 | 1.4 | 1.2 | 2.0 | 2.0 | 2.1 |

## 32 YR. STATISTICS FOR WIS STATION S90

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.5 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 247.5 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 0.9 |
| LARGEST WAVE HS | (METERS) | 5.1 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 256.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 77112112 |

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 377 | 872 | 18 | 20 | 3 | . | . | . | . | . | 1290 |
| 0.50-0.99 | . | 1592 | 380 | 11 | 22 | 6 | . | . | . | . | 2011 |
| 1.00-1.49 | . | . | 745 | 36 | 3 | 4 | . | . | . | . | 788 |
| 1.50-1.99 | . | . | 208 | 12 | 1 | . | . | . | . | . | 221 |
| 2.00-2.49 | . | . | 11 | 16 | 1 | . | . | . | . | . | 28 |
| 2.50-2.99 | . | . | . | 5 | . | . | . | . | . | . | 5 |
| 3.00-3.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 377 | 2464 | 1362 | 101 | 30 | 10 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 4070.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 437 | 945 | 22 | 5 | 1 | . | . | . | . | . | 1410 |
| 0.50-0.99 | . | 1158 | 511 | 11 | 11 | 2 | . | . | . | . | 1693 |
| 1.00-1.49 | . | . | 663 | 4 | 2 | 1 | . | . | . | . | 670 |
| 1.50-1.99 | . | . | 91 | 209 | . | . | . | . | . | . | 300 |
| 2.00-2.49 | . | . | 1 | 129 | . | . | . | . | . | . | 130 |
| 2.50-2.99 | . | . | . | 26 | 29 | . | . | . | . | . | 55 |
| 3.00-3.49 | . | . | . | . | 10 | . | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 4.00-4.49 | . | . | . | . | . | 4 | . | . | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 437 | 2103 | 1288 | 384 | 53 | 13 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 4009.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 608 | 1013 | 12 | 4 | . | . | . | . | . | . | 1637 |
| 0.50-0.99 | . | 1181 | 890 | . | 3 | . | . | . | . | . | 2074 |
| 1.00-1.49 | . | . | 589 | 1 | . | . | . | . | . | . | 590 |
| 1.50-1.99 | . | . | 85 | 183 | . | . | . | . | . | . | 268 |
| 2.00-2.49 | . | . | . | 135 | . | . | . | . | . | . | 135 |
| 2.50-2.99 | . | . | . | 18 | 24 | . | . | . | . | . | 42 |
| 3.00-3.49 | . | . | . | . | 13 | 1 | . | . | . | . | 14 |
| 3.50-3.99 | . | . | . | . | 1 | 4 | . | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 608 | 2194 | 1576 | 341 | 41 | 8 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 4468.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 489 | 858 | 10 | 8 | . | . | . | . | . | . | 1365 |
| 0.50-0.99 | . | 1968 | 1614 | 1 | 2 | 1 | . | . | . | . | 3586 |
| 1.00-1.49 | . | . | 1069 | 14 | . | . | . | . | . | . | 1083 |
| 1.50-1.99 | . | . | 256 | 301 | . | . | . | . | . | . | 557 |
| 2.00-2.49 | . | . | . | 203 | 10 | . | . | . | . | . | 213 |
| 2.50-2.99 | . | . | . | 31 | 57 | . | . | . | . | . | 88 |
| 3.00-3.49 | . | . | . | . | 28 | 9 | . | . | . | . | 37 |
| 3.50-3.99 | . | . | . | . | 4 | 12 | . | . | . | . | 16 |
| 4.00-4.49 | . | . | . | . | . | 11 | 3 | . | . | . | 14 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 489 | 2826 | 2949 | 558 | 101 | 33 | 7 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 6523.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 528 | 813 | 8 | 2 | 1 | 1 | . | . | . | . | 1353 |
| 0.50-0.99 | . | 3173 | 2638 | 3 | 3 | 1 | 1 | . | . | . | 5819 |
| 1.00-1.49 | . | . | 1443 | 4 | . | . | . | . | . | . | 1447 |
| 1.50-1.99 | . | . | 283 | 249 | . | . | . | . | . | . | 532 |
| 2.00-2.49 | . | . | . | 134 | . | . | . | . | . | . | 134 |
| 2.50-2.99 | . | . | . | 28 | 4 | . | . | . | . | . | 32 |
| 3.00-3.49 | . | . | . | . | 7 | . | . | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | 3 | . | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 528 | 3986 | 4372 | 420 | 18 | 4 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 8730.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 260 | 360 | 11 | 2 | . | . | . | . | . | . | 633 |
| 0.50-0.99 | . | 1409 | 757 | . | . | 2 | . | . | . | . | 2168 |
| 1.00-1.49 | . | . | 443 | 1 | . | . | . | . | . | . | 444 |
| 1.50-1.99 | . | . | 102 | 90 | . | . | . | . | . | . | 192 |
| 2.00-2.49 | . | . | . | 48 | . | . | . | . | . | . | 48 |
| 2.50-2.99 | . | . | . | 7 | 2 | . | . | . | . | . | 9 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 260 | 1769 | 1313 | 148 | 2 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 3273.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 235 | 427 | 7 | 3 | . | . | . | . | . | . | 672 |
| 0.50-0.99 | . | 1141 | 267 | . | 1 | . | . | . | . | . | 1409 |
| 1.00-1.49 | . | . | 191 | . | . | . | . | . | . | . | 191 |
| 1.50-1.99 | . | . | 69 | 3 | . | . | . | . | . | . | 72 |
| 2.00-2.49 | . | . | . | 12 | . | . | . | . | . | . | 12 |
| 2.50-2.99 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 235 | 1568 | 534 | 19 | 1 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 2208.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 309 | 865 | 6 | 4 | . | . | . | . | . | . | 1184 |
| 0.50-0.99 | . | 1168 | 179 | . | . | 1 | . | . | . | . | 1348 |
| 1.00-1.49 | . | . | 209 | . | . | . | . | . | . | . | 209 |
| 1.50-1.99 | . | . | 20 | 1 | . | . | . | . | . | . | 21 |
| 2.00-2.49 | . | . | . | 1 | . | . | . | . | . | . | 1 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 309 | 2033 | 414 | 6 | 0 | 1 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 2587.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 343 | 1043 | 10 | 3 | . | . | . | . | . | . | 1399 |
| 0.50-0.99 | . | 1394 | 131 | 5 | . | . | . | . | . | . | 1530 |
| 1.00-1.49 | . | . | 293 | . | . | . | . | . | . | . | 293 |
| 1.50-1.99 | . | . | 29 | . | . | . | . | . | . | . | 29 |
| 2.00-2.49 | . | . | 1 | 1 | . | . | . | . | . | . | 2 |
| 2.50-2.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 343 | 2437 | 464 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 3046.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 371 | 814 | 12 | 4 | . | . | . | . | . | . | 1201 |
| 0.50-0.99 | . | 1208 | 855 | 9 | . | . | . | . | . | . | 2073 |
| 1.00-1.49 | . | . | 555 | 95 | 3 | . | . | . | . | . | 653 |
| 1.50-1.99 | . | . | 87 | 110 | 11 | . | . | . | . | . | 208 |
| 2.00-2.49 | . | . | . | 40 | 19 | 1 | . | . | . | . | 60 |
| 2.50-2.99 | . | . | . | . | 16 | 6 | . | . | . | . | 22 |
| 3.00-3.49 | . | . | . | . | 1 | 14 | 1 | . | . | . | 16 |
| 3.50-3.99 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 371 | 2023 | 1509 | 258 | 50 | 23 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 3970.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 686 | 1542 | 21 | 5 | 1 | . | . | . | . | . | 2255 |
| 0.50-0.99 | . | 1993 | 2331 | 6 | 1 | . | . | . | . | . | 4331 |
| 1.00-1.49 | . | . | 960 | 268 | 6 | 1 | . | . | . | . | 1235 |
| 1.50-1.99 | . | . | 77 | 282 | 64 | 3 | 2 | . | . | . | 428 |
| 2.00-2.49 | . | . | . | 99 | 69 | 9 | . | . | . | . | 177 |
| 2.50-2.99 | . | . | . | 4 | 74 | 33 | 1 | . | . | . | 112 |
| 3.00-3.49 | . | . | . | . | 2 | 54 | 6 | . | . | . | 62 |
| 3.50-3.99 | . | . | . | . | . | 11 | 20 | 1 | . | . | 32 |
| 4.00-4.49 | . | . | . | . | . | . | 8 | 4 | . | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 5 | . | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | 2 | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 686 | 3535 | 3389 | 664 | 217 | 111 | 39 | 11 | 3 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 3.7 NO. OF CASES= 8104.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1254 | 3218 | 68 | 11 | . | . | . | . | . | . | 4551 |
| 0.50-0.99 | . | 4065 | 1264 | 22 | 2 | . | . | . | . | . | 5353 |
| 1.00-1.49 | . | . | 1022 | 122 | 2 | . | . | . | . | . | 1146 |
| 1.50-1.99 | . | . | 209 | 88 | 24 | 5 | . | . | . | . | 326 |
| 2.00-2.49 | . | . | 11 | 47 | 17 | 7 | 1 | . | . | . | 83 |
| 2.50-2.99 | . | . | . | 9 | 12 | 4 | . | . | . | . | 25 |
| 3.00-3.49 | . | . | . | . | 3 | 4 | . | . | . | . | 7 |
| 3.50-3.99 | . | . | . | . | . | 6 | 2 | . | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | . | 3 | 1 | . | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1254 | 7283 | 2574 | 299 | 60 | 26 | 6 | 4 | 1 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 10770.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1424 | 3132 | 23 | 16 | . | . | . | . | . | . | 4595 |
| 0.50-0.99 | . | 4339 | 443 | 6 | 3 | . | . | . | . | . | 4791 |
| 1.00-1.49 | . | . | 2123 | 3 | . | . | . | . | . | . | 2126 |
| 1.50-1.99 | . | . | 598 | . | . | . | . | . | . | . | 598 |
| 2.00-2.49 | . | . | 24 | 72 | . | . | . | . | . | . | 96 |
| 2.50-2.99 | . | . | . | 18 | . | . | . | . | . | . | 18 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 1424 | 7471 | 3211 | 115 | 3 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.2 NO. OF CASES= 11437.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 665 | 1764 | 18 | 5 | . | . | . | . | . | . | 2452 |
| 0.50-0.99 | . | 3042 | 660 | 3 | 2 | . | . | . | . | . | 3707 |
| 1.00-1.49 | . | . | 1931 | 1 | . | . | . | . | . | . | 1932 |
| 1.50-1.99 | . | . | 970 | 54 | . | . | . | . | . | . | 1024 |
| 2.00-2.49 | . | . | 34 | 167 | . | . | . | . | . | . | 201 |
| 2.50-2.99 | . | . | . | 38 | . | . | . | . | . | . | 38 |
| 3.00-3.49 | . | . | . | 6 | 3 | . | . | . | . | . | 9 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 665 | 4806 | 3613 | 274 | 5 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 8761.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 401 | 788 | 28 | 5 | . | . | . | . | . | . | 1222 |
| 0.50-0.99 | . | 2257 | 1178 | 5 | 4 | . | . | . | . | . | 3444 |
| 1.00-1.49 | . | . | 1265 | 3 | . | . | . | . | . | . | 1268 |
| 1.50-1.99 | . | . | 1183 | 258 | . | . | . | . | . | . | 1441 |
| 2.00-2.49 | . | . | . | 281 | . | . | . | . | . | . | 281 |
| 2.50-2.99 | . | . | . | 58 | . | . | . | . | . | . | 58 |
| 3.00-3.49 | . | . | . | 2 | 12 | . | . | . | . | . | 14 |
| 3.50-3.99 | . | . | . | . | 3 | . | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 401 | 3045 | 3654 | 612 | 20 | 0 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 7237.

STATION S91 48.08N 89.22W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

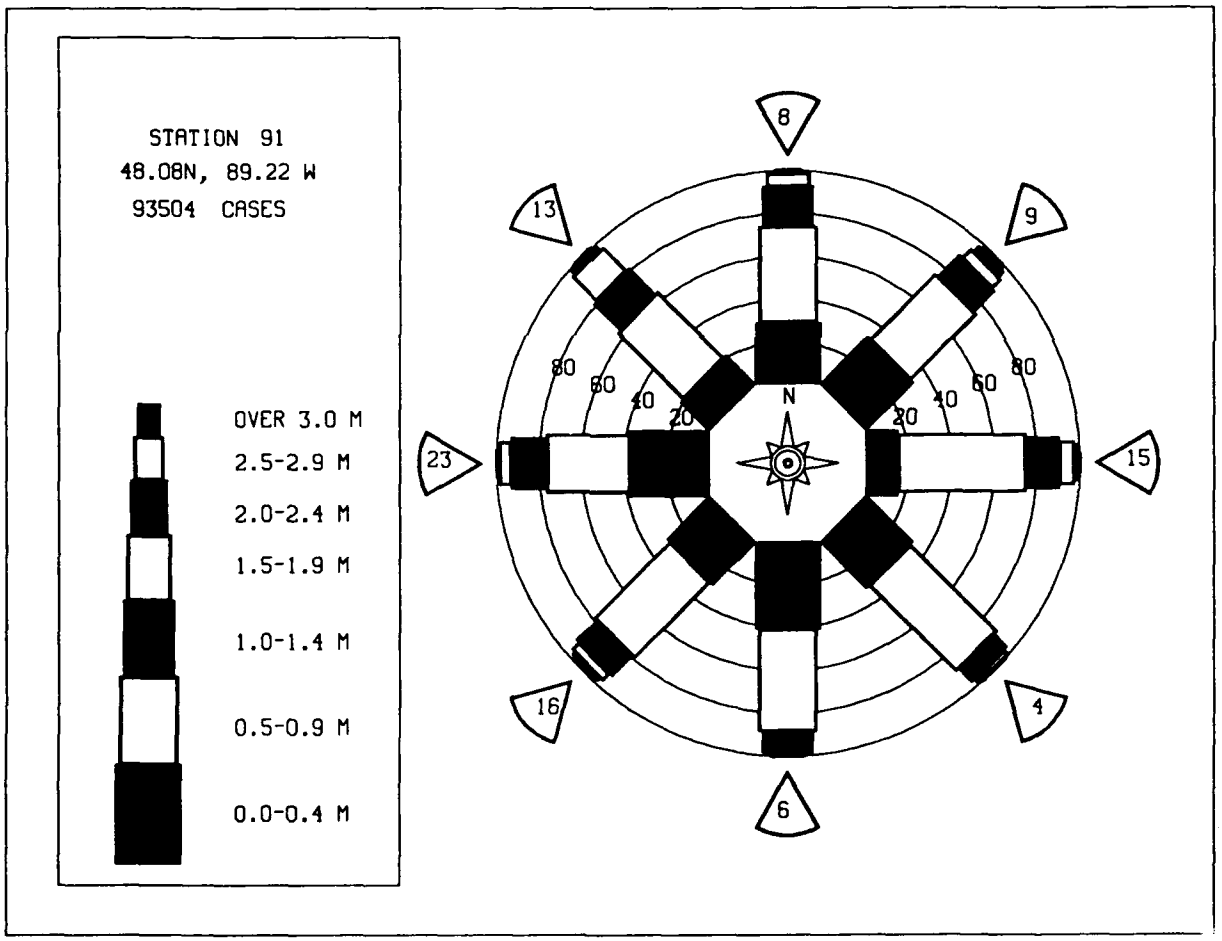
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 243 | 647 | 16 | 12 | 1 | 1 | . | . | . | . | 920 |
| 0.50-0.99 | . | 1513 | 510 | 7 | 9 | . | . | . | . | . | 2039 |
| 1.00-1.49 | . | . | 973 | 2 | . | 1 | . | . | . | . | 976 |
| 1.50-1.99 | . | . | 505 | 67 | . | . | . | . | . | . | 572 |
| 2.00-2.49 | . | . | 10 | 69 | . | . | . | . | . | . | 79 |
| 2.50-2.99 | . | . | . | 18 | . | . | . | . | . | . | 18 |
| 3.00-3.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 243 | 2160 | 2014 | 175 | 10 | 2 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 4311.

STATION S91 48.08N 89.22W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 863 | 1910 | 29 | 11 | | | | | | | 2813 |
| 0.50-0.99 | . | 3261 | 1461 | 9 | 6 | 1 | . | . | . | . | 4738 |
| 1.00-1.49 | . | . | 1448 | 55 | 1 | . | . | . | . | . | 1504 |
| 1.50-1.99 | . | . | 478 | 191 | 10 | . | . | . | . | . | 679 |
| 2.00-2.49 | . | . | 9 | 146 | 11 | 1 | . | . | . | . | 167 |
| 2.50-2.99 | . | . | . | 26 | 22 | 4 | . | . | . | . | 52 |
| 3.00-3.49 | . | . | . | . | 8 | 8 | . | . | . | . | 16 |
| 3.50-3.99 | . | . | . | . | 1 | 4 | 2 | . | . | . | 7 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 863 | 5171 | 3425 | 438 | 59 | 19 | 3 | 0 | 0 | 0 | |

MEAN HS(M)= 0.8 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 3.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S91 (48.08N 89.22W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.9 | 1.0 | 1.0 | 0.8 | 0.8 | 0.6 | 0.6 | 0.5 | 0.6 | 0.9 | 1.0 | 0.9 | 0.8 |
| 1957 | 0.9 | 0.9 | 0.8 | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.1 | 1.0 | 0.8 |
| 1958 | 0.8 | 1.0 | 0.7 | 0.9 | 0.7 | 0.7 | 0.6 | 0.6 | 0.7 | 0.8 | 1.1 | 0.9 | 0.8 |
| 1959 | 0.9 | 0.9 | 0.9 | 0.8 | 0.9 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 | 0.9 | 1.0 | 0.8 |
| 1960 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.8 | 1.0 | 1.0 | 0.7 |
| 1961 | 0.8 | 0.8 | 0.9 | 0.7 | 0.7 | 0.6 | 0.4 | 0.5 | 0.7 | 0.8 | 0.9 | 0.9 | 0.7 |
| 1962 | 1.1 | 0.9 | 0.8 | 0.7 | 0.8 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 1.0 | 0.8 |
| 1963 | 0.9 | 1.0 | 0.9 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 1.0 | 1.1 | 0.8 |
| 1964 | 1.0 | 0.9 | 0.9 | 0.7 | 0.7 | 0.5 | 0.5 | 0.6 | 0.7 | 0.6 | 0.9 | 0.8 | 0.7 |
| 1965 | 1.1 | 1.1 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.7 | 0.9 | 1.3 | 1.2 | 0.8 |
| 1966 | 1.2 | 1.2 | 1.5 | 1.0 | 1.0 | 0.8 | 0.7 | 0.8 | 1.0 | 1.2 | 1.2 | 1.2 | 1.1 |
| 1967 | 1.2 | 1.2 | 1.3 | 1.1 | 1.0 | 0.9 | 0.8 | 0.7 | 0.9 | 1.2 | 1.1 | 1.3 | 1.1 |
| 1968 | 1.1 | 1.4 | 1.3 | 1.1 | 0.9 | 0.8 | 0.8 | 0.8 | 0.9 | 1.1 | 1.3 | 1.3 | 1.1 |
| 1969 | 1.1 | 0.8 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.6 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 |
| 1970 | 0.8 | 0.9 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 0.9 | 0.8 | 0.7 |
| 1971 | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 0.8 | 0.7 | 0.7 |
| 1972 | 0.9 | 0.8 | 0.8 | 0.6 | 0.5 | 0.6 | 0.4 | 0.4 | 0.7 | 0.8 | 0.7 | 0.9 | 0.7 |
| 1973 | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.7 | 0.8 | 1.0 | 0.8 | 0.7 |
| 1974 | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.6 | 0.5 | 0.6 | 0.6 | 0.7 | 0.9 | 0.9 | 0.7 |
| 1975 | 1.0 | 0.9 | 0.9 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 0.9 | 0.7 | 0.7 |
| 1976 | 0.8 | 0.8 | 1.0 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 1.0 | 0.9 | 0.7 |
| 1977 | 1.0 | 1.0 | 1.1 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | 1.0 | 0.7 |
| 1978 | 0.8 | 0.6 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.7 | 0.7 | 0.8 | 0.7 | 0.6 |
| 1979 | 0.7 | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.6 | 0.8 | 0.7 | 0.6 |
| 1980 | 0.8 | 0.6 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.7 | 0.8 | 0.6 | 0.9 | 0.6 |
| 1981 | 0.8 | 0.8 | 0.9 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.7 | 0.7 | 0.8 | 0.7 | 0.7 |
| 1982 | 1.0 | 0.7 | 0.9 | 0.8 | 0.7 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 0.8 | 1.0 | 0.8 |
| 1983 | 0.8 | 0.9 | 1.1 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 1.2 | 1.1 | 0.8 |
| 1984 | 1.0 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.7 | 0.9 | 0.9 | 0.9 | 0.8 |
| 1985 | 1.0 | 0.9 | 1.0 | 0.8 | 0.7 | 0.7 | 0.5 | 0.6 | 0.7 | 0.8 | 0.8 | 1.0 | 0.8 |
| 1986 | 1.0 | 0.8 | 0.9 | 0.8 | 0.6 | 0.6 | 0.5 | 0.5 | 0.8 | 0.7 | 0.9 | 0.8 | 0.8 |
| 1987 | 0.6 | 0.6 | 0.7 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 | 0.6 | 0.6 | 0.5 |
| MEAN | 0.9 | 0.9 | 0.9 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 0.9 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S91 (48.08N 89.22W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.5 | 2.9 | 4.4 | 2.4 | 2.6 | 1.4 | 1.4 | 1.5 | 2.0 | 2.9 | 3.1 | 2.7 |
| 1957 | 2.8 | 2.4 | 2.4 | 2.1 | 2.2 | 2.1 | 1.8 | 2.7 | 2.1 | 2.0 | 3.2 | 2.9 |
| 1958 | 2.8 | 2.9 | 1.9 | 2.5 | 1.9 | 3.4 | 1.5 | 3.0 | 3.1 | 2.7 | 4.8 | 2.3 |
| 1959 | 2.3 | 4.2 | 2.8 | 2.2 | 3.9 | 1.6 | 2.9 | 1.8 | 3.2 | 2.5 | 2.5 | 3.9 |
| 1960 | 2.6 | 2.6 | 2.9 | 2.3 | 2.4 | 1.5 | 1.6 | 1.9 | 2.1 | 3.0 | 3.1 | 3.5 |
| 1961 | 2.1 | 2.1 | 2.5 | 2.7 | 2.1 | 1.6 | 1.6 | 1.8 | 2.6 | 2.5 | 3.9 | 2.9 |
| 1962 | 3.0 | 2.4 | 2.9 | 1.8 | 2.4 | 1.6 | 1.6 | 1.6 | 2.1 | 3.3 | 3.3 | 2.7 |
| 1963 | 2.3 | 3.2 | 3.3 | 2.6 | 2.1 | 2.2 | 1.5 | 1.8 | 2.5 | 2.1 | 3.1 | 3.3 |
| 1964 | 2.8 | 4.1 | 3.2 | 2.2 | 3.3 | 1.8 | 1.1 | 1.7 | 2.7 | 2.1 | 2.7 | 2.0 |
| 1965 | 4.3 | 3.6 | 2.4 | 2.1 | 1.9 | 1.5 | 1.4 | 1.4 | 2.2 | 3.6 | 4.3 | 3.9 |
| 1966 | 3.2 | 4.3 | 4.7 | 2.9 | 2.7 | 2.5 | 2.3 | 2.2 | 2.5 | 4.2 | 4.4 | 3.1 |
| 1967 | 5.3 | 3.1 | 4.0 | 2.8 | 2.9 | 2.4 | 2.5 | 2.1 | 3.4 | 2.8 | 3.9 | 4.3 |
| 1968 | 3.4 | 4.1 | 4.4 | 3.8 | 2.2 | 2.2 | 2.8 | 2.9 | 3.1 | 3.1 | 4.0 | 5.3 |
| 1969 | 3.8 | 2.1 | 2.6 | 2.2 | 2.2 | 2.1 | 1.2 | 2.2 | 2.2 | 2.6 | 2.4 | 2.6 |
| 1970 | 2.1 | 2.2 | 3.1 | 2.2 | 1.8 | 2.2 | 1.7 | 1.4 | 2.5 | 3.9 | 3.0 | 3.1 |
| 1971 | 2.5 | 3.0 | 3.4 | 2.0 | 2.3 | 1.5 | 1.8 | 1.5 | 2.1 | 5.6 | 3.5 | 2.1 |
| 1972 | 3.0 | 2.8 | 2.5 | 2.3 | 1.3 | 2.0 | 1.4 | 2.1 | 3.4 | 3.0 | 2.4 | 4.2 |
| 1973 | 2.1 | 2.3 | 2.4 | 2.4 | 2.1 | 1.4 | 1.4 | 1.2 | 2.3 | 3.6 | 2.7 | 2.8 |
| 1974 | 2.5 | 1.9 | 2.7 | 2.2 | 2.0 | 1.6 | 1.6 | 1.9 | 1.7 | 2.8 | 2.5 | 2.9 |
| 1975 | 4.3 | 2.9 | 3.5 | 1.8 | 3.0 | 1.4 | 1.8 | 2.5 | 3.0 | 3.7 | 2.8 | 2.2 |
| 1976 | 3.0 | 2.7 | 3.1 | 1.9 | 1.4 | 1.6 | 1.8 | 1.6 | 1.9 | 3.5 | 2.2 | 2.5 |
| 1977 | 2.5 | 3.2 | 3.8 | 1.8 | 2.5 | 1.4 | 1.9 | 1.4 | 2.1 | 2.8 | 5.2 | 4.2 |
| 1978 | 1.9 | 1.8 | 2.4 | 1.9 | 1.8 | 2.1 | 1.4 | 1.6 | 2.5 | 2.2 | 3.0 | 2.1 |
| 1979 | 1.9 | 2.6 | 2.2 | 2.2 | 1.9 | 2.3 | 1.6 | 1.6 | 2.1 | 1.8 | 4.3 | 3.0 |
| 1980 | 2.3 | 1.9 | 2.3 | 1.9 | 1.5 | 1.3 | 1.5 | 3.1 | 4.1 | 2.3 | 2.2 | 3.5 |
| 1981 | 2.2 | 2.2 | 2.7 | 2.6 | 1.8 | 2.8 | 1.5 | 1.4 | 4.5 | 2.4 | 2.6 | 1.8 |
| 1982 | 4.0 | 1.7 | 3.7 | 2.6 | 1.5 | 1.8 | 1.6 | 1.3 | 2.4 | 3.8 | 4.3 | 3.8 |
| 1983 | 2.2 | 4.3 | 2.9 | 2.7 | 1.9 | 1.9 | 1.4 | 1.7 | 2.0 | 2.2 | 5.5 | 3.2 |
| 1984 | 4.2 | 3.4 | 3.2 | 4.5 | 2.0 | 1.9 | 1.5 | 1.9 | 3.0 | 3.3 | 3.3 | 2.6 |
| 1985 | 3.7 | 2.2 | 4.6 | 2.5 | 1.7 | 2.0 | 1.5 | 1.9 | 3.0 | 2.5 | 3.2 | 2.6 |
| 1986 | 3.6 | 2.9 | 2.5 | 2.0 | 2.8 | 1.5 | 1.5 | 1.9 | 2.2 | 2.6 | 5.2 | 2.0 |
| 1987 | 1.8 | 2.3 | 2.3 | 1.5 | 1.8 | 0.7 | 1.2 | 1.0 | 1.2 | 1.8 | 2.4 | 1.9 |

32 YR. STATISTICS FOR WIS STATION S91

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.8 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 3.4 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.5 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 0.9 |
| LARGEST WAVE HS | (METERS) | 5.6 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 233.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 71103115 |

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 274 | 627 | 149 | 23 | 1 | . | . | . | . | . | 1074 |
| 0.50-0.99 | . | 288 | 991 | 80 | 31 | 7 | . | . | . | . | 1397 |
| 1.00-1.49 | . | . | 468 | 141 | 27 | 27 | . | . | . | . | 663 |
| 1.50-1.99 | . | . | 36 | 359 | 11 | 20 | 5 | . | . | . | 431 |
| 2.00-2.49 | . | . | . | 168 | 47 | 7 | 2 | 3 | . | . | 227 |
| 2.50-2.99 | . | . | . | 3 | 124 | 1 | . | 2 | . | . | 130 |
| 3.00-3.49 | . | . | . | . | 26 | 17 | . | 3 | . | . | 46 |
| 3.50-3.99 | . | . | . | . | . | 8 | . | . | . | . | 8 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | 2 | . | 4 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 274 | 915 | 1644 | 774 | 267 | 89 | 8 | 8 | 2 | 1 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 3736.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 259 | 524 | 146 | 12 | 2 | 1 | . | . | . | . | 944 |
| 0.50-0.99 | . | 287 | 840 | 104 | 23 | 1 | . | . | . | . | 1255 |
| 1.00-1.49 | . | . | 300 | 148 | 36 | 19 | . | . | . | . | 503 |
| 1.50-1.99 | . | . | 14 | 190 | 26 | 34 | 4 | . | . | . | 268 |
| 2.00-2.49 | . | . | . | 80 | 34 | 21 | 6 | 2 | . | . | 143 |
| 2.50-2.99 | . | . | . | 3 | 42 | 21 | 2 | 1 | . | . | 69 |
| 3.00-3.49 | . | . | . | . | 18 | 22 | 9 | 10 | 1 | . | 60 |
| 3.50-3.99 | . | . | . | . | 1 | 9 | 4 | 3 | 1 | . | 18 |
| 4.00-4.49 | . | . | . | . | . | 3 | 3 | 5 | 2 | . | 13 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | 4 | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | 1 | 2 | 4 |
| 5.50-5.99 | . | . | . | . | . | . | 1 | . | . | 2 | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 259 | 811 | 1300 | 537 | 182 | 131 | 31 | 22 | 9 | 5 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.3 NO. OF CASES= 3090.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 382 | 760 | 188 | 16 | . | . | . | . | . | . | 1346 |
| 0.50-0.99 | . | 333 | 976 | 112 | 21 | 4 | . | . | . | . | 1446 |
| 1.00-1.49 | . | . | 341 | 186 | 26 | 7 | . | . | . | . | 560 |
| 1.50-1.99 | . | . | 13 | 185 | 43 | 12 | 1 | . | . | . | 254 |
| 2.00-2.49 | . | . | . | 59 | 47 | 29 | 2 | . | . | . | 137 |
| 2.50-2.99 | . | . | . | 3 | 25 | 22 | 8 | . | . | . | 58 |
| 3.00-3.49 | . | . | . | . | 2 | 28 | 8 | 10 | . | . | 48 |
| 3.50-3.99 | . | . | . | . | . | 6 | 9 | 9 | . | . | 24 |
| 4.00-4.49 | . | . | . | . | . | . | 5 | 11 | 3 | . | 19 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | 1 | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | 2 | 1 | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 382 | 1093 | 1518 | 561 | 164 | 108 | 34 | 31 | 7 | 2 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.1 NO. OF CASES= 3663.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 334 | 874 | 140 | 17 | 1 | . | . | . | . | . | 1366 |
| 0.50-0.99 | . | 416 | 1208 | 106 | 12 | 1 | . | . | . | . | 1743 |
| 1.00-1.49 | . | . | 348 | 301 | 33 | 6 | . | . | . | . | 688 |
| 1.50-1.99 | . | . | 11 | 177 | 64 | 17 | . | . | . | . | 269 |
| 2.00-2.49 | . | . | . | 67 | 47 | 32 | 5 | . | . | . | 151 |
| 2.50-2.99 | . | . | . | . | 68 | 17 | 5 | 2 | . | . | 92 |
| 3.00-3.49 | . | . | . | . | 8 | 71 | 6 | 4 | . | . | 89 |
| 3.50-3.99 | . | . | . | . | . | 37 | 4 | 4 | . | . | 45 |
| 4.00-4.49 | . | . | . | . | . | 12 | 9 | 6 | 2 | . | 29 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 7 | 5 | . | 20 |
| 5.00-5.49 | . | . | . | . | . | . | 4 | 3 | 6 | 1 | 14 |
| 5.50-5.99 | . | . | . | . | . | . | 1 | 1 | 2 | 2 | 6 |
| 6.00-6.49 | . | . | . | . | . | . | . | 2 | 1 | 1 | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | 2 | 2 | 2 | 6 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 334 | 1290 | 1707 | 668 | 233 | 193 | 42 | 31 | 18 | 6 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.3 NO. OF CASES= 4245.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 579 | 1494 | 188 | 14 | . | . | . | . | . | . | 2275 |
| 0.50-0.99 | . | 960 | 2743 | 81 | 9 | 2 | . | . | . | . | 3795 |
| 1.00-1.49 | . | . | 825 | 760 | 38 | 6 | . | . | . | . | 1629 |
| 1.50-1.99 | . | . | 21 | 416 | 128 | 25 | 1 | . | . | . | 591 |
| 2.00-2.49 | . | . | . | 96 | 93 | 33 | 7 | . | . | . | 229 |
| 2.50-2.99 | . | . | . | . | 131 | 36 | . | 2 | . | . | 169 |
| 3.00-3.49 | . | . | . | . | 9 | 114 | . | 2 | 1 | . | 126 |
| 3.50-3.99 | . | . | . | . | . | 90 | 5 | . | . | . | 95 |
| 4.00-4.49 | . | . | . | . | . | 25 | 14 | 1 | . | . | 40 |
| 4.50-4.99 | . | . | . | . | . | 1 | 25 | 1 | . | . | 27 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 2 | . | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | . | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | 3 | 1 | . | 4 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 579 | 2454 | 3777 | 1367 | 408 | 332 | 55 | 15 | 2 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 8419.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 451 | 1053 | 115 | 12 | . | 1 | . | . | . | . | 1631 |
| 0.50-0.99 | . | 595 | 1548 | 45 | 4 | 1 | . | . | . | . | 2193 |
| 1.00-1.49 | . | . | 403 | 275 | 16 | 3 | 1 | 1 | . | . | 699 |
| 1.50-1.99 | . | . | 13 | 198 | 42 | 2 | 1 | 1 | . | . | 257 |
| 2.00-2.49 | . | . | . | 53 | 25 | 8 | . | . | . | . | 86 |
| 2.50-2.99 | . | . | . | . | 41 | 6 | . | 1 | . | . | 48 |
| 3.00-3.49 | . | . | . | . | 2 | 32 | 1 | 1 | . | . | 36 |
| 3.50-3.99 | . | . | . | . | . | 10 | . | . | . | . | 10 |
| 4.00-4.49 | . | . | . | . | . | 2 | 4 | . | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 451 | 1648 | 2079 | 583 | 130 | 64 | 10 | 6 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 4661.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 560 | 1011 | 162 | 18 | 1 | . | . | . | . | . | 1752 |
| 0.50-0.99 | . | 399 | 888 | 18 | 2 | 2 | . | . | . | . | 1309 |
| 1.00-1.49 | . | . | 225 | 83 | 2 | . | . | . | . | . | 310 |
| 1.50-1.99 | . | . | 7 | 109 | 1 | 2 | . | . | . | . | 119 |
| 2.00-2.49 | . | . | . | 41 | 13 | . | . | . | . | . | 54 |
| 2.50-2.99 | . | . | . | . | 7 | 1 | . | . | . | . | 8 |
| 3.00-3.49 | . | . | . | . | 3 | 1 | . | . | . | . | 4 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 560 | 1410 | 1282 | 269 | 29 | 6 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 3333.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 480 | 1107 | 108 | 13 | . | . | . | . | . | . | 1708 |
| 0.50-0.99 | . | 439 | 873 | 14 | 4 | 3 | . | . | . | . | 1333 |
| 1.00-1.49 | . | . | 180 | 64 | 1 | 1 | . | . | . | . | 246 |
| 1.50-1.99 | . | . | 6 | 85 | 1 | . | 1 | . | . | . | 93 |
| 2.00-2.49 | . | . | . | 28 | 6 | . | . | . | . | . | 34 |
| 2.50-2.99 | . | . | . | 1 | 17 | . | . | . | . | . | 18 |
| 3.00-3.49 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 480 | 1546 | 1167 | 205 | 31 | 4 | 1 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 3219.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 553 | 1115 | 131 | 13 | 2 | . | . | . | . | . | 1814 |
| 0.50-0.99 | . | 402 | 834 | 17 | 9 | 1 | . | . | . | . | 1263 |
| 1.00-1.49 | . | . | 267 | 52 | 4 | 1 | . | . | . | . | 324 |
| 1.50-1.99 | . | . | 11 | 122 | . | 1 | . | . | . | . | 134 |
| 2.00-2.49 | . | . | . | 45 | 6 | . | . | . | . | . | 51 |
| 2.50-2.99 | . | . | . | 2 | 8 | . | . | . | . | . | 10 |
| 3.00-3.49 | . | . | . | . | 2 | . | . | . | . | . | 2 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 553 | 1517 | 1243 | 251 | 31 | 4 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 3374.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 469 | 1120 | 159 | 19 | 1 | . | . | . | . | . | 1768 |
| 0.50-0.99 | . | 441 | 1070 | 28 | 6 | 1 | . | . | . | . | 1546 |
| 1.00-1.49 | . | . | 352 | 113 | 4 | . | . | . | . | . | 469 |
| 1.50-1.99 | . | . | 21 | 165 | 9 | . | . | . | . | . | 195 |
| 2.00-2.49 | . | . | . | 69 | 24 | 1 | . | . | . | . | 94 |
| 2.50-2.99 | . | . | . | . | 36 | . | . | . | . | . | 36 |
| 3.00-3.49 | . | . | . | . | 1 | 5 | . | . | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 469 | 1561 | 1602 | 394 | 81 | 7 | 0 | 0 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 3856.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 618 | 1658 | 320 | 35 | 4 | . | . | . | . | . | 2635 |
| 0.50-0.99 | . | 592 | 1986 | 146 | 12 | 4 | . | 1 | . | . | 2741 |
| 1.00-1.49 | . | . | 416 | 350 | 12 | 4 | . | . | . | . | 782 |
| 1.50-1.99 | . | . | 35 | 265 | 29 | . | . | . | . | . | 329 |
| 2.00-2.49 | . | . | . | 91 | 73 | 2 | . | . | . | . | 166 |
| 2.50-2.99 | . | . | . | 1 | 105 | 1 | . | . | . | . | 107 |
| 3.00-3.49 | . | . | . | . | 2 | 22 | . | . | . | . | 24 |
| 3.50-3.99 | . | . | . | . | . | 11 | . | . | . | . | 11 |
| 4.00-4.49 | . | . | . | . | . | 5 | . | . | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 618 | 2250 | 2757 | 888 | 237 | 49 | 0 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 6370.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 794 | 2230 | 370 | 48 | 1 | . | . | . | . | . | 3443 |
| 0.50-0.99 | . | 1021 | 2916 | 162 | 24 | 6 | . | . | . | . | 4129 |
| 1.00-1.49 | . | 2 | 705 | 740 | 20 | 1 | . | . | . | . | 1468 |
| 1.50-1.99 | . | . | 47 | 479 | 104 | . | . | . | . | . | 630 |
| 2.00-2.49 | . | . | . | 156 | 148 | 12 | . | . | . | . | 316 |
| 2.50-2.99 | . | . | . | 1 | 154 | 28 | . | . | . | . | 183 |
| 3.00-3.49 | . | . | . | . | 13 | 102 | 1 | . | . | . | 116 |
| 3.50-3.99 | . | . | . | . | . | 40 | 1 | . | . | . | 41 |
| 4.00-4.49 | . | . | . | . | . | 8 | 11 | 4 | . | . | 23 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 6 | . | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | . | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 794 | 3253 | 4038 | 1586 | 464 | 197 | 16 | 15 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.0 NO. OF CASES= 9703.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 1149 | 2799 | 409 | 64 | 12 | . | . | . | . | . | 4433 |
| 0.50-0.99 | . | 1194 | 3282 | 94 | 26 | 14 | . | . | . | . | 4610 |
| 1.00-1.49 | . | 1 | 890 | 945 | 5 | 3 | . | . | . | . | 1844 |
| 1.50-1.99 | . | . | 83 | 890 | 157 | 1 | . | . | . | . | 1131 |
| 2.00-2.49 | . | . | . | 328 | 254 | 24 | . | . | . | . | 606 |
| 2.50-2.99 | . | . | . | 4 | 419 | 82 | . | . | . | . | 505 |
| 3.00-3.49 | . | . | . | . | 17 | 309 | . | . | . | . | 326 |
| 3.50-3.99 | . | . | . | . | . | 125 | 1 | . | . | . | 126 |
| 4.00-4.49 | . | . | . | . | . | 32 | 31 | . | . | . | 63 |
| 4.50-4.99 | . | . | . | . | . | . | 13 | 2 | . | . | 15 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 1149 | 3994 | 4664 | 2325 | 890 | 590 | 45 | 5 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 12787.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 783 | 2107 | 281 | 45 | 6 | . | . | . | . | . | 3222 |
| 0.50-0.99 | . | 878 | 2864 | 56 | 34 | 9 | . | . | . | . | 3841 |
| 1.00-1.49 | . | 1 | 1065 | 709 | 8 | 9 | 1 | . | . | . | 1793 |
| 1.50-1.99 | . | . | 67 | 1161 | 52 | . | . | . | . | . | 1280 |
| 2.00-2.49 | . | . | . | 493 | 274 | 2 | . | . | . | . | 769 |
| 2.50-2.99 | . | . | . | 2 | 595 | 18 | . | . | . | . | 615 |
| 3.00-3.49 | . | . | . | . | 72 | 193 | . | . | . | . | 265 |
| 3.50-3.99 | . | . | . | . | . | 87 | . | . | . | . | 87 |
| 4.00-4.49 | . | . | . | . | . | 24 | 11 | . | . | . | 35 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | . | . | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | 4 | . | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 783 | 2986 | 4277 | 2466 | 1041 | 342 | 24 | 3 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 11161.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 368 | 1061 | 207 | 38 | 5 | 1 | . | . | . | . | 1680 |
| 0.50-0.99 | . | 536 | 2167 | 74 | 32 | 11 | . | . | . | . | 2820 |
| 1.00-1.49 | . | . | 977 | 392 | 11 | 8 | 1 | . | . | . | 1389 |
| 1.50-1.99 | . | . | 48 | 932 | 2 | 1 | . | . | . | . | 983 |
| 2.00-2.49 | . | . | . | 462 | 196 | . | . | . | . | . | 658 |
| 2.50-2.99 | . | . | . | 1 | 425 | . | . | . | . | . | 426 |
| 3.00-3.49 | . | . | . | . | 73 | 36 | . | . | . | . | 109 |
| 3.50-3.99 | . | . | . | . | . | 26 | . | . | . | . | 26 |
| 4.00-4.49 | . | . | . | . | . | 6 | . | . | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 368 | 1597 | 3399 | 1899 | 744 | 89 | 4 | 0 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 7587.

STATION S92 47.38N 89.45W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

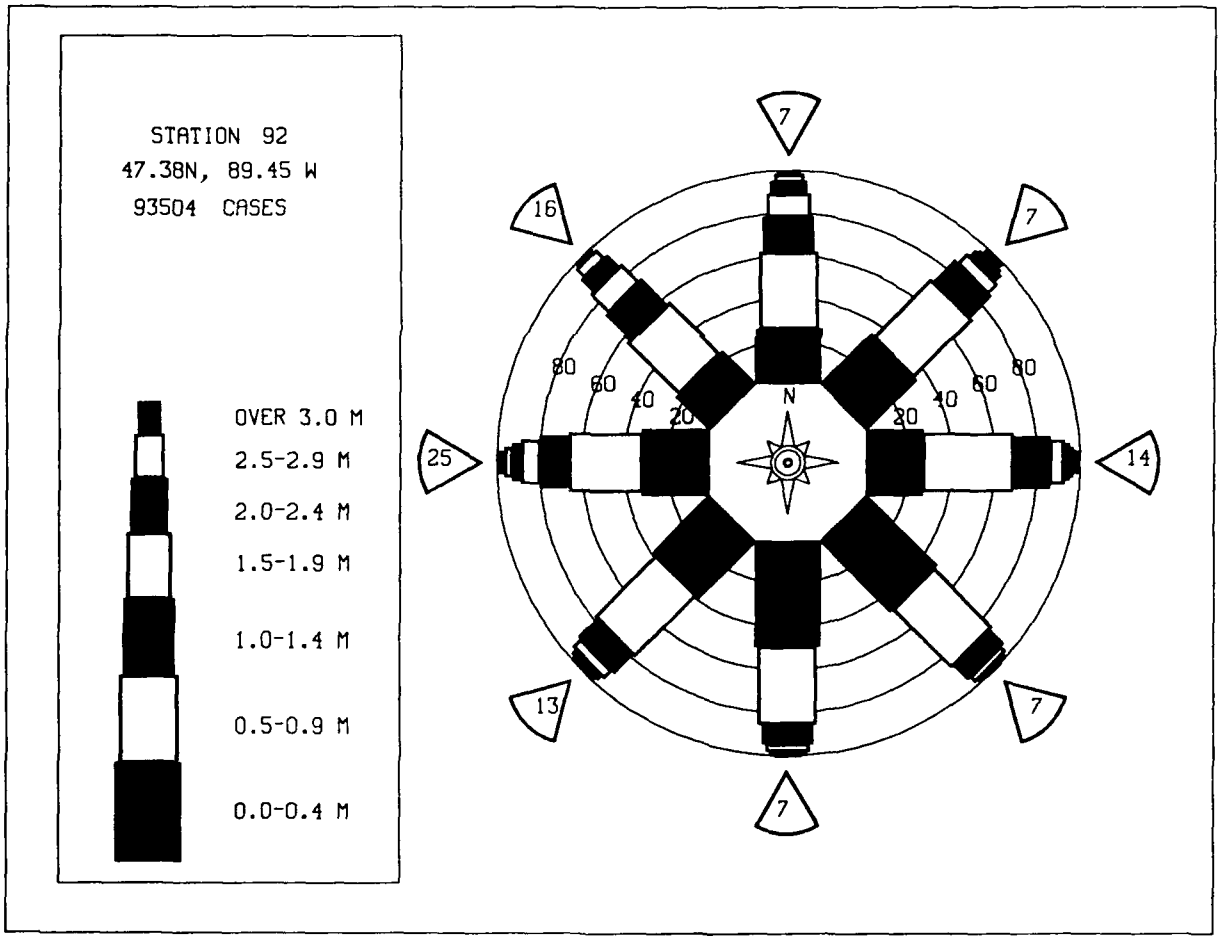
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 209 | 559 | 131 | 21 | 2 | . | . | . | . | . | 922 |
| 0.50-0.99 | . | 336 | 1193 | 58 | 32 | 11 | . | . | . | . | 1630 |
| 1.00-1.49 | . | . | 642 | 160 | 13 | 18 | 1 | . | . | . | 834 |
| 1.50-1.99 | . | . | 27 | 491 | . | 5 | 3 | . | . | . | 526 |
| 2.00-2.49 | . | . | . | 270 | 91 | . | 1 | . | . | . | 362 |
| 2.50-2.99 | . | . | . | 1 | 228 | . | . | . | . | . | 229 |
| 3.00-3.49 | . | . | . | . | 48 | 17 | . | . | . | . | 65 |
| 3.50-3.99 | . | . | . | . | . | 16 | . | . | . | . | 16 |
| 4.00-4.49 | . | . | . | . | . | 2 | . | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 209 | 895 | 1993 | 1001 | 414 | 69 | 5 | 0 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 4300.

STATION S92 47.38N 89.45W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 827 | 2010 | 321 | 41 | 4 | . | . | . | . | . | 3203 |
| 0.50-0.99 | . | 912 | 2638 | 120 | 28 | 8 | . | . | . | . | 3706 |
| 1.00-1.49 | . | . | 841 | 542 | 26 | 11 | . | . | . | . | 1420 |
| 1.50-1.99 | . | . | 46 | 623 | 67 | 12 | 1 | . | . | . | 749 |
| 2.00-2.49 | . | . | . | 251 | 138 | 17 | 2 | . | . | . | 408 |
| 2.50-2.99 | . | . | . | 2 | 243 | 23 | 1 | . | . | . | 269 |
| 3.00-3.49 | . | . | . | . | 30 | 97 | 2 | 3 | . | . | 132 |
| 3.50-3.99 | . | . | . | . | . | 47 | 2 | 1 | . | . | 50 |
| 4.00-4.49 | . | . | . | . | . | 12 | 9 | 2 | . | . | 23 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 1 | 1 | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 827 | 2922 | 3846 | 1579 | 536 | 227 | 24 | 9 | 1 | 0 | |

MEAN HS(M)= 0.9 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S92 (47.38N 89.45W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MONTH | | | | | | | |
| 1956 | 0.7 | 1.1 | 1.2 | 1.1 | 0.8 | 0.6 | 0.6 | 0.5 | 0.7 | 1.2 | 1.4 | 1.2 | 0.9 |
| 1957 | 1.3 | 1.2 | 0.9 | 0.9 | 0.9 | 0.6 | 0.5 | 0.6 | 0.7 | 0.7 | 1.3 | 1.2 | 0.9 |
| 1958 | 0.8 | 1.3 | 0.5 | 0.9 | 0.8 | 0.6 | 0.5 | 0.5 | 0.8 | 0.9 | 1.4 | 1.0 | 0.9 |
| 1959 | 1.0 | 1.0 | 0.9 | 0.9 | 0.9 | 0.5 | 0.5 | 0.5 | 0.8 | 0.9 | 1.3 | 1.3 | 0.9 |
| 1960 | 1.1 | 1.0 | 0.9 | 1.0 | 0.8 | 0.5 | 0.5 | 0.6 | 0.7 | 0.9 | 1.3 | 1.2 | 0.9 |
| 1961 | 0.9 | 1.0 | 1.1 | 0.9 | 0.7 | 0.6 | 0.4 | 0.4 | 0.7 | 0.8 | 1.0 | 1.0 | 0.8 |
| 1962 | 1.4 | 0.9 | 0.9 | 0.8 | 0.7 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 0.9 | 1.2 | 0.8 |
| 1963 | 1.2 | 1.2 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 1.1 | 1.2 | 0.8 |
| 1964 | 1.2 | 1.0 | 1.1 | 1.0 | 0.8 | 0.5 | 0.5 | 0.7 | 0.8 | 0.9 | 1.1 | 0.9 | 0.9 |
| 1965 | 1.4 | 1.4 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.7 | 1.1 | 1.7 | 1.5 | 1.0 |
| 1966 | 1.6 | 1.5 | 2.0 | 1.3 | 1.2 | 0.8 | 0.7 | 0.7 | 1.0 | 1.5 | 1.5 | 1.5 | 1.3 |
| 1967 | 1.6 | 1.4 | 1.5 | 1.2 | 1.1 | 0.8 | 0.7 | 0.7 | 0.9 | 1.6 | 1.4 | 1.9 | 1.2 |
| 1968 | 1.3 | 2.0 | 1.6 | 1.3 | 0.9 | 0.8 | 0.8 | 0.8 | 0.9 | 1.2 | 1.7 | 1.6 | 1.3 |
| 1969 | 1.5 | 0.9 | 1.1 | 0.8 | 0.7 | 0.6 | 0.5 | 0.7 | 0.7 | 1.0 | 1.1 | 0.9 | 0.9 |
| 1970 | 1.0 | 1.2 | 1.0 | 1.1 | 0.9 | 0.6 | 0.6 | 0.5 | 0.8 | 0.9 | 1.1 | 1.0 | 0.9 |
| 1971 | 1.3 | 1.3 | 1.1 | 1.0 | 0.8 | 0.5 | 0.6 | 0.5 | 0.6 | 1.0 | 1.1 | 1.0 | 0.9 |
| 1972 | 1.4 | 1.1 | 1.1 | 0.8 | 0.5 | 0.6 | 0.4 | 0.4 | 0.8 | 1.1 | 0.8 | 1.1 | 0.8 |
| 1973 | 1.1 | 1.0 | 1.0 | 0.9 | 0.8 | 0.5 | 0.5 | 0.4 | 0.8 | 0.9 | 1.2 | 1.0 | 0.8 |
| 1974 | 1.0 | 0.7 | 1.0 | 0.8 | 0.7 | 0.6 | 0.5 | 0.6 | 0.7 | 0.8 | 1.1 | 1.0 | 0.8 |
| 1975 | 1.2 | 1.0 | 1.3 | 0.7 | 0.4 | 0.5 | 0.5 | 0.6 | 0.7 | 1.0 | 1.2 | 0.9 | 0.8 |
| 1976 | 1.2 | 1.2 | 1.3 | 0.8 | 0.7 | 0.6 | 0.4 | 0.5 | 0.6 | 0.6 | 1.0 | 1.0 | 0.8 |
| 1977 | 1.3 | 1.4 | 1.5 | 0.6 | 0.6 | 0.4 | 0.5 | 0.5 | 0.7 | 0.8 | 1.0 | 1.3 | 0.9 |
| 1978 | 1.1 | 0.8 | 0.8 | 0.9 | 0.5 | 0.5 | 0.4 | 0.5 | 0.9 | 0.8 | 1.1 | 1.1 | 0.8 |
| 1979 | 1.0 | 0.8 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 | 1.0 | 1.1 | 0.7 |
| 1980 | 1.0 | 0.8 | 0.9 | 0.6 | 0.6 | 0.5 | 0.4 | 0.5 | 0.8 | 1.1 | 0.8 | 1.2 | 0.8 |
| 1981 | 1.0 | 1.0 | 1.0 | 0.8 | 0.5 | 0.6 | 0.4 | 0.4 | 0.8 | 0.9 | 0.9 | 0.8 | 0.8 |
| 1982 | 1.4 | 1.1 | 1.3 | 0.9 | 0.7 | 0.5 | 0.4 | 0.4 | 0.7 | 0.9 | 1.1 | 1.2 | 0.9 |
| 1983 | 1.0 | 0.9 | 1.4 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.7 | 0.8 | 1.4 | 1.3 | 0.9 |
| 1984 | 1.1 | 1.0 | 1.1 | 1.0 | 0.6 | 0.5 | 0.5 | 0.4 | 0.7 | 1.0 | 1.2 | 1.3 | 0.9 |
| 1985 | 1.3 | 1.0 | 1.4 | 0.8 | 0.6 | 0.7 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 | 1.3 | 0.9 |
| 1986 | 1.1 | 0.8 | 1.2 | 1.0 | 0.6 | 0.5 | 0.4 | 0.4 | 0.8 | 0.7 | 1.2 | 1.1 | 0.8 |
| 1987 | 0.9 | 1.0 | 1.2 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.9 | 1.0 | 0.9 | 0.7 |
| MEAN | 1.2 | 1.1 | 1.1 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 1.2 | 1.2 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S92 (47.38N 89.45W)

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MONTH | | | | | | |
| 1956 | 3.3 | 3.9 | 5.9 | 3.4 | 2.9 | 1.9 | 1.7 | 1.6 | 2.6 | 4.1 | 4.3 | 4.5 |
| 1957 | 3.5 | 3.2 | 3.1 | 4.2 | 3.1 | 3.0 | 2.3 | 1.8 | 2.8 | 2.5 | 4.1 | 4.4 |
| 1958 | 3.4 | 3.2 | 2.4 | 4.1 | 3.2 | 2.1 | 2.5 | 1.8 | 3.2 | 3.6 | 5.1 | 3.8 |
| 1959 | 3.2 | 3.9 | 4.0 | 3.6 | 4.0 | 1.8 | 2.2 | 2.2 | 3.3 | 3.2 | 4.4 | 5.0 |
| 1960 | 3.5 | 3.7 | 3.6 | 3.8 | 3.2 | 1.9 | 2.1 | 3.0 | 2.7 | 3.4 | 4.4 | 3.3 |
| 1961 | 3.1 | 3.2 | 3.6 | 3.4 | 2.1 | 1.7 | 2.4 | 2.2 | 2.9 | 2.8 | 4.7 | 3.5 |
| 1962 | 3.7 | 3.6 | 3.8 | 3.2 | 2.5 | 1.5 | 2.4 | 1.5 | 2.8 | 4.8 | 3.5 | 4.2 |
| 1963 | 3.5 | 3.6 | 3.1 | 3.3 | 2.0 | 2.4 | 1.7 | 1.7 | 2.2 | 2.5 | 3.5 | 4.4 |
| 1964 | 4.4 | 4.8 | 3.1 | 3.6 | 2.6 | 1.9 | 1.5 | 2.5 | 3.3 | 3.9 | 4.2 | 3.2 |
| 1965 | 4.2 | 4.4 | 3.8 | 3.0 | 3.1 | 2.3 | 1.7 | 1.7 | 3.2 | 3.5 | 6.4 | 4.9 |
| 1966 | 5.9 | 3.7 | 6.9 | 4.8 | 3.5 | 3.6 | 2.3 | 3.0 | 3.3 | 4.9 | 4.9 | 4.4 |
| 1967 | 6.6 | 3.8 | 4.3 | 4.8 | 3.9 | 3.0 | 3.6 | 2.5 | 4.2 | 4.7 | 3.9 | 4.9 |
| 1968 | 3.6 | 5.4 | 5.1 | 4.4 | 3.0 | 2.4 | 3.5 | 3.5 | 3.4 | 4.0 | 5.4 | 5.7 |
| 1969 | 4.9 | 3.5 | 4.2 | 3.1 | 2.2 | 2.6 | 1.6 | 2.8 | 2.2 | 3.6 | 3.2 | 3.9 |
| 1970 | 3.0 | 3.4 | 4.3 | 4.1 | 3.2 | 1.7 | 1.9 | 2.2 | 3.4 | 3.6 | 3.5 | 4.0 |
| 1971 | 3.4 | 4.1 | 4.9 | 2.8 | 3.3 | 1.7 | 2.1 | 1.8 | 2.2 | 4.4 | 4.1 | 3.6 |
| 1972 | 3.9 | 3.9 | 3.3 | 3.2 | 1.7 | 2.0 | 1.6 | 1.4 | 3.4 | 4.2 | 3.4 | 5.2 |
| 1973 | 3.0 | 2.8 | 3.7 | 3.1 | 3.0 | 1.5 | 2.0 | 1.2 | 3.1 | 2.9 | 3.2 | 3.5 |
| 1974 | 4.2 | 3.0 | 3.6 | 3.2 | 2.6 | 1.7 | 2.7 | 2.5 | 1.7 | 2.7 | 3.1 | 3.7 |
| 1975 | 5.2 | 4.1 | 5.3 | 2.8 | 1.4 | 1.9 | 2.3 | 2.7 | 2.7 | 4.4 | 4.5 | 3.3 |
| 1976 | 3.7 | 4.0 | 5.1 | 3.1 | 2.3 | 1.9 | 1.2 | 2.1 | 2.8 | 2.7 | 3.4 | 4.4 |
| 1977 | 4.0 | 5.7 | 5.7 | 2.2 | 2.2 | 1.5 | 3.1 | 2.0 | 4.2 | 3.2 | 4.3 | 5.0 |
| 1978 | 3.2 | 2.6 | 3.7 | 3.0 | 1.7 | 1.5 | 1.3 | 1.7 | 3.1 | 3.3 | 3.5 | 3.4 |
| 1979 | 3.0 | 3.9 | 3.5 | 3.8 | 2.5 | 1.6 | 2.2 | 1.7 | 2.3 | 2.6 | 3.0 | 2.9 |
| 1980 | 4.7 | 3.5 | 3.7 | 2.1 | 1.7 | 1.6 | 1.1 | 2.0 | 3.5 | 3.8 | 2.9 | 4.2 |
| 1981 | 2.9 | 2.9 | 3.4 | 3.6 | 1.5 | 3.5 | 1.2 | 1.3 | 4.4 | 3.2 | 3.6 | 2.8 |
| 1982 | 4.2 | 2.8 | 5.9 | 4.0 | 2.1 | 3.0 | 2.1 | 1.5 | 2.3 | 3.2 | 4.9 | 3.8 |
| 1983 | 3.1 | 4.0 | 4.4 | 2.9 | 1.8 | 2.0 | 2.3 | 1.9 | 2.8 | 2.8 | 4.2 | 3.7 |
| 1984 | 4.1 | 3.0 | 4.0 | 3.4 | 2.5 | 2.2 | 2.5 | 1.7 | 2.2 | 3.7 | 4.3 | 4.0 |
| 1985 | 3.7 | 3.6 | 6.7 | 3.5 | 2.4 | 3.7 | 1.4 | 2.2 | 3.5 | 3.2 | 2.7 | 3.8 |
| 1986 | 4.3 | 3.7 | 3.4 | 3.4 | 2.8 | 1.4 | 1.7 | 1.3 | 2.8 | 2.9 | 4.5 | 3.4 |
| 1987 | 3.1 | 4.3 | 4.3 | 2.4 | 2.7 | 1.3 | 1.5 | 2.0 | 1.8 | 3.0 | 3.2 | 3.1 |

32 YR. STATISTICS FOR WIS STATION S92

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT | (METERS) | 0.9 |
| MEAN PEAK WAVE PERIOD | (SECONDS) | 4.1 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP | (SECONDS) | 1.3 |
| LARGEST WAVE HS | (METERS) | 6.9 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS | (DEGREES) | 69.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66030418 |

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 137 | 383 | 210 | 28 | . | . | . | . | . | . | 758 |
| 0.50-0.99 | . | 433 | 729 | 233 | 31 | . | . | . | . | . | 1426 |
| 1.00-1.49 | . | . | 389 | 111 | 116 | 18 | . | . | . | . | 634 |
| 1.50-1.99 | . | . | 167 | 97 | 72 | 60 | . | . | . | . | 396 |
| 2.00-2.49 | . | . | . | 109 | 12 | 75 | 6 | . | . | . | 202 |
| 2.50-2.99 | . | . | . | 24 | 3 | 11 | 21 | . | . | . | 59 |
| 3.00-3.49 | . | . | . | 1 | 1 | 3 | 9 | 3 | . | . | 17 |
| 3.50-3.99 | . | . | . | . | . | . | 1 | 3 | . | . | 4 |
| 4.00-4.49 | . | . | . | . | 1 | . | . | 3 | 1 | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 137 | 816 | 1495 | 603 | 236 | 167 | 37 | 9 | 1 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.4 NO. OF CASES= 3287.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 158 | 428 | 168 | 13 | . | . | . | . | . | . | 767 |
| 0.50-0.99 | . | 335 | 726 | 172 | 14 | 2 | . | . | . | . | 1249 |
| 1.00-1.49 | . | . | 224 | 195 | 50 | 4 | . | . | . | . | 473 |
| 1.50-1.99 | . | . | 42 | 103 | 79 | 36 | . | . | . | . | 260 |
| 2.00-2.49 | . | . | . | 52 | 31 | 74 | 2 | . | . | . | 159 |
| 2.50-2.99 | . | . | . | 7 | 29 | 26 | 7 | . | . | . | 69 |
| 3.00-3.49 | . | . | . | . | 8 | 21 | 7 | 1 | . | . | 37 |
| 3.50-3.99 | . | . | . | . | . | 12 | 8 | . | . | . | 20 |
| 4.00-4.49 | . | . | . | . | . | 1 | 14 | 1 | . | . | 16 |
| 4.50-4.99 | . | . | . | . | . | 1 | 5 | 5 | . | . | 11 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | 1 | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 3 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | 2 | . | 2 |
| TOTAL | 158 | 763 | 1160 | 542 | 211 | 177 | 43 | 13 | 7 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 2892.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 222 | 617 | 241 | 22 | . | . | . | . | . | . | 1102 |
| 0.50-0.99 | . | 303 | 962 | 170 | 14 | 1 | . | . | . | . | 1450 |
| 1.00-1.49 | . | . | 280 | 325 | 34 | 2 | . | . | . | . | 641 |
| 1.50-1.99 | . | . | 25 | 151 | 104 | 7 | . | . | . | . | 287 |
| 2.00-2.49 | . | . | . | 49 | 40 | 49 | . | . | . | . | 138 |
| 2.50-2.99 | . | . | . | 1 | 55 | 31 | 3 | . | . | . | 90 |
| 3.00-3.49 | . | . | . | . | . | 40 | 10 | 2 | . | . | 52 |
| 3.50-3.99 | . | . | . | . | . | 20 | 14 | 4 | . | . | 38 |
| 4.00-4.49 | . | . | . | . | . | 1 | 19 | 7 | . | . | 27 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | 10 | 1 | . | 14 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 2 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| TOTAL | 222 | 920 | 1508 | 718 | 247 | 151 | 49 | 29 | 6 | 1 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 3615.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 245 | 733 | 187 | 22 | . | . | . | . | . | . | 1187 |
| 0.50-0.99 | . | 421 | 1192 | 125 | 19 | 4 | . | . | . | . | 1761 |
| 1.00-1.49 | . | . | 353 | 342 | 27 | 5 | 1 | 1 | . | . | 729 |
| 1.50-1.99 | . | . | 18 | 172 | 85 | 10 | 1 | 1 | . | . | 287 |
| 2.00-2.49 | . | . | . | 58 | 39 | 35 | . | . | . | . | 132 |
| 2.50-2.99 | . | . | . | 1 | 63 | 23 | 4 | 1 | . | . | 92 |
| 3.00-3.49 | . | . | . | . | 5 | 71 | 6 | . | . | . | 82 |
| 3.50-3.99 | . | . | . | . | . | 24 | 24 | 2 | . | . | 50 |
| 4.00-4.49 | . | . | . | . | . | 4 | 22 | 8 | 1 | . | 35 |
| 4.50-4.99 | . | . | . | . | . | 1 | 7 | 20 | 2 | . | 30 |
| 5.00-5.49 | . | . | . | . | . | . | . | 14 | 3 | . | 17 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | 4 | . | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | 2 | 5 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 4 | 4 |
| TOTAL | 245 | 1154 | 1750 | 720 | 238 | 177 | 65 | 52 | 16 | 6 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 8.0 MEAN TP(SEC)= 4.4 NO. OF CASES= 4153.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 441 | 1282 | 260 | 27 | | | | | | | 2010 |
| 0.50-0.99 | . | 933 | 2651 | 144 | 31 | 4 | 1 | . | . | . | 3764 |
| 1.00-1.49 | . | . | 853 | 742 | 39 | 14 | 2 | . | . | . | 1650 |
| 1.50-1.99 | . | . | 42 | 392 | 174 | 19 | 3 | . | . | . | 630 |
| 2.00-2.49 | . | . | . | 128 | 58 | 58 | 1 | . | . | . | 245 |
| 2.50-2.99 | . | . | . | 4 | 133 | 38 | 9 | . | . | . | 184 |
| 3.00-3.49 | . | . | . | . | 8 | 108 | 8 | 2 | . | . | 126 |
| 3.50-3.99 | . | . | . | . | . | 49 | 22 | 6 | 1 | . | 78 |
| 4.00-4.49 | . | . | . | . | . | 5 | 47 | 9 | 1 | . | 62 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 33 | . | . | 41 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 27 | 4 | . | 32 |
| 5.50-5.99 | . | . | . | . | . | . | . | 6 | 5 | 1 | 12 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 9 | . | 9 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | 2 | 3 | 5 |
| TOTAL | 441 | 2215 | 3806 | 1437 | 443 | 295 | 102 | 83 | 25 | 4 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.4 NO. OF CASES= 8295.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 355 | 812 | 160 | 14 | | | | | | | 1341 |
| 0.50-0.99 | . | 602 | 1429 | 102 | 25 | 5 | . | . | . | . | 2163 |
| 1.00-1.49 | . | . | 514 | 216 | 36 | 11 | . | . | . | . | 777 |
| 1.50-1.99 | . | . | 40 | 198 | 52 | 20 | 2 | . | . | . | 312 |
| 2.00-2.49 | . | . | . | 73 | 31 | 21 | 6 | . | . | . | 131 |
| 2.50-2.99 | . | . | . | 4 | 42 | 10 | 1 | 4 | . | . | 61 |
| 3.00-3.49 | . | . | . | . | 9 | 18 | 3 | . | . | . | 30 |
| 3.50-3.99 | . | . | . | . | . | 13 | 10 | 2 | . | . | 25 |
| 4.00-4.49 | . | . | . | . | . | 1 | 7 | 1 | 1 | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | 2 | 1 | . | 7 |
| 5.00-5.49 | . | . | . | . | . | . | . | 4 | . | . | 4 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 1 | 2 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | 1 | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 2 | 2 |
| TOTAL | 355 | 1414 | 2143 | 607 | 195 | 99 | 33 | 13 | 3 | 4 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 7.6 MEAN TP(SEC)= 4.1 NO. OF CASES= 4566.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 336 | 836 | 178 | 29 | 5 | | | | | | 1384 |
| 0.50-0.99 | . | 412 | 764 | 93 | 27 | 14 | 2 | . | . | . | 1312 |
| 1.00-1.49 | . | . | 311 | 31 | 19 | 18 | . | . | . | . | 379 |
| 1.50-1.99 | . | . | 26 | 78 | 6 | 9 | 6 | . | . | . | 125 |
| 2.00-2.49 | . | . | . | 36 | 3 | 3 | 1 | 2 | . | . | 45 |
| 2.50-2.99 | . | . | . | 5 | 5 | 2 | 2 | . | . | . | 14 |
| 3.00-3.49 | . | . | . | . | 2 | 1 | 1 | 2 | . | . | 6 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 336 | 1248 | 1279 | 272 | 67 | 48 | 12 | 4 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 3065.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 356 | 957 | 139 | 17 | 3 | | | | | | 1472 |
| 0.50-0.99 | . | 528 | 817 | 60 | 26 | 14 | 1 | . | . | . | 1446 |
| 1.00-1.49 | . | . | 266 | 28 | 19 | 17 | . | . | . | . | 330 |
| 1.50-1.99 | . | . | 20 | 79 | 3 | 2 | 4 | . | . | . | 108 |
| 2.00-2.49 | . | . | . | 27 | 1 | 3 | 2 | . | . | . | 33 |
| 2.50-2.99 | . | . | . | 3 | 6 | . | 1 | 2 | . | . | 12 |
| 3.00-3.49 | . | . | . | . | 1 | . | . | . | . | . | 1 |
| 3.50-3.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 356 | 1485 | 1242 | 214 | 59 | 36 | 8 | 3 | 0 | 0 | |

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.6 NO. OF CASES= 3190.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 304 | 913 | 175 | 18 | 2 | 1 | . | . | . | . | 1413 |
| 0.50-0.99 | . | 466 | 989 | 67 | 11 | 5 | . | . | . | . | 1538 |
| 1.00-1.49 | . | . | 349 | 72 | 16 | 8 | 1 | . | . | . | 446 |
| 1.50-1.99 | . | . | 28 | 137 | 4 | 4 | . | 1 | . | . | 174 |
| 2.00-2.49 | . | . | . | 48 | 5 | 1 | . | . | . | . | 54 |
| 2.50-2.99 | . | . | . | 2 | 16 | . | 1 | . | . | . | 19 |
| 3.00-3.49 | . | . | . | . | 2 | . | 1 | . | . | . | 3 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 304 | 1379 | 1541 | 344 | 56 | 19 | 3 | 1 | 0 | 0 | |

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 3419.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 264 | 868 | 192 | 21 | . | . | . | . | . | . | 1345 |
| 0.50-0.99 | . | 437 | 1365 | 94 | 19 | 5 | . | . | . | . | 1920 |
| 1.00-1.49 | . | . | 458 | 172 | 14 | 7 | . | . | . | . | 651 |
| 1.50-1.99 | . | . | 38 | 181 | 17 | 3 | 2 | . | . | . | 241 |
| 2.00-2.49 | . | . | . | 83 | 33 | 3 | . | . | . | . | 119 |
| 2.50-2.99 | . | . | . | . | 36 | 1 | . | . | . | . | 37 |
| 3.00-3.49 | . | . | . | . | 4 | 6 | . | . | . | . | 10 |
| 3.50-3.99 | . | . | . | . | . | 3 | . | . | . | . | 3 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 264 | 1305 | 2053 | 551 | 123 | 29 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 4056.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 285 | 1265 | 450 | 21 | 1 | . | . | . | . | . | 2022 |
| 0.50-0.99 | . | 624 | 2404 | 300 | 26 | 3 | . | . | . | . | 3357 |
| 1.00-1.49 | . | . | 451 | 534 | 42 | 6 | 1 | . | . | . | 1034 |
| 1.50-1.99 | . | . | 51 | 278 | 139 | 7 | . | . | . | . | 475 |
| 2.00-2.49 | . | . | . | 74 | 75 | 57 | . | . | . | . | 206 |
| 2.50-2.99 | . | . | . | 2 | 96 | 26 | . | . | . | . | 124 |
| 3.00-3.49 | . | . | . | . | 5 | 41 | 6 | . | . | . | 52 |
| 3.50-3.99 | . | . | . | . | . | 29 | 11 | . | . | . | 40 |
| 4.00-4.49 | . | . | . | . | . | 2 | 10 | . | . | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 3 | . | . | 8 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 285 | 1889 | 3356 | 1209 | 384 | 171 | 33 | 5 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.3 NO. OF CASES= 6870.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 377 | 2096 | 648 | 17 | 1 | . | . | . | . | . | 3139 |
| 0.50-0.99 | . | 991 | 4435 | 456 | 27 | 3 | 1 | . | . | . | 5913 |
| 1.00-1.49 | . | . | 930 | 1295 | 112 | 7 | 1 | . | . | . | 2345 |
| 1.50-1.99 | . | . | 85 | 563 | 389 | 26 | . | . | . | . | 1063 |
| 2.00-2.49 | . | . | . | 185 | 137 | 152 | . | . | . | . | 474 |
| 2.50-2.99 | . | . | . | 3 | 228 | 113 | 5 | 1 | . | . | 350 |
| 3.00-3.49 | . | . | . | . | 11 | 202 | 8 | 1 | . | . | 222 |
| 3.50-3.99 | . | . | . | . | . | 111 | 39 | 2 | . | . | 152 |
| 4.00-4.49 | . | . | . | . | . | 4 | 65 | 5 | . | . | 74 |
| 4.50-4.99 | . | . | . | . | . | . | 14 | 21 | 1 | . | 36 |
| 5.00-5.49 | . | . | . | . | . | . | . | 16 | 2 | . | 18 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 5 | . | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 2 | . | 2 |
| 7.00+ | | | | | | | | | 1 | | 1 |
| TOTAL | 377 | 3087 | 6098 | 2519 | 905 | 618 | 133 | 50 | 14 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 12920.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 536 | 2474 | 630 | 35 | . | 1 | . | . | . | . | 3676 |
| 0.50-0.99 | . | 1164 | 4622 | 387 | 37 | 8 | . | . | . | . | 6218 |
| 1.00-1.49 | . | . | 1443 | 1720 | 80 | 12 | . | . | . | . | 3255 |
| 1.50-1.99 | . | . | 130 | 1188 | 618 | 52 | 2 | . | . | . | 1990 |
| 2.00-2.49 | . | . | . | 432 | 417 | 274 | 1 | . | . | . | 1124 |
| 2.50-2.99 | . | . | . | 11 | 496 | 223 | 6 | . | . | . | 736 |
| 3.00-3.49 | . | . | . | . | 40 | 553 | 18 | 1 | . | . | 612 |
| 3.50-3.99 | . | . | . | . | 2 | 298 | 102 | 5 | . | . | 407 |
| 4.00-4.49 | . | . | . | . | . | 18 | 203 | 2 | . | . | 223 |
| 4.50-4.99 | . | . | . | . | . | 1 | 63 | 57 | 1 | . | 122 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 52 | . | . | 53 |
| 5.50-5.99 | . | . | . | . | . | . | . | 12 | 7 | . | 19 |
| 6.00-6.49 | . | . | . | . | . | . | . | 2 | 12 | . | 14 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 7 | . | 7 |
| 7.00+ | . | . | . | . | . | . | . | . | 3 | 2 | 5 |
| TOTAL | 536 | 3638 | 6825 | 3773 | 1690 | 1440 | 396 | 131 | 30 | 2 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 8.1 MEAN TP(SEC)= 4.8 NO. OF CASES= 17281.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 360 | 1302 | 418 | 33 | 1 | . | . | . | . | . | 2114 |
| 0.50-0.99 | . | 1041 | 1825 | 166 | 37 | 5 | . | . | . | . | 3074 |
| 1.00-1.49 | . | . | 818 | 609 | 48 | 6 | . | . | . | . | 1481 |
| 1.50-1.99 | . | . | 89 | 979 | 71 | 7 | 2 | . | . | . | 1148 |
| 2.00-2.49 | . | . | 3 | 290 | 175 | 11 | 1 | . | . | . | 480 |
| 2.50-2.99 | . | . | . | 11 | 134 | 33 | 1 | 1 | . | . | 180 |
| 3.00-3.49 | . | . | . | 1 | 13 | 62 | . | . | . | . | 76 |
| 3.50-3.99 | . | . | . | . | . | 39 | 1 | 1 | . | . | 41 |
| 4.00-4.49 | . | . | . | . | . | 3 | 12 | . | . | . | 15 |
| 4.50-4.99 | . | . | . | . | . | . | 8 | 5 | . | . | 13 |
| 5.00-5.49 | . | . | . | . | . | . | . | 6 | . | . | 6 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 360 | 2343 | 3153 | 2089 | 479 | 166 | 25 | 15 | 2 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 8087.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 196 | 616 | 312 | 34 | . | . | . | . | . | . | 1158 |
| 0.50-0.99 | . | 842 | 897 | 199 | 44 | 3 | . | . | . | . | 1985 |
| 1.00-1.49 | . | . | 419 | 263 | 62 | 23 | 1 | . | . | . | 768 |
| 1.50-1.99 | . | . | 257 | 262 | 18 | 32 | . | . | . | . | 569 |
| 2.00-2.49 | . | . | 29 | 78 | 44 | 9 | 2 | . | . | . | 162 |
| 2.50-2.99 | . | . | . | 10 | 17 | 2 | . | . | . | . | 29 |
| 3.00-3.49 | . | . | . | 2 | . | 3 | . | . | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | 1 | . | . | . | . | 1 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 196 | 1458 | 1914 | 848 | 185 | 73 | 3 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 4383.

STATION S93 47.67N 88.78W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

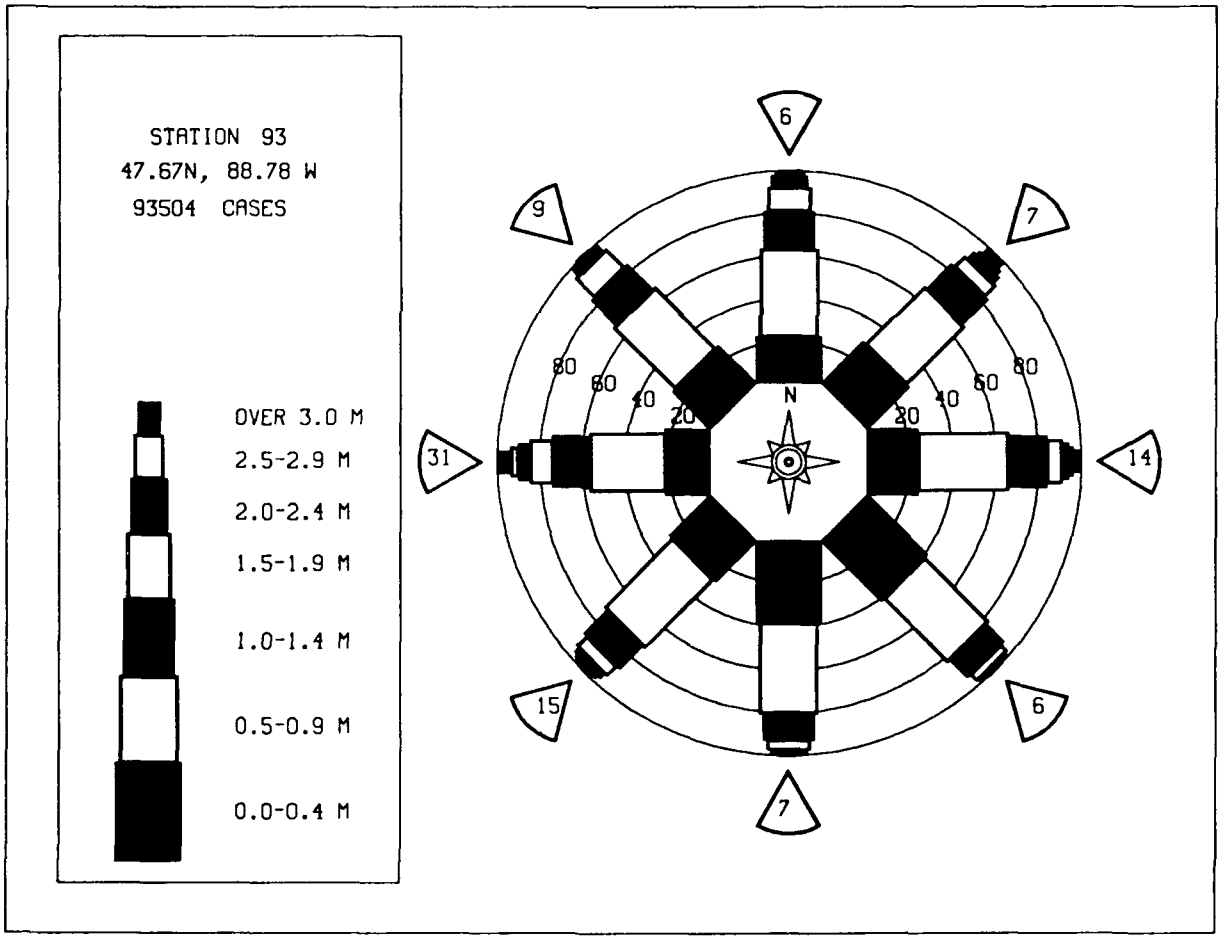
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 114 | 396 | 207 | 26 | 2 | . | . | . | . | . | 745 |
| 0.50-0.99 | . | 571 | 684 | 194 | 49 | 4 | . | . | . | . | 1502 |
| 1.00-1.49 | . | . | 462 | 105 | 105 | 22 | . | . | . | . | 694 |
| 1.50-1.99 | . | . | 275 | 131 | 23 | 42 | . | . | . | . | 471 |
| 2.00-2.49 | . | . | 21 | 141 | 10 | 14 | 3 | . | . | . | 189 |
| 2.50-2.99 | . | . | . | 32 | 6 | 1 | 5 | . | . | . | 44 |
| 3.00-3.49 | . | . | . | . | 4 | . | . | 1 | . | . | 5 |
| 3.50-3.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.00-4.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 114 | 967 | 1649 | 629 | 199 | 83 | 8 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 3425.

STATION S93 47.67N 88.78W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 469 | 1598 | 458 | 38 | 1 | . | . | . | . | . | 2564 |
| 0.50-0.99 | . | 1011 | 2649 | 296 | 44 | 8 | . | . | . | . | 4008 |
| 1.00-1.49 | . | . | 852 | 676 | 82 | 18 | . | . | . | . | 1628 |
| 1.50-1.99 | . | . | 134 | 499 | 185 | 34 | 2 | . | . | . | 854 |
| 2.00-2.49 | . | . | 5 | 186 | 111 | 84 | 2 | . | . | . | 388 |
| 2.50-2.99 | . | . | . | 12 | 137 | 54 | 6 | . | . | . | 209 |
| 3.00-3.49 | . | . | . | . | 11 | 113 | 8 | 1 | . | . | 133 |
| 3.50-3.99 | . | . | . | . | . | 60 | 23 | 2 | . | . | 85 |
| 4.00-4.49 | . | . | . | . | . | 4 | 40 | 3 | . | . | 47 |
| 4.50-4.99 | . | . | . | . | . | . | 12 | 15 | . | . | 27 |
| 5.00-5.49 | . | . | . | . | . | . | . | 13 | 1 | . | 14 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 2 | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 469 | 2609 | 4098 | 1707 | 571 | 375 | 93 | 37 | 7 | 1 | |

MEAN HS(M)= 1.0 LARGEST HS(M)= 8.1 MEAN TP(SEC)= 4.3 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S93 (47.67N 88.78W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.8 | 1.3 | 1.3 | 1.1 | 0.8 | 0.6 | 0.6 | 0.5 | 0.7 | 1.2 | 1.3 | 1.3 | 1.0 |
| 1957 | 1.3 | 1.3 | 0.9 | 0.9 | 1.0 | 0.7 | 0.5 | 0.6 | 0.8 | 0.7 | 1.3 | 1.2 | 0.9 |
| 1958 | 0.8 | 1.1 | 0.5 | 1.0 | 0.8 | 0.7 | 0.6 | 0.6 | 0.9 | 1.0 | 1.6 | 1.1 | 0.9 |
| 1959 | 1.0 | 1.1 | 0.9 | 0.9 | 0.9 | 0.6 | 0.5 | 0.5 | 0.9 | 0.9 | 1.4 | 1.5 | 0.9 |
| 1960 | 1.1 | 0.9 | 0.8 | 1.0 | 0.8 | 0.5 | 0.5 | 0.6 | 0.7 | 0.9 | 1.4 | 1.2 | 0.9 |
| 1961 | 0.9 | 1.0 | 1.1 | 0.9 | 0.7 | 0.6 | 0.4 | 0.4 | 0.8 | 0.9 | 1.0 | 1.1 | 0.8 |
| 1962 | 1.4 | 1.0 | 0.9 | 0.8 | 0.7 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 0.9 | 1.1 | 0.8 |
| 1963 | 1.2 | 1.2 | 1.0 | 0.8 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 1.1 | 1.3 | 0.8 |
| 1964 | 1.2 | 1.0 | 1.2 | 1.0 | 0.8 | 0.5 | 0.5 | 0.7 | 0.9 | 1.0 | 1.2 | 1.1 | 0.9 |
| 1965 | 1.6 | 1.7 | 1.2 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.8 | 1.2 | 1.9 | 1.7 | 1.1 |
| 1966 | 1.9 | 1.8 | 2.2 | 1.4 | 1.4 | 0.9 | 0.8 | 0.9 | 1.2 | 1.8 | 1.6 | 1.8 | 1.5 |
| 1967 | 1.8 | 1.6 | 1.7 | 1.4 | 1.2 | 1.0 | 0.8 | 0.8 | 1.0 | 1.7 | 1.5 | 2.3 | 1.4 |
| 1968 | 1.6 | 2.1 | 1.8 | 1.5 | 1.1 | 0.9 | 1.0 | 1.0 | 1.1 | 1.4 | 1.9 | 1.9 | 1.4 |
| 1969 | 1.8 | 1.1 | 1.3 | 0.9 | 0.8 | 0.7 | 0.5 | 0.7 | 0.8 | 1.2 | 1.3 | 1.0 | 1.0 |
| 1970 | 1.1 | 1.2 | 1.2 | 1.2 | 0.9 | 0.6 | 0.6 | 0.6 | 0.9 | 1.1 | 1.3 | 1.1 | 1.0 |
| 1971 | 1.5 | 1.4 | 1.2 | 1.0 | 0.9 | 0.5 | 0.7 | 0.6 | 0.8 | 1.2 | 1.3 | 1.2 | 1.0 |
| 1972 | 1.6 | 1.2 | 1.2 | 0.9 | 0.6 | 0.6 | 0.5 | 0.5 | 0.9 | 1.1 | 1.0 | 1.2 | 1.0 |
| 1973 | 1.2 | 1.1 | 1.1 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.9 | 1.0 | 1.3 | 1.0 | 0.9 |
| 1974 | 1.1 | 0.8 | 1.2 | 0.8 | 0.8 | 0.6 | 0.6 | 0.7 | 0.7 | 0.9 | 1.2 | 1.1 | 0.9 |
| 1975 | 1.3 | 1.1 | 1.2 | 0.7 | 0.5 | 0.6 | 0.6 | 0.7 | 0.8 | 1.1 | 1.3 | 1.1 | 0.9 |
| 1976 | 1.3 | 1.2 | 1.4 | 0.9 | 0.7 | 0.6 | 0.4 | 0.6 | 0.7 | 0.7 | 1.0 | 1.0 | 0.9 |
| 1977 | 1.4 | 1.5 | 1.5 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.8 | 0.8 | 1.0 | 1.5 | 0.9 |
| 1978 | 1.1 | 0.9 | 0.9 | 1.0 | 0.6 | 0.5 | 0.5 | 0.6 | 0.9 | 0.8 | 1.2 | 1.3 | 0.8 |
| 1979 | 1.0 | 0.8 | 1.1 | 0.8 | 0.7 | 0.5 | 0.4 | 0.5 | 0.7 | 0.7 | 1.1 | 1.1 | 0.8 |
| 1980 | 1.1 | 0.8 | 1.0 | 0.7 | 0.6 | 0.6 | 0.4 | 0.6 | 0.9 | 1.1 | 0.9 | 1.3 | 0.8 |
| 1981 | 1.0 | 1.0 | 1.0 | 0.8 | 0.5 | 0.6 | 0.4 | 0.4 | 0.9 | 1.0 | 1.0 | 0.9 | 0.8 |
| 1982 | 1.5 | 1.2 | 1.5 | 0.9 | 0.8 | 0.6 | 0.5 | 0.5 | 0.8 | 1.0 | 1.2 | 1.3 | 1.0 |
| 1983 | 1.0 | 0.9 | 1.4 | 0.8 | 0.7 | 0.5 | 0.5 | 0.4 | 0.8 | 0.9 | 1.6 | 1.4 | 0.9 |
| 1984 | 1.1 | 1.0 | 1.1 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.8 | 1.1 | 1.3 | 1.4 | 0.9 |
| 1985 | 1.3 | 1.1 | 1.5 | 0.8 | 0.7 | 0.7 | 0.4 | 0.5 | 0.7 | 0.9 | 1.0 | 1.4 | 0.9 |
| 1986 | 1.2 | 0.9 | 1.2 | 1.1 | 0.6 | 0.6 | 0.5 | 0.5 | 0.8 | 0.8 | 1.2 | 1.2 | 0.9 |
| 1987 | 1.0 | 1.1 | 1.3 | 0.7 | 0.6 | 0.4 | 0.5 | 0.6 | 0.5 | 0.9 | 1.1 | 0.9 | 0.8 |
| MEAN | 1.3 | 1.2 | 1.2 | 0.9 | 0.8 | 0.6 | 0.5 | 0.6 | 0.8 | 1.0 | 1.3 | 1.3 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S93 (47.67N 88.78W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 4.0 | 4.9 | 7.6 | 4.0 | 3.3 | 1.7 | 1.7 | 1.9 | 2.6 | 4.9 | 4.4 | 5.0 |
| 1957 | 3.8 | 3.7 | 3.9 | 5.0 | 3.4 | 3.2 | 2.4 | 2.0 | 3.0 | 2.8 | 4.5 | 4.7 |
| 1958 | 3.2 | 3.8 | 2.5 | 4.9 | 3.6 | 2.4 | 2.7 | 1.9 | 3.9 | 3.8 | 6.4 | 5.1 |
| 1959 | 3.4 | 4.7 | 5.0 | 4.1 | 4.6 | 1.9 | 2.3 | 2.1 | 3.7 | 3.1 | 5.3 | 5.8 |
| 1960 | 3.9 | 3.9 | 3.5 | 4.5 | 3.5 | 1.9 | 1.7 | 3.6 | 2.8 | 4.2 | 4.7 | 3.9 |
| 1961 | 2.8 | 3.8 | 5.1 | 3.6 | 2.3 | 2.0 | 2.4 | 1.8 | 3.3 | 3.5 | 4.5 | 4.6 |
| 1962 | 4.5 | 4.0 | 4.3 | 3.4 | 2.1 | 1.5 | 2.2 | 1.5 | 2.8 | 6.0 | 4.2 | 4.7 |
| 1963 | 4.0 | 3.3 | 3.5 | 2.8 | 2.3 | 2.6 | 1.9 | 1.6 | 2.6 | 2.4 | 3.6 | 5.1 |
| 1964 | 5.3 | 4.4 | 3.4 | 4.3 | 3.1 | 1.9 | 1.6 | 2.8 | 3.4 | 4.2 | 5.2 | 4.0 |
| 1965 | 4.4 | 5.9 | 4.6 | 3.6 | 3.6 | 2.5 | 1.7 | 2.0 | 4.3 | 5.3 | 7.8 | 5.7 |
| 1966 | 8.1 | 5.2 | 8.0 | 5.4 | 3.8 | 4.7 | 2.9 | 3.4 | 3.6 | 7.0 | 5.0 | 5.9 |
| 1967 | 7.2 | 4.8 | 4.9 | 6.2 | 4.5 | 3.3 | 2.9 | 2.4 | 3.3 | 5.8 | 5.1 | 6.4 |
| 1968 | 4.5 | 6.1 | 6.9 | 4.9 | 3.6 | 3.0 | 4.6 | 4.4 | 4.6 | 5.4 | 6.2 | 7.2 |
| 1969 | 5.5 | 4.0 | 4.7 | 3.5 | 2.3 | 2.9 | 1.5 | 2.9 | 2.7 | 4.1 | 3.9 | 5.0 |
| 1970 | 3.4 | 3.8 | 5.2 | 5.3 | 4.0 | 1.8 | 1.7 | 2.4 | 3.6 | 4.8 | 3.6 | 4.0 |
| 1971 | 4.0 | 4.8 | 5.6 | 2.9 | 4.0 | 1.8 | 2.3 | 1.9 | 2.8 | 5.8 | 5.3 | 4.4 |
| 1972 | 5.2 | 5.4 | 3.7 | 3.7 | 1.5 | 2.1 | 1.9 | 2.0 | 4.3 | 5.0 | 4.1 | 5.0 |
| 1973 | 3.9 | 3.2 | 4.2 | 3.4 | 3.2 | 1.8 | 2.2 | 0.9 | 3.8 | 3.2 | 3.7 | 4.1 |
| 1974 | 4.2 | 3.1 | 4.4 | 3.7 | 2.6 | 2.2 | 2.7 | 2.5 | 2.3 | 3.0 | 3.9 | 4.5 |
| 1975 | 5.4 | 4.4 | 5.0 | 2.5 | 2.3 | 3.2 | 2.7 | 3.0 | 3.2 | 6.3 | 5.0 | 4.6 |
| 1976 | 4.7 | 3.9 | 5.6 | 3.8 | 2.5 | 1.9 | 1.1 | 2.1 | 3.0 | 2.6 | 3.6 | 5.5 |
| 1977 | 5.0 | 6.9 | 5.2 | 1.9 | 2.4 | 1.6 | 3.3 | 2.5 | 5.4 | 3.7 | 5.6 | 6.3 |
| 1978 | 3.8 | 3.3 | 4.2 | 3.2 | 1.9 | 1.8 | 1.5 | 2.1 | 3.7 | 3.9 | 4.1 | 3.9 |
| 1979 | 3.8 | 3.9 | 3.7 | 5.0 | 2.5 | 1.8 | 2.3 | 1.9 | 2.1 | 2.8 | 3.9 | 3.5 |
| 1980 | 5.6 | 3.6 | 4.3 | 2.3 | 1.9 | 1.9 | 1.2 | 2.8 | 4.4 | 4.6 | 3.5 | 4.7 |
| 1981 | 3.6 | 3.0 | 4.1 | 3.7 | 1.7 | 3.5 | 1.2 | 1.3 | 5.7 | 3.0 | 4.5 | 3.4 |
| 1982 | 5.2 | 3.6 | 7.3 | 4.8 | 2.6 | 3.2 | 2.6 | 1.6 | 2.6 | 4.0 | 5.8 | 4.7 |
| 1983 | 3.8 | 4.5 | 4.8 | 3.0 | 1.9 | 2.1 | 2.6 | 1.8 | 2.9 | 3.1 | 4.9 | 4.6 |
| 1984 | 5.3 | 3.2 | 5.2 | 3.2 | 2.4 | 2.7 | 2.6 | 1.7 | 2.2 | 4.7 | 5.3 | 5.3 |
| 1985 | 4.4 | 3.7 | 7.9 | 4.1 | 3.2 | 4.2 | 1.2 | 2.2 | 4.0 | 4.0 | 3.0 | 4.8 |
| 1986 | 4.3 | 3.9 | 4.1 | 3.8 | 2.1 | 1.4 | 1.8 | 1.2 | 3.3 | 3.5 | 4.8 | 3.5 |
| 1987 | 3.2 | 5.4 | 5.7 | 2.6 | 2.6 | 1.6 | 1.7 | 2.7 | 1.7 | 3.3 | 3.7 | 3.4 |

32 YR. STATISTICS FOR WIS STATION S93

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 1.0 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 4.3 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 270.0 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.4 |
| LARGEST WAVE HS . . . . . | (METERS) | 8.1 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 11.1 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 276.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66012715 |

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 101 | 525 | 116 | . | . | . | . | . | . | . | 742 |
| 0.50-0.99 | . | 242 | 1575 | 51 | 5 | . | . | . | . | . | 1873 |
| 1.00-1.49 | . | . | 408 | 547 | 33 | . | . | . | . | . | 988 |
| 1.50-1.99 | . | . | 24 | 379 | 144 | 7 | 1 | . | . | . | 555 |
| 2.00-2.49 | . | . | . | 129 | 118 | 8 | 1 | . | . | . | 256 |
| 2.50-2.99 | . | . | . | 1 | 195 | 23 | . | . | . | . | 219 |
| 3.00-3.49 | . | . | . | . | 5 | 122 | . | . | . | . | 127 |
| 3.50-3.99 | . | . | . | . | . | 49 | . | . | . | . | 49 |
| 4.00-4.49 | . | . | . | . | . | 6 | 4 | . | . | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | . | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 101 | 767 | 2123 | 1107 | 500 | 215 | 11 | 0 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.7 NO. OF CASES= 4522.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 81 | 441 | 89 | . | . | . | . | . | . | . | 611 |
| 0.50-0.99 | . | 221 | 1349 | 54 | 5 | . | . | . | . | . | 1629 |
| 1.00-1.49 | . | . | 268 | 425 | 21 | . | . | . | . | . | 714 |
| 1.50-1.99 | . | . | 9 | 204 | 91 | 9 | . | . | . | . | 313 |
| 2.00-2.49 | . | . | . | 52 | 67 | 23 | . | . | . | . | 142 |
| 2.50-2.99 | . | . | . | . | 81 | 21 | . | . | . | . | 102 |
| 3.00-3.49 | . | . | . | . | 1 | 79 | . | . | . | . | 80 |
| 3.50-3.99 | . | . | . | . | . | 44 | 2 | . | . | . | 46 |
| 4.00-4.49 | . | . | . | . | . | 2 | 8 | . | . | . | 10 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 81 | 662 | 1715 | 735 | 266 | 178 | 10 | 0 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 3421.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 158 | 706 | 105 | 1 | . | . | . | . | . | . | 970 |
| 0.50-0.99 | . | 294 | 1694 | 51 | 6 | . | . | . | . | . | 2045 |
| 1.00-1.49 | . | . | 344 | 515 | 24 | 3 | . | . | . | . | 886 |
| 1.50-1.99 | . | . | 13 | 198 | 117 | 6 | 2 | . | . | . | 336 |
| 2.00-2.49 | . | . | . | 37 | 63 | 25 | . | . | . | . | 125 |
| 2.50-2.99 | . | . | . | . | 71 | 37 | . | . | . | . | 108 |
| 3.00-3.49 | . | . | . | . | 2 | 72 | . | . | . | . | 74 |
| 3.50-3.99 | . | . | . | . | . | 47 | 9 | . | . | . | 56 |
| 4.00-4.49 | . | . | . | . | . | . | 8 | . | . | . | 8 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 158 | 1000 | 2156 | 802 | 283 | 190 | 20 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.4 NO. OF CASES= 4322.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 182 | 660 | 66 | . | . | . | . | . | . | . | 908 |
| 0.50-0.99 | . | 391 | 1622 | 37 | 5 | . | . | . | . | . | 2055 |
| 1.00-1.49 | . | . | 313 | 437 | 26 | 4 | . | . | . | . | 780 |
| 1.50-1.99 | . | . | 11 | 196 | 78 | 8 | . | . | . | . | 293 |
| 2.00-2.49 | . | . | . | 42 | 59 | 17 | 4 | . | . | . | 122 |
| 2.50-2.99 | . | . | . | . | 65 | 23 | . | . | . | . | 88 |
| 3.00-3.49 | . | . | . | . | . | 56 | . | 1 | . | . | 57 |
| 3.50-3.99 | . | . | . | . | . | 23 | 1 | . | . | . | 24 |
| 4.00-4.49 | . | . | . | . | . | 1 | 8 | . | . | . | 9 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 182 | 1051 | 2012 | 712 | 233 | 132 | 14 | 2 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.3 NO. OF CASES= 4068.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 189 | 765 | 81 | 4 | . | . | . | . | . | . | 1039 |
| 0.50-0.99 | . | 402 | 1413 | 73 | 6 | . | . | . | . | . | 1894 |
| 1.00-1.49 | . | . | 253 | 274 | 39 | . | . | . | . | . | 566 |
| 1.50-1.99 | . | . | 8 | 171 | 47 | 20 | . | . | . | . | 246 |
| 2.00-2.49 | . | . | . | 65 | 40 | 10 | 2 | . | . | . | 117 |
| 2.50-2.99 | . | . | . | . | 62 | 8 | 1 | . | . | . | 71 |
| 3.00-3.49 | . | . | . | . | 9 | 40 | 1 | . | . | . | 50 |
| 3.50-3.99 | . | . | . | . | . | 21 | 2 | . | . | . | 23 |
| 4.00-4.49 | . | . | . | . | . | 6 | 1 | . | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | 3 | . | . | . | 3 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 189 | 1167 | 1755 | 587 | 203 | 105 | 10 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.2 NO. OF CASES= 3767.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 168 | 553 | 69 | . | . | . | . | . | . | . | 790 |
| 0.50-0.99 | . | 267 | 865 | 51 | 1 | . | . | . | . | . | 1184 |
| 1.00-1.49 | . | . | 193 | 204 | 26 | 3 | . | . | . | . | 426 |
| 1.50-1.99 | . | . | 4 | 104 | 44 | 11 | . | . | . | . | 163 |
| 2.00-2.49 | . | . | . | 34 | 32 | 36 | 2 | . | . | . | 104 |
| 2.50-2.99 | . | . | . | 2 | 31 | 14 | 3 | . | . | . | 50 |
| 3.00-3.49 | . | . | . | . | . | 23 | 1 | 1 | . | . | 25 |
| 3.50-3.99 | . | . | . | . | . | 9 | 2 | 1 | . | . | 12 |
| 4.00-4.49 | . | . | . | . | . | 1 | 3 | 1 | . | . | 5 |
| 4.50-4.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 168 | 820 | 1131 | 395 | 134 | 97 | 11 | 5 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 2593.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 220 | 824 | 362 | 1 | . | . | . | . | . | . | 1407 |
| 0.50-0.99 | . | 363 | 1836 | 331 | 9 | . | . | . | . | . | 2539 |
| 1.00-1.49 | . | . | 327 | 434 | 144 | 5 | . | . | . | . | 910 |
| 1.50-1.99 | . | . | 11 | 189 | 145 | 50 | 1 | . | . | . | 396 |
| 2.00-2.49 | . | . | . | 56 | 68 | 49 | 1 | . | . | . | 174 |
| 2.50-2.99 | . | . | . | . | 72 | 25 | 3 | 2 | . | . | 102 |
| 3.00-3.49 | . | . | . | . | 3 | 50 | 3 | 3 | . | . | 59 |
| 3.50-3.99 | . | . | . | . | . | 22 | 4 | 2 | . | . | 28 |
| 4.00-4.49 | . | . | . | . | . | 2 | 23 | . | . | . | 25 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 10 | . | . | 11 |
| 5.00-5.49 | . | . | . | . | . | . | . | 8 | . | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 220 | 1187 | 2536 | 1011 | 441 | 203 | 36 | 28 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 5307.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 268 | 1335 | 645 | 4 | . | . | . | . | . | . | 2252 |
| 0.50-0.99 | . | 490 | 3161 | 520 | 6 | . | . | . | . | . | 4177 |
| 1.00-1.49 | . | . | 401 | 929 | 269 | 5 | . | . | . | . | 1604 |
| 1.50-1.99 | . | . | 14 | 228 | 340 | 68 | . | . | . | . | 650 |
| 2.00-2.49 | . | . | . | 73 | 106 | 117 | 3 | . | . | . | 299 |
| 2.50-2.99 | . | . | . | 1 | 91 | 64 | 8 | 1 | . | . | 165 |
| 3.00-3.49 | . | . | . | . | 10 | 83 | 6 | . | . | . | 99 |
| 3.50-3.99 | . | . | . | . | . | 40 | 25 | . | . | . | 65 |
| 4.00-4.49 | . | . | . | . | . | 5 | 37 | 1 | . | . | 43 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 7 | . | . | 13 |
| 5.00-5.49 | . | . | . | . | . | . | . | 9 | . | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 5 | . | 8 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 268 | 1825 | 4221 | 1755 | 822 | 382 | 85 | 21 | 6 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.6 NO. OF CASES= 8793.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 240 | 1104 | 388 | 6 | . | . | . | . | . | . | 1738 |
| 0.50-0.99 | . | 458 | 2017 | 365 | 8 | . | . | . | . | . | 2848 |
| 1.00-1.49 | . | . | 425 | 790 | 142 | 7 | . | . | . | . | 1364 |
| 1.50-1.99 | . | . | 29 | 220 | 233 | 32 | . | . | . | . | 514 |
| 2.00-2.49 | . | . | . | 79 | 86 | 88 | 4 | . | . | . | 257 |
| 2.50-2.99 | . | . | . | 3 | 90 | 42 | 4 | 1 | . | . | 140 |
| 3.00-3.49 | . | . | . | . | 7 | 75 | 11 | 1 | . | . | 94 |
| 3.50-3.99 | . | . | . | . | . | 55 | 23 | 1 | . | . | 79 |
| 4.00-4.49 | . | . | . | . | . | 3 | 17 | 5 | . | . | 25 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 4 | . | . | 10 |
| 5.00-5.49 | . | . | . | . | . | . | 2 | 6 | . | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 1 | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 240 | 1562 | 2859 | 1463 | 566 | 302 | 67 | 20 | 1 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 6636.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 221 | 799 | 182 | . | . | . | . | . | . | . | 1202 |
| 0.50-0.99 | . | 370 | 1236 | 129 | 3 | . | . | . | . | . | 1738 |
| 1.00-1.49 | . | . | 344 | 270 | 37 | 1 | . | . | . | . | 652 |
| 1.50-1.99 | . | . | 36 | 228 | 71 | 6 | . | . | . | . | 341 |
| 2.00-2.49 | . | . | . | 71 | 54 | 26 | . | . | . | . | 151 |
| 2.50-2.99 | . | . | . | 2 | 60 | 18 | 1 | . | . | . | 81 |
| 3.00-3.49 | . | . | . | . | 7 | 33 | 1 | . | . | . | 41 |
| 3.50-3.99 | . | . | . | . | . | 9 | 6 | . | . | . | 15 |
| 4.00-4.49 | . | . | . | . | . | 5 | 4 | . | . | . | 9 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 221 | 1169 | 1798 | 700 | 232 | 98 | 14 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.2 NO. OF CASES= 3969.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 262 | 1075 | 425 | 6 | . | . | . | . | . | . | 1768 |
| 0.50-0.99 | . | 430 | 1654 | 379 | 7 | . | . | . | . | . | 2470 |
| 1.00-1.49 | . | . | 355 | 346 | 130 | 6 | . | . | . | . | 837 |
| 1.50-1.99 | . | . | 38 | 244 | 106 | 28 | 1 | . | . | . | 417 |
| 2.00-2.49 | . | . | . | 104 | 84 | 25 | 4 | . | . | . | 217 |
| 2.50-2.99 | . | . | . | 2 | 70 | 23 | 3 | 1 | . | . | 99 |
| 3.00-3.49 | . | . | . | . | 17 | 56 | 5 | . | . | . | 78 |
| 3.50-3.99 | . | . | . | . | . | 23 | 7 | 2 | . | . | 32 |
| 4.00-4.49 | . | . | . | . | . | 1 | 1 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | 1 | 3 | 2 | . | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 262 | 1505 | 2472 | 1081 | 414 | 163 | 24 | 5 | 0 | 0 | |

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.3 NO. OF CASES= 5556.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 287 | 1666 | 714 | 38 | . | . | . | . | . | . | 2705 |
| 0.50-0.99 | . | 689 | 2996 | 830 | 148 | 2 | . | . | . | . | 4665 |
| 1.00-1.49 | . | . | 740 | 775 | 320 | 139 | . | . | . | . | 1974 |
| 1.50-1.99 | . | . | 35 | 486 | 188 | 221 | 12 | . | . | . | 942 |
| 2.00-2.49 | . | . | . | 168 | 162 | 136 | 69 | 12 | . | . | 547 |
| 2.50-2.99 | . | . | . | 4 | 224 | 57 | 41 | 22 | . | . | 348 |
| 3.00-3.49 | . | . | . | . | 36 | 144 | 9 | 14 | 2 | . | 205 |
| 3.50-3.99 | . | . | . | . | 1 | 90 | 12 | 18 | 4 | . | 125 |
| 4.00-4.49 | . | . | . | . | . | 11 | 25 | 8 | 6 | . | 50 |
| 4.50-4.99 | . | . | . | . | . | 6 | 8 | 7 | 7 | . | 28 |
| 5.00-5.49 | . | . | . | . | . | . | 4 | 9 | 2 | . | 15 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | 1 | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | 2 | 3 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 287 | 2355 | 4485 | 2301 | 1079 | 806 | 180 | 91 | 24 | 4 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.7 NO. OF CASES= 10882.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 290 | 1891 | 245 | 11 | . | . | . | . | . | . | 2437 |
| 0.50-0.99 | . | 750 | 3033 | 163 | 57 | 2 | . | . | . | . | 4005 |
| 1.00-1.49 | . | . | 948 | 891 | 102 | 119 | . | . | . | . | 2060 |
| 1.50-1.99 | . | . | 29 | 770 | 192 | 109 | 17 | . | . | . | 1117 |
| 2.00-2.49 | . | . | . | 257 | 278 | 50 | 39 | 24 | . | . | 648 |
| 2.50-2.99 | . | . | . | 5 | 325 | 53 | 5 | 16 | 1 | . | 405 |
| 3.00-3.49 | . | . | . | . | 48 | 223 | 2 | 9 | 1 | . | 283 |
| 3.50-3.99 | . | . | . | . | . | 103 | 3 | . | 4 | . | 110 |
| 4.00-4.49 | . | . | . | . | . | 38 | 13 | 1 | 4 | . | 56 |
| 4.50-4.99 | . | . | . | . | . | 4 | 9 | 2 | . | . | 15 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 1 | 1 | 2 | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 290 | 2641 | 4255 | 2097 | 1002 | 701 | 89 | 53 | 12 | 2 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.6 NO. OF CASES= 10437.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 240 | 1324 | 142 | 2 | . | . | . | . | . | . | 1708 |
| 0.50-0.99 | . | 490 | 2462 | 68 | 4 | . | . | . | . | . | 3024 |
| 1.00-1.49 | . | . | 737 | 798 | 10 | 6 | . | . | . | . | 1551 |
| 1.50-1.99 | . | . | 17 | 662 | 162 | 8 | . | . | . | . | 849 |
| 2.00-2.49 | . | . | . | 177 | 236 | 8 | 3 | . | . | . | 424 |
| 2.50-2.99 | . | . | . | 4 | 242 | 22 | 1 | 1 | . | . | 270 |
| 3.00-3.49 | . | . | . | . | 31 | 144 | . | . | . | . | 175 |
| 3.50-3.99 | . | . | . | . | . | 62 | 1 | . | . | . | 63 |
| 4.00-4.49 | . | . | . | . | . | 13 | 8 | . | . | . | 21 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 240 | 1814 | 3358 | 1711 | 685 | 263 | 16 | 2 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 7576.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 125 | 784 | 131 | 4 | . | . | . | . | . | . | 1044 |
| 0.50-0.99 | . | 371 | 2263 | 45 | 1 | . | . | . | . | . | 2680 |
| 1.00-1.49 | . | . | 620 | 871 | 10 | . | . | . | . | . | 1501 |
| 1.50-1.99 | . | . | 19 | 665 | 197 | 1 | . | . | . | . | 882 |
| 2.00-2.49 | . | . | . | 162 | 284 | 12 | . | . | . | . | 458 |
| 2.50-2.99 | . | . | . | . | 364 | 49 | . | . | . | . | 413 |
| 3.00-3.49 | . | . | . | . | 9 | 182 | . | . | . | . | 191 |
| 3.50-3.99 | . | . | . | . | . | 36 | . | . | . | . | 36 |
| 4.00-4.49 | . | . | . | . | . | 3 | 4 | . | . | . | 7 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | . | . | . | 6 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 125 | 1155 | 3033 | 1747 | 865 | 283 | 10 | 0 | 0 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 6760.

STATION S94 47.95N 87.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

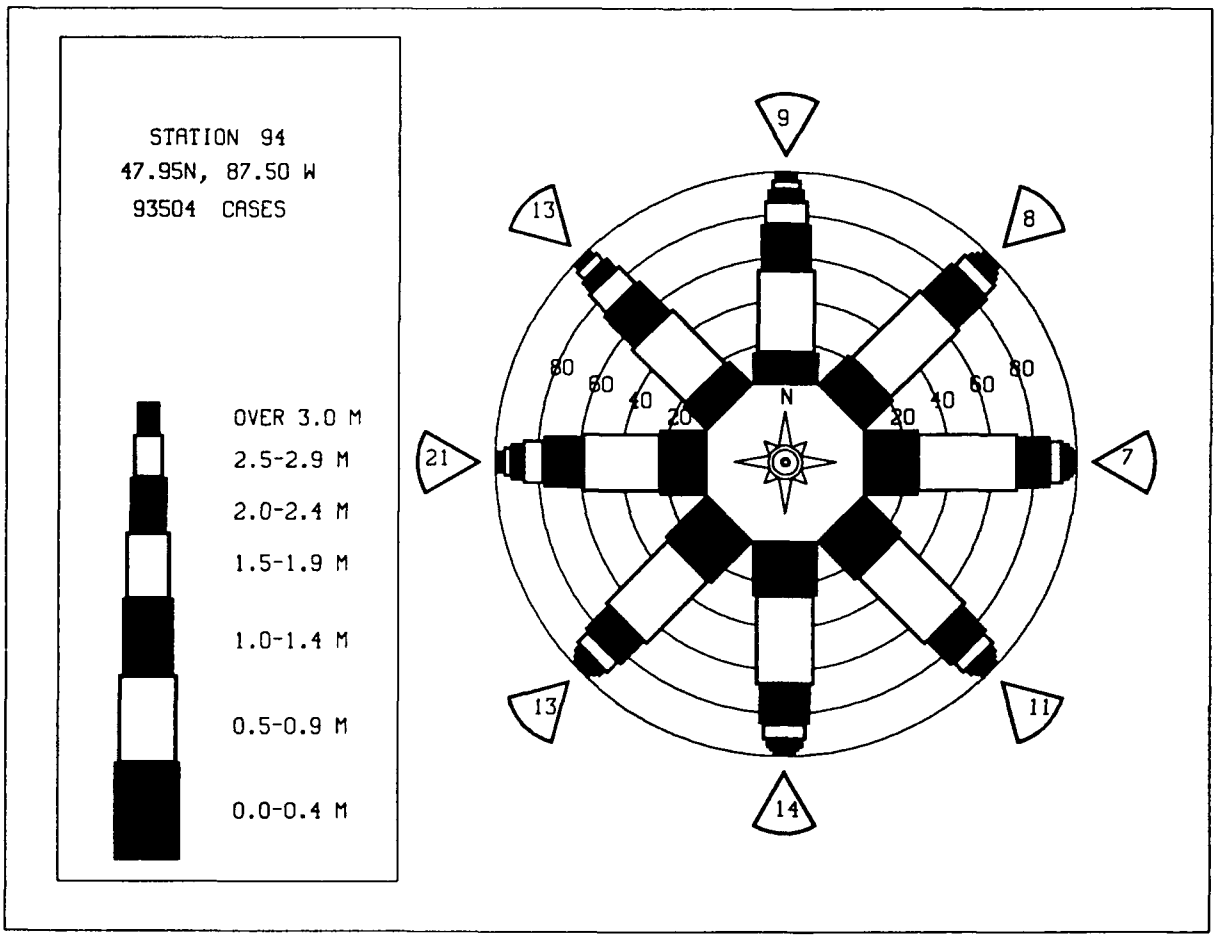
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 87 | 511 | 96 | . | . | . | . | . | . | . | 694 |
| 0.50-0.99 | . | 219 | 1588 | 63 | 4 | . | . | . | . | . | 1874 |
| 1.00-1.49 | . | . | 452 | 700 | 16 | . | . | . | . | . | 1168 |
| 1.50-1.99 | . | . | 27 | 462 | 170 | 3 | . | . | . | . | 662 |
| 2.00-2.49 | . | . | . | 130 | 186 | 5 | . | . | . | . | 321 |
| 2.50-2.99 | . | . | . | 2 | 251 | 51 | . | . | . | . | 304 |
| 3.00-3.49 | . | . | . | . | 7 | 139 | . | . | . | . | 146 |
| 3.50-3.99 | . | . | . | . | . | 40 | 1 | 1 | . | . | 42 |
| 4.00-4.49 | . | . | . | . | . | 7 | 5 | . | . | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | . | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 87 | 730 | 2163 | 1357 | 634 | 245 | 10 | 1 | 0 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.8 NO. OF CASES= 4895.

STATION S94 47.95N 87.50W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 312 | 1497 | 386 | 8 | . | . | . | . | . | . | 2203 |
| 0.50-0.99 | . | 645 | 3076 | 321 | 28 | . | . | . | . | . | 4070 |
| 1.00-1.49 | . | . | 713 | 921 | 135 | 30 | . | . | . | . | 1799 |
| 1.50-1.99 | . | . | 33 | 541 | 233 | 59 | 3 | . | . | . | 869 |
| 2.00-2.49 | . | . | . | 164 | 193 | 64 | 13 | 3 | . | . | 437 |
| 2.50-2.99 | . | . | . | 2 | 230 | 53 | 7 | 4 | . | . | 296 |
| 3.00-3.49 | . | . | . | . | 19 | 152 | 4 | 3 | . | . | 178 |
| 3.50-3.99 | . | . | . | . | . | 68 | 10 | 2 | . | . | 80 |
| 4.00-4.49 | . | . | . | . | . | 10 | 17 | 1 | 1 | . | 29 |
| 4.50-4.99 | . | . | . | . | . | 1 | 5 | 3 | . | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 312 | 2142 | 4208 | 1957 | 838 | 437 | 59 | 19 | 1 | 0 | |

MEAN HS(M)= 1.0 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S94 (47.95N 87.50W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.7 | 1.1 | 1.0 | 0.9 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 1.1 | 1.1 | 1.1 | 0.8 |
| 1957 | 1.2 | 1.2 | 0.9 | 0.8 | 0.8 | 0.6 | 0.5 | 0.6 | 0.8 | 0.8 | 1.2 | 1.2 | 0.9 |
| 1958 | 0.8 | 1.2 | 0.5 | 0.8 | 0.8 | 0.7 | 0.5 | 0.6 | 0.8 | 0.9 | 1.5 | 1.1 | 0.8 |
| 1959 | 1.0 | 1.0 | 0.9 | 0.8 | 0.8 | 0.5 | 0.5 | 0.5 | 0.8 | 0.9 | 1.2 | 1.2 | 0.8 |
| 1960 | 1.1 | 0.9 | 0.8 | 0.9 | 0.7 | 0.5 | 0.5 | 0.6 | 0.7 | 0.9 | 1.3 | 1.1 | 0.8 |
| 1961 | 0.9 | 0.9 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.8 | 0.9 | 1.0 | 1.0 | 0.8 |
| 1962 | 1.3 | 0.9 | 0.7 | 0.7 | 0.6 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 1.0 | 1.3 | 0.8 |
| 1963 | 1.2 | 1.3 | 1.2 | 0.9 | 0.7 | 0.5 | 0.6 | 0.5 | 0.7 | 0.9 | 1.2 | 1.3 | 0.9 |
| 1964 | 1.3 | 1.2 | 1.3 | 1.1 | 0.8 | 0.6 | 0.6 | 0.8 | 1.0 | 1.1 | 1.1 | 1.1 | 1.0 |
| 1965 | 1.6 | 1.6 | 1.1 | 0.9 | 0.8 | 0.8 | 0.7 | 0.6 | 0.9 | 1.3 | 1.7 | 1.5 | 1.1 |
| 1966 | 1.5 | 1.7 | 1.9 | 1.2 | 1.2 | 0.7 | 0.7 | 0.7 | 1.1 | 1.6 | 1.7 | 1.6 | 1.3 |
| 1967 | 1.6 | 1.7 | 1.6 | 1.2 | 1.2 | 0.9 | 0.7 | 0.8 | 1.3 | 2.1 | 1.6 | 2.0 | 1.4 |
| 1968 | 1.5 | 2.1 | 1.7 | 1.3 | 1.1 | 0.8 | 0.8 | 0.8 | 1.1 | 1.8 | 2.0 | 1.7 | 1.4 |
| 1969 | 1.7 | 1.1 | 1.3 | 0.9 | 0.9 | 0.7 | 0.6 | 0.8 | 1.1 | 1.5 | 1.6 | 1.1 | 1.1 |
| 1970 | 1.2 | 1.4 | 1.2 | 1.2 | 1.0 | 0.7 | 0.6 | 0.6 | 1.2 | 1.8 | 1.7 | 1.2 | 1.1 |
| 1971 | 1.4 | 1.3 | 1.2 | 1.0 | 0.8 | 0.5 | 0.6 | 0.6 | 0.9 | 1.5 | 1.6 | 1.1 | 1.1 |
| 1972 | 1.5 | 1.2 | 1.2 | 0.8 | 0.5 | 0.5 | 0.5 | 0.6 | 1.2 | 1.5 | 1.3 | 1.1 | 1.0 |
| 1973 | 1.2 | 1.2 | 1.2 | 1.0 | 0.9 | 0.6 | 0.6 | 0.5 | 1.1 | 1.2 | 1.6 | 1.1 | 1.0 |
| 1974 | 1.1 | 0.9 | 1.2 | 0.9 | 0.7 | 0.7 | 0.6 | 0.8 | 0.9 | 1.3 | 1.4 | 1.1 | 1.0 |
| 1975 | 1.0 | 0.8 | 0.8 | 0.5 | 0.5 | 0.7 | 0.6 | 0.7 | 1.0 | 1.5 | 1.6 | 1.2 | 0.9 |
| 1976 | 1.4 | 1.4 | 1.5 | 0.9 | 0.7 | 0.6 | 0.5 | 0.6 | 0.8 | 0.8 | 1.2 | 1.2 | 1.0 |
| 1977 | 1.3 | 1.5 | 1.3 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.8 | 0.9 | 1.1 | 1.3 | 0.9 |
| 1978 | 1.2 | 0.9 | 0.9 | 0.9 | 0.6 | 0.5 | 0.5 | 0.7 | 0.9 | 1.0 | 1.2 | 1.3 | 0.9 |
| 1979 | 1.0 | 0.8 | 1.1 | 0.7 | 0.7 | 0.7 | 0.5 | 0.7 | 0.9 | 1.2 | 1.5 | 1.3 | 0.9 |
| 1980 | 1.2 | 0.8 | 1.1 | 0.7 | 0.7 | 0.6 | 0.5 | 0.7 | 1.2 | 1.5 | 1.1 | 1.3 | 0.9 |
| 1981 | 1.0 | 1.1 | 1.1 | 0.8 | 0.6 | 0.6 | 0.4 | 0.4 | 1.0 | 1.3 | 1.3 | 1.0 | 0.9 |
| 1982 | 1.6 | 1.2 | 1.5 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 1.0 | 1.4 | 1.6 | 1.4 | 1.1 |
| 1983 | 1.3 | 1.0 | 1.4 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 1.0 | 1.2 | 1.8 | 1.4 | 1.0 |
| 1984 | 1.2 | 1.1 | 1.2 | 0.9 | 0.7 | 0.7 | 0.5 | 0.5 | 1.1 | 1.4 | 1.8 | 1.5 | 1.0 |
| 1985 | 1.5 | 1.2 | 1.4 | 0.8 | 0.7 | 0.8 | 0.5 | 0.7 | 1.1 | 1.4 | 1.4 | 1.4 | 1.1 |
| 1986 | 1.3 | 0.9 | 1.2 | 1.1 | 0.7 | 0.6 | 0.5 | 0.6 | 1.0 | 1.1 | 1.5 | 1.3 | 1.0 |
| 1987 | 1.1 | 1.1 | 1.2 | 0.7 | 0.6 | 0.4 | 0.5 | 0.6 | 0.6 | 1.0 | 1.2 | 1.1 | 0.9 |
| MEAN | 1.2 | 1.2 | 1.2 | 0.9 | 0.8 | 0.6 | 0.5 | 0.6 | 0.9 | 1.2 | 1.4 | 1.3 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S94 (47.95N 87.50W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 2.2 | 3.4 | 4.2 | 3.0 | 2.3 | 1.6 | 1.5 | 1.3 | 2.5 | 3.7 | 3.4 | 3.4 |
| 1957 | 3.0 | 3.3 | 3.0 | 2.7 | 3.0 | 2.9 | 2.6 | 1.9 | 2.9 | 2.4 | 3.4 | 3.7 |
| 1958 | 3.2 | 3.3 | 2.2 | 4.2 | 2.8 | 2.2 | 2.1 | 1.7 | 2.9 | 3.0 | 5.2 | 3.6 |
| 1959 | 3.0 | 4.1 | 3.3 | 3.1 | 3.8 | 1.7 | 2.0 | 2.0 | 2.6 | 3.3 | 3.8 | 4.4 |
| 1960 | 3.0 | 2.8 | 3.1 | 3.2 | 2.5 | 1.5 | 1.8 | 3.0 | 2.6 | 3.4 | 3.5 | 3.8 |
| 1961 | 3.5 | 2.8 | 3.6 | 2.9 | 2.2 | 1.6 | 1.6 | 2.0 | 2.6 | 2.8 | 4.1 | 3.5 |
| 1962 | 3.6 | 2.9 | 3.0 | 2.9 | 2.1 | 1.4 | 1.8 | 1.5 | 2.6 | 4.3 | 3.2 | 4.2 |
| 1963 | 3.4 | 3.8 | 3.8 | 3.3 | 2.2 | 1.7 | 1.7 | 1.7 | 2.8 | 2.7 | 4.1 | 4.5 |
| 1964 | 3.8 | 3.9 | 3.7 | 4.5 | 3.5 | 1.9 | 1.3 | 2.6 | 3.3 | 3.9 | 4.2 | 3.1 |
| 1965 | 3.9 | 4.3 | 4.1 | 3.1 | 2.7 | 2.3 | 1.7 | 2.2 | 3.3 | 3.7 | 5.2 | 3.6 |
| 1966 | 5.3 | 3.9 | 4.9 | 4.2 | 3.6 | 3.1 | 2.5 | 2.7 | 3.4 | 5.1 | 4.2 | 4.3 |
| 1967 | 3.9 | 4.0 | 4.1 | 4.0 | 4.3 | 3.3 | 2.7 | 2.7 | 4.0 | 6.2 | 3.9 | 5.1 |
| 1968 | 4.6 | 4.7 | 4.5 | 3.8 | 3.0 | 2.7 | 3.1 | 3.0 | 3.2 | 5.7 | 4.3 | 4.9 |
| 1969 | 3.8 | 3.5 | 4.2 | 2.7 | 2.8 | 2.2 | 1.8 | 2.8 | 3.1 | 4.4 | 5.1 | 3.7 |
| 1970 | 3.2 | 3.8 | 4.7 | 3.8 | 3.6 | 2.0 | 2.6 | 2.0 | 4.8 | 5.7 | 5.7 | 3.7 |
| 1971 | 3.4 | 4.0 | 3.8 | 3.0 | 3.1 | 1.7 | 2.1 | 1.3 | 3.4 | 5.3 | 5.7 | 4.0 |
| 1972 | 4.3 | 3.7 | 3.9 | 2.8 | 1.6 | 1.6 | 1.2 | 1.7 | 4.1 | 4.6 | 3.9 | 3.2 |
| 1973 | 3.0 | 3.1 | 3.5 | 2.9 | 3.3 | 1.9 | 1.7 | 1.2 | 4.0 | 3.5 | 4.0 | 3.8 |
| 1974 | 4.0 | 3.4 | 3.4 | 2.7 | 2.6 | 2.4 | 1.9 | 2.2 | 2.4 | 3.6 | 5.3 | 3.4 |
| 1975 | 4.0 | 3.1 | 2.3 | 1.2 | 1.9 | 2.4 | 1.8 | 2.6 | 3.7 | 6.1 | 5.5 | 3.6 |
| 1976 | 4.1 | 4.1 | 4.4 | 3.1 | 2.8 | 2.2 | 1.2 | 2.5 | 2.9 | 3.1 | 3.4 | 4.4 |
| 1977 | 4.5 | 4.1 | 4.0 | 2.8 | 2.1 | 1.5 | 2.9 | 2.3 | 5.3 | 3.1 | 6.0 | 4.0 |
| 1978 | 3.7 | 3.0 | 4.0 | 3.0 | 2.6 | 1.7 | 1.3 | 1.8 | 2.7 | 3.8 | 3.8 | 4.1 |
| 1979 | 3.4 | 2.9 | 3.6 | 3.7 | 2.9 | 3.6 | 1.7 | 2.4 | 2.3 | 4.3 | 5.5 | 3.2 |
| 1980 | 5.0 | 2.8 | 3.7 | 3.1 | 1.8 | 1.3 | 1.6 | 2.7 | 4.8 | 5.3 | 3.7 | 4.1 |
| 1981 | 3.2 | 2.9 | 3.4 | 3.1 | 1.8 | 2.9 | 1.1 | 1.5 | 5.1 | 4.5 | 3.8 | 2.8 |
| 1982 | 4.3 | 3.3 | 6.8 | 4.5 | 2.7 | 2.2 | 2.0 | 1.6 | 3.8 | 4.4 | 5.8 | 3.8 |
| 1983 | 4.4 | 4.6 | 3.8 | 2.6 | 1.8 | 1.6 | 2.4 | 2.3 | 3.0 | 4.4 | 4.5 | 4.7 |
| 1984 | 4.6 | 3.4 | 4.7 | 3.4 | 2.1 | 3.0 | 1.7 | 1.9 | 4.4 | 5.0 | 5.8 | 4.7 |
| 1985 | 4.1 | 3.6 | 5.2 | 3.6 | 1.9 | 3.2 | 1.5 | 2.8 | 4.7 | 4.4 | 3.6 | 4.2 |
| 1986 | 4.1 | 3.1 | 4.1 | 3.0 | 2.7 | 1.5 | 1.5 | 2.0 | 3.2 | 4.6 | 5.6 | 3.4 |
| 1987 | 2.9 | 4.9 | 3.5 | 2.7 | 2.5 | 1.3 | 1.7 | 2.2 | 2.3 | 3.9 | 3.5 | 3.5 |

32 YR. STATISTICS FOR WIS STATION S94

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 1.0 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 4.5 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 247.5 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.7 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.3 |
| LARGEST WAVE HS . . . . . | (METERS) | 6.8 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 251.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 82031318 |

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 118 | 725 | 198 | 3 | . | . | . | . | . | . | 1044 |
| 0.50-0.99 | . | 397 | 2296 | 174 | 3 | . | . | . | . | . | 2870 |
| 1.00-1.49 | . | . | 583 | 859 | 56 | . | . | . | . | . | 1498 |
| 1.50-1.99 | . | . | 41 | 433 | 243 | 13 | . | . | . | . | 730 |
| 2.00-2.49 | . | . | 1 | 207 | 162 | 98 | . | . | . | . | 468 |
| 2.50-2.99 | . | . | . | 1 | 249 | 54 | 3 | . | . | . | 307 |
| 3.00-3.49 | . | . | . | . | 19 | 270 | 8 | . | . | . | 297 |
| 3.50-3.99 | . | . | . | . | . | 141 | 47 | . | . | . | 188 |
| 4.00-4.49 | . | . | . | . | . | 14 | 115 | 5 | . | . | 134 |
| 4.50-4.99 | . | . | . | . | . | . | 40 | 33 | . | . | 73 |
| 5.00-5.49 | . | . | . | . | . | . | 3 | 32 | . | . | 35 |
| 5.50-5.99 | . | . | . | . | . | . | . | 16 | 1 | . | 17 |
| 6.00-6.49 | . | . | . | . | . | . | . | 6 | 1 | . | 7 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 6 | . | 6 |
| 7.00+ | . | . | . | . | . | . | . | . | 1 | . | 1 |
| TOTAL | 118 | 1122 | 3119 | 1677 | 732 | 590 | 216 | 92 | 9 | 0 | |

MEAN HS(M) = 1.3 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.9 NO. OF CASES= 7192.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 120 | 721 | 139 | . | . | . | . | . | . | . | 980 |
| 0.50-0.99 | . | 357 | 1947 | 100 | 1 | . | . | . | . | . | 2405 |
| 1.00-1.49 | . | . | 404 | 547 | 33 | . | . | . | . | . | 984 |
| 1.50-1.99 | . | . | 9 | 286 | 87 | 5 | . | . | . | . | 387 |
| 2.00-2.49 | . | . | . | 110 | 70 | 19 | . | . | . | . | 199 |
| 2.50-2.99 | . | . | . | 2 | 142 | 12 | 1 | . | . | . | 157 |
| 3.00-3.49 | . | . | . | . | 4 | 109 | 1 | . | . | . | 114 |
| 3.50-3.99 | . | . | . | . | . | 52 | 12 | 1 | . | . | 65 |
| 4.00-4.49 | . | . | . | . | . | 5 | 18 | . | . | . | 23 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 5 | . | . | 11 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | . | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 120 | 1078 | 2499 | 1045 | 337 | 202 | 38 | 11 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 4995.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 125 | 850 | 157 | 2 | . | . | . | . | . | . | 1134 |
| 0.50-0.99 | . | 343 | 1818 | 101 | . | . | . | . | . | . | 2262 |
| 1.00-1.49 | . | . | 391 | 498 | 20 | . | . | . | . | . | 909 |
| 1.50-1.99 | . | . | 14 | 250 | 71 | 3 | . | . | . | . | 338 |
| 2.00-2.49 | . | . | . | 104 | 77 | 10 | . | . | . | . | 191 |
| 2.50-2.99 | . | . | . | 1 | 114 | 20 | . | . | . | . | 135 |
| 3.00-3.49 | . | . | . | . | 2 | 75 | . | . | . | . | 77 |
| 3.50-3.99 | . | . | . | . | . | 25 | . | . | . | . | 25 |
| 4.00-4.49 | . | . | . | . | . | 4 | 8 | . | . | . | 12 |
| 4.50-4.99 | . | . | . | . | . | . | 4 | . | . | . | 4 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 125 | 1193 | 2380 | 956 | 284 | 137 | 12 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.4 NO. OF CASES= 4766.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 99 | 543 | 112 | 2 | . | . | . | . | . | . | 756 |
| 0.50-0.99 | . | 275 | 1346 | 55 | . | . | . | . | . | . | 1676 |
| 1.00-1.49 | . | . | 285 | 280 | 8 | . | . | . | . | . | 573 |
| 1.50-1.99 | . | . | 4 | 139 | 55 | . | . | . | . | . | 198 |
| 2.00-2.49 | . | . | . | 41 | 59 | 14 | . | . | . | . | 114 |
| 2.50-2.99 | . | . | . | . | 42 | 22 | 1 | . | . | . | 65 |
| 3.00-3.49 | . | . | . | . | 2 | 35 | 2 | . | . | . | 39 |
| 3.50-3.99 | . | . | . | . | . | 12 | 2 | . | . | . | 14 |
| 4.00-4.49 | . | . | . | . | . | . | 6 | . | . | . | 6 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 99 | 818 | 1747 | 517 | 166 | 83 | 11 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 3228.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 91 | 502 | 108 | 3 | . | . | . | . | . | . | 704 |
| 0.50-0.99 | . | 220 | 1032 | 55 | . | . | . | . | . | . | 1307 |
| 1.00-1.49 | . | . | 201 | 283 | 10 | . | . | . | . | . | 494 |
| 1.50-1.99 | . | . | 3 | 89 | 73 | 3 | . | . | . | . | 168 |
| 2.00-2.49 | . | . | . | 23 | 39 | 22 | . | . | . | . | 84 |
| 2.50-2.99 | . | . | . | . | 31 | 23 | 1 | . | . | . | 55 |
| 3.00-3.49 | . | . | . | . | 1 | 42 | 2 | . | . | . | 45 |
| 3.50-3.99 | . | . | . | . | . | 17 | 10 | . | . | . | 27 |
| 4.00-4.49 | . | . | . | . | . | 1 | 8 | . | . | . | 9 |
| 4.50-4.99 | . | . | . | . | . | . | 1 | 1 | . | . | 2 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 91 | 722 | 1344 | 453 | 154 | 108 | 22 | 1 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 2717.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 71 | 350 | 68 | 1 | . | . | . | . | . | . | 490 |
| 0.50-0.99 | . | 150 | 873 | 50 | . | . | . | . | . | . | 1073 |
| 1.00-1.49 | . | . | 199 | 278 | 16 | . | . | . | . | . | 493 |
| 1.50-1.99 | . | . | 2 | 117 | 86 | . | . | . | . | . | 205 |
| 2.00-2.49 | . | . | . | 20 | 75 | 32 | . | . | . | . | 127 |
| 2.50-2.99 | . | . | . | . | 37 | 21 | . | . | . | . | 58 |
| 3.00-3.49 | . | . | . | . | 1 | 26 | 3 | . | . | . | 30 |
| 3.50-3.99 | . | . | . | . | . | 9 | 4 | . | . | . | 13 |
| 4.00-4.49 | . | . | . | . | . | . | 2 | . | . | . | 2 |
| 4.50-4.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 71 | 500 | 1142 | 466 | 215 | 88 | 9 | 3 | 0 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 2342.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 82 | 504 | 140 | 1 | . | . | . | . | . | . | 727 |
| 0.50-0.99 | . | 317 | 1599 | 103 | . | . | . | . | . | . | 2019 |
| 1.00-1.49 | . | . | 300 | 451 | 32 | . | . | . | . | . | 783 |
| 1.50-1.99 | . | . | 11 | 171 | 124 | 9 | . | . | . | . | 315 |
| 2.00-2.49 | . | . | . | 45 | 72 | 34 | . | . | . | . | 151 |
| 2.50-2.99 | . | . | . | . | 77 | 13 | 1 | . | . | . | 91 |
| 3.00-3.49 | . | . | . | . | 7 | 36 | 2 | . | . | . | 45 |
| 3.50-3.99 | . | . | . | . | . | 2 | 3 | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 82 | 821 | 2050 | 771 | 312 | 94 | 7 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.4 NO. OF CASES= 3878.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 120 | 713 | 129 | 4 | . | . | . | . | . | . | 966 |
| 0.50-0.99 | . | 405 | 1709 | 54 | . | . | . | . | . | . | 2168 |
| 1.00-1.49 | . | . | 362 | 388 | 16 | . | . | . | . | . | 766 |
| 1.50-1.99 | . | . | 11 | 183 | 93 | 5 | . | . | . | . | 292 |
| 2.00-2.49 | . | . | . | 63 | 82 | 9 | . | . | . | . | 154 |
| 2.50-2.99 | . | . | . | 2 | 88 | 4 | . | . | . | . | 94 |
| 3.00-3.49 | . | . | . | . | 3 | 31 | 1 | . | . | . | 35 |
| 3.50-3.99 | . | . | . | . | . | 5 | . | . | . | . | 5 |
| 4.00-4.49 | . | . | . | . | . | . | 1 | . | . | . | 1 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 120 | 1118 | 2211 | 694 | 282 | 54 | 2 | 0 | 0 | 0 | |

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 4198.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 191 | 932 | 142 | . | . | . | . | . | . | . | 1265 |
| 0.50-0.99 | . | 603 | 2305 | 43 | 1 | . | . | . | . | . | 2952 |
| 1.00-1.49 | . | . | 675 | 633 | 12 | . | . | . | . | . | 1320 |
| 1.50-1.99 | . | . | 35 | 606 | 155 | 1 | . | . | . | . | 797 |
| 2.00-2.49 | . | . | . | 144 | 227 | 7 | . | . | . | . | 378 |
| 2.50-2.99 | . | . | . | 3 | 315 | 13 | . | . | . | . | 331 |
| 3.00-3.49 | . | . | . | . | 7 | 100 | . | . | . | . | 107 |
| 3.50-3.99 | . | . | . | . | . | 39 | . | 1 | . | . | 40 |
| 4.00-4.49 | . | . | . | . | . | 17 | 7 | . | . | . | 24 |
| 4.50-4.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.00-5.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 5.50-5.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 191 | 1535 | 3157 | 1429 | 717 | 177 | 7 | 1 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.5 NO. OF CASES= 6756.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 127 | 1027 | 152 | 8 | . | . | . | . | . | . | 1314 |
| 0.50-0.99 | . | 625 | 3672 | 80 | 1 | . | . | . | . | . | 4378 |
| 1.00-1.49 | . | . | 988 | 1220 | 9 | . | . | . | . | . | 2217 |
| 1.50-1.99 | . | . | 73 | 799 | 382 | 1 | . | . | . | . | 1255 |
| 2.00-2.49 | . | . | . | 212 | 348 | 60 | . | . | . | . | 620 |
| 2.50-2.99 | . | . | . | 4 | 315 | 97 | . | . | . | . | 416 |
| 3.00-3.49 | . | . | . | . | 12 | 264 | . | . | . | . | 276 |
| 3.50-3.99 | . | . | . | . | . | 115 | 14 | . | . | . | 129 |
| 4.00-4.49 | . | . | . | . | . | 11 | 44 | . | . | . | 55 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 5 | . | . | 12 |
| 5.00-5.49 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 5.50-5.99 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 127 | 1652 | 4885 | 2323 | 1067 | 548 | 65 | 8 | 0 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.7 NO. OF CASES= 9997.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 102 | 801 | 159 | 2 | . | . | . | . | . | . | 1064 |
| 0.50-0.99 | . | 485 | 2171 | 73 | 3 | . | . | . | . | . | 2732 |
| 1.00-1.49 | . | . | 580 | 717 | 11 | . | . | . | . | . | 1308 |
| 1.50-1.99 | . | . | 28 | 379 | 175 | 2 | . | . | . | . | 584 |
| 2.00-2.49 | . | . | . | 109 | 150 | 43 | . | . | . | . | 302 |
| 2.50-2.99 | . | . | . | 1 | 128 | 60 | . | . | . | . | 189 |
| 3.00-3.49 | . | . | . | . | 5 | 130 | . | . | . | . | 135 |
| 3.50-3.99 | . | . | . | . | . | 78 | 12 | . | . | . | 90 |
| 4.00-4.49 | . | . | . | . | . | 1 | 32 | . | . | . | 33 |
| 4.50-4.99 | . | . | . | . | . | . | 2 | 3 | . | . | 5 |
| 5.00-5.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 5.50-5.99 | . | . | . | . | . | . | . | 5 | . | . | 5 |
| 6.00-6.49 | . | . | . | . | . | . | . | 1 | . | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 102 | 1286 | 2938 | 1281 | 472 | 314 | 46 | 10 | 0 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.6 NO. OF CASES= 6042.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 109 | 633 | 142 | 7 | . | 1 | . | . | . | . | 891 |
| 0.50-0.99 | . | 362 | 1787 | 84 | 4 | 1 | . | . | . | . | 2238 |
| 1.00-1.49 | . | . | 483 | 592 | 14 | 2 | . | . | . | . | 1091 |
| 1.50-1.99 | . | . | 26 | 288 | 140 | 3 | . | . | . | . | 457 |
| 2.00-2.49 | . | . | . | 80 | 113 | 50 | . | . | . | . | 243 |
| 2.50-2.99 | . | . | . | . | 89 | 44 | . | . | . | . | 133 |
| 3.00-3.49 | . | . | . | . | 3 | 115 | 1 | . | . | . | 119 |
| 3.50-3.99 | . | . | . | . | . | 49 | 11 | . | . | . | 60 |
| 4.00-4.49 | . | . | . | . | . | . | 17 | . | . | . | 17 |
| 4.50-4.99 | . | . | . | . | . | . | 5 | 5 | . | . | 10 |
| 5.00-5.49 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 109 | 995 | 2438 | 1051 | 363 | 264 | 34 | 10 | 1 | 0 | |

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.6 NO. OF CASES= 4934.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 145 | 897 | 198 | 1 | . | . | . | . | . | . | 1241 |
| 0.50-0.99 | . | 451 | 2398 | 111 | 7 | 1 | . | . | . | . | 2968 |
| 1.00-1.49 | . | 1 | 688 | 842 | 43 | 7 | 2 | . | 1 | . | 1584 |
| 1.50-1.99 | . | . | 45 | 411 | 205 | 8 | . | 1 | 1 | . | 671 |
| 2.00-2.49 | . | . | . | 149 | 130 | 66 | . | . | . | . | 345 |
| 2.50-2.99 | . | . | . | 1 | 136 | 74 | 1 | . | . | . | 212 |
| 3.00-3.49 | . | . | . | . | 6 | 168 | 3 | . | . | . | 177 |
| 3.50-3.99 | . | . | . | . | 1 | 63 | 7 | 1 | . | . | 72 |
| 4.00-4.49 | . | . | . | . | . | 4 | 45 | . | . | . | 49 |
| 4.50-4.99 | . | . | . | . | . | . | 6 | 3 | . | . | 9 |
| 5.00-5.49 | . | . | . | . | . | . | . | 5 | . | . | 5 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | . | . | 2 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | 1 | . | 1 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 145 | 1349 | 3329 | 1515 | 528 | 391 | 64 | 12 | 4 | 0 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.6 NO. OF CASES= 6877.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 117 | 1160 | 479 | 25 | 2 | . | . | . | . | . | 1783 |
| 0.50-0.99 | . | 524 | 2969 | 513 | 53 | 7 | 1 | . | . | . | 4067 |
| 1.00-1.49 | . | 1 | 705 | 1116 | 299 | 52 | 12 | 3 | . | . | 2188 |
| 1.50-1.99 | . | . | 54 | 445 | 360 | 133 | 16 | 4 | . | . | 1012 |
| 2.00-2.49 | . | . | . | 159 | 171 | 151 | 13 | 3 | 1 | . | 498 |
| 2.50-2.99 | . | . | . | 5 | 162 | 82 | 21 | 4 | 2 | 2 | 278 |
| 3.00-3.49 | . | . | . | . | 13 | 161 | 18 | 6 | 3 | . | 201 |
| 3.50-3.99 | . | . | . | . | . | 122 | 34 | 3 | 1 | . | 160 |
| 4.00-4.49 | . | . | . | . | . | 11 | 59 | 12 | . | . | 82 |
| 4.50-4.99 | . | . | . | . | . | . | 17 | 17 | 2 | . | 36 |
| 5.00-5.49 | . | . | . | . | . | . | . | 6 | 2 | . | 8 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | . | . | 3 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 117 | 1685 | 4207 | 2263 | 1060 | 719 | 191 | 61 | 11 | 2 | |

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.9 NO. OF CASES= 9667.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 98 | 752 | 403 | 3 | . | . | . | . | . | . | 1256 |
| 0.50-0.99 | . | 361 | 2837 | 519 | 13 | . | . | . | . | . | 3730 |
| 1.00-1.49 | . | . | 563 | 1289 | 245 | 9 | . | . | . | . | 2106 |
| 1.50-1.99 | . | . | 45 | 392 | 555 | 114 | 1 | . | . | . | 1107 |
| 2.00-2.49 | . | . | . | 126 | 143 | 265 | 7 | . | . | . | 541 |
| 2.50-2.99 | . | . | . | 3 | 224 | 120 | 43 | 1 | . | . | 391 |
| 3.00-3.49 | . | . | . | . | 14 | 213 | 40 | 12 | . | . | 279 |
| 3.50-3.99 | . | . | . | . | . | 91 | 83 | 11 | 1 | . | 186 |
| 4.00-4.49 | . | . | . | . | . | 3 | 78 | 34 | 1 | . | 116 |
| 4.50-4.99 | . | . | . | . | . | . | 7 | 45 | 2 | . | 54 |
| 5.00-5.49 | . | . | . | . | . | . | . | 12 | 1 | . | 13 |
| 5.50-5.99 | . | . | . | . | . | . | . | 2 | 8 | . | 10 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | 3 | . | 3 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 98 | 1113 | 3848 | 2332 | 1194 | 815 | 259 | 117 | 16 | 0 | |

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 5.1 NO. OF CASES= 9177.

STATION S95 47.23N 86.43W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

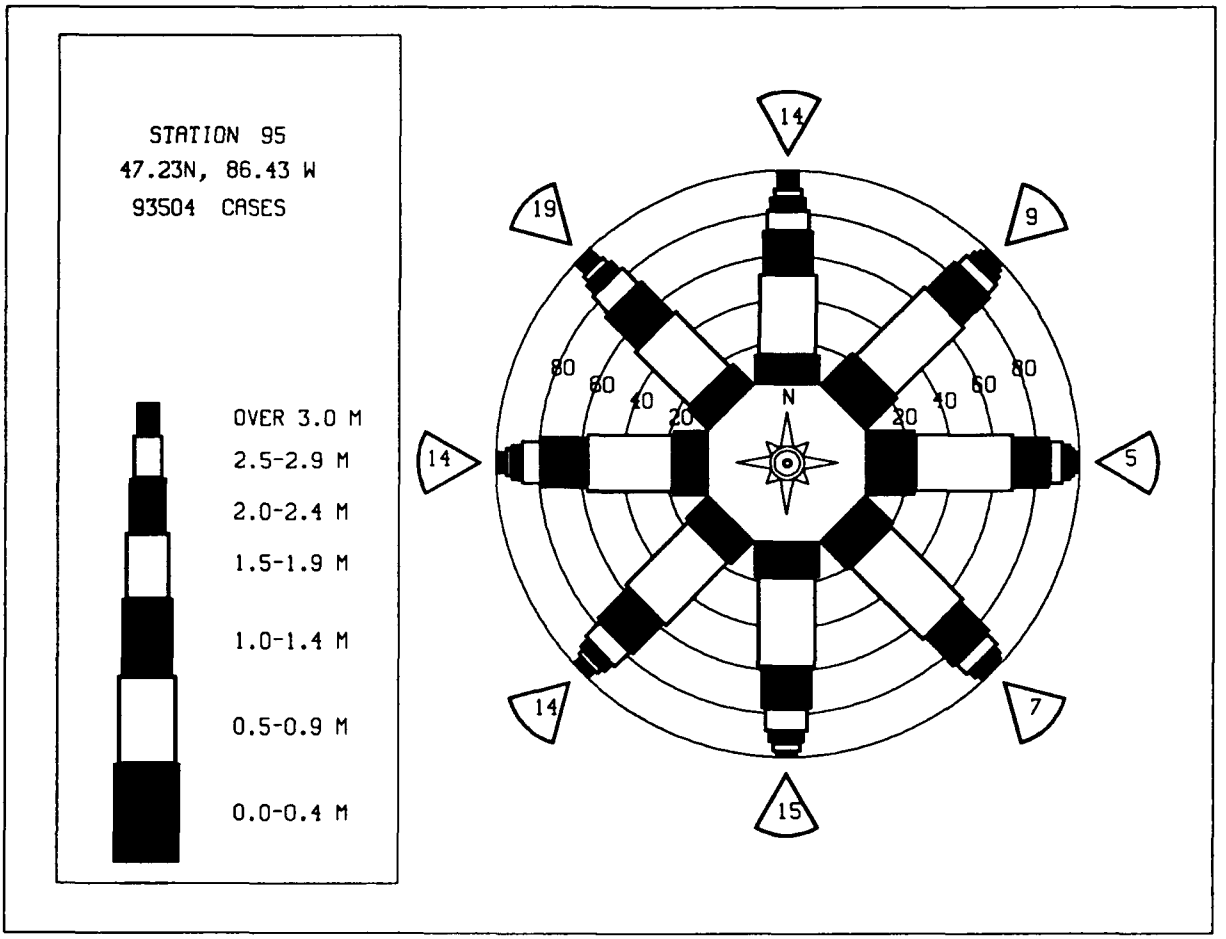
| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 74 | 578 | 156 | 4 | . | . | . | . | . | . | 812 |
| 0.50-0.99 | . | 285 | 1883 | 190 | 2 | . | . | . | . | . | 2360 |
| 1.00-1.49 | . | 1 | 499 | 1006 | 87 | 3 | . | . | . | . | 1596 |
| 1.50-1.99 | . | . | 45 | 419 | 345 | 47 | . | . | . | . | 856 |
| 2.00-2.49 | . | . | . | 189 | 167 | 160 | 1 | . | . | . | 517 |
| 2.50-2.99 | . | . | . | 2 | 268 | 87 | 12 | . | . | . | 369 |
| 3.00-3.49 | . | . | . | . | 16 | 222 | 20 | 1 | . | . | 259 |
| 3.50-3.99 | . | . | . | . | . | 110 | 72 | 6 | . | . | 188 |
| 4.00-4.49 | . | . | . | . | . | 6 | 100 | 20 | . | . | 126 |
| 4.50-4.99 | . | . | . | . | . | . | 18 | 48 | . | . | 66 |
| 5.00-5.49 | . | . | . | . | . | . | . | 27 | 5 | . | 32 |
| 5.50-5.99 | . | . | . | . | . | . | . | 4 | 5 | . | 9 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | | | | | | | | | | | 0 |
| TOTAL | 74 | 864 | 2583 | 1810 | 885 | 635 | 223 | 106 | 10 | 0 | |

MEAN HS(M) = 1.4 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 5.2 NO. OF CASES= 6738.

STATION S95 47.23N 86.43W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

| HEIGHT(METRES) | PEAK PERIOD(SECONDS) | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | <3.0 | 3.0-3.9 | 4.0-4.9 | 5.0-5.9 | 6.0-6.9 | 7.0-7.9 | 8.0-8.9 | 9.0-9.9 | 10.0-10.9 | 11.0-LONGER | |
| 0.00-0.49 | 179 | 1169 | 288 | 6 | . | . | . | . | . | . | 1642 |
| 0.50-0.99 | . | 616 | 3264 | 231 | 9 | . | . | . | . | . | 4120 |
| 1.00-1.49 | . | . | 791 | 1100 | 91 | 7 | 1 | . | . | . | 1990 |
| 1.50-1.99 | . | . | 45 | 541 | 315 | 35 | 1 | . | . | . | 937 |
| 2.00-2.49 | . | . | . | 178 | 209 | 104 | 2 | . | . | . | 493 |
| 2.50-2.99 | . | . | . | 2 | 242 | 75 | 8 | . | . | . | 327 |
| 3.00-3.49 | . | . | . | . | 12 | 200 | 10 | 2 | . | . | 224 |
| 3.50-3.99 | . | . | . | . | . | 93 | 31 | 2 | . | . | 126 |
| 4.00-4.49 | . | . | . | . | . | 8 | 54 | 7 | . | . | 69 |
| 4.50-4.99 | . | . | . | . | . | . | 11 | 16 | . | . | 27 |
| 5.00-5.49 | . | . | . | . | . | . | . | 9 | . | . | 9 |
| 5.50-5.99 | . | . | . | . | . | . | . | 3 | 1 | . | 4 |
| 6.00-6.49 | . | . | . | . | . | . | . | . | . | . | 0 |
| 6.50-6.99 | . | . | . | . | . | . | . | . | . | . | 0 |
| 7.00+ | . | . | . | . | . | . | . | . | . | . | 0 |
| TOTAL | 179 | 1785 | 4388 | 2058 | 878 | 522 | 118 | 39 | 1 | 0 | |

MEAN HS(M)= 1.1 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION S95 (47.23N 86.43W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 0.7 | 1.1 | 1.0 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 1.0 | 1.1 | 1.1 | 0.8 |
| 1957 | 1.7 | 1.5 | 1.2 | 1.0 | 1.0 | 0.9 | 0.7 | 0.8 | 1.2 | 1.0 | 1.4 | 1.7 | 1.2 |
| 1958 | 1.1 | 1.7 | 0.7 | 1.0 | 0.9 | 0.8 | 0.6 | 0.6 | 0.9 | 1.0 | 1.8 | 1.3 | 1.1 |
| 1959 | 1.0 | 1.1 | 1.0 | 0.8 | 0.9 | 0.5 | 0.5 | 0.5 | 0.8 | 0.9 | 1.2 | 1.3 | 0.9 |
| 1960 | 1.3 | 1.3 | 0.9 | 1.0 | 0.9 | 0.6 | 0.5 | 0.7 | 0.7 | 1.1 | 1.6 | 1.3 | 1.0 |
| 1961 | 1.0 | 1.1 | 1.3 | 0.8 | 0.8 | 0.7 | 0.4 | 0.5 | 1.0 | 1.1 | 1.3 | 1.2 | 0.9 |
| 1962 | 1.5 | 1.1 | 0.8 | 0.9 | 0.7 | 0.5 | 0.5 | 0.6 | 0.8 | 0.9 | 1.3 | 1.6 | 0.9 |
| 1963 | 1.4 | 1.5 | 1.5 | 1.1 | 0.8 | 0.7 | 0.7 | 0.7 | 0.8 | 1.0 | 1.5 | 1.5 | 1.1 |
| 1964 | 1.7 | 1.7 | 1.6 | 1.3 | 1.0 | 0.8 | 0.6 | 0.9 | 1.2 | 1.3 | 1.3 | 1.3 | 1.2 |
| 1965 | 1.8 | 1.9 | 1.3 | 1.0 | 0.9 | 0.8 | 0.8 | 0.7 | 0.9 | 1.6 | 1.7 | 1.8 | 1.3 |
| 1966 | 1.6 | 1.8 | 2.1 | 1.1 | 1.2 | 0.7 | 0.8 | 0.7 | 1.0 | 1.7 | 2.0 | 1.8 | 1.4 |
| 1967 | 1.9 | 1.9 | 1.6 | 1.2 | 1.0 | 0.7 | 0.7 | 0.8 | 1.1 | 1.6 | 1.5 | 1.8 | 1.3 |
| 1968 | 1.6 | 2.3 | 1.7 | 1.3 | 1.0 | 0.7 | 0.8 | 0.8 | 0.9 | 1.6 | 1.8 | 1.8 | 1.4 |
| 1969 | 1.9 | 1.3 | 1.7 | 1.1 | 0.9 | 0.8 | 0.6 | 0.8 | 1.0 | 1.5 | 1.5 | 1.5 | 1.2 |
| 1970 | 1.6 | 1.9 | 1.3 | 1.4 | 1.1 | 0.8 | 0.7 | 0.7 | 1.2 | 1.6 | 1.7 | 1.6 | 1.3 |
| 1971 | 1.4 | 1.5 | 1.4 | 1.0 | 0.8 | 0.5 | 0.6 | 0.6 | 0.8 | 1.2 | 1.4 | 1.3 | 1.0 |
| 1972 | 1.6 | 1.3 | 1.4 | 0.8 | 0.5 | 0.6 | 0.6 | 0.6 | 1.1 | 1.4 | 1.2 | 1.5 | 1.1 |
| 1973 | 1.5 | 1.4 | 1.6 | 1.2 | 0.9 | 0.6 | 0.7 | 0.7 | 1.0 | 1.2 | 1.6 | 1.4 | 1.2 |
| 1974 | 1.3 | 1.1 | 1.4 | 1.1 | 0.8 | 0.7 | 0.6 | 0.7 | 0.9 | 1.3 | 1.3 | 1.4 | 1.0 |
| 1975 | 1.5 | 0.9 | 1.2 | 0.7 | 0.5 | 0.7 | 0.7 | 0.7 | 0.9 | 1.4 | 1.6 | 1.4 | 1.0 |
| 1976 | 1.8 | 1.7 | 2.0 | 1.3 | 0.9 | 0.8 | 0.6 | 0.8 | 1.0 | 0.9 | 1.3 | 1.5 | 1.2 |
| 1977 | 1.4 | 1.6 | 1.2 | 0.8 | 0.6 | 0.7 | 0.6 | 0.7 | 0.9 | 1.1 | 1.3 | 1.4 | 1.0 |
| 1978 | 1.7 | 1.1 | 1.0 | 1.0 | 0.8 | 0.7 | 0.7 | 0.9 | 0.9 | 1.3 | 1.5 | 1.4 | 1.1 |
| 1979 | 1.4 | 1.2 | 1.5 | 0.8 | 0.7 | 0.7 | 0.5 | 0.7 | 1.1 | 1.1 | 1.6 | 1.7 | 1.1 |
| 1980 | 1.4 | 1.0 | 1.3 | 0.9 | 0.6 | 0.6 | 0.5 | 0.7 | 1.1 | 1.4 | 1.1 | 1.4 | 1.0 |
| 1981 | 1.0 | 1.3 | 1.2 | 1.0 | 0.7 | 0.6 | 0.5 | 0.4 | 0.9 | 1.2 | 1.4 | 1.2 | 1.0 |
| 1982 | 1.9 | 1.3 | 1.8 | 1.2 | 0.6 | 0.6 | 0.6 | 0.5 | 1.1 | 1.3 | 1.4 | 1.6 | 1.2 |
| 1983 | 1.6 | 1.3 | 1.7 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.9 | 1.1 | 1.7 | 1.5 | 1.1 |
| 1984 | 1.4 | 1.4 | 1.6 | 1.0 | 0.7 | 0.7 | 0.5 | 0.5 | 1.0 | 1.2 | 1.9 | 1.8 | 1.1 |
| 1985 | 1.5 | 1.5 | 1.6 | 1.0 | 0.6 | 0.7 | 0.5 | 0.6 | 1.0 | 1.1 | 1.2 | 1.5 | 1.1 |
| 1986 | 1.6 | 0.9 | 1.5 | 1.2 | 0.6 | 0.7 | 0.5 | 0.6 | 0.8 | 1.0 | 1.4 | 1.5 | 1.0 |
| 1987 | 1.4 | 1.2 | 1.4 | 0.9 | 0.7 | 0.5 | 0.6 | 0.7 | 0.7 | 1.2 | 1.3 | 1.4 | 1.0 |
| MEAN | 1.5 | 1.4 | 1.4 | 1.0 | 0.8 | 0.7 | 0.6 | 0.7 | 0.9 | 1.2 | 1.5 | 1.5 | |

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION S95 (47.23N 86.43W)

MONTH

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1956 | 1.9 | 3.8 | 4.1 | 2.8 | 1.8 | 1.5 | 1.3 | 1.4 | 2.7 | 4.3 | 3.4 | 3.2 |
| 1957 | 3.9 | 4.5 | 3.8 | 3.5 | 3.0 | 3.3 | 3.6 | 2.4 | 3.7 | 3.2 | 4.7 | 4.6 |
| 1958 | 4.0 | 4.4 | 3.4 | 4.0 | 3.2 | 2.3 | 1.9 | 1.8 | 2.6 | 3.0 | 5.5 | 4.2 |
| 1959 | 3.1 | 3.6 | 3.6 | 2.4 | 3.7 | 1.7 | 1.5 | 1.4 | 2.6 | 3.9 | 3.5 | 4.6 |
| 1960 | 4.0 | 4.1 | 3.4 | 2.9 | 2.9 | 1.8 | 1.8 | 2.6 | 2.3 | 4.7 | 4.6 | 3.9 |
| 1961 | 5.1 | 3.4 | 4.5 | 2.7 | 2.6 | 2.1 | 2.0 | 1.6 | 2.8 | 3.7 | 4.4 | 4.4 |
| 1962 | 4.2 | 4.2 | 3.5 | 3.5 | 2.5 | 1.9 | 1.9 | 2.1 | 2.4 | 4.8 | 3.3 | 4.9 |
| 1963 | 3.4 | 5.3 | 5.4 | 4.5 | 2.5 | 2.2 | 2.3 | 2.3 | 2.9 | 3.6 | 5.4 | 5.2 |
| 1964 | 4.9 | 4.4 | 4.4 | 5.6 | 3.3 | 3.7 | 1.7 | 2.8 | 4.4 | 4.7 | 4.7 | 3.7 |
| 1965 | 4.4 | 4.8 | 4.3 | 3.0 | 2.3 | 2.3 | 2.5 | 2.7 | 3.2 | 5.0 | 5.9 | 4.9 |
| 1966 | 5.3 | 4.8 | 5.5 | 3.6 | 3.5 | 3.0 | 2.4 | 2.6 | 3.5 | 5.2 | 7.0 | 4.3 |
| 1967 | 5.4 | 5.2 | 3.9 | 3.7 | 3.4 | 2.5 | 3.2 | 2.6 | 3.4 | 4.1 | 4.3 | 4.4 |
| 1968 | 4.2 | 5.7 | 5.3 | 4.6 | 2.6 | 2.4 | 3.0 | 2.8 | 2.3 | 4.5 | 5.7 | 5.9 |
| 1969 | 5.1 | 5.1 | 5.6 | 3.7 | 2.8 | 3.4 | 2.4 | 3.4 | 3.7 | 3.9 | 4.3 | 5.6 |
| 1970 | 4.8 | 4.8 | 3.9 | 4.4 | 3.0 | 2.5 | 2.8 | 2.3 | 3.7 | 4.3 | 5.9 | 5.6 |
| 1971 | 4.6 | 4.8 | 4.7 | 3.1 | 3.5 | 1.5 | 1.5 | 1.5 | 2.8 | 3.7 | 4.3 | 4.3 |
| 1972 | 5.2 | 4.6 | 4.5 | 3.1 | 1.5 | 1.7 | 1.4 | 1.7 | 4.3 | 6.4 | 3.6 | 5.3 |
| 1973 | 4.3 | 3.9 | 5.8 | 3.2 | 3.2 | 1.6 | 1.9 | 2.5 | 3.8 | 4.5 | 4.1 | 4.4 |
| 1974 | 4.3 | 4.9 | 3.9 | 3.5 | 2.9 | 2.0 | 1.7 | 2.1 | 2.5 | 3.7 | 3.9 | 4.9 |
| 1975 | 5.6 | 3.3 | 3.7 | 1.9 | 2.3 | 2.6 | 2.4 | 3.4 | 2.8 | 4.9 | 4.9 | 4.4 |
| 1976 | 4.9 | 5.4 | 5.2 | 3.4 | 3.6 | 2.9 | 1.9 | 3.1 | 4.0 | 3.9 | 4.5 | 4.9 |
| 1977 | 4.2 | 4.4 | 5.0 | 3.5 | 2.0 | 2.1 | 2.6 | 2.0 | 5.2 | 3.6 | 6.0 | 3.8 |
| 1978 | 6.2 | 3.9 | 4.6 | 4.1 | 3.4 | 2.3 | 2.2 | 2.8 | 3.6 | 4.2 | 4.4 | 4.0 |
| 1979 | 3.9 | 3.6 | 5.7 | 4.1 | 3.0 | 2.2 | 1.4 | 3.5 | 3.8 | 4.3 | 4.3 | 4.4 |
| 1980 | 6.1 | 4.4 | 5.1 | 3.6 | 1.9 | 1.9 | 1.7 | 2.1 | 4.5 | 4.5 | 4.5 | 4.8 |
| 1981 | 2.8 | 3.7 | 3.8 | 3.4 | 2.8 | 3.3 | 2.0 | 1.4 | 4.3 | 4.5 | 4.3 | 4.1 |
| 1982 | 5.9 | 3.6 | 6.5 | 5.0 | 2.2 | 2.1 | 2.1 | 1.6 | 3.4 | 4.4 | 5.1 | 4.0 |
| 1983 | 5.3 | 4.9 | 5.8 | 2.3 | 2.6 | 2.5 | 2.7 | 1.9 | 2.9 | 3.8 | 4.4 | 5.2 |
| 1984 | 4.7 | 4.8 | 5.5 | 4.4 | 3.5 | 3.6 | 1.4 | 2.3 | 2.9 | 4.3 | 5.1 | 5.7 |
| 1985 | 4.4 | 5.5 | 4.8 | 4.5 | 2.3 | 3.0 | 1.9 | 2.6 | 3.9 | 3.6 | 3.2 | 6.7 |
| 1986 | 5.5 | 3.0 | 5.4 | 3.7 | 3.0 | 2.8 | 1.2 | 1.9 | 3.0 | 4.1 | 5.2 | 4.1 |
| 1987 | 4.7 | 6.8 | 4.6 | 3.8 | 3.1 | 1.5 | 2.3 | 2.5 | 2.4 | 5.5 | 4.3 | 4.6 |

32 YR. STATISTICS FOR WIS STATION S95

| | | |
|---|---|---|
| MEAN SIGNIFICANT WAVE HEIGHT . . . . . | (METERS) | 1.1 |
| MEAN PEAK WAVE PERIOD . . . . . | (SECONDS) | 4.7 |
| MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND . . | (DEGREES) | 202.5 |
| STANDARD DEVIATION OF WAVE HS . . . . . | (METERS) | 0.8 |
| STANDARD DEVIATION OF WAVE TP . . . . . | (SECONDS) | 1.3 |
| LARGEST WAVE HS . . . . . | (METERS) | 7.0 |
| WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . | (SECONDS) | 10.0 |
| AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . | (DEGREES) | 5.0 |
| DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) | | 66112809 |

# APPENDIX B: RETURN PERIOD TABLES

Station 1 (47.95N , 89.42W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.3(0.11) | 2.7(0.06) | 4.0(0.08) | 5.3(0.10) |
| 5.00 | 5.7(0.15) | 2.9(0.09) | 4.3(0.12) | 5.7(0.14) |
| 10.00 | 6.1(0.19) | 3.1(0.11) | 4.6(0.14) | 6.1(0.17) |
| 20.00 | 6.4(0.22) | 3.3(0.12) | 4.9(0.17) | 6.4(0.21) |
| 50.00 | 6.9(0.26) | 3.6(0.15) | 5.2(0.20) | 6.8(0.25) |

Station 2 (47.80N , 89.63W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.1(0.11) | 3.7(0.08) | 4.5(0.09) | 5.3(0.09) |
| 5.00 | 5.6(0.15) | 4.1(0.11) | 4.9(0.12) | 5.6(0.12) |
| 10.00 | 5.9(0.18) | 4.3(0.14) | 5.2(0.15) | 5.9(0.15) |
| 20.00 | 6.2(0.21) | 4.6(0.16) | 5.5(0.18) | 6.2(0.18) |
| 50.00 | 6.7(0.26) | 4.9(0.20) | 5.8(0.22) | 6.6(0.22) |

Station 3 (47.80N , 89.45W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.0(0.10) | 3.7(0.08) | 4.5(0.09) | 5.2(0.09) |
| 5.00 | 5.4(0.15) | 4.0(0.11) | 4.9(0.13) | 5.6(0.13) |
| 10.00 | 5.8(0.18) | 4.3(0.14) | 5.2(0.16) | 5.9(0.16) |
| 20.00 | 6.1(0.21) | 4.5(0.16) | 5.5(0.19) | 6.2(0.19) |
| 50.00 | 6.5(0.25) | 4.9(0.20) | 5.9(0.23) | 6.6(0.23) |

Station 4 (47.67N , 90.07W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.7(0.09) | 3.3(0.07) | 7.2(0.17) | 7.2(0.17) |
| 5.00 | 5.1(0.13) | 3.6(0.10) | 7.9(0.24) | 7.9(0.24) |
| 10.00 | 5.4(0.15) | 3.9(0.12) | 8.5(0.29) | 8.4(0.29) |
| 20.00 | 5.6(0.18) | 4.1(0.14) | 9.0(0.35) | 9.0(0.34) |
| 50.00 | 6.0(0.22) | 4.4(0.17) | 9.7(0.42) | 9.7(0.42) |

Station 5 (47.67N , 90.28W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.5(0.10) | 3.3(0.07) | 7.3(0.19) | 7.3(0.19) |
| 5.00 | 4.9(0.13) | 3.6(0.10) | 8.1(0.27) | 8.1(0.26) |
| 10.00 | 5.2(0.16) | 3.8(0.12) | 8.7(0.33) | 8.7(0.32) |
| 20.00 | 5.5(0.19) | 4.1(0.15) | 9.3(0.39) | 9.3(0.38) |
| 50.00 | 5.9(0.23) | 4.4(0.18) | 10.1(0.47) | 10.1(0.46) |

Station 6 (47.67N , 90.50W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.3(0.09) | 3.4(0.08) | 7.2(0.18) | 7.2(0.17) |
| 5.00 | 4.7(0.13) | 3.7(0.11) | 8.0(0.25) | 8.0(0.24) |
| 10.00 | 4.9(0.16) | 4.0(0.13) | 8.6(0.30) | 8.5(0.30) |
| 20.00 | 5.2(0.19) | 4.2(0.16) | 9.1(0.36) | 9.1(0.35) |
| 50.00 | 5.6(0.22) | 4.5(0.19) | 9.9(0.43) | 9.8(0.42) |

Station 7 (47.53N , 90.70W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.0(0.08) | 3.2(0.09) | 7.1(0.17) | 7.1(0.17) |
| 5.00 | 4.3(0.11) | 3.6(0.12) | 7.8(0.24) | 7.8(0.23) |
| 10.00 | 4.6(0.13) | 3.9(0.15) | 8.4(0.29) | 8.3(0.28) |
| 20.00 | 4.8(0.16) | 4.1(0.17) | 8.9(0.34) | 8.9(0.33) |
| 50.00 | 5.2(0.19) | 4.5(0.21) | 9.6(0.41) | 9.6(0.40) |

Station 8 (47.53N , 90.92W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 3.1(0.06) | 3.3(0.08) | 7.1(0.16) | 7.1(0.16) |
| 5.00 | 3.3(0.08) | 3.7(0.11) | 7.8(0.22) | 7.8(0.22) |
| 10.00 | 3.5(0.10) | 4.0(0.14) | 8.3(0.27) | 8.3(0.27) |
| 20.00 | 3.7(0.12) | 4.2(0.17) | 8.8(0.32) | 8.8(0.32) |
| 50.00 | 4.0(0.15) | 4.6(0.20) | 9.5(0.39) | 9.5(0.39) |

Station 9 (47.38N , 90.92W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 3.8(0.07) | 3.2(0.08) | 6.3(0.13) | 6.3(0.13) |
| 5.00 | 4.1(0.09) | 3.5(0.12) | 6.9(0.19) | 6.9(0.18) |
| 10.00 | 4.3(0.12) | 3.8(0.14) | 7.3(0.23) | 7.3(0.22) |
| 20.00 | 4.5(0.14) | 4.1(0.17) | 7.7(0.27) | 7.7(0.27) |
| 50.00 | 4.7(0.16) | 4.4(0.20) | 8.3(0.33) | 8.2(0.32) |

Station 10 (47.38N , 91.13W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 2.8(0.06) | 3.1(0.09) | 6.3(0.12) | 6.3(0.12) |
| 5.00 | 3.1(0.08) | 3.5(0.12) | 6.8(0.16) | 6.8(0.16) |
| 10.00 | 3.3(0.10) | 3.8(0.15) | 7.2(0.20) | 7.2(0.20) |
| 20.00 | 3.4(0.11) | 4.1(0.18) | 7.6(0.23) | 7.6(0.23) |
| 50.00 | 3.7(0.14) | 4.5(0.22) | 8.1(0.28) | 8.1(0.28) |

Station 11 (47.23N , 91.13W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 3.7(0.07) | 3.3(0.09) | 6.6(0.15) | 6.6(0.14) |
| 5.00 | 4.0(0.10) | 3.7(0.13) | 7.2(0.20) | 7.2(0.20) |
| 10.00 | 4.2(0.13) | 4.0(0.16) | 7.6(0.25) | 7.6(0.25) |
| 20.00 | 4.5(0.15) | 4.2(0.19) | 8.1(0.29) | 8.1(0.29) |
| 50.00 | 4.8(0.18) | 4.6(0.22) | 8.7(0.35) | 8.6(0.35) |

Station 12 (47.08N , 91.35W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 3.3(0.07) | 2.6(0.09) | 6.8(0.16) | 6.8(0.16) |
| 5.00 | 3.6(0.09) | 3.0(0.12) | 7.5(0.22) | 7.5(0.22) |
| 10.00 | 3.8(0.11) | 3.3(0.15) | 8.0(0.27) | 8.0(0.27) |
| 20.00 | 4.1(0.13) | 3.5(0.17) | 8.5(0.32) | 8.5(0.32) |
| 50.00 | 4.3(0.16) | 3.9(0.21) | 9.1(0.39) | 9.1(0.39) |

Station 13 (47.08N , 91.57W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 2.7(0.05) | 2.6(0.08) | 6.6(0.11) | 6.6(0.11) |
| 5.00 | 2.9(0.07) | 2.9(0.12) | 7.1(0.16) | 7.1(0.16) |
| 10.00 | 3.1(0.09) | 3.2(0.14) | 7.4(0.19) | 7.4(0.19) |
| 20.00 | 3.2(0.11) | 3.4(0.17) | 7.8(0.23) | 7.8(0.23) |
| 50.00 | 3.4(0.13) | 3.8(0.21) | 8.3(0.28) | 8.3(0.28) |

Station 14 (46.95N , 91.57W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 3.0(0.07) | 2.2(0.05) | 5.8(0.17) | 5.8(0.17) |
| 5.00 | 3.3(0.10) | 2.4(0.07) | 6.5(0.23) | 6.5(0.23) |
| 10.00 | 3.5(0.12) | 2.6(0.09) | 7.1(0.28) | 7.1(0.28) |
| 20.00 | 3.7(0.15) | 2.8(0.11) | 7.6(0.34) | 7.6(0.34) |
| 50.00 | 4.0(0.18) | 3.0(0.13) | 8.3(0.41) | 8.3(0.40) |

Station 15 (46.80N , 92.00W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 2.2(0.03) | 1.6(0.04) | 4.8(0.18) | 4.8(0.18) |
| 5.00 | 2.4(0.05) | 1.8(0.05) | 5.5(0.25) | 5.5(0.25) |
| 10.00 | 2.5(0.06) | 1.9(0.06) | 6.0(0.31) | 6.0(0.31) |
| 20.00 | 2.6(0.07) | 2.0(0.07) | 6.5(0.36) | 6.5(0.36) |
| 50.00 | 2.7(0.08) | 2.1(0.09) | 7.2(0.44) | 7.2(0.44) |

Station 16 (46.80N , 91.78W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.0(0.19) | 2.4(0.05) | 2.7(0.04) | 5.0(0.18) |
| 5.00 | 5.8(0.26) | 2.6(0.07) | 2.9(0.05) | 5.8(0.26) |
| 10.00 | 6.4(0.32) | 2.8(0.09) | 3.0(0.06) | 6.4(0.31) |
| 20.00 | 6.9(0.37) | 2.9(0.10) | 3.1(0.07) | 6.9(0.37) |
| 50.00 | 7.7(0.45) | 3.1(0.13) | 3.3(0.09) | 7.7(0.45) |

Station 17 (46.80N , 91.57W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.4(0.20) | 2.7(0.04) | 3.2(0.04) | 5.4(0.19) |
| 5.00 | 6.2(0.27) | 2.8(0.06) | 3.3(0.06) | 6.2(0.27) |
| 10.00 | 6.8(0.33) | 3.0(0.07) | 3.5(0.07) | 6.8(0.33) |
| 20.00 | 7.5(0.39) | 3.1(0.08) | 3.6(0.09) | 7.4(0.39) |
| 50.00 | 8.3(0.48) | 3.3(0.10) | 3.8(0.10) | 8.2(0.47) |

Station 18 (46.95N , 91.35W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.7(0.18) | 3.2(0.06) | 3.3(0.08) | 5.7(0.18) |
| 5.00 | 6.4(0.26) | 3.5(0.08) | 3.6(0.11) | 6.4(0.25) |
| 10.00 | 7.0(0.31) | 3.7(0.10) | 3.9(0.13) | 7.0(0.31) |
| 20.00 | 7.6(0.37) | 3.9(0.12) | 4.1(0.15) | 7.6(0.36) |
| 50.00 | 8.3(0.44) | 4.1(0.14) | 4.4(0.18) | 8.3(0.44) |

Station 19 (46.95N , 91.13W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.1(0.16) | 3.2(0.06) | 3.3(0.06) | 5.2(0.16) |
| 5.00 | 5.8(0.23) | 3.5(0.09) | 3.6(0.08) | 5.8(0.22) |
| 10.00 | 6.3(0.28) | 3.7(0.11) | 3.8(0.09) | 6.3(0.27) |
| 20.00 | 6.8(0.33) | 3.8(0.13) | 3.9(0.11) | 6.8(0.32) |
| 50.00 | 7.5(0.40) | 4.1(0.16) | 4.1(0.13) | 7.5(0.38) |

Station 20 (47.08N , 90.92W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 6.1(0.12) | 3.8(0.10) | 3.7(0.06) | 6.1(0.12) |
| 5.00 | 6.6(0.17) | 4.3(0.15) | 4.0(0.09) | 6.6(0.17) |
| 10.00 | 6.9(0.21) | 4.6(0.18) | 4.2(0.11) | 6.9(0.20) |
| 20.00 | 7.3(0.24) | 4.9(0.21) | 4.4(0.13) | 7.3(0.24) |
| 50.00 | 7.8(0.29) | 5.4(0.25) | 4.6(0.15) | 7.8(0.29) |

Station 21 (47.08N , 90.50W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 4.6(0.09) | 5.5(0.11) | 4.3(0.06) | 5.6(0.10) |
| 5.00 | 5.0(0.12) | 5.9(0.15) | 4.6(0.09) | 6.0(0.13) |
| 10.00 | 5.3(0.15) | 6.3(0.19) | 4.8(0.11) | 6.3(0.16) |
| 20.00 | 5.6(0.18) | 6.6(0.22) | 5.0(0.13) | 6.6(0.19) |
| 50.00 | 5.9(0.22) | 7.1(0.27) | 5.2(0.15) | 7.0(0.23) |

Station 22 (46.95N , 90.50W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 4.5(0.10) | 5.3(0.11) | 4.1(0.06) | 5.4(0.10) |
| 5.00 | 4.9(0.13) | 5.8(0.16) | 4.3(0.09) | 5.8(0.14) |
| 10.00 | 5.2(0.16) | 6.1(0.19) | 4.5(0.11) | 6.2(0.17) |
| 20.00 | 5.5(0.19) | 6.5(0.22) | 4.7(0.13) | 6.5(0.20) |
| 50.00 | 5.9(0.23) | 6.9(0.27) | 5.0(0.15) | 6.9(0.24) |

Station 23 (46.80N , 90.50W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 3.9(0.09) | 5.0(0.11) | 4.1(0.08) | 5.1(0.10) |
| 5.00 | 4.3(0.13) | 5.5(0.15) | 4.4(0.10) | 5.5(0.14) |
| 10.00 | 4.6(0.16) | 5.8(0.19) | 4.6(0.13) | 5.8(0.17) |
| 20.00 | 4.8(0.19) | 6.2(0.22) | 4.8(0.15) | 6.2(0.20) |
| 50.00 | 5.2(0.23) | 6.6(0.26) | 5.1(0.18) | 6.6(0.24) |

Station 24 (46.65N , 90.50W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 5.0(0.11) | 3.8(0.06) | 2.0(0.04) | 5.0(0.10) |
| 5.00 | 5.4(0.15) | 4.1(0.08) | 2.2(0.05) | 5.4(0.14) |
| 10.00 | 5.8(0.18) | 4.3(0.10) | 2.3(0.07) | 5.7(0.17) |
| 20.00 | 6.1(0.22) | 4.4(0.12) | 2.4(0.08) | 6.0(0.21) |
| 50.00 | 6.5(0.26) | 4.7(0.15) | 2.6(0.09) | 6.5(0.25) |

Station 25 (46.65N , 90.28W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 4.7(0.13) | 4.2(0.06) | 3.0(0.04) | 4.9(0.10) |
| 5.00 | 5.3(0.18) | 4.5(0.09) | 3.1(0.06) | 5.3(0.14) |
| 10.00 | 5.7(0.22) | 4.7(0.11) | 3.3(0.07) | 5.6(0.17) |
| 20.00 | 6.1(0.26) | 4.9(0.13) | 3.4(0.08) | 5.9(0.20) |
| 50.00 | 6.6(0.31) | 5.1(0.15) | 3.6(0.10) | 6.3(0.24) |

Station 26 (46.80N , 90.07W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.0(0.11) | 4.2(0.05) | 2.9(0.05) | 5.1(0.10) |
| 5.00 | 5.5(0.15) | 4.4(0.07) | 3.1(0.06) | 5.5(0.14) |
| 10.00 | 5.9(0.19) | 4.5(0.08) | 3.3(0.08) | 5.8(0.17) |
| 20.00 | 6.2(0.22) | 4.7(0.10) | 3.4(0.09) | 6.2(0.20) |
| 50.00 | 6.7(0.27) | 4.9(0.12) | 3.6(0.11) | 6.6(0.24) |

Station 27 (46.95N , 89.45W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.4(0.12) | 4.5(0.07) | 4.3(0.06) | 5.5(0.11) |
| 5.00 | 5.9(0.17) | 4.8(0.10) | 4.6(0.08) | 6.0(0.15) |
| 10.00 | 6.3(0.21) | 5.1(0.12) | 4.8(0.10) | 6.3(0.18) |
| 20.00 | 6.7(0.25) | 5.3(0.14) | 4.9(0.12) | 6.6(0.21) |
| 50.00 | 7.2(0.30) | 5.6(0.17) | 5.2(0.14) | 7.1(0.26) |

Station 28 (46.95N , 89.63W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.4(0.12) | 4.7(0.07) | 4.7(0.07) | 5.6(0.10) |
| 5.00 | 5.9(0.17) | 5.0(0.10) | 5.0(0.10) | 6.0(0.14) |
| 10.00 | 6.3(0.20) | 5.2(0.12) | 5.2(0.12) | 6.3(0.17) |
| 20.00 | 6.6(0.24) | 5.4(0.14) | 5.4(0.15) | 6.6(0.20) |
| 50.00 | 7.1(0.29) | 5.7(0.17) | 5.7(0.17) | 7.0(0.24) |

Station 29 (46.95N , 89.42W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.4(0.12) | 5.1(0.07) | 4.7(0.08) | 5.8(0.09) |
| 5.00 | 5.9(0.17) | 5.4(0.10) | 5.1(0.12) | 6.2(0.13) |
| 10.00 | 6.3(0.21) | 5.6(0.12) | 5.3(0.14) | 6.5(0.16) |
| 20.00 | 6.7(0.25) | 5.8(0.14) | 5.6(0.17) | 6.8(0.19) |
| 50.00 | 7.2(0.30) | 6.1(0.17) | 5.9(0.21) | 7.2(0.23) |

Station 30 (47.08N , 89.22W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.5(0.12) | 4.8(0.07) | 5.7(0.10) | 6.1(0.10) |
| 5.00 | 6.0(0.17) | 5.1(0.10) | 6.1(0.13) | 6.5(0.14) |
| 10.00 | 6.4(0.20) | 5.4(0.12) | 6.4(0.16) | 6.8(0.17) |
| 20.00 | 6.8(0.24) | 5.6(0.14) | 6.7(0.19) | 7.1(0.20) |
| 50.00 | 7.3(0.29) | 5.9(0.17) | 7.1(0.23) | 7.5(0.24) |

Station 31 (47.08N , 89.00W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 5.2(0.11) | 5.4(0.08) | 5.7(0.11) | 6.2(0.10) |
| 5.00 | 5.7(0.15) | 5.7(0.11) | 6.1(0.15) | 6.6(0.15) |
| 10.00 | 6.1(0.19) | 6.0(0.13) | 6.5(0.18) | 6.9(0.18) |
| 20.00 | 6.4(0.22) | 6.2(0.16) | 6.8(0.21) | 7.2(0.21) |
| 50.00 | 6.8(0.27) | 6.6(0.19) | 7.2(0.26) | 7.7(0.25) |

Station 32 (47.23N , 88.78W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 5.2(0.11) | 5.6(0.09) | 5.8(0.10) | 6.3(0.10) |
| 5.00 | 5.6(0.15) | 6.0(0.13) | 6.2(0.14) | 6.7(0.14) |
| 10.00 | 6.0(0.18) | 6.3(0.16) | 6.5(0.17) | 7.0(0.17) |
| 20.00 | 6.3(0.22) | 6.6(0.19) | 6.8(0.20) | 7.3(0.20) |
| 50.00 | 6.8(0.26) | 7.0(0.22) | 7.2(0.24) | 7.7(0.24) |

Station 33 (47.38N , 88.57W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 5.1(0.11) | 5.5(0.11) | 6.2(0.11) | 6.5(0.11) |
| 5.00 | 5.6(0.15) | 6.0(0.16) | 6.6(0.15) | 6.9(0.15) |
| 10.00 | 5.9(0.18) | 6.3(0.19) | 6.9(0.18) | 7.2(0.18) |
| 20.00 | 6.3(0.22) | 6.7(0.23) | 7.3(0.21) | 7.6(0.21) |
| 50.00 | 6.7(0.26) | 7.2(0.27) | 7.7(0.26) | 8.0(0.26) |

Station 34 (47.53N , 88.35W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 6.0(0.12) | 4.2(0.07) | 6.4(0.12) | 6.8(0.12) |
| 5.00 | 6.5(0.17) | 4.4(0.09) | 6.9(0.16) | 7.3(0.16) |
| 10.00 | 6.9(0.20) | 4.7(0.11) | 7.3(0.20) | 7.6(0.20) |
| 20.00 | 7.3(0.24) | 4.9(0.13) | 7.7(0.23) | 8.0(0.23) |
| 50.00 | 7.8(0.29) | 5.1(0.16) | 8.1(0.28) | 8.5(0.28) |

Station 35 (47.53N , 88.13W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 5.6(0.10) | 4.8(0.07) | 6.3(0.11) | 6.6(0.11) |
| 5.00 | 6.0(0.14) | 5.1(0.10) | 6.8(0.15) | 7.0(0.15) |
| 10.00 | 6.3(0.17) | 5.4(0.13) | 7.1(0.18) | 7.4(0.18) |
| 20.00 | 6.6(0.20) | 5.6(0.15) | 7.4(0.21) | 7.7(0.22) |
| 50.00 | 7.1(0.24) | 5.9(0.18) | 7.8(0.26) | 8.1(0.26) |

Station 36 (47.53N , 87.93W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.3(0.10) | 4.9(0.07) | 6.3(0.11) | 6.4(0.10) |
| 5.00 | 5.8(0.14) | 5.3(0.10) | 6.7(0.15) | 6.8(0.14) |
| 10.00 | 6.1(0.17) | 5.5(0.12) | 7.0(0.18) | 7.1(0.17) |
| 20.00 | 6.4(0.21) | 5.7(0.14) | 7.4(0.21) | 7.4(0.20) |
| 50.00 | 6.8(0.25) | 6.0(0.17) | 7.8(0.26) | 7.9(0.25) |

Station 37 (47.53N , 87.72W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.9(0.10) | 4.8(0.07) | 6.2(0.10) | 6.2(0.10) |
| 5.00 | 5.4(0.13) | 5.1(0.09) | 6.6(0.14) | 6.6(0.14) |
| 10.00 | 5.7(0.16) | 5.3(0.11) | 6.9(0.17) | 6.9(0.17) |
| 20.00 | 6.0(0.19) | 5.5(0.14) | 7.2(0.21) | 7.2(0.20) |
| 50.00 | 6.4(0.23) | 5.8(0.16) | 7.6(0.25) | 7.6(0.24) |

Station 38 (47.53N , 87.50W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.7(0.07) | 4.5(0.08) | 6.2(0.10) | 6.2(0.10) |
| 5.00 | 5.0(0.10) | 4.8(0.11) | 6.6(0.14) | 6.6(0.13) |
| 10.00 | 5.2(0.12) | 5.1(0.13) | 6.9(0.17) | 6.9(0.16) |
| 20.00 | 5.4(0.14) | 5.3(0.16) | 7.2(0.20) | 7.2(0.19) |
| 50.00 | 5.7(0.17) | 5.6(0.19) | 7.6(0.24) | 7.5(0.23) |

Station 39 (47.35N , 87.50W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.6(0.07) | 5.4(0.08) | 4.9(0.06) | 5.5(0.07) |
| 5.00 | 4.9(0.09) | 5.7(0.11) | 5.1(0.08) | 5.8(0.10) |
| 10.00 | 5.1(0.11) | 5.9(0.13) | 5.3(0.10) | 6.0(0.12) |
| 20.00 | 5.3(0.13) | 6.2(0.15) | 5.5(0.11) | 6.2(0.14) |
| 50.00 | 5.6(0.16) | 6.5(0.18) | 5.7(0.14) | 6.5(0.17) |

Station 40 (47.38N , 87.72W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 3.4(0.06) | 3.7(0.05) | 5.4(0.10) | 5.4(0.10) |
| 5.00 | 3.6(0.08) | 4.0(0.07) | 5.9(0.14) | 5.9(0.14) |
| 10.00 | 3.8(0.09) | 4.1(0.09) | 6.2(0.17) | 6.2(0.17) |
| 20.00 | 4.0(0.11) | 4.3(0.10) | 6.6(0.21) | 6.5(0.20) |
| 50.00 | 4.2(0.14) | 4.5(0.13) | 7.0(0.25) | 7.0(0.25) |

Station 41 (47.23N , 87.93W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 3.4(0.05) | 4.1(0.09) | 5.5(0.12) | 5.6(0.12) |
| 5.00 | 3.7(0.07) | 4.4(0.12) | 6.0(0.17) | 6.1(0.17) |
| 10.00 | 3.8(0.09) | 4.7(0.15) | 6.4(0.21) | 6.5(0.21) |
| 20.00 | 4.0(0.11) | 5.0(0.17) | 6.8(0.25) | 6.9(0.25) |
| 50.00 | 4.2(0.13) | 5.3(0.21) | 7.3(0.30) | 7.4(0.30) |

Station 42 (47.08N , 88.13W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 2.9(0.05) | 4.8(0.16) | 5.6(0.13) | 5.8(0.13) |
| 5.00 | 3.1(0.07) | 5.5(0.22) | 6.2(0.18) | 6.4(0.18) |
| 10.00 | 3.3(0.09) | 6.0(0.27) | 6.6(0.22) | 6.8(0.22) |
| 20.00 | 3.4(0.10) | 6.5(0.32) | 7.0(0.27) | 7.2(0.26) |
| 50.00 | 3.6(0.12) | 7.1(0.39) | 7.6(0.32) | 7.8(0.32) |

Station 43 (46.95N , 88.35W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 2.3(0.04) | 1.8(0.03) | 3.2(0.07) | 3.2(0.07) |
| 5.00 | 2.5(0.05) | 1.9(0.04) | 3.5(0.10) | 3.5(0.09) |
| 10.00 | 2.6(0.07) | 2.0(0.05) | 3.7(0.12) | 3.7(0.12) |
| 20.00 | 2.7(0.08) | 2.1(0.06) | 3.9(0.14) | 3.9(0.14) |
| 50.00 | 2.9(0.09) | 2.2(0.08) | 4.2(0.17) | 4.2(0.17) |

Station 44 (46.95N , 87.93W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 5.8(0.13) | 5.2(0.12) | 3.2(0.06) | 6.0(0.11) |
| 5.00 | 6.4(0.18) | 5.7(0.16) | 3.4(0.08) | 6.5(0.15) |
| 10.00 | 6.8(0.22) | 6.1(0.20) | 3.6(0.09) | 6.8(0.19) |
| 20.00 | 7.2(0.25) | 6.4(0.23) | 3.8(0.11) | 7.2(0.22) |
| 50.00 | 7.7(0.31) | 6.9(0.28) | 4.0(0.13) | 7.7(0.27) |

Station 45 (46.95N , 87.72W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 5.6(0.12) | 5.6(0.11) | 3.6(0.05) | 6.0(0.10) |
| 5.00 | 6.1(0.16) | 6.0(0.15) | 3.8(0.07) | 6.5(0.14) |
| 10.00 | 6.5(0.20) | 6.3(0.18) | 4.0(0.09) | 6.8(0.17) |
| 20.00 | 6.9(0.24) | 6.7(0.21) | 4.2(0.11) | 7.1(0.20) |
| 50.00 | 7.3(0.28) | 7.1(0.26) | 4.4(0.13) | 7.5(0.24) |

Station 46 (46.80N , 87.50W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.3(0.12) | 5.7(0.11) | 7.5(0.12) | 7.5(0.11) |
| 5.00 | 4.8(0.17) | 6.1(0.15) | 7.9(0.16) | 7.9(0.16) |
| 10.00 | 5.2(0.20) | 6.4(0.18) | 8.3(0.20) | 8.3(0.19) |
| 20.00 | 5.6(0.24) | 6.8(0.21) | 8.7(0.23) | 8.6(0.23) |
| 50.00 | 6.1(0.29) | 7.2(0.26) | 9.1(0.28) | 9.1(0.27) |

Station 47 (46.65N , 87.28W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 3.4(0.06) | 6.6(0.13) | 8.3(0.14) | 8.3(0.14) |
| 5.00 | 3.7(0.09) | 7.2(0.18) | 8.9(0.20) | 8.9(0.19) |
| 10.00 | 3.9(0.11) | 7.6(0.22) | 9.3(0.25) | 9.3(0.24) |
| 20.00 | 4.1(0.13) | 7.9(0.26) | 9.8(0.29) | 9.8(0.28) |
| 50.00 | 4.4(0.15) | 8.5(0.31) | 10.4(0.35) | 10.3(0.34) |

Station 48 (46.65N , 87.07W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.8(0.11) | 8.5(0.15) | 5.1(0.08) | 8.5(0.15) |
| 5.00 | 6.3(0.15) | 9.2(0.22) | 5.4(0.12) | 9.2(0.21) |
| 10.00 | 6.7(0.19) | 9.7(0.26) | 5.7(0.14) | 9.7(0.26) |
| 20.00 | 7.0(0.22) | 10.2(0.31) | 5.9(0.17) | 10.2(0.31) |
| 50.00 | 7.5(0.27) | 10.8(0.38) | 6.3(0.20) | 10.8(0.37) |

Station 49 (46.65N , 86.85W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.1(0.09) | 8.4(0.15) | 5.4(0.08) | 8.4(0.15) |
| 5.00 | 5.5(0.12) | 9.0(0.21) | 5.8(0.11) | 9.0(0.21) |
| 10.00 | 5.8(0.15) | 9.5(0.26) | 6.1(0.14) | 9.5(0.26) |
| 20.00 | 6.1(0.18) | 10.0(0.31) | 6.3(0.16) | 10.0(0.31) |
| 50.00 | 6.4(0.22) | 10.6(0.37) | 6.6(0.20) | 10.6(0.37) |

Station 50 (46.65N , 86.65W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 8.1(0.15) | 6.7(0.09) | 4.2(0.07) | 8.1(0.15) |
| 5.00 | 8.7(0.21) | 7.1(0.12) | 4.5(0.10) | 8.8(0.21) |
| 10.00 | 9.2(0.26) | 7.4(0.15) | 4.7(0.12) | 9.2(0.25) |
| 20.00 | 9.7(0.31) | 7.7(0.18) | 4.9(0.14) | 9.7(0.30) |
| 50.00 | 10.3(0.37) | 8.1(0.22) | 5.2(0.17) | 10.3(0.36) |

Station 51 (46.65N , 86.43W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 7.7(0.15) | 7.0(0.09) | 4.3(0.07) | 7.9(0.13) |
| 5.00 | 8.4(0.21) | 7.4(0.13) | 4.7(0.10) | 8.5(0.19) |
| 10.00 | 8.9(0.26) | 7.7(0.15) | 4.9(0.12) | 8.9(0.23) |
| 20.00 | 9.3(0.31) | 7.9(0.18) | 5.1(0.14) | 9.3(0.27) |
| 50.00 | 10.0(0.37) | 8.3(0.22) | 5.4(0.17) | 9.9(0.33) |

Station 52 (46.80N , 86.22W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.1(0.08) | 6.8(0.11) | 5.4(0.08) | 6.9(0.10) |
| 5.00 | 5.5(0.11) | 7.3(0.15) | 5.8(0.11) | 7.3(0.14) |
| 10.00 | 5.7(0.13) | 7.6(0.18) | 6.0(0.14) | 7.6(0.18) |
| 20.00 | 6.0(0.16) | 8.0(0.21) | 6.3(0.16) | 8.0(0.21) |
| 50.00 | 6.3(0.19) | 8.4(0.26) | 6.6(0.19) | 8.4(0.25) |

Station 53 (46.80N , 86.00W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.5(0.06) | 6.3(0.07) | 6.0(0.10) | 6.5(0.08) |
| 5.00 | 4.7(0.08) | 6.6(0.10) | 6.5(0.14) | 6.9(0.11) |
| 10.00 | 4.9(0.10) | 6.8(0.13) | 6.8(0.17) | 7.1(0.14) |
| 20.00 | 5.1(0.12) | 7.1(0.15) | 7.1(0.20) | 7.4(0.16) |
| 50.00 | 5.4(0.15) | 7.4(0.18) | 7.5(0.24) | 7.7(0.20) |

Station 54 (46.80N , 85.78W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.1(0.05) | 5.4(0.07) | 6.5(0.09) | 6.5(0.09) |
| 5.00 | 4.4(0.08) | 5.7(0.10) | 6.9(0.13) | 6.9(0.12) |
| 10.00 | 4.5(0.09) | 5.9(0.12) | 7.2(0.16) | 7.2(0.15) |
| 20.00 | 4.7(0.11) | 6.1(0.14) | 7.5(0.18) | 7.4(0.18) |
| 50.00 | 4.9(0.13) | 6.4(0.17) | 7.8(0.22) | 7.8(0.22) |

Station 55 (46.80N , 85.57W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.0(0.06) | 5.5(0.08) | 6.6(0.09) | 6.7(0.09) |
| 5.00 | 4.2(0.08) | 5.8(0.11) | 7.0(0.12) | 7.1(0.12) |
| 10.00 | 4.4(0.10) | 6.1(0.14) | 7.3(0.15) | 7.3(0.15) |
| 20.00 | 4.6(0.12) | 6.3(0.17) | 7.6(0.18) | 7.6(0.18) |
| 50.00 | 4.8(0.14) | 6.7(0.20) | 8.0(0.22) | 8.0(0.21) |

Station 56 (46.80N , 85.37W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.3(0.07) | 6.7(0.10) | 6.4(0.10) | 6.9(0.09) |
| 5.00 | 4.6(0.10) | 7.1(0.14) | 6.9(0.14) | 7.3(0.13) |
| 10.00 | 4.8(0.12) | 7.4(0.17) | 7.2(0.17) | 7.7(0.16) |
| 20.00 | 5.1(0.14) | 7.7(0.20) | 7.5(0.21) | 7.9(0.19) |
| 50.00 | 5.4(0.17) | 8.1(0.24) | 7.9(0.25) | 8.3(0.23) |

Station 57 (46.80N , 85.15W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 3.7(0.05) | 5.3(0.08) | 7.2(0.09) | 7.2(0.09) |
| 5.00 | 3.9(0.07) | 5.6(0.12) | 7.6(0.13) | 7.6(0.13) |
| 10.00 | 4.0(0.08) | 5.9(0.14) | 7.9(0.16) | 7.9(0.16) |
| 20.00 | 4.2(0.10) | 6.1(0.17) | 8.2(0.19) | 8.2(0.19) |
| 50.00 | 4.4(0.12) | 6.5(0.20) | 8.6(0.23) | 8.6(0.23) |

Station 58 (46.80N , 84.93W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 3.0(0.05) | 2.6(0.04) | 7.1(0.09) | 7.1(0.09) |
| 5.00 | 3.2(0.07) | 2.8(0.06) | 7.5(0.13) | 7.5(0.13) |
| 10.00 | 3.3(0.08) | 2.9(0.07) | 7.8(0.16) | 7.8(0.16) |
| 20.00 | 3.5(0.10) | 3.1(0.09) | 8.1(0.19) | 8.1(0.19) |
| 50.00 | 3.7(0.12) | 3.2(0.10) | 8.4(0.22) | 8.4(0.22) |

Station 59 (46.63N , 84.93W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 3.0(0.05) | 3.1(0.05) | 3.2(0.05) | 3.4(0.05) |
| 5.00 | 3.2(0.07) | 3.3(0.07) | 3.4(0.07) | 3.6(0.06) |
| 10.00 | 3.4(0.08) | 3.4(0.08) | 3.5(0.08) | 3.7(0.08) |
| 20.00 | 3.5(0.10) | 3.6(0.10) | 3.7(0.09) | 3.9(0.09) |
| 50.00 | 3.7(0.12) | 3.8(0.12) | 3.8(0.11) | 4.1(0.11) |

Station 60 (46.48N , 84.72W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 2.9(0.04) | 4.6(0.08) | 3.8(0.07) | 4.7(0.07) |
| 5.00 | 3.1(0.05) | 4.9(0.11) | 4.1(0.10) | 5.0(0.10) |
| 10.00 | 3.2(0.06) | 5.2(0.13) | 4.3(0.12) | 5.2(0.12) |
| 20.00 | 3.3(0.07) | 5.4(0.15) | 4.5(0.14) | 5.4(0.15) |
| 50.00 | 3.4(0.09) | 5.7(0.18) | 4.8(0.17) | 5.7(0.18) |

Station 61 (46.63N , 84.72W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 4.1(0.08) | 4.0(0.05) | 3.3(0.06) | 4.4(0.07) |
| 5.00 | 4.5(0.12) | 4.3(0.07) | 3.6(0.08) | 4.6(0.09) |
| 10.00 | 4.8(0.14) | 4.4(0.09) | 3.8(0.10) | 4.8(0.11) |
| 20.00 | 5.0(0.17) | 4.6(0.11) | 4.0(0.12) | 5.1(0.13) |
| 50.00 | 5.3(0.20) | 4.8(0.13) | 4.2(0.14) | 5.3(0.16) |

Station 62 (46.80N , 84.72W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 5.9(0.11) | 7.4(0.11) | 3.5(0.06) | 7.4(0.10) |
| 5.00 | 6.4(0.15) | 7.9(0.15) | 3.8(0.09) | 7.9(0.14) |
| 10.00 | 6.7(0.18) | 8.3(0.18) | 4.0(0.11) | 8.2(0.17) |
| 20.00 | 7.0(0.21) | 8.6(0.22) | 4.2(0.13) | 8.5(0.21) |
| 50.00 | 7.5(0.26) | 9.1(0.26) | 4.4(0.16) | 9.0(0.25) |

Station 63 (46.95N , 84.72W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 6.6(0.10) | 7.1(0.12) | 3.1(0.06) | 7.3(0.10) |
| 5.00 | 7.0(0.14) | 7.6(0.17) | 3.3(0.08) | 7.7(0.14) |
| 10.00 | 7.3(0.17) | 8.0(0.20) | 3.5(0.10) | 8.0(0.17) |
| 20.00 | 7.6(0.20) | 8.3(0.24) | 3.7(0.12) | 8.3(0.20) |
| 50.00 | 8.1(0.24) | 8.8(0.29) | 3.9(0.14) | 8.8(0.24) |

Station 64 (47.08N , 84.93W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 5.5(0.09) | 6.7(0.09) | 4.2(0.07) | 6.7(0.08) |
| 5.00 | 5.9(0.13) | 7.1(0.12) | 4.5(0.10) | 7.1(0.12) |
| 10.00 | 6.2(0.15) | 7.3(0.15) | 4.7(0.12) | 7.3(0.14) |
| 20.00 | 6.5(0.18) | 7.6(0.18) | 4.9(0.14) | 7.6(0.17) |
| 50.00 | 6.9(0.22) | 8.0(0.22) | 5.2(0.17) | 7.9(0.20) |

Station 65 (47.23N , 84.72W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 2.4(0.03) | 5.0(0.07) | 6.3(0.09) | 6.3(0.09) |
| 5.00 | 2.5(0.04) | 5.3(0.10) | 6.7(0.13) | 6.7(0.12) |
| 10.00 | 2.6(0.05) | 5.5(0.12) | 7.0(0.15) | 7.0(0.15) |
| 20.00 | 2.7(0.06) | 5.8(0.15) | 7.3(0.18) | 7.3(0.18) |
| 50.00 | 2.8(0.07) | 6.1(0.18) | 7.7(0.22) | 7.7(0.22) |

Station 66 (47.38N , 84.93W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.3(0.09) | 4.7(0.08) | 3.5(0.06) | 5.4(0.08) |
| 5.00 | 5.7(0.12) | 5.1(0.11) | 3.8(0.09) | 5.8(0.11) |
| 10.00 | 5.9(0.15) | 5.3(0.13) | 4.0(0.11) | 6.0(0.14) |
| 20.00 | 6.2(0.18) | 5.5(0.15) | 4.2(0.12) | 6.3(0.16) |
| 50.00 | 6.6(0.21) | 5.8(0.18) | 4.4(0.15) | 6.6(0.20) |

Station 67 (47.53N , 85.15W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.9(0.10) | 5.1(0.09) | 3.4(0.05) | 6.0(0.10) |
| 5.00 | 6.4(0.14) | 5.5(0.12) | 3.6(0.07) | 6.4(0.14) |
| 10.00 | 6.7(0.17) | 5.8(0.15) | 3.7(0.08) | 6.8(0.17) |
| 20.00 | 7.0(0.21) | 6.1(0.18) | 3.9(0.10) | 7.1(0.20) |
| 50.00 | 7.4(0.25) | 6.4(0.22) | 4.1(0.12) | 7.5(0.24) |

Station 68 (47.67N , 85.15W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 3.0(0.05) | 5.7(0.11) | 5.5(0.09) | 6.0(0.10) |
| 5.00 | 3.2(0.06) | 6.2(0.16) | 5.9(0.13) | 6.4(0.14) |
| 10.00 | 3.4(0.08) | 6.6(0.19) | 6.2(0.15) | 6.7(0.17) |
| 20.00 | 3.5(0.09) | 6.9(0.23) | 6.4(0.18) | 7.0(0.20) |
| 50.00 | 3.7(0.11) | 7.4(0.28) | 6.8(0.22) | 7.4(0.24) |

Station 69 (47.80N , 85.15W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 2.8(0.04) | 4.9(0.12) | 5.3(0.08) | 5.7(0.10) |
| 5.00 | 2.9(0.06) | 5.5(0.17) | 5.7(0.12) | 6.1(0.14) |
| 10.00 | 3.1(0.08) | 5.8(0.21) | 6.0(0.14) | 6.4(0.17) |
| 20.00 | 3.2(0.09) | 6.2(0.24) | 6.2(0.17) | 6.7(0.20) |
| 50.00 | 3.4(0.11) | 6.7(0.29) | 6.6(0.20) | 7.1(0.25) |

Station 70 (47.95N , 85.15W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.4(0.12) | 4.8(0.10) | 2.1(0.03) | 5.6(0.11) |
| 5.00 | 5.9(0.16) | 5.2(0.13) | 2.3(0.04) | 6.1(0.15) |
| 10.00 | 6.2(0.20) | 5.5(0.16) | 2.3(0.05) | 6.4(0.19) |
| 20.00 | 6.6(0.23) | 5.8(0.19) | 2.4(0.06) | 6.8(0.22) |
| 50.00 | 7.1(0.28) | 6.2(0.23) | 2.5(0.07) | 7.2(0.27) |

Station 71 (47.80N , 85.37W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.8(0.11) | 3.7(0.06) | 2.7(0.04) | 5.8(0.11) |
| 5.00 | 6.2(0.15) | 3.9(0.08) | 2.9(0.06) | 6.2(0.15) |
| 10.00 | 6.5(0.18) | 4.1(0.10) | 3.0(0.07) | 6.5(0.18) |
| 20.00 | 6.9(0.21) | 4.3(0.12) | 3.1(0.08) | 6.9(0.21) |
| 50.00 | 7.3(0.26) | 4.5(0.14) | 3.3(0.10) | 7.3(0.26) |

Station 72 (47.80N , 85.57W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.7(0.10) | 4.5(0.08) | 3.2(0.06) | 5.7(0.09) |
| 5.00 | 6.1(0.13) | 4.9(0.12) | 3.5(0.08) | 6.1(0.13) |
| 10.00 | 6.4(0.16) | 5.1(0.14) | 3.7(0.10) | 6.4(0.16) |
| 20.00 | 6.7(0.19) | 5.4(0.17) | 3.8(0.12) | 6.7(0.19) |
| 50.00 | 7.1(0.23) | 5.7(0.20) | 4.1(0.14) | 7.1(0.23) |

Station 73 (47.80N , 85.78W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.6(0.10) | 5.0(0.07) | 3.5(0.05) | 5.7(0.09) |
| 5.00 | 6.1(0.14) | 5.3(0.10) | 3.7(0.07) | 6.1(0.13) |
| 10.00 | 6.4(0.17) | 5.5(0.12) | 3.9(0.08) | 6.4(0.16) |
| 20.00 | 6.7(0.20) | 5.7(0.14) | 4.0(0.09) | 6.7(0.18) |
| 50.00 | 7.1(0.25) | 6.0(0.17) | 4.2(0.11) | 7.1(0.22) |

Station 74 (47.95N , 86.00W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.4(0.10) | 5.4(0.08) | 3.9(0.05) | 5.7(0.09) |
| 5.00 | 5.8(0.14) | 5.8(0.12) | 4.2(0.07) | 6.1(0.12) |
| 10.00 | 6.1(0.17) | 6.0(0.14) | 4.3(0.09) | 6.4(0.15) |
| 20.00 | 6.4(0.20) | 6.3(0.17) | 4.5(0.11) | 6.6(0.18) |
| 50.00 | 6.8(0.24) | 6.6(0.21) | 4.7(0.13) | 7.0(0.21) |

Station 75 (48.08N , 86.22W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.8(0.09) | 5.7(0.09) | 4.8(0.06) | 5.8(0.09) |
| 5.00 | 5.1(0.12) | 6.1(0.13) | 5.1(0.08) | 6.2(0.13) |
| 10.00 | 5.4(0.15) | 6.4(0.16) | 5.3(0.10) | 6.5(0.15) |
| 20.00 | 5.6(0.18) | 6.7(0.19) | 5.5(0.12) | 6.8(0.18) |
| 50.00 | 6.0(0.21) | 7.0(0.22) | 5.7(0.14) | 7.2(0.22) |

Station 76 (48.23N , 86.22W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.6(0.11) | 5.7(0.10) | 5.1(0.07) | 5.9(0.09) |
| 5.00 | 5.0(0.15) | 6.2(0.14) | 5.4(0.09) | 6.3(0.13) |
| 10.00 | 5.3(0.18) | 6.5(0.17) | 5.6(0.11) | 6.6(0.15) |
| 20.00 | 5.6(0.21) | 6.8(0.20) | 5.8(0.13) | 6.9(0.18) |
| 50.00 | 6.0(0.26) | 7.2(0.24) | 6.1(0.16) | 7.3(0.22) |

Station 77 (48.38N , 86.43W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.3(0.11) | 5.8(0.09) | 5.5(0.08) | 6.1(0.08) |
| 5.00 | 4.8(0.15) | 6.2(0.12) | 5.9(0.12) | 6.4(0.12) |
| 10.00 | 5.1(0.18) | 6.5(0.15) | 6.2(0.14) | 6.7(0.14) |
| 20.00 | 5.4(0.21) | 6.8(0.18) | 6.4(0.17) | 7.0(0.17) |
| 50.00 | 5.8(0.26) | 7.1(0.22) | 6.8(0.20) | 7.3(0.20) |

Station 78 (48.52N , 86.43W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.8(0.12) | 6.1(0.10) | 5.7(0.10) | 6.4(0.09) |
| 5.00 | 5.3(0.17) | 6.5(0.14) | 6.1(0.13) | 6.8(0.13) |
| 10.00 | 5.7(0.21) | 6.9(0.17) | 6.4(0.16) | 7.1(0.15) |
| 20.00 | 6.0(0.24) | 7.2(0.20) | 6.7(0.19) | 7.3(0.18) |
| 50.00 | 6.5(0.29) | 7.6(0.24) | 7.1(0.23) | 7.7(0.22) |

Station 79 (48.67N , 86.43W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 3.8(0.11) | 6.4(0.11) | 6.0(0.11) | 6.6(0.09) |
| 5.00 | 4.3(0.16) | 6.9(0.15) | 6.4(0.15) | 7.0(0.13) |
| 10.00 | 4.7(0.20) | 7.2(0.18) | 6.8(0.19) | 7.3(0.16) |
| 20.00 | 5.0(0.23) | 7.5(0.21) | 7.2(0.22) | 7.6(0.18) |
| 50.00 | 5.5(0.28) | 8.0(0.26) | 7.6(0.27) | 8.0(0.22) |

Station 80 (48.67N , 86.65W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 6.5(0.11) | 6.4(0.11) | 2.6(0.05) | 6.9(0.09) |
| 5.00 | 7.0(0.16) | 6.9(0.16) | 2.9(0.07) | 7.3(0.13) |
| 10.00 | 7.4(0.19) | 7.3(0.19) | 3.0(0.09) | 7.5(0.15) |
| 20.00 | 7.7(0.23) | 7.6(0.23) | 3.2(0.11) | 7.8(0.18) |
| 50.00 | 8.2(0.27) | 8.1(0.27) | 3.4(0.13) | 8.2(0.22) |

Station 81 (48.67N , 86.85W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 6.7(0.12) | 7.0(0.13) | 2.8(0.06) | 7.3(0.11) |
| 5.00 | 7.2(0.17) | 7.5(0.18) | 3.1(0.09) | 7.8(0.15) |
| 10.00 | 7.6(0.20) | 8.0(0.22) | 3.3(0.11) | 8.1(0.19) |
| 20.00 | 8.0(0.24) | 8.4(0.26) | 3.4(0.13) | 8.5(0.22) |
| 50.00 | 8.5(0.29) | 8.9(0.32) | 3.7(0.15) | 8.9(0.26) |

Station 82 (48.67N , 87.28W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 6.4(0.15) | 7.4(0.13) | 6.2(0.14) | 7.6(0.11) |
| 5.00 | 7.1(0.21) | 7.9(0.18) | 6.8(0.19) | 8.1(0.15) |
| 10.00 | 7.5(0.25) | 8.4(0.22) | 7.3(0.24) | 8.4(0.18) |
| 20.00 | 8.0(0.30) | 8.8(0.27) | 7.7(0.28) | 8.8(0.21) |
| 50.00 | 8.6(0.36) | 9.3(0.32) | 8.3(0.34) | 9.2(0.26) |

Station 83 (48.67N , 87.50W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 6.3(0.15) | 7.5(0.12) | 5.1(0.14) | 7.6(0.10) |
| 5.00 | 6.9(0.21) | 8.0(0.16) | 5.7(0.20) | 8.0(0.15) |
| 10.00 | 7.4(0.26) | 8.4(0.20) | 6.2(0.25) | 8.4(0.18) |
| 20.00 | 7.9(0.30) | 8.7(0.23) | 6.7(0.29) | 8.7(0.21) |
| 50.00 | 8.5(0.36) | 9.2(0.28) | 7.2(0.35) | 9.1(0.25) |

Station 84 (48.67N , 87.72W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.6(0.09) | 6.6(0.13) | 6.8(0.13) | 7.2(0.11) |
| 5.00 | 5.0(0.12) | 7.2(0.18) | 7.4(0.19) | 7.6(0.15) |
| 10.00 | 5.2(0.15) | 7.6(0.22) | 7.8(0.23) | 8.0(0.18) |
| 20.00 | 5.5(0.17) | 8.0(0.26) | 8.2(0.27) | 8.3(0.22) |
| 50.00 | 5.9(0.21) | 8.5(0.31) | 8.8(0.33) | 8.8(0.26) |

Station 85 (48.67N , 87.93W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 5.4(0.11) | 7.0(0.14) | 4.1(0.09) | 7.0(0.13) |
| 5.00 | 5.9(0.15) | 7.6(0.20) | 4.4(0.12) | 7.6(0.18) |
| 10.00 | 6.2(0.19) | 8.0(0.24) | 4.7(0.15) | 8.0(0.22) |
| 20.00 | 6.6(0.22) | 8.5(0.29) | 5.0(0.17) | 8.4(0.26) |
| 50.00 | 7.0(0.27) | 9.1(0.34) | 5.3(0.21) | 8.9(0.32) |

Station 86 (48.52N , 88.13W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.4(0.09) | 5.7(0.11) | 4.8(0.09) | 5.8(0.10) |
| 5.00 | 4.8(0.12) | 6.2(0.15) | 5.2(0.13) | 6.3(0.13) |
| 10.00 | 5.1(0.15) | 6.6(0.19) | 5.4(0.16) | 6.6(0.16) |
| 20.00 | 5.4(0.18) | 6.9(0.22) | 5.7(0.18) | 6.9(0.19) |
| 50.00 | 5.7(0.22) | 7.4(0.26) | 6.1(0.22) | 7.3(0.23) |

Station 87 (48.38N , 88.35W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.0(0.09) | 5.3(0.09) | 5.1(0.11) | 5.6(0.09) |
| 5.00 | 4.4(0.12) | 5.6(0.12) | 5.6(0.15) | 6.0(0.12) |
| 10.00 | 4.7(0.15) | 5.9(0.15) | 5.9(0.18) | 6.3(0.15) |
| 20.00 | 4.9(0.17) | 6.2(0.18) | 6.3(0.22) | 6.5(0.17) |
| 50.00 | 5.3(0.21) | 6.6(0.21) | 6.7(0.26) | 6.9(0.21) |

Station 88 (48.23N , 88.57W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.4(0.07) | 3.7(0.11) | 4.8(0.10) | 5.0(0.08) |
| 5.00 | 4.7(0.09) | 4.2(0.15) | 5.2(0.14) | 5.3(0.11) |
| 10.00 | 4.9(0.11) | 4.5(0.18) | 5.5(0.17) | 5.6(0.14) |
| 20.00 | 5.1(0.14) | 4.8(0.22) | 5.8(0.20) | 5.9(0.16) |
| 50.00 | 5.4(0.16) | 5.3(0.26) | 6.2(0.24) | 6.2(0.20) |

Station 89 (48.23N , 88.78W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 4.1(0.06) | 2.8(0.08) | 4.1(0.07) | 4.3(0.06) |
| 5.00 | 4.4(0.09) | 3.1(0.11) | 4.4(0.10) | 4.6(0.09) |
| 10.00 | 4.6(0.11) | 3.3(0.14) | 4.7(0.12) | 4.8(0.11) |
| 20.00 | 4.8(0.13) | 3.6(0.16) | 4.9(0.15) | 5.0(0.12) |
| 50.00 | 5.0(0.16) | 3.9(0.20) | 5.2(0.18) | 5.3(0.15) |

Station 90 (48.08N , 89.00W)

| Return Period (yr) | Angle Class | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | All |
| 2.00 | 3.8(0.06) | 1.9(0.04) | 3.9(0.08) | 4.1(0.06) |
| 5.00 | 4.0(0.08) | 2.1(0.06) | 4.2(0.11) | 4.4(0.09) |
| 10.00 | 4.2(0.10) | 2.2(0.07) | 4.5(0.14) | 4.6(0.11) |
| 20.00 | 4.4(0.12) | 2.4(0.09) | 4.7(0.16) | 4.8(0.13) |
| 50.00 | 4.7(0.15) | 2.5(0.10) | 5.1(0.19) | 5.1(0.16) |

Station 91 (48.08N , 89.22W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 4.4(0.10) | 2.4(0.04) | 4.2(0.09) | 4.6(0.08) |
| 5.00 | 4.8(0.14) | 2.6(0.06) | 4.6(0.12) | 4.9(0.11) |
| 10.00 | 5.1(0.17) | 2.8(0.08) | 4.8(0.15) | 5.2(0.13) |
| 20.00 | 5.4(0.20) | 2.9(0.09) | 5.1(0.17) | 5.4(0.16) |
| 50.00 | 5.8(0.24) | 3.1(0.11) | 5.5(0.21) | 5.8(0.19) |

Station 92 (47.38N , 89.45W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 4.9(0.07) | 2.7(0.05) | 5.7(0.11) | 5.8(0.10) |
| 5.00 | 5.2(0.10) | 2.9(0.07) | 6.2(0.15) | 6.2(0.13) |
| 10.00 | 5.4(0.12) | 3.1(0.09) | 6.6(0.19) | 6.6(0.16) |
| 20.00 | 5.7(0.14) | 3.3(0.11) | 6.9(0.22) | 6.8(0.19) |
| 50.00 | 5.9(0.17) | 3.5(0.13) | 7.4(0.27) | 7.3(0.23) |

Station 93 (47.67N , 88.78W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 6.7(0.14) | 3.7(0.10) | 6.3(0.11) | 7.0(0.11) |
| 5.00 | 7.3(0.20) | 4.1(0.14) | 6.8(0.15) | 7.5(0.16) |
| 10.00 | 7.7(0.24) | 4.4(0.17) | 7.2(0.18) | 7.8(0.19) |
| 20.00 | 8.1(0.28) | 4.8(0.20) | 7.5(0.22) | 8.2(0.23) |
| 50.00 | 8.7(0.34) | 5.2(0.24) | 7.9(0.26) | 8.7(0.27) |

Station 94 (47.95N , 87.50W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 5.2(0.08) | 4.8(0.09) | 5.1(0.08) | 5.6(0.07) |
| 5.00 | 5.6(0.11) | 5.2(0.12) | 5.4(0.11) | 5.9(0.10) |
| 10.00 | 5.8(0.14) | 5.4(0.15) | 5.7(0.14) | 6.2(0.13) |
| 20.00 | 6.1(0.16) | 5.7(0.18) | 6.0(0.16) | 6.4(0.15) |
| 50.00 | 6.4(0.20) | 6.1(0.22) | 6.3(0.20) | 6.7(0.18) |

Station 95 (47.23N , 86.43W)

| Return Period (yr) | Angle Class 1 | 2 | 3 | All |
|---|---|---|---|---|
| 2.00 | 4.8(0.08) | 5.9(0.08) | 5.3(0.07) | 6.0(0.07) |
| 5.00 | 5.2(0.11) | 6.3(0.11) | 5.6(0.10) | 6.3(0.10) |
| 10.00 | 5.4(0.14) | 6.5(0.13) | 5.9(0.12) | 6.6(0.12) |
| 20.00 | 5.7(0.16) | 6.8(0.15) | 6.1(0.14) | 6.8(0.14) |
| 50.00 | 6.0(0.20) | 7.1(0.19) | 6.4(0.17) | 7.1(0.17) |

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