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WAVE INFORMATION STUDIES
OF US COASTLINES

WIS REPORT 24

HINDCAST WAVE INFORMATION FOR THE GREAT LAKES: LAKE MICHIGAN

by

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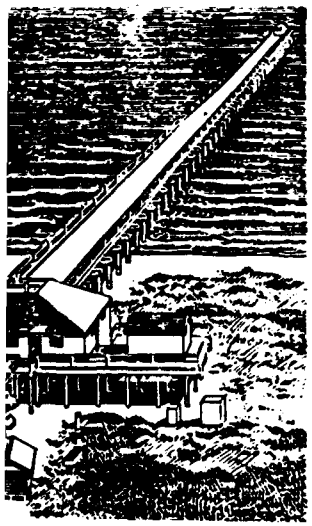

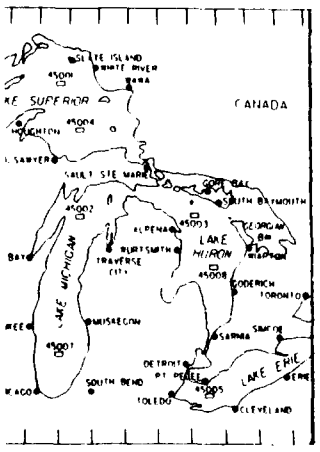

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Thirty-two years of hindcast wind and wave information is summarized for 70 locations along the shoreline of Lake Michigan in four data products: (a) percent occurrence tables; (b) wave rose diagrams; (c) mean and largest wave heights and 32-year statistics tables; and (d) return period tables. The procedures used to produce this information are discussed, and examples of verification against measurements are shown.

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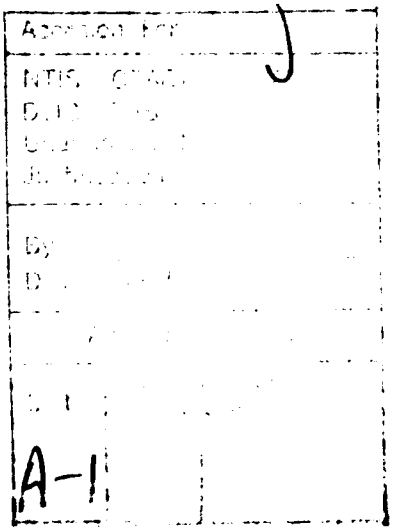
PREFACE

The Wave Information Study (WIS) was authorized in December 1976 by Headquarters, US Army Corps of Engineers (HQUSACE). The study is part of the 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.; John G. Housley; James E. Crews; and Robert H. Campbell. Mr. J. Michael Hemsley was the former Program Manager, Ms. Carolyn M. Holmes is the present Progam 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), 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. General supervision was provided by Mr. Charles C. Calhoun, Jr., Assistant Chief, CERC, and Dr. James R. Houston, Chief, CERC.

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 MICHIGAN

PART I: INTRODUCTION

1. The primary purpose of this study is to provide an accurate and comprehensive long-term wave climate database for the Great Lakes. The goal is to accurately represent the statistics of wave parameters such as height, period, and direction. It is expected that at any station the hindcast values may, at times, differ from measured values, but that 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.

2. This report describes the selection of a grid and locations for hindcast information, 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 efforts currently being undertaken by both US and Canadian interests to develop 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 and projects such as jetties, harbors, revetments, breakwaters, and beach design, construction, and maintenance, as well as projects for providing safe recreation.

3. Prior to 1979, measurements of wave data on the Great Lakes were scarce and quite short in duration. 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.

4. 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.

5. These buoys provide the best long-term wave measurements available for the Great Lakes. Unfortunately, the buoys are removed during the potentially heavy icing season of November to March and are, therefore, subject to miss the winter storms that may 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

6. Prior to this effort, numerical hindcasts of the Great Lakes were conducted by Resio and Vincent (1976a, b, 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 (1988). The RV study established the hindcast procedure for the Great Lakes which 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).

7. 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 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 pre-1950 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; and (d) the present study reflects advances in the understanding of the physics involved in wave generation, propagation, and dissipation. RV classified "storm events" as days with average 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.

8. 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 used was similar to that employed in the present study. The overlake winds were estimated from several land stations (as per RV), and the presence of ice cover was included. The criteria used to determine the extent of ice cover are similar to those used for the present study. The Canadian hindcasts produced a wave climate database for stations along the Canadian shoreline that are 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 the number of stations at which information is saved are lake specific. Stations were selected to provide accurate representation over the lake with the minimum number of sites. These stations were considered priority sites by the Ministry of Natural Resource and Conservation Authority personnel due to damage during previous storms, shoreline erosion, and existing and proposed developments.

Procedure

9. The selection of a grid in this Wave Information Study (WIS) study was based on the grids used previously in the RV study to allow for comparison to the present study. A 10-statute-mile square grid covering the entire lake was generated. Most of the nearshore grid points and a few midlake grid points were designated as stations at which all model data would be saved (Figure 2). Based on this grid, a land-water boundary matrix was established

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

(0 = land, 1 = water) for computational purposes. Deep water was assumed across the entire grid; therefore, no bathymetry was 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.

10. 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 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.

11. 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, significant 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 and depth of each station are given in Table 1.

PART II: WIND FIELDS

12. 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.

13. The calculation of winds from pressure observations or pressure 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 due to the inconsistent nature of the 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 in the RV study since it addresses only "storm events" that are short in duration. The directions measured by ships were not used in RV since they were inconsistent many times.

14. With this approach 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 Center (CCC), came from airports and various other CCC weather stations around the lakes. Table 2 lists wind observation stations and the period of record available.

15. 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 are interpolated to provide a continuous

time series. All data were then corrected to 20 m using the standard 1/7th power law for the wind speed profile (Davenport 1960). This approximation

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

estimates wind speed U at 20 m from the observed U at elevation z.

16. Corrections for air-water temperature differences and for the difference in frictional effects between land and water were applied within the interpolation routine. The correction for surface roughness employed was an approximation to a set of curves, developed by RV (1977a), relating the overland-overlake wind speed ratio to air-water temperature difference and overland wind speed. The approximation of these curves is given by the following formula derived by Schwab and Morton (1984).

$$U_w = U_1 \left(1.2 + \frac{1.85}{U_1} \right) \left[1.0 - \frac{\Delta T}{|\Delta T|} \left(\frac{|\Delta T|}{1920} \right)^{\frac{1}{3}} \right] \tag{2}$$

Where U_1 is the overland wind speed in meters per second at an elevation of 20 m and the air-sea temperature difference ΔT is measured in degrees C. Air-sea temperature differences derived from ship observations and classified as a function of month and 10-deg direction intervals were obtained from RV (1977a).

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

18. 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 WIS Project Office.

19. 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 3 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.

20. 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 1973, 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).

21. 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

22. 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 3. 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 θ. 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.

23. 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. It was only recently that 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 that follows the scaling aspects of this integral, is offered by Resio (1981).

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

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

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 4, 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

25. 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.

26. 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

27. 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

28. 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

θ_{wv} = wave direction

θ_{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 Behavior of Wave-Wave Interaction Source Term

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

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

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

$$\hat{E}_0 = E_0 \frac{g^2}{u_*^4} \tag{8}$$

and

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

where

E_0 = total wave energy

u_* = friction velocity

x = fetch

The constant J ranges in value from 1.0×10^{-4} to 1.5×10^{-4}. The value used in this study is 1.28×10^{-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

$$\langle c_g \rangle = \frac{1}{E_0}\int_0^\infty \int_{-\frac{\pi}{2}}^{\frac{\pi}{2}} E_2(f,\theta)\,\vec{c}_g\, d\theta\, df \tag{12}$$

If a parameter β_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 θ due to the k^{th} source term, is solved at every time step for each water point in the computational grid. 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.

30. 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 c_m is the phase velocity of the spectral peak and λ is a constant of proportionality and ranges in value from 1.5 to 2.0. The value used in this study is 1.75. The constant α 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 γ and σ are the JONSWAP coefficients. From the form of Equations 17, 18, and 19, it is apparent that the parameter λ is dependent on γ and σ in a fairly nonlinear fashion; however, the actual variability for reasonable values of γ and σ constrain λ to be somewhere between 1.5 and 2.0, so the net effect of variations in γ and σ is not too large. In DWAVE the

value of λ is set at a constant 1.76.

31. 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 α_* is α 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, λ, α_*, and β_1. Each of these parameters can be defined independently, J and α on an empirical basis and λ and β_1 from numerical constraints.

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

$$S_{NL}(f,\theta) = \left[\hat{E}(f)\Big|^{n+1} - \hat{E}(f)\Big|^{n}\right]\Phi(\theta - \theta_0) \tag{29}$$

where $\hat{E}(f)$ is the estimated value of the one-dimensional spectral density $E(f)$, $\Phi(\theta - \theta_0)$ is an angular function, and θ_0 is the mean wave propagation direction. The approach to a fully developed sea can be modeled by introducing a limiting parameter such that

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

where T_m is the peak period and p is given by

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

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

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).

33. 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

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

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 5 from Resio and Bach.*

34. 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.

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* Resio and Bach, op. cit.

PART IV: VERIFICATION

35. Most numerical wave models require a certain amount of fine-tuning, or calibration, in any application. A wave 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. The values of the free parameters in DWAVE, discussed in the previous section, gave satisfactory results in a number of past applications, so these values were not changed for this study.

36. Considering the procedures for correcting and interpolating the windfields, it was decided that there was enough uncertainty in these values so that they could be adjusted somewhat to obtain the best comparisons to measurements. The approach used was to adjust the interpolated wind speeds to obtain the best correlations between hindcast and measured wave heights and peak periods and also to obtain the best comparisons between the distributions of these quantities. The wave model was first run with unadjusted winds for a year when measurements were available from both NOAA buoys. Both wave heights and peak periods were biased slightly high with respect to the buoy measurements. A number of adjustments to reduce the windspeeds were applied. The one that gave the best results was a simple reduction of all windspeeds by 3 knots. Table 3 summarizes the correlation coefficients for wave height and peak period at Buoys 45002 and 45007 using this adjustment. These coefficients are relatively high for a wave hindcast study and indicate that the model is accurately representing the time variation of wave conditions at these two points. Wave conditions were next hindcast using this adjustment for all times when buoy data were available.

37. Figures 6-9 show the distribution of heights (0.5-m increments) and periods (1.0-sec increments) for the model results and measurements at Buoys 45002 and 45007 for all available data. Monthly mean wave heights at the two buoy locations are shown in Figures 10 and 11. Values are missing for the months of December through April because measurements are not available or are too few for good representation. Similar plots for peak period are shown in Figures 12 and 13. These plots of distributions and means indicate that

model results are accurately representing the mean wave climatology at these two locations.

38. Plots of the maximum wave height (by month) measured and modeled at these two sites are shown in Figures 14 and 15. Maximum values are within 0.5 m of each other. Similar plots of wave period are shown in Figures 16 and 17. Maximum values are within 1.0 sec at both locations with the exception of May, when they differ by 2.0 sec.

39. As a final verification, model results were compared with available measurements at Burns Harbor, Indiana, at the southern tip of the lake during two storms in 1987. Wave height and peak period as a function of time for a storm in February are shown in Figures 18 and 19. The model results are from WIS Sta 62, which is approximately 10 miles from the measurement site outside the breakwater at Burns Harbor. Measurements and model results are within 0.5 m of each other throughout the storm. Peak periods are generally within 1.0 sec. of each other, but at times differ by about 2 sec. These conditions were caused by the passage of a low pressure system from the northwest to southeast which intensified when it was east of Lake Michigan. Surface pressure charts from the Weather Bureau indicated winds from the northwest at 25 to 30 knots. This is a typical meteorological situation and, depending on the path and size of the low pressure area, can result in strong winds along the length of Lake Michigan. This situation represents an event with an approximate 5- to 10-year return period for this location according to the hindcast results (see Appendix B).

40. The second storm occurred in March of 1987 and was due to a high pressure center in Canada north of North Dakota. Surface pressure charts indicate winds from the north at 20 to 25 knots. Wave heights and peak periods as a function of time are shown in Figures 20 and 21. In this case, the hindcast wave heights are generally within 0.5 m of each other during the peak occurrences. Peak periods from the hindcast are consistently lower than measurements by about 3 sec during the peak occurrences. This underestimation of the periods may be due to underestimation of wind duration by missing the beginning of the event. This underestimation could be caused by the 3-hr update of windfields versus more frequent updates. Measured wave height increases faster than modeled at the beginning of the event, which could also be caused by understimation of wind at the beginning of the event. Wave

heights for this storm were less than the value (4.5 m) for the 2-year return period.

41. As mentioned in the introduction, the investigators do not expect to match every wave event at every location for the 32-year period. Some will be matched accurately as the February storm, some will be underestimated, and some may be overestimated. However, in the mean the hindcast results should represent the wave climate at each station. This representation is confirmed by the good match in the distributions of heights and periods at the two buoy sites. It is recommended that separate studies be done for specific storms at specific sites for more detailed information. The WIS database will be helpful in identifying the various storm events for a specific site.

PART V: EFFECTS OF ICE

42. Lake Michigan is the third largest of the Great Lakes both in terms of surface area and in mean depth. The lake has three major bathymetric regions, a southern, central, and northern basin. Depths over the lake are generally greater than 100 m with the shallowest areas being at the extreme southern and northern ends of the lake. Ice coverage can vary from open water over the whole lake during the winter months to 70- to 100-percent coverage for a majority of the winter months. Information from this hindcast indicates that the largest wave heights at stations around the lake generally occur in the months between November and February. Thus, design wave heights could be affected by ice coverage.

43. To estimate the effect of ice coverage on the generation and propagation of wind waves over the lake, the investigators have used an extensive, 20-winter, digital data set compiled by the Great Lakes Environmental Research Laboratory (GLERL) of 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.

44. 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 estimating the effects of ice coverage on wave conditions.

45. 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.

46. This procedure resulted in the formation of nine half-month land-water boundary matrices reflecting the various stages of ice cover development and decay. These periods extend from mid-December through April. The ice coverage on Lake Michigan is shown in Figures 22-28. No grid points were covered by ice according to the criteria for the month of April. As can be seen from the periods (16-31 December, 1-15 January, 16-31 January, 1-14 February, 1-15 March, and 16-31 March), there is little ice coverage over the lake as defined above. The effect of this limited median ice coverage would be to eliminate wave information for those stations that are ice covered for the various 2-week periods or affect the fetch distances to non-ice-covered stations. Thus, for any given station, the distribution of wave heights and periods over the 32 years might change due to ice coverage or fetch lengths for a particular 2-week period. Where there is ice coverage during the winter, it is confined to the shoreline and does not extend out into the lake with the exception of the 15-28 February interval. Thus, fetch lengths to any station are not changed significantly. This implies that the effect on return period statistics due to median ice coverage on Lake Michigan will primarily be due to exclusion of some storm events at ice-covered stations during the 32-year hindcast period. Considering this limited median coverage, the hindcast was not repeated with adjustment of the land-water boundary for ice coverage.

PART VI: RESULTS AND CONCLUSIONS

47. The results of this study are the directional wave spectra and wind speed and direction every 3 hr at the 70 locations over the lake. This information is archived as part of the WIS data bank and is available in its entirety or for specified locations and or times. It can be used in a variety of studies requiring wind and wave information. 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.

48. 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 (1976a, b, and c; 1977a and b; 1978) for estimates of extreme waves. The return period wave heights estimated in this study were compared with those reported in RV. 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 the Coastal Engineering Research Center's (CERC's) Automated Coastal Engineering System (ACES), fits five candidate probability distributions to a series of ranked extreme significant 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.

49. The results are presented and compared with RV in Figures 29-32 and Table 4. RV stations are expressed using the equivalent WIS station number. The RV and WIS station locations are the same, but numbered differently, and there are a greater number of WIS stations. When there is no equivalent RV station in Table 4, a return period wave height is not listed. The general

pattern of return period wave heights around the lake is quite similar between the two studies. There are some exceptions. RV return period wave heights are both lower and higher than the general pattern at some stations. The lower RV wave heights are attributed to the hindcast procedure used to determine the wave height at a station.

50. For a given storm event, the windfield was determined over the lake, and the wave spectra calculated. A shore-parallel line was specified at each station, and all wave energy in each spectrum that did not have a directional component toward this shore-parallel line was omitted. All wave information was then calculated from this filtered spectrum. Thus, the wave height became dependent on the orientation of this shore-parallel line.

51. An example of this effect is illustrated in Figure 29. The RV 5-year return period wave height at Sta 4 and 6 is about 5.2 m, whereas the value at Sta 5 and 7 is about 3.8 m. The RV shore-parallel line at Sta 4 and 6 is oriented from northwest to southeast, which means the station is exposed to all waves over the long fetches to the north. The RV shore-parallel line at Sta 5 and 7 is oriented from north-northeast to south-southeast, which blocks some of the wave energy over long fetches to the north. Thus, in this case, at adjacent stations the 5-year return period wave height differs by about 1.4 m.

52. Other similar occurrences in this figure and those for the longer return periods are attributed to this relationship between specified shoreline orientation and fetch. The WIS hindcast did not filter out wave energy by direction. Thus, there is the possibility that wave energy will have an offshore directional component.

53. The cases in which RV estimates higher return period wave heights than WIS may be due to overestimation by RV of winds in extreme events. In the RV study, wind data from land stations, which were on magnetic tape, were processed first by scanning the data for wind events equal to or larger than approximately 20 to 25 knots and lasting about 12 hr. These storm events were then hindcast and made up the population of storms occurring more frequently. Digitized wind data did not exist for a long time period prior to the RV study, and so the population of major storms was not well represented in the digitized record. To represent these events, available historical information was analyzed for major storms of record. Windfields were estimated and waves

hindcast. Because information and measurements were scarce, these extreme cases may be less accurately represented. It is possible that early measurements may have included wind gusts that would result in higher winds and waves.

54. An example of this scenario is shown in Figure 32. The RV estimates of the 50-year return period wave height are about 8.5 m at Sta 1-4 and 6. The WIS values at the same locations are about 6.5 m. RV Sta 5 has the same value as WIS probably because of the directional filtering discussed previously. An 8.5-m wave height generated over the available fetch would require a 50- to 55-knot wind blowing for 16 hr and have an associated 14-sec period (SPM 1984). Although possible, this requirement seems unlikely considering the meteorological events in this area.

55. The return period wave heights from RV and WIS are for the most part the same. There are some differences, dependent on location, which could be significant in a design study. Possible reasons for the differences have been discussed. This general agreement is further assurance that the present study is an accurate representation of the wind and wave climate on Lake Michigan. The results of the present study represent the only continuous long period (32 year) time series of wind and spectral wave data available at essentially any point on the lake. This study should be a powerful tool for years to come as different problems requiring wind and wave information on the lake are investigated.

PART VII: EXPLANATION OF SUMMARY TABLES

Summary Tables

Description

56. Two types of wave height and period distribution tables are presented: azimuth tables and tables for all directions. The azimuth tables give the percent occurrence of waves in the height and period ranges for specified stations and directions. The title of each table identifies the station and azimuth range. The direction bands are centered on 22.5-deg increments such as 0, 22.5, 45, etc. (Table 5). The period ranges were derived from the period ranges available from the WIS hindcast model (Table 6), and the height ranges are in 0.25-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.

b. The largest wave height .

c. The mean peak period.

d. The number of cases (wave occurrences computed at 3-hr intervals).

57. The all-directions table for each station is printed following the 337.5-deg azimuth table for the specified station. This table gives the percent occurrence of waves within specified height and period ranges coming from all directions for the indicated station. 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

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

Example

59. To find the number of hours that waves of 2.00 to 2.24 m and 8.0 to 8.9 sec are expected to occur from the 0-deg band at Sta 1 for a 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 0.024 percent (Appendix A). Then 0.024 is divided by 100 to give the probability (0.00024) 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:

[(Value read in table/1,000)/100] * 280,512 = number of hours waves in this height, period, direction category occurred during hindcast period

For this example: [(24/1,000)/100] * 280,512 = 67 hr .

Wave Rose Diagrams

Description

60. The wave rose diagrams present the distribution of wave height by direction for the 32 years of hindcast information. The diagrams show the percent occurrence of wave height categories from eight direction ranges (45-deg bands) and the percentage of waves occurring from the separate directions for the specified station.

61. As in most wave rose diagrams, the width of each bar segment indicates the height 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

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

Example

63. The wave rose diagram for Sta 1 indicates that 11 percent of the waves were from the north, 0-deg band (waves moving) north to south, and of the 11 percent, approximately 30 percent were 0.0 to 0.4 m, about 30 percent were 0.5 to 0.9 m, about 20 percent were 1.0 to 1.4 m, etc. (Appendix A). The total for each leg is 100 percent for the specified direction band.

Mean Height, Largest Height, and 32-Year Statistics Tables

Description

64. Two tables that summarize the mean and largest wave height 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 height . The largest height table provides the largest wave height hindcast for each month in each year. The 32-year statistics tables provide the following:

a. Mean wave height.

b. Mean peak period.

c. Most frequent direction band.

d. Standard deviation of wave height.

e. Standard deviation of peak period.

f. Largest wave height hindcast.

g. Peak period of largest wave.

h. Direction of largest wave.

i. Date and time (GMT) of largest wave.

Use of the tables

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

Example

66. To determine the mean wave height for January 1956, simply read the value in the specified column and row (Appendix A). The mean height for 1956 is given in the MEAN column opposite 1956. The mean wave height for all January's is given in the MEAN row under JAN. For this example:

a. The mean height for JAN 1956 = 0.7 m.

b. The mean height for 1956 = 0.5 m.

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

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

a. The largest height for JAN 1956 = 2.4 m.

b. The largest height for 1956 = 2.4 m.

c. The largest height for all JAN's = 5.0 m.

Return Period Tables

Description

67. 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 the CERC's ACES, fits five candidate probability distributions to a series of ranked extreme significant 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. Significant wave heights for recurrence intervals of 2, 5, 10, 20, and 50 years are listed.

b. The standard error (sigma r) in the significant wave height is included in parentheses next to each wave height estimate.

c. The four angle classes are defined as viewed by an observer on shore (Figure 33):

(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.

Use of the table

68. Estimates of extreme wave heights and their standard errors can simply be read from the table for the desired return period and station. Table 7 provides the factor by which the standard error should be multiplied to obtain bounds for various bands of confidence and the corresponding probability of exceeding the upper bound. Table 8 can be used to find the probability of a given return period wave height being equaled or exceeded in a specified number (1, 10, 25, or 50) of years.

Example

69. Wave height values for specified return periods are simply read from the table for the desired station. For example, the 50-year return period wave height for Sta 1, Angle Class 1, is 2.5 m. The 50-year return period wave height for Sta 1, All Directions, is 6.4 m. Table 8 shows that the 6.4-m wave height has a probability of 0.18 of being equaled or exceeded at least once in 10 years.

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Table 1

Lake Michigan Stations

Stations	Longitude, deg N	Latitude, deg W	Depth, m
1	41.81	87.38	13
2	41.95	87.55	11
3	42.10	87.55	24
4	42.25	87.73	15
5	42.35	87.73	27
6	42.54	87.73	40
7	42.68	87.72	15
8	42.83	87.70	18
9	42.98	87.70	46
10	43.12	87.68	82
11	43.27	87.68	100
12	43.42	87.67	110
13	43.55	87.67	64
14	43.70	87.66	18
15	43.85	87.65	42
16	43.98	87.64	18
17	44.13	87.43	55
18	44.27	87.43	46
19	44.41	87.42	66
20	44.55	87.22	128
21	44.70	87.20	84
22	44.83	87.18	55
23	44.98	86.98	73
24	45.13	86.97	36
25	45.27	86.75	55
26	45.40	86.75	15
27	45.53	86.53	73
28	45.68	86.31	62
29	45.82	86.10	47
30	45.80	85.90	49
31	45.65	85.70	36
32	45.50	85.50	91
33	45.48	85.30	27
34	45.35	85.53	82
35	45.23	85.73	91
36	45.23	85.93	69
37	45.23	86.15	128
38	45.09	86.15	73
39	44.95	86.17	36
40	44.80	86.18	36
41	44.67	86.40	16
42	44.53	86.40	181
43	44.38	86.41	110

(Continued)

Table 1 (Concluded)

Stations	Longitude, deg N	Latitude, deg W	Depth, m
44	44.23	86.43	36
45	44.10	86.63	137
46	43.95	86.65	88
47	43.82	86.65	66
48	43.67	86.67	91
49	43.53	86.68	91
50	43.38	86.48	36
51	43.23	86.50	73
52	43.08	86.32	33
53	42.93	86.33	55
54	42.78	86.33	60
55	42.64	86.35	55
56	42.50	86.36	36
57	42.35	86.37	29
58	42.22	86.58	36
59	42.08	86.58	27
60	41.93	86.78	42
61	41.80	86.98	22
62	41.80	87.18	22
63	42.28	87.16	91
64	42.67	87.13	146
65	43.10	87.10	82
66	43.53	87.08	90
67	43.97	87.05	100
68	44.39	86.82	219
69	44.82	86.58	219
70	45.25	86.34	183

Table 2

Wind Observation Stations

Station Name	Period of Record
Chicago	1956-1987
Milwaukee	1956-1987
Green Bay	1956-1987
Sault Ste. Marie	1956-1987
Traverse City	1956-1987
Muskegon	1956-1987
South Bend	1956-1987
Buoy 45002	1979-1987
Buoy 45007	1981-1987

Table 3

Correlation Coefficients for Verification

Year	Months	Number of Values	Correlation Coefficient (r) Wave Height	Peak Period
		Buoy 45002		
1981	Apr-Nov	1711	0.93	0.71
1982	Apr-Dec	1851	0.92	0.77
1983	Mar-Dec	1936	0.84	0.71
1984	Apr-Dec	1487	0.94	0.80
		Buoy 45007		
1981	Jul-Nov	942	0.93	0.76
1982	Mar-Dec	2090	0.91	0.67
1983	May-Nov	1493	0.94	0.78
1984	Apr-Oct	1794	0.91	0.72

Table 4

Comparison of Return Period Wave Height, m

WIS Station Number	Return Period, years							
	5		10		20		50	
	RV	WIS	RV	WIS	RV	WIS	RV	WIS
1	5.1	5.3	6.0	5.7	6.8	6.0	7.9	6.4
2	5.4	5.5	6.3	5.8	7.3	6.1	8.7	6.5
3	5.3	5.4	6.2	5.7	7.1	6.0	8.2	6.3
4	5.2	5.4	6.1	5.6	7.0	5.9	8.2	6.3
5	3.8	5.3	4.4	5.6	5.1	5.9	6.3	6.3
6	5.2	5.5	6.1	5.8	7.1	6.1	8.5	6.5
7	3.9	5.7	4.3	6.0	4.9	6.3	6.1	6.8
8	5.2	5.7	5.9	6.0	6.5	6.4	7.4	6.8
9	5.0	5.4	5.7	5.7	6.4	6.1	7.3	6.5
10	4.8	5.3	5.5	5.6	6.2	5.9	7.2	6.3
11	3.9	5.0	4.2	5.3	4.8	5.6	5.8	6.0
12	3.7	4.9	4.3	5.2	4.9	5.4	5.9	5.8
13	3.8	4.6	4.2	4.9	4.8	5.1	5.6	5.4
14	4.0	4.4	4.7	4.7	5.3	4.9	6.1	5.2
15	4.7	4.4	5.2	4.6	5.8	4.8	6.5	5.0
16	3.8	4.5	4.3	4.8	4.8	5.0	5.5	5.3
17	3.7	4.6	4.2	4.9	4.7	5.1	5.5	5.4
18	4.5	4.6	4.9	4.8	5.4	5.0	5.9	5.3
19	3.8	4.7	4.4	4.9	4.8	5.2	5.5	5.5
20	3.6	4.7	4.0	5.0	4.3	5.3	4.8	5.6
21	3.6	4.5	4.1	4.8	4.6	5.1	5.2	5.5
22	4.7	4.5	5.3	4.8	6.1	5.1	7.2	5.5
23	4.5	4.4	5.1	4.7	5.8	5.0	6.9	5.4
24	3.6	4.3	4.3	4.5	4.9	4.8	5.8	5.1
25	3.4	4.4	4.0	4.7	4.6	5.0	5.5	5.3
26	3.2	4.4	3.7	4.6	4.1	4.9	4.7	5.3
27	4.7	4.5	5.4	4.8	6.1	5.0	7.2	5.4
28	4.1	4.2	4.9	4.5	5.9	4.7	7.5	5.0
29	3.9	4.2	4.6	4.4	5.3	4.7	6.4	4.9
30	3.7	4.3	4.3	4.6	5.1	4.8	6.2	5.2
31	-	4.5	-	4.8	-	5.0	-	5.4
32	-	4.4	-	4.7	-	5.0	-	5.3
33	3.7	4.2	4.3	4.5	5.0	4.8	6.1	5.1
34	4.3	4.5	4.8	4.8	5.4	5.1	6.2	5.4
35	4.1	4.5	4.7	4.8	5.3	5.0	6.1	5.3
36	-	4.6	-	4.9	-	5.1	-	5.4
37	-	4.7	-	4.9	-	5.2	-	5.5
38	3.7	4.7	4.3	4.9	4.9	5.1	5.7	5.4
39	3.9	4.8	4.5	5.1	5.1	5.4	5.9	5.7

(Continued)

Table 4 (Concluded)

WIS Station Number	Return Period, years							
	5		10		20		50	
	RV	WIS	RV	WIS	RV	WIS	RV	WIS
40	4.6	4.8	5.2	5.1	5.8	5.4	6.6	5.8
41	5.2	5.2	6.0	5.5	6.9	5.8	8.1	6.2
42	5.2	5.2	5.9	5.6	6.8	5.9	8.1	6.3
43	4.3	5.2	5.0	5.6	5.8	6.0	6.8	6.4
44	4.5	5.4	5.1	5.8	5.7	6.2	6.5	6.7
45	4.3	5.4	4.8	5.8	5.5	6.1	6.2	6.5
46	5.3	5.7	5.9	6.1	6.7	6.4	7.7	6.9
47	5.1	6.0	5.7	6.3	6.2	6.7	6.9	7.2
48	5.4	6.1	6.1	6.5	6.9	6.8	8.1	7.3
49	5.4	6.3	6.1	6.7	6.8	7.1	7.7	7.6
50	5.7	6.1	6.4	6.4	7.1	6.7	8.0	7.1
51	5.7	6.1	6.4	6.4	7.1	6.7	8.0	7.2
52	5.8	6.1	6.5	6.4	7.2	6.7	8.1	7.1
53	5.6	6.2	6.2	6.5	6.9	6.8	7.9	7.2
54	5.3	6.2	6.0	6.5	6.6	6.8	7.7	7.3
55	5.4	5.9	6.0	6.2	6.6	6.5	7.5	6.8
56	5.3	5.7	6.2	6.0	7.1	6.3	8.3	6.7
57	5.2	5.4	6.0	5.7	6.7	6.0	7.7	6.4
58	5.0	5.3	5.8	5.6	6.5	5.8	7.4	6.2
59	5.0	5.3	5.6	5.6	6.3	5.8	7.2	6.2
60	4.8	5.5	5.5	5.8	6.1	6.2	7.0	6.6
61	5.2	5.1	5.9	5.4	6.5	5.7	7.4	6.1
62	5.4	4.9	6.0	5.2	6.5	5.5	7.3	5.9

Table 5

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 6

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 < 4.25	
0.23	4.3	4.25 < T < 4.44	
			4.0-4.9
0.22	4.5	4.44 < T < 4.65	
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	
			11.0-longer
0.08	12.5	11.76 < T < 13.24	
0.07	14.3	13.24 < T < 15.4	

Table 7

Confidence Interval Bounds for Extreme

Significant Wave Heights

Confidence Level	Bounds Around Significant 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 8

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 (1973).

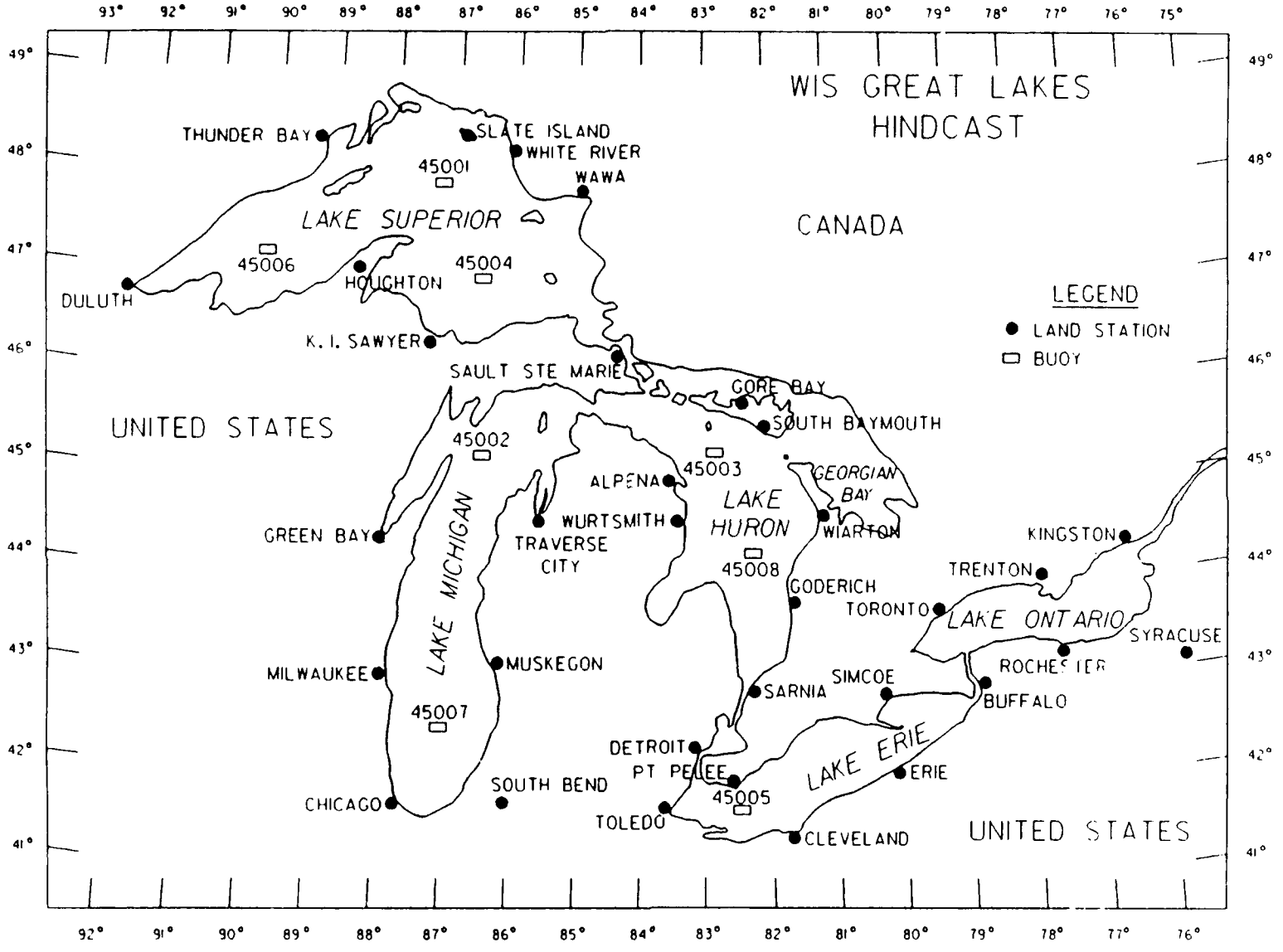


Figure 1. General location map for Great Lakes hindcast

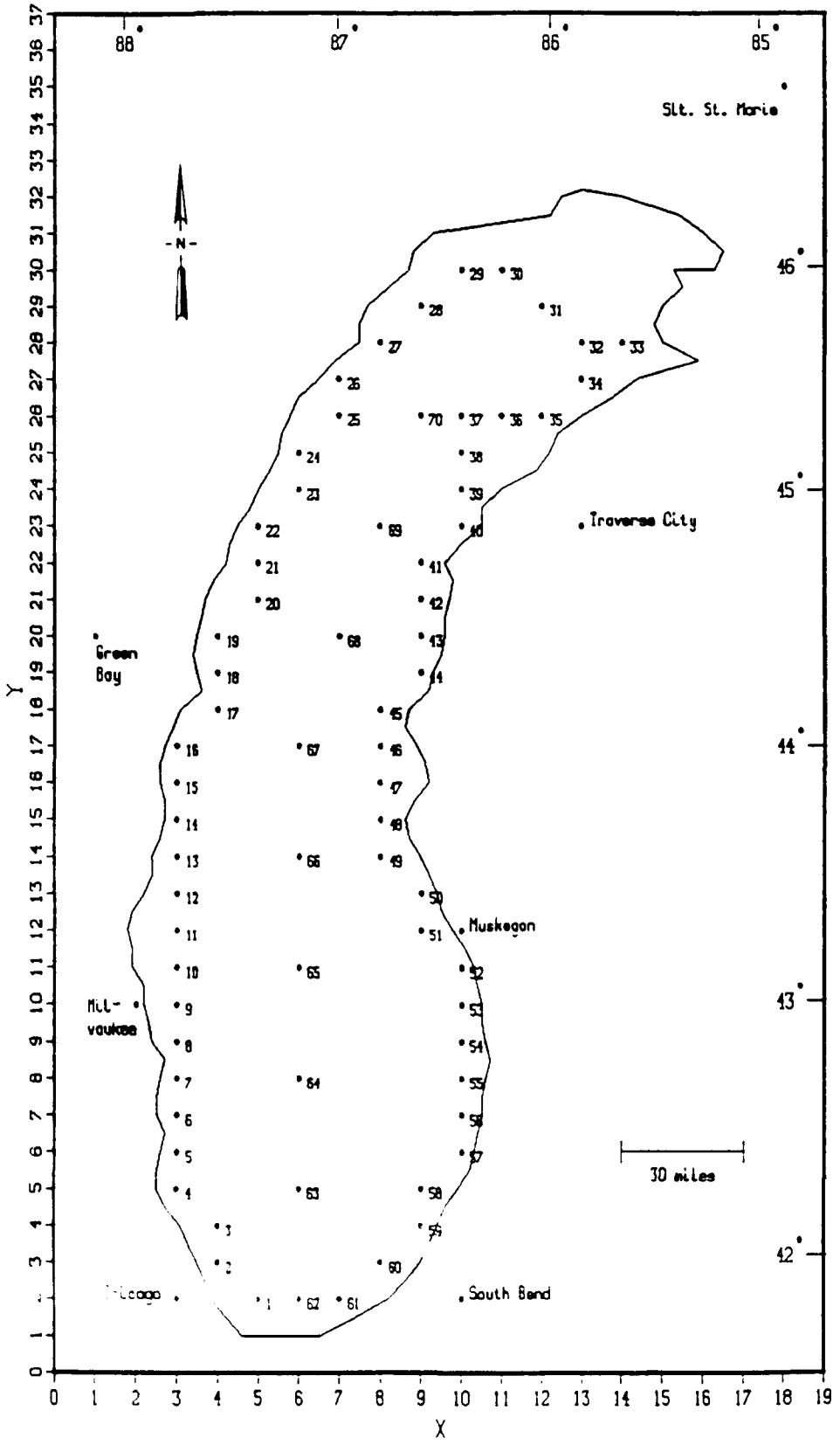


Figure 2. Station location map for Lake Michigan

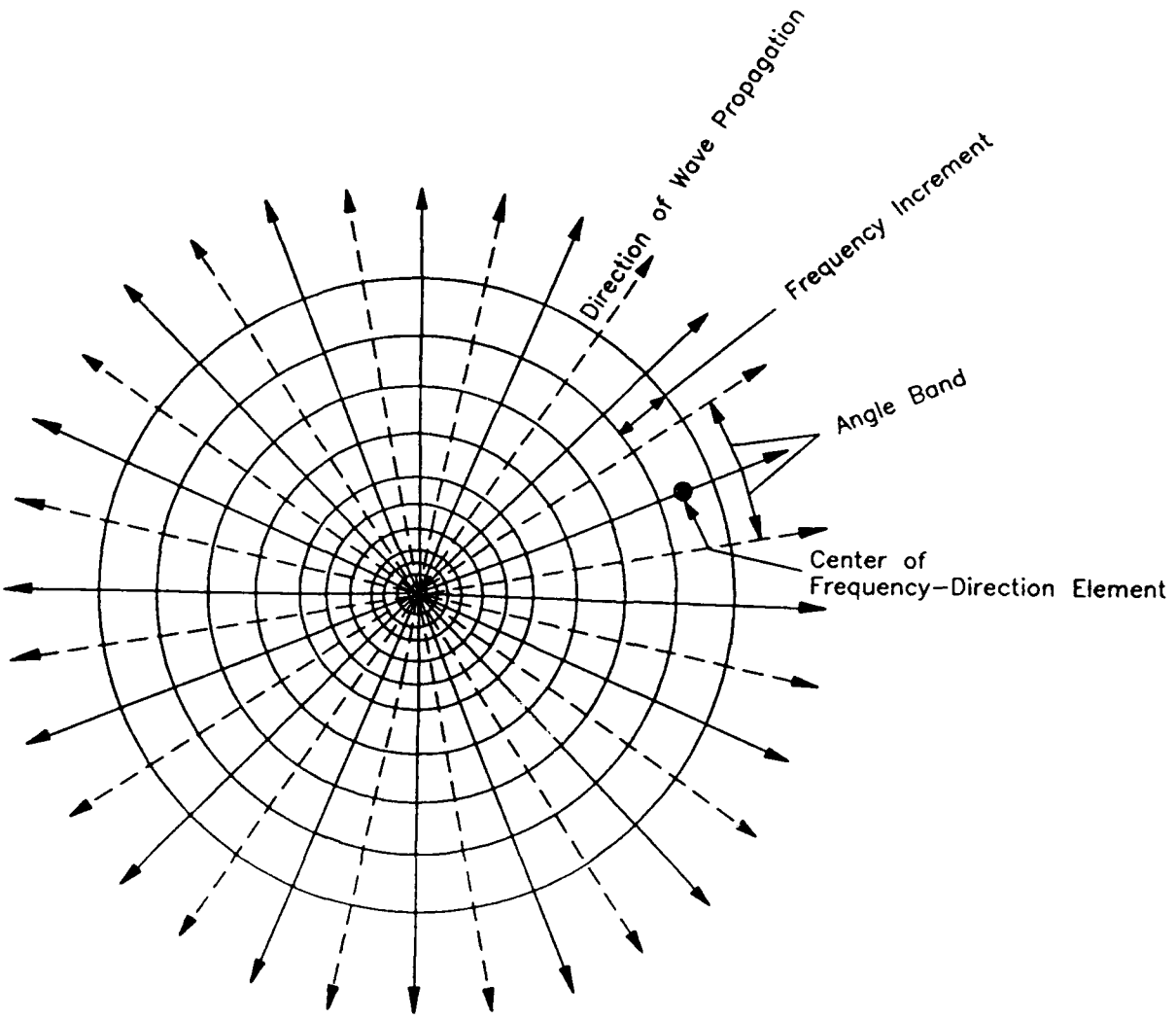


Figure 3. Schematic representation of directional spectrum

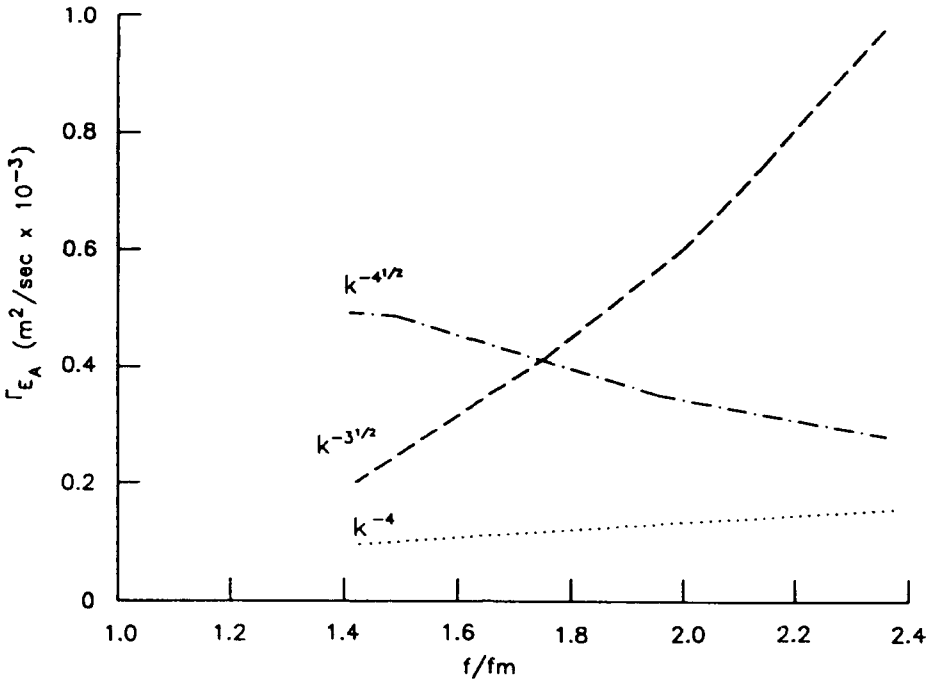


Figure 4. Calculated energy fluxes through spectrum as a function of frequency normalized by peak frequency *fm* based on complete Boltzmann integral

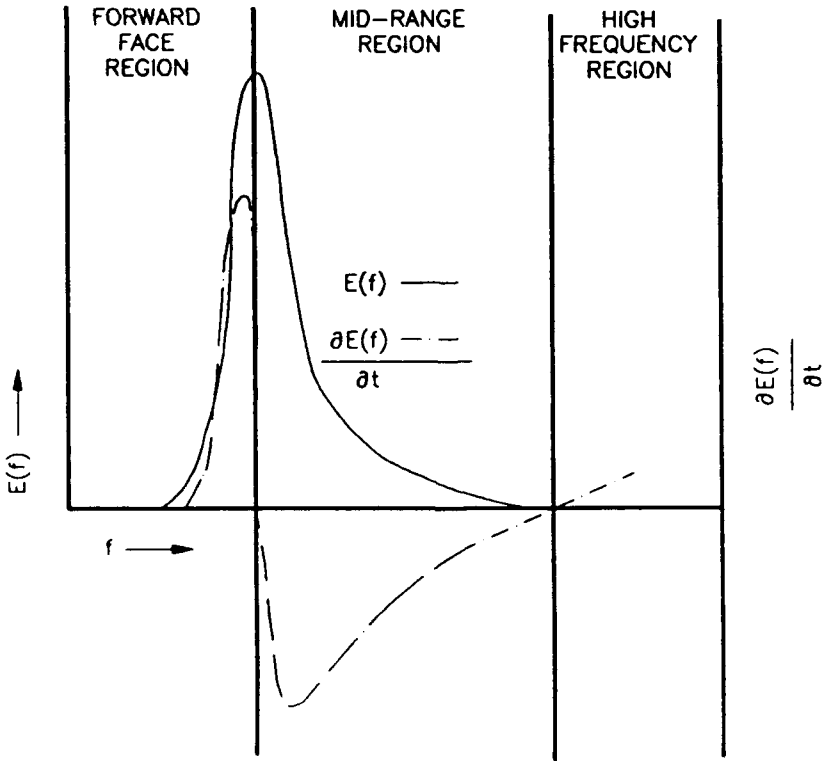


Figure 5. Nonlinear energy transfer as a function of frequency

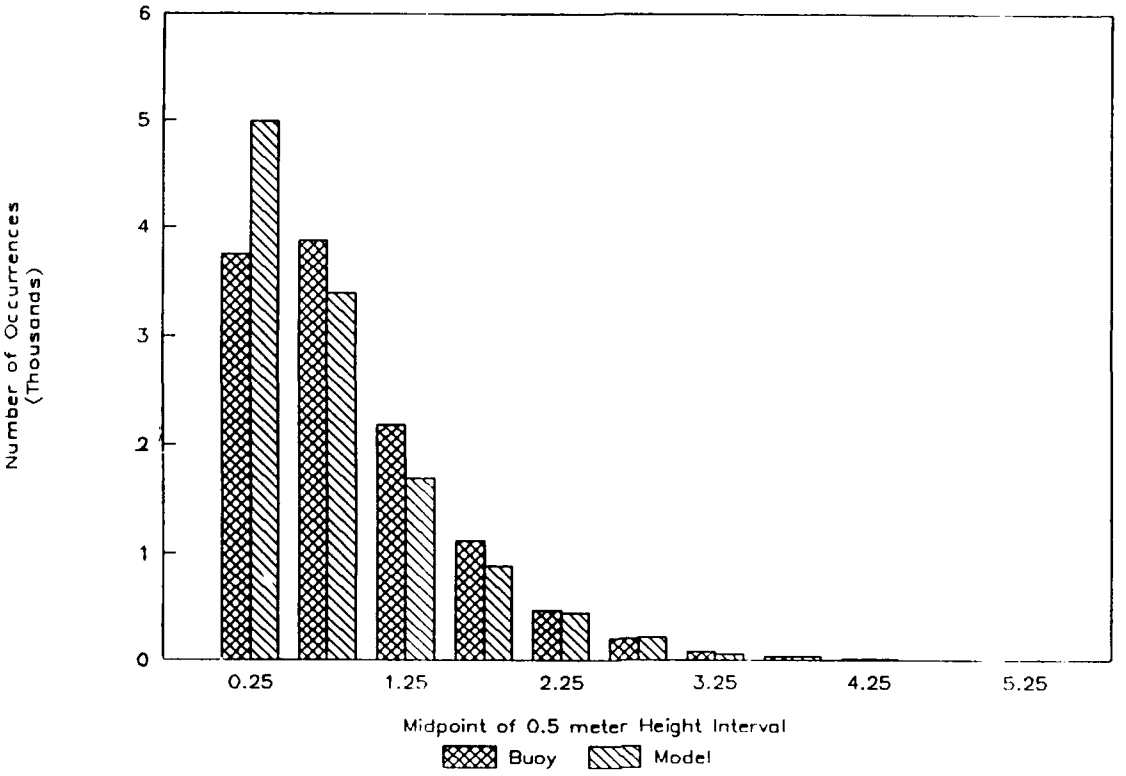


Figure 6. Distribution of measured and calculataed wave heights at Buoy 45002 (WIS Sta 70)

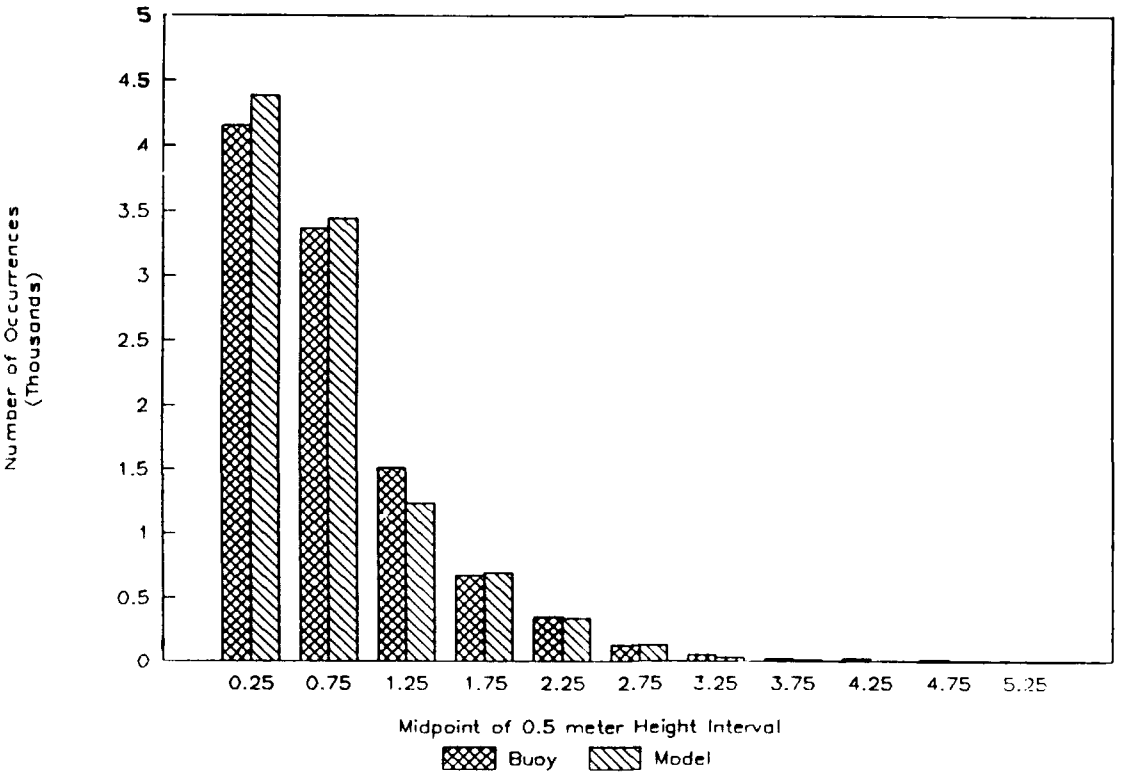


Figure 7. Distribution of measured and calculated wave heights at Buoy 45007 (WIS Sta 64)

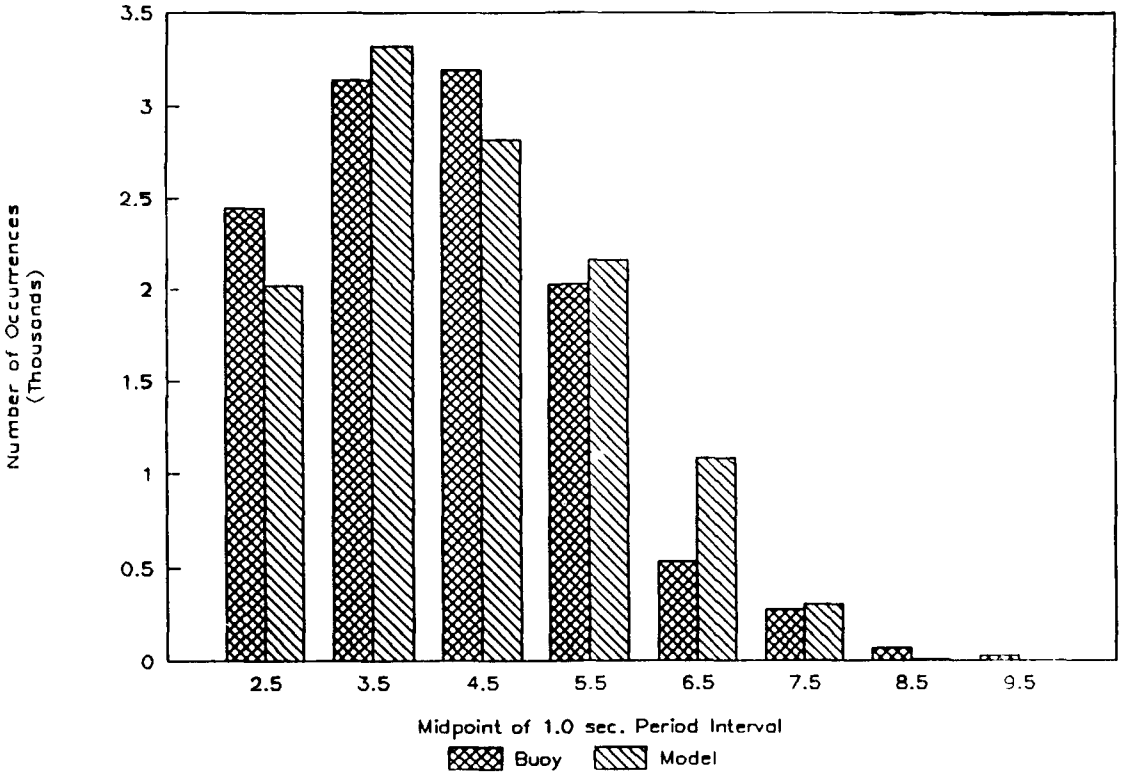


Figure 8. Distribution of measured and calculated wave peak periods at Buoy 45002 (WIS Sta 70)

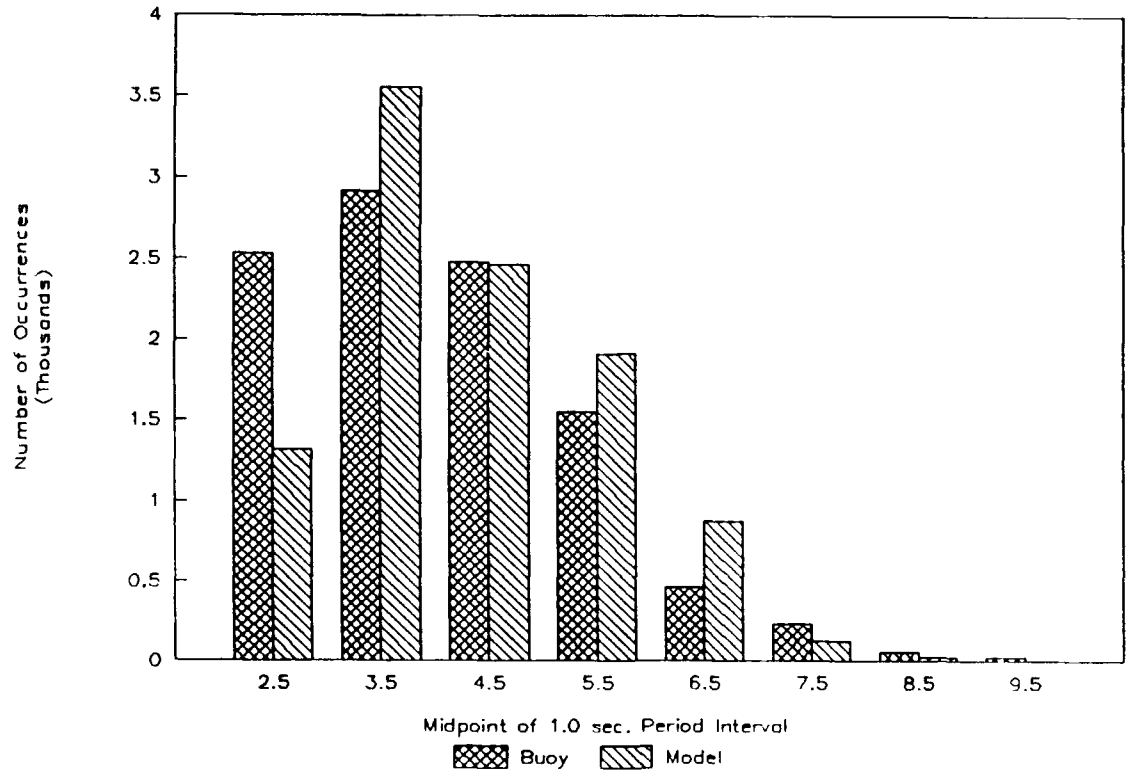


Figure 9. Distribution of measured and calculated wave peak periods at Buoy 45007 (WIS Sta 64)

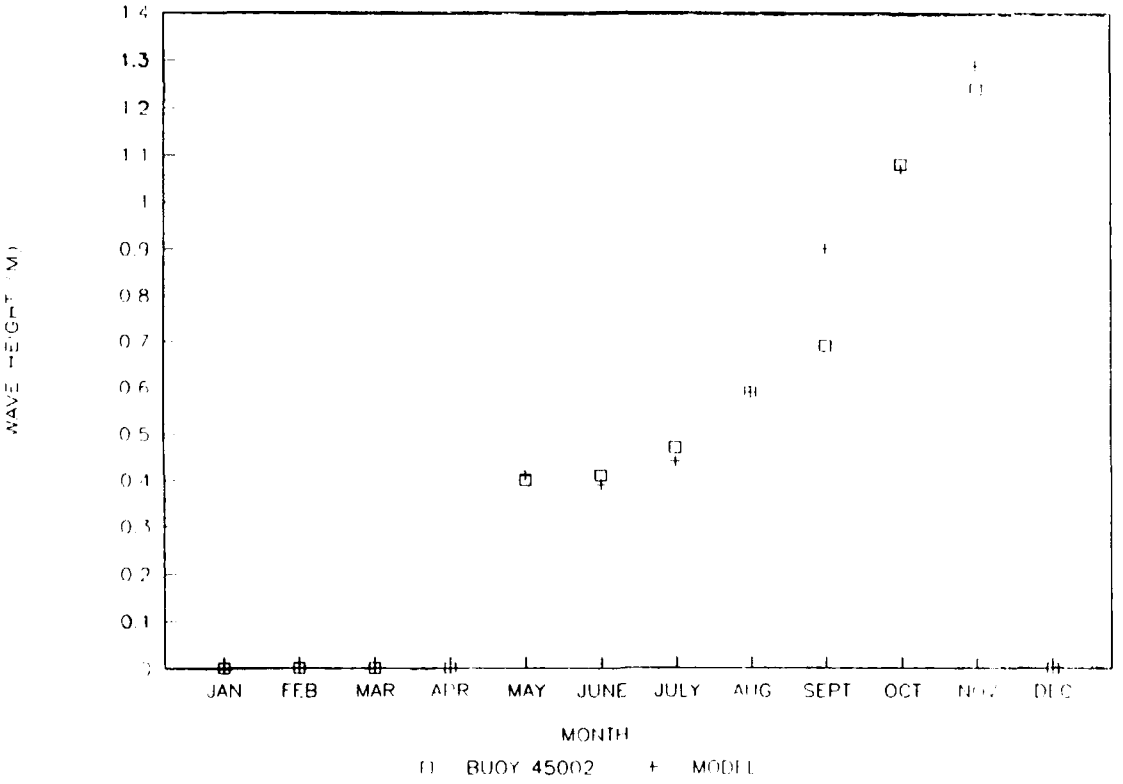


Figure 10. Monthly mean wave height at Buoy 45002 (WIS Sta 70)

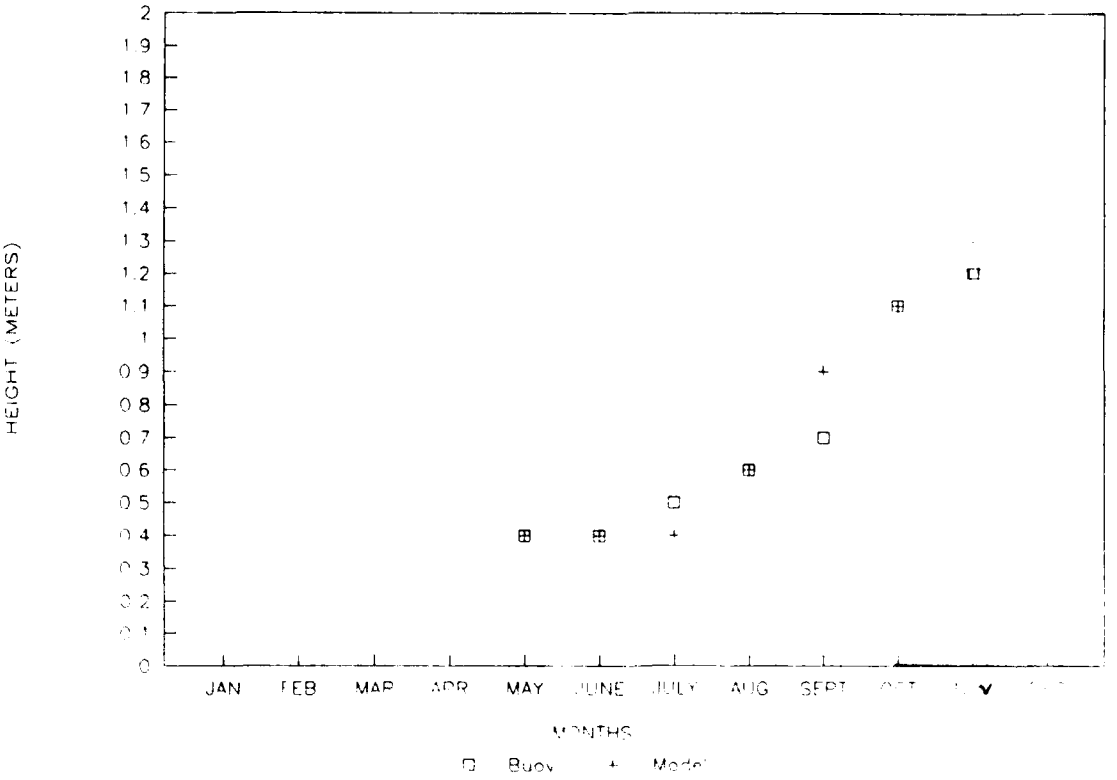


Figure 11. Monthly mean wave height at Buoy 45007 (WIS Sta 64)

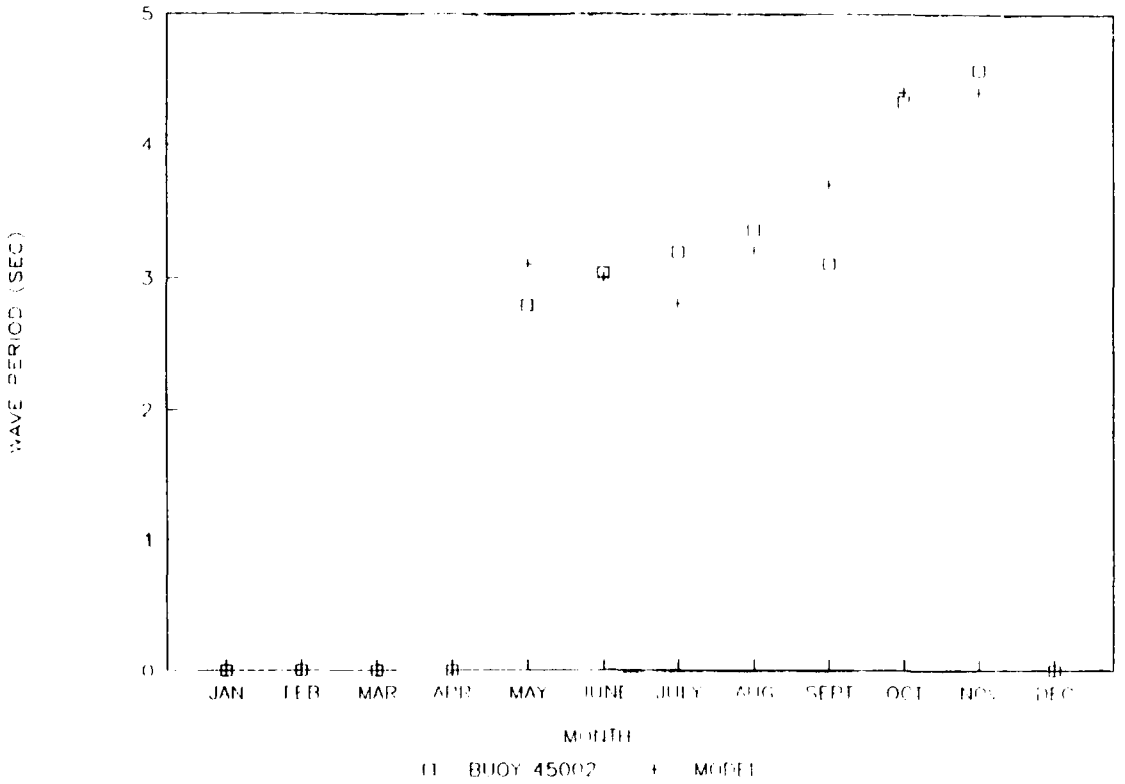


Figure 12. Monthly mean wave peak period at Buoy 45002 (WIS Sta 70)

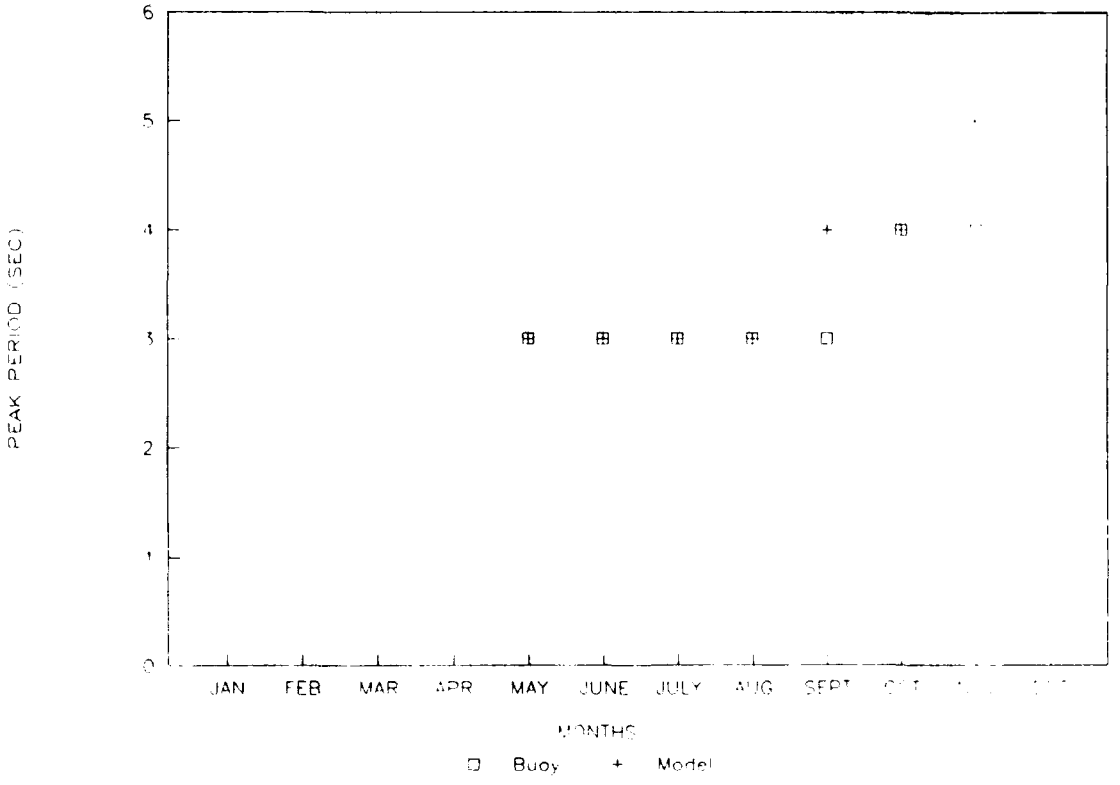


Figure 13. Monthly mean wave peak period at Buoy 45007 (WIS Sta 64)

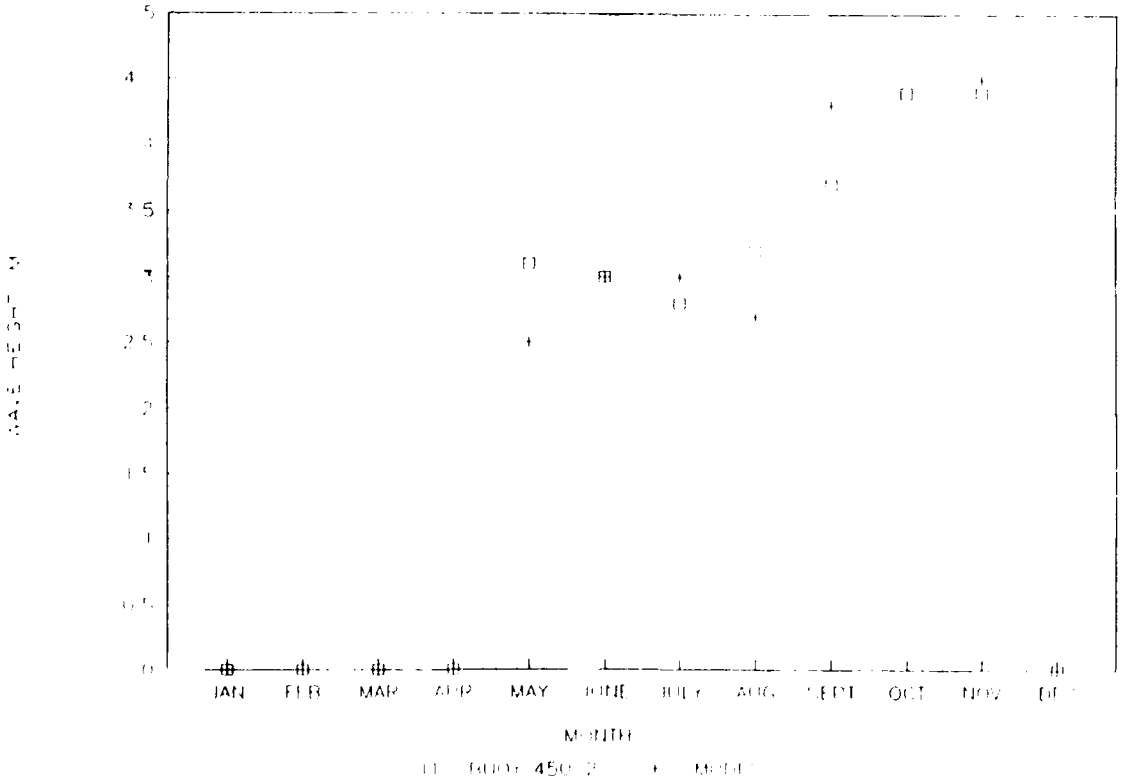


Figure 14. Monthly maximum wave height at Buoy 45002 (WIS Sta 70)

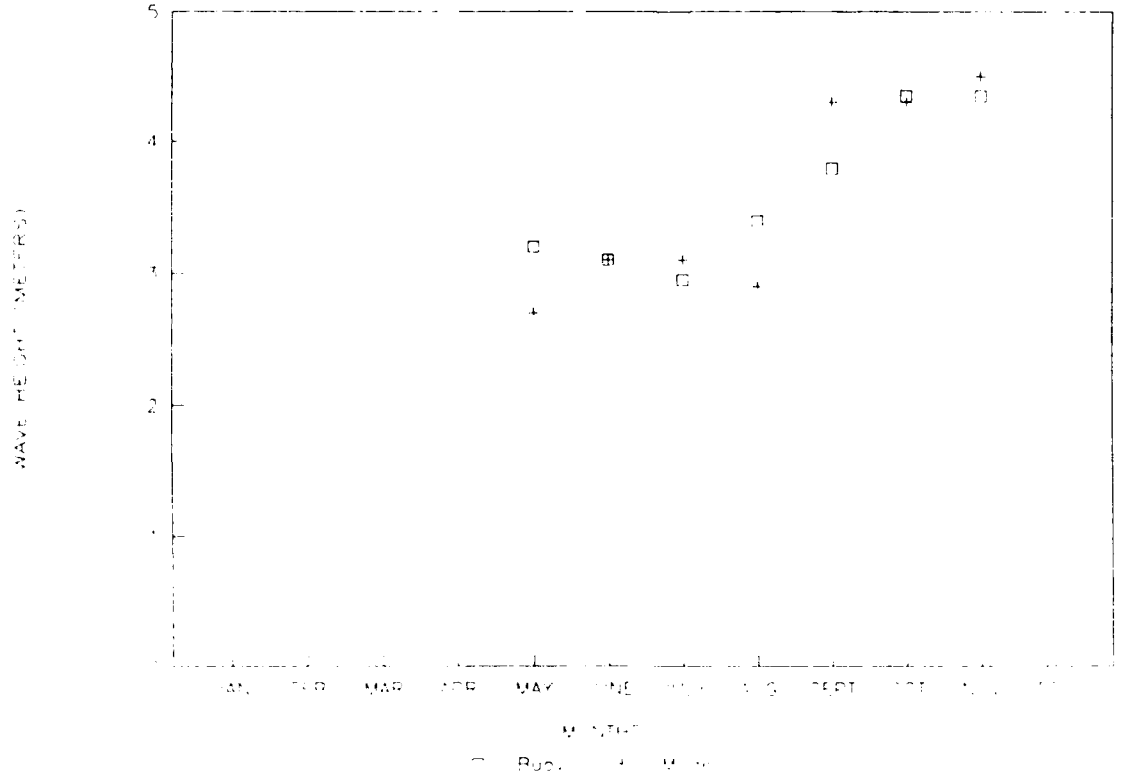


Figure 15. Monthly maximum wave height at Buoy 45007 (WIS Sta 64)

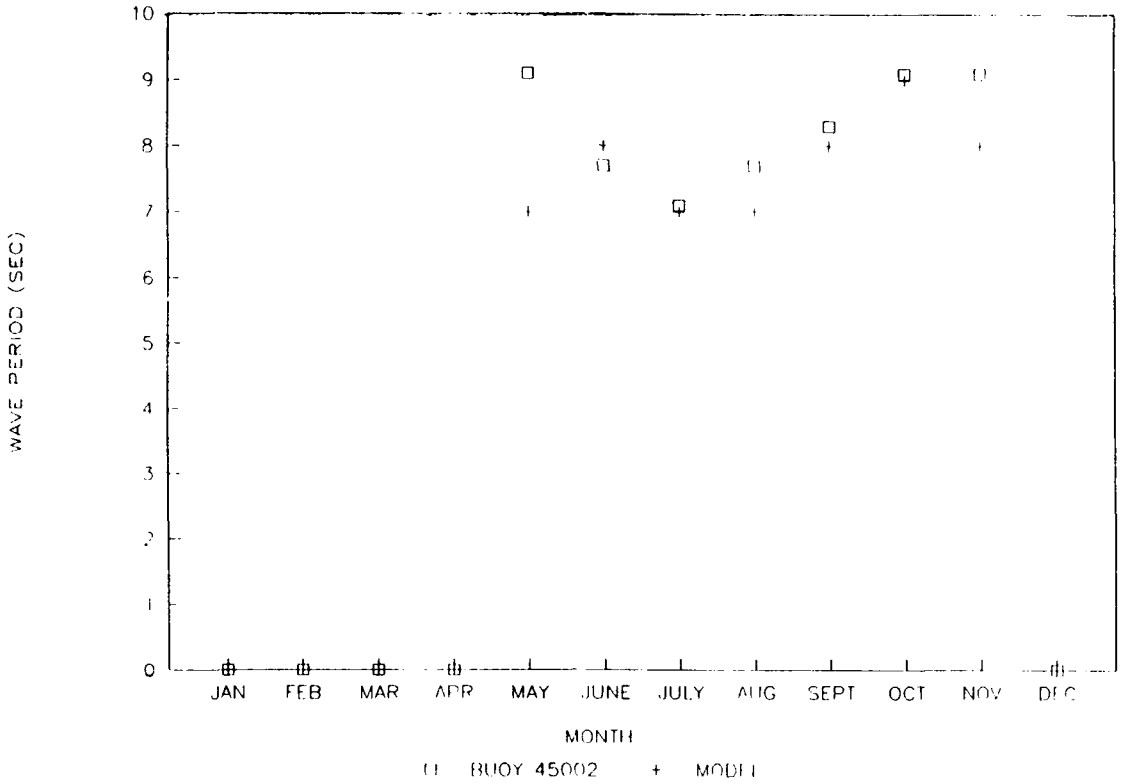


Figure 16. Monthly maximum wave peak period at Buoy 45002 (WIS Sta 70)

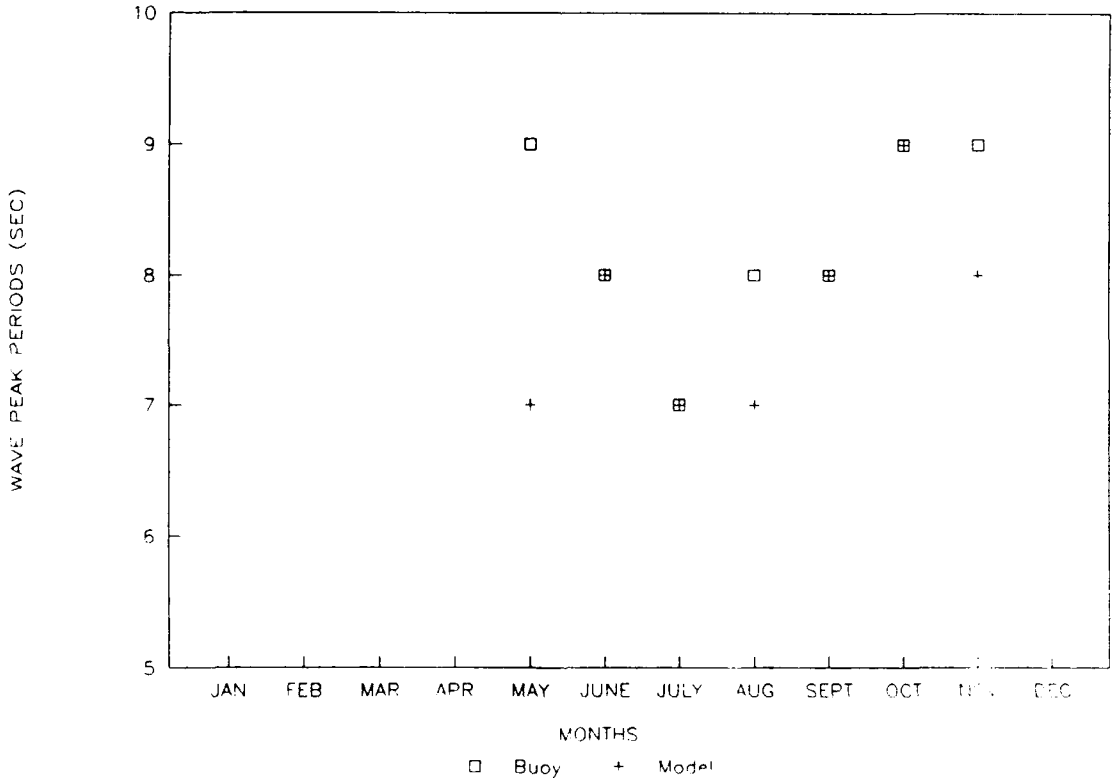


Figure 17. Monthly maximum wave peak period at Buoy 45007 (WIS Sta 64)

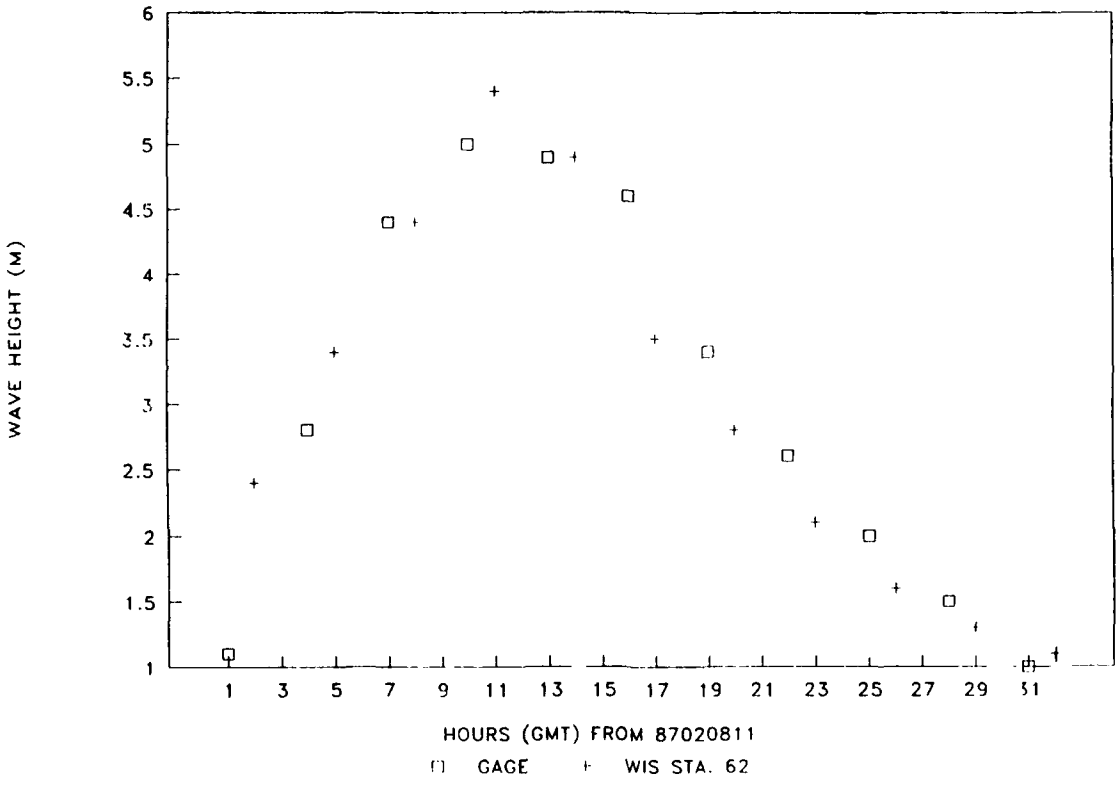


Figure 18. Measured and calculated wave height during storm of 8 February 1987 at Burns Harbor, Indiana

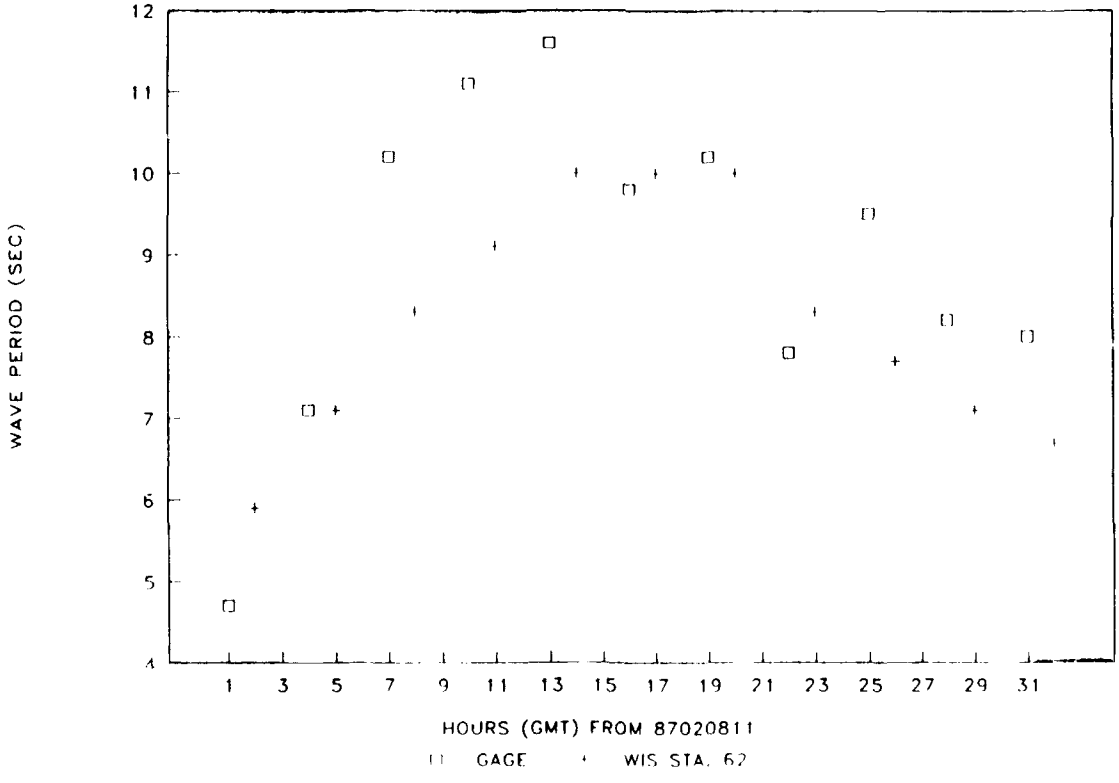


Figure 19. Measured and calculated wave peak period during storm of 8 February 1987 at Burns Harbor, Indiana

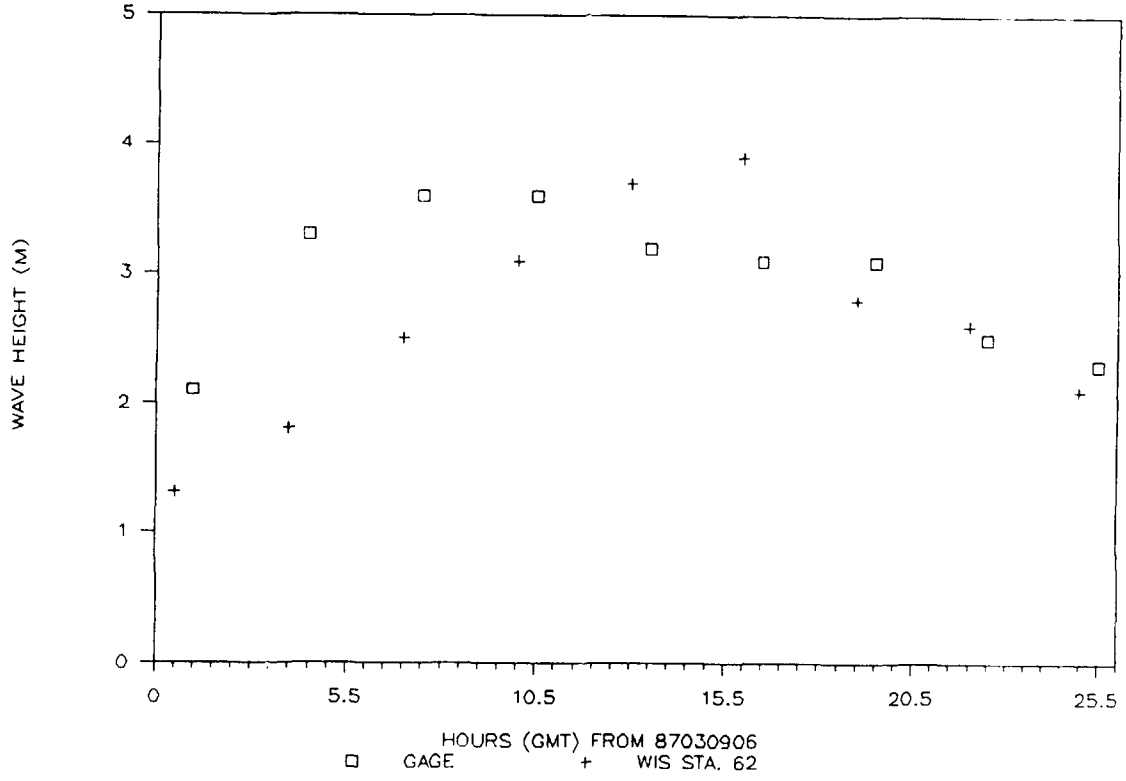


Figure 20. Measured and calculated wave height during storm of 9 March 1987 at Burns Harbor, Indiana

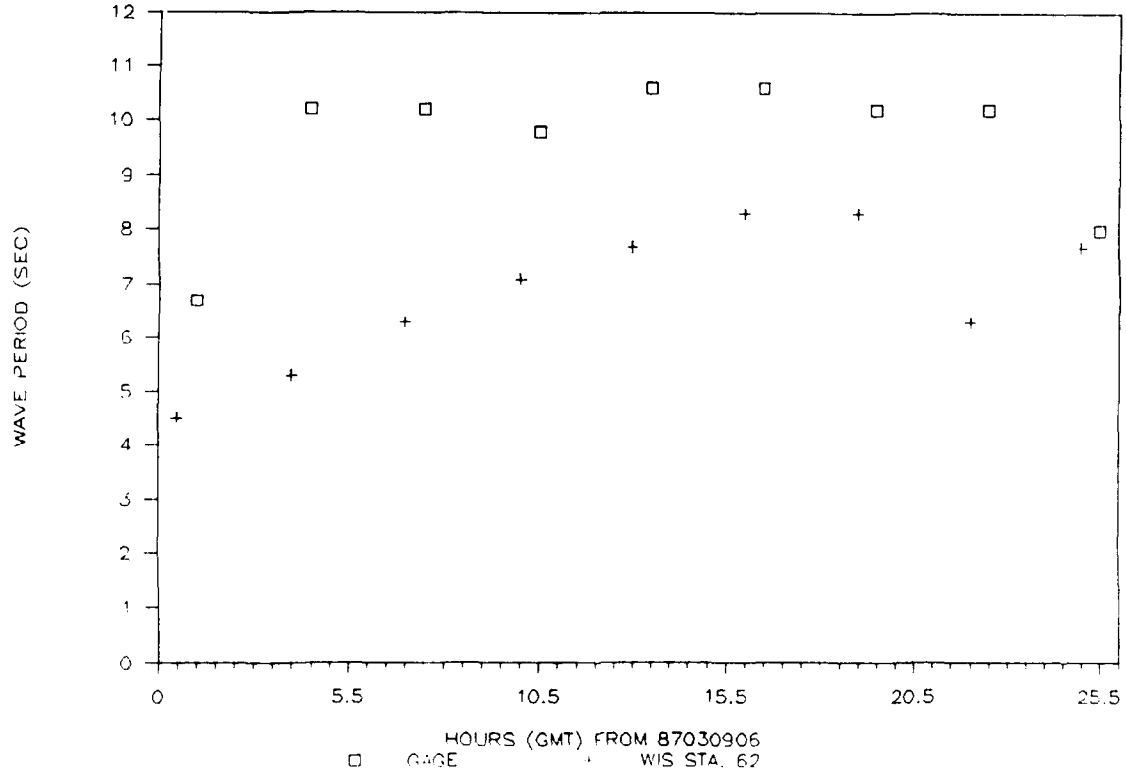


Figure 21. Measured and calculated wave peak period during storm of 9 March 1987 at Burns Harbor, Indiana

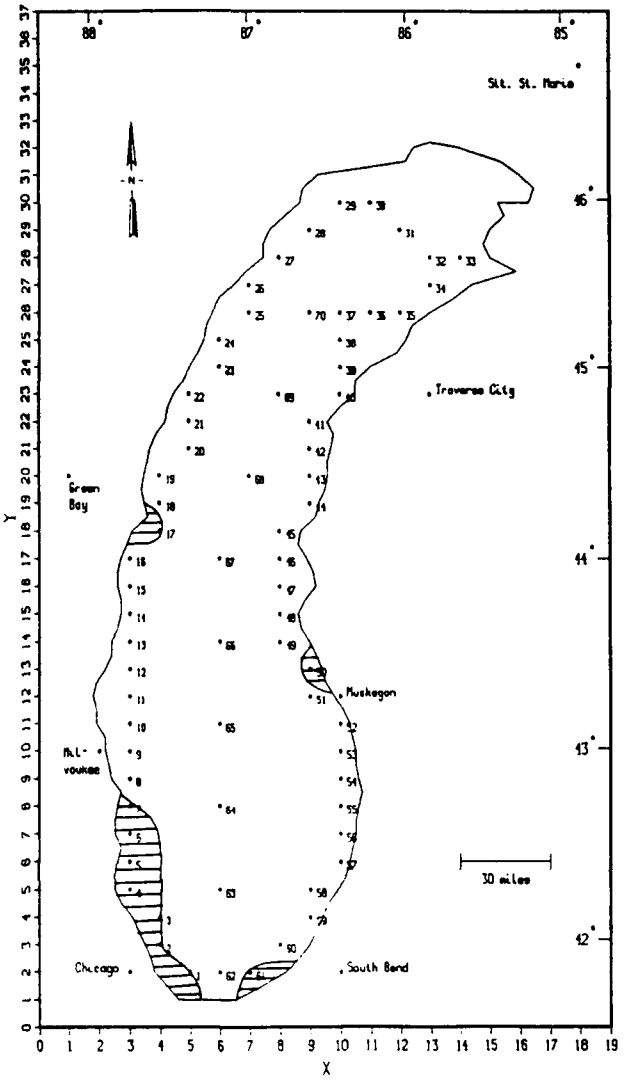


Figure 22. Estimated median ice coverage on Lake Michigan for the period 16-31 December

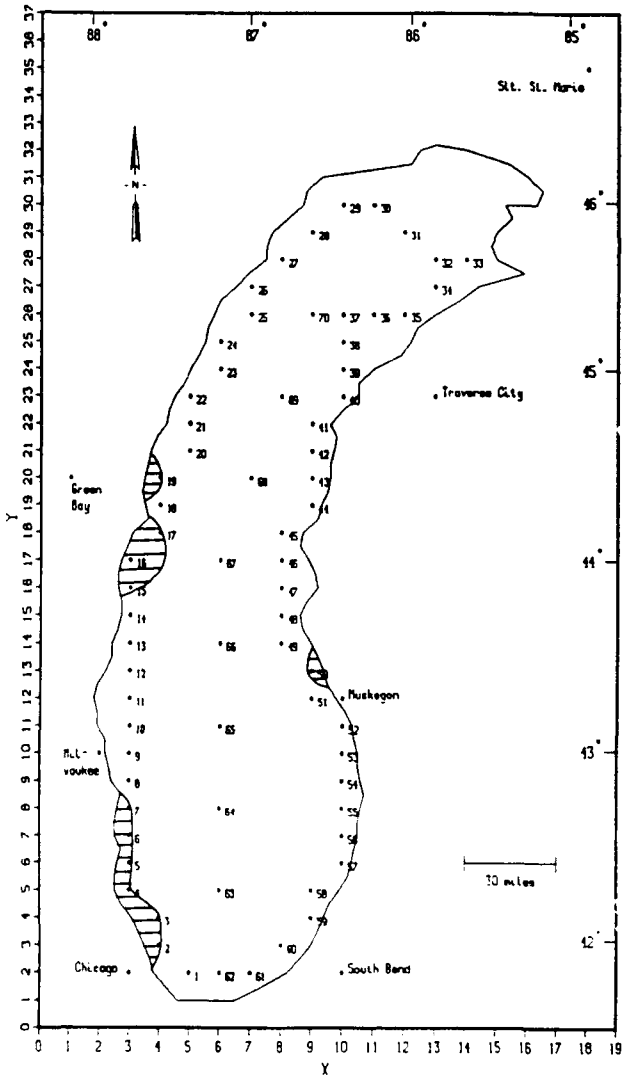


Figure 23. Estimated median ice coverage on Lake Michigan for the period 1-15 January

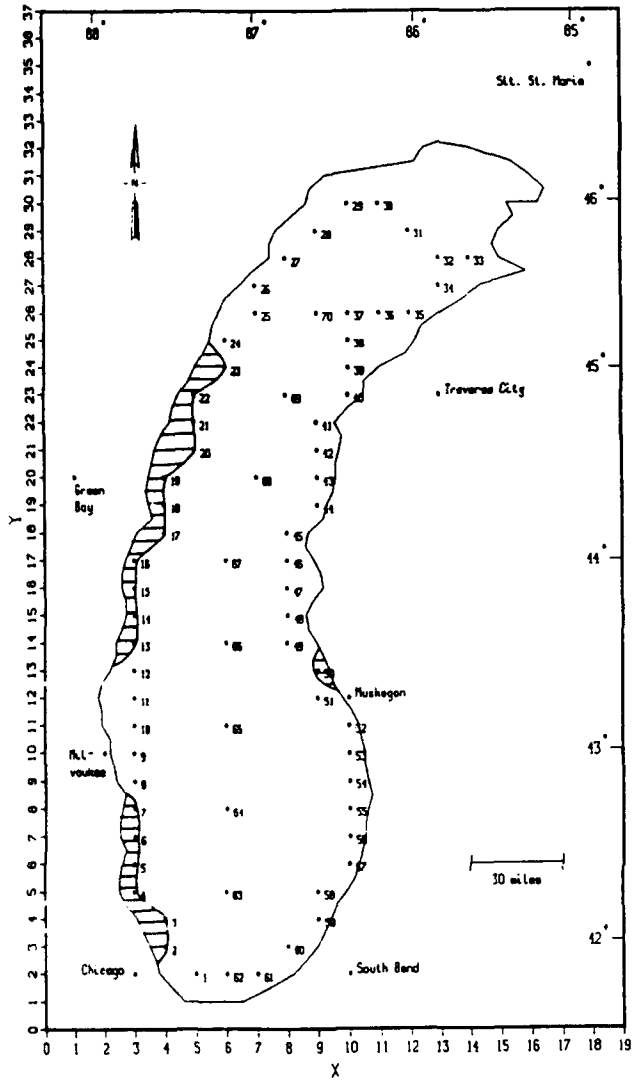


Figure 24. Estimated median ice coverage on Lake Michigan for the period 16-31 January

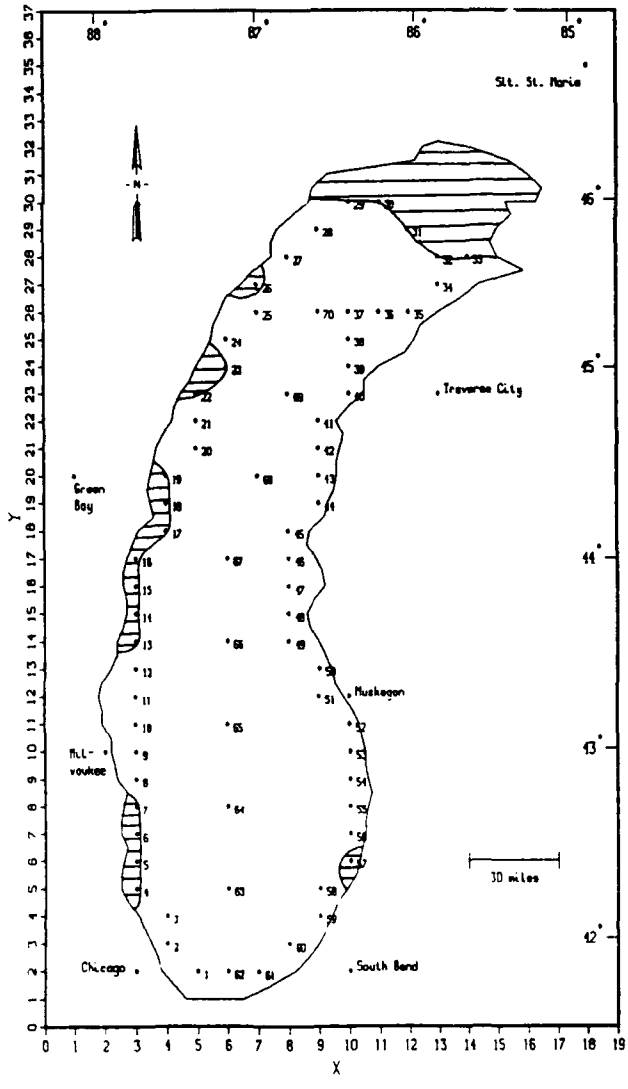


Figure 25. Estimated median ice coverage on Lake Michigan for the period 1-14 February

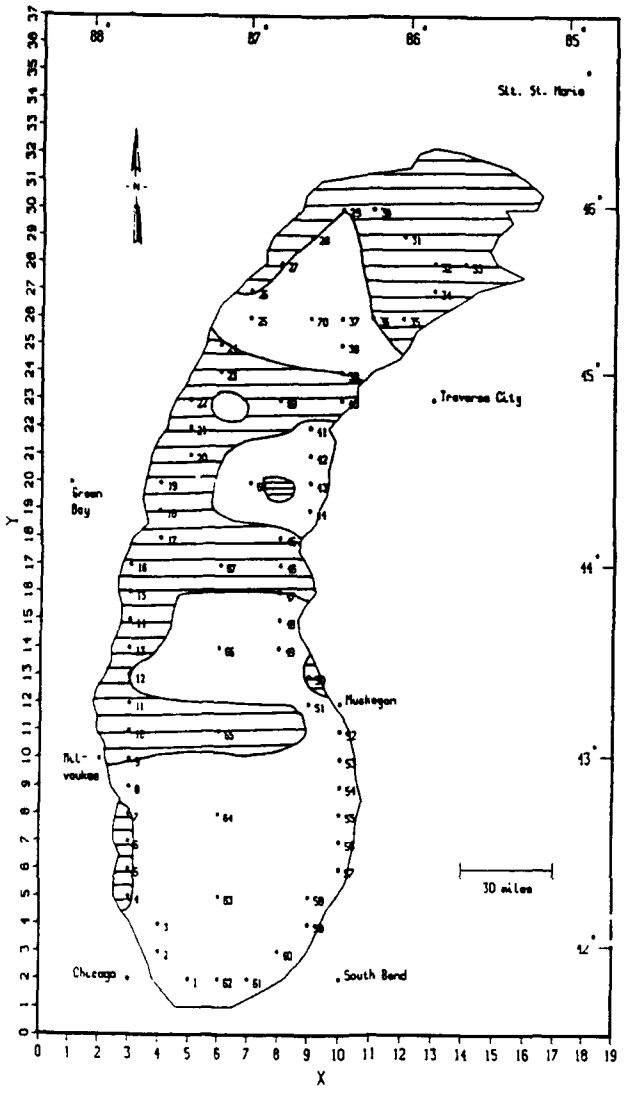


Figure 26. Estimated median ice coverage on Lake Michigan for the period 15-28 February

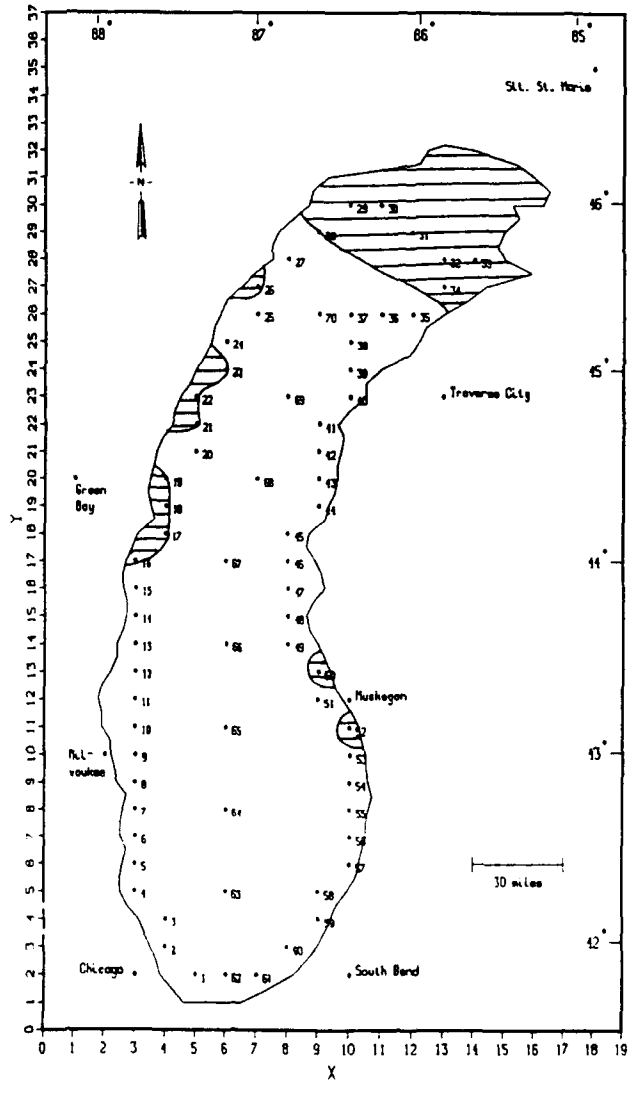


Figure 27. Estimated median ice coverage on Lake Michigan for the period 1-15 March

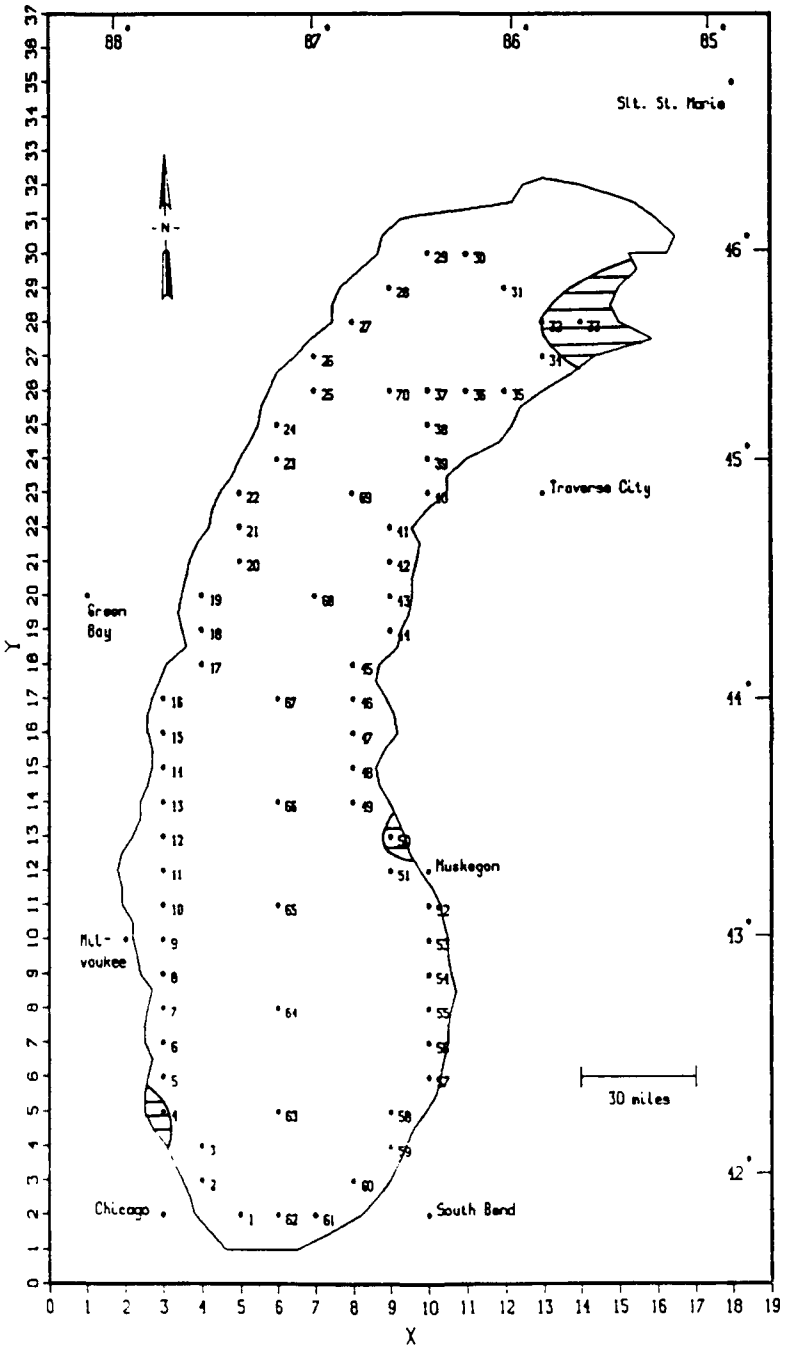


Figure 28. Estimated median ice coverage on on Lake Michigan for the period 16-31 March

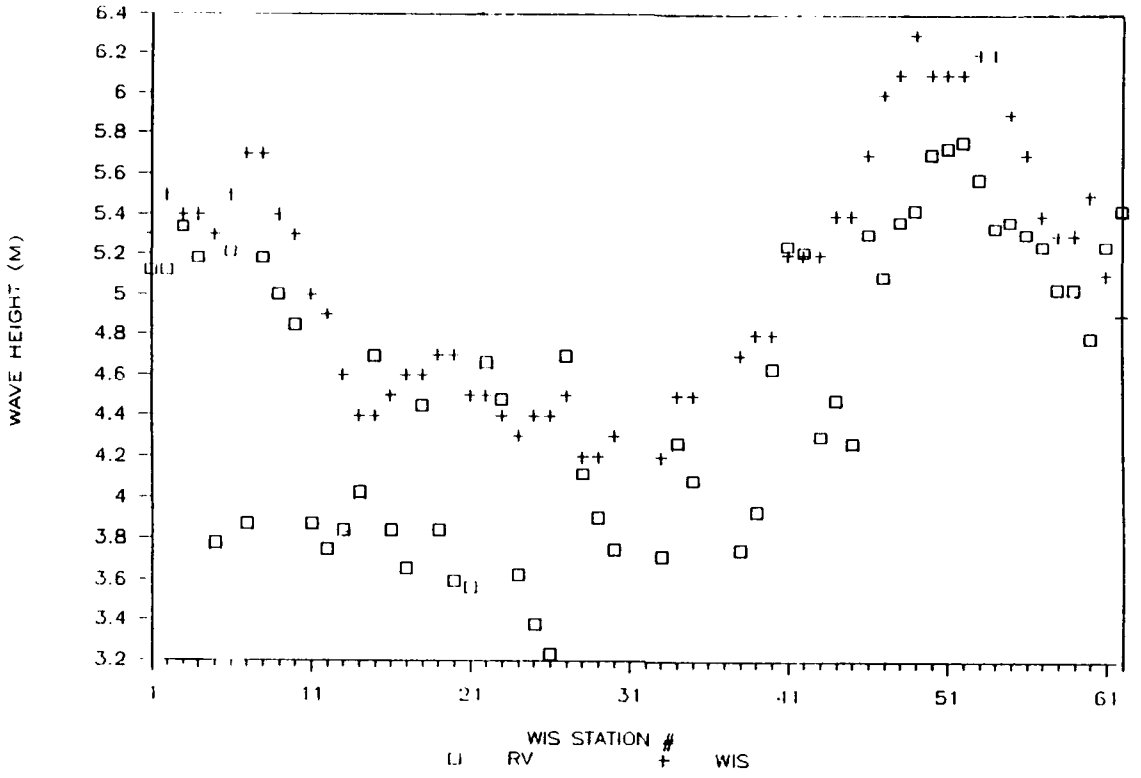


Figure 29. Estimated 5-year return period wave heights at stations around Lake Michigan

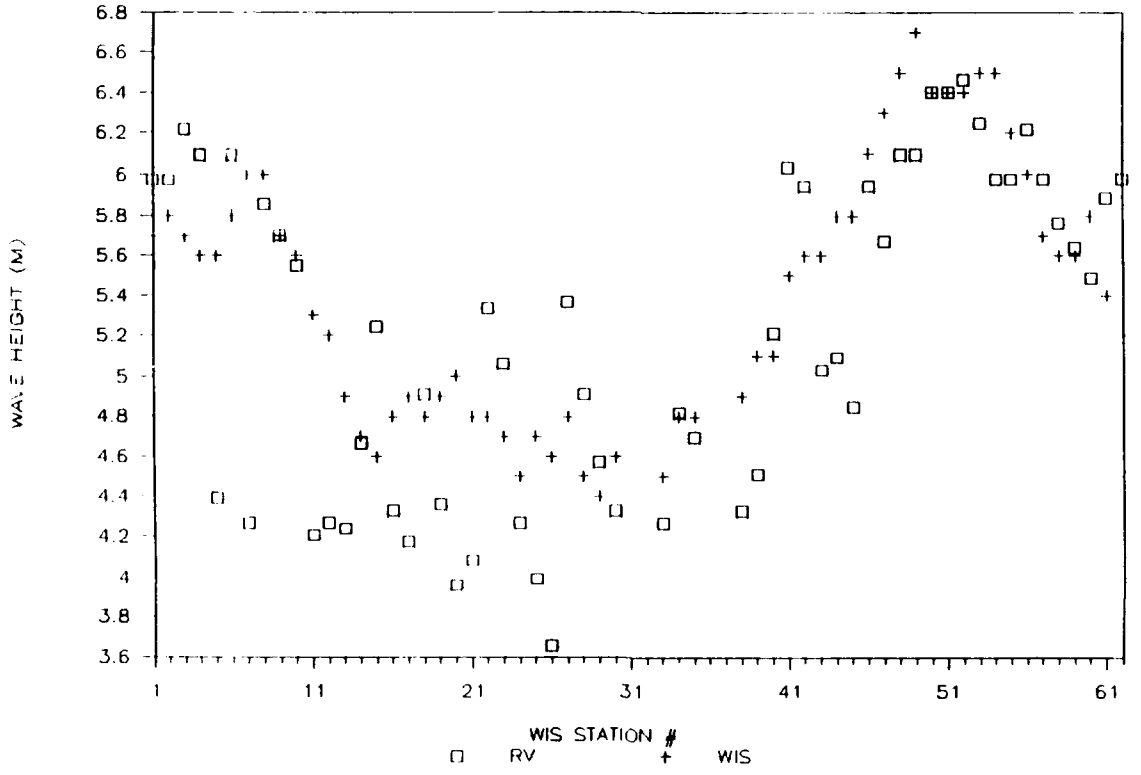


Figure 30. Estimated 10-year return period wave heights at stations around Lake Michigan

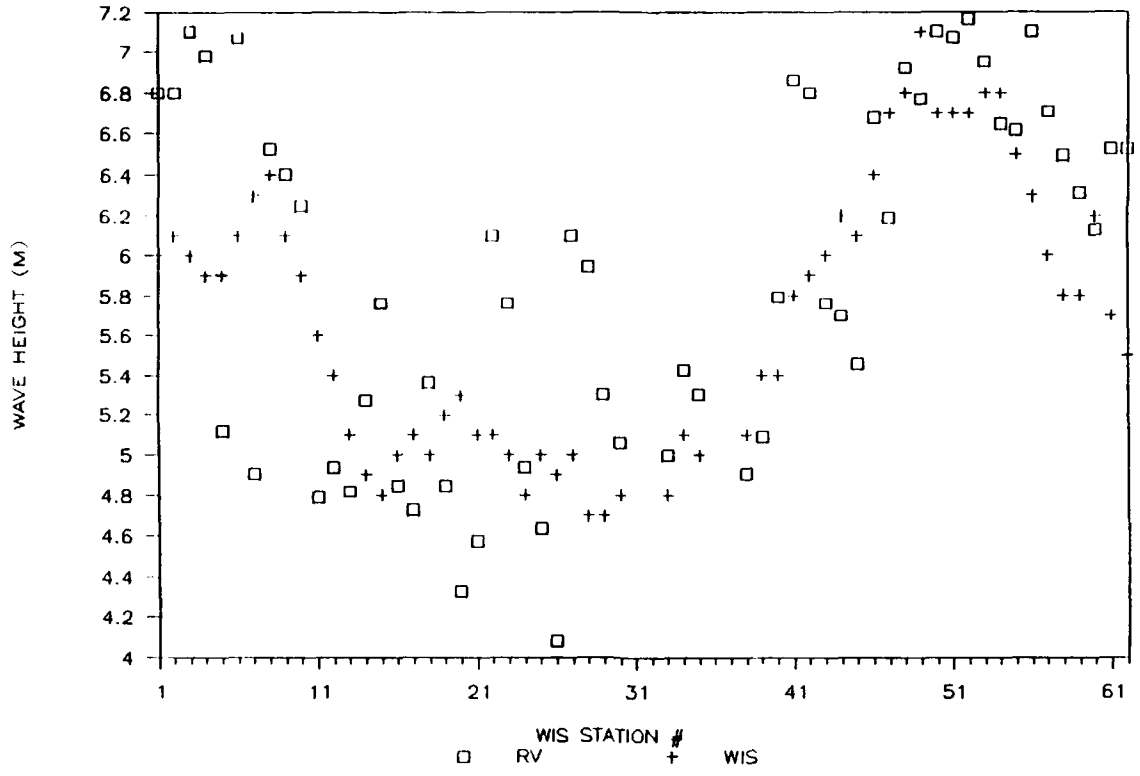


Figure 31. Estimated 20-year return period wave heights at stations around Lake Michigan

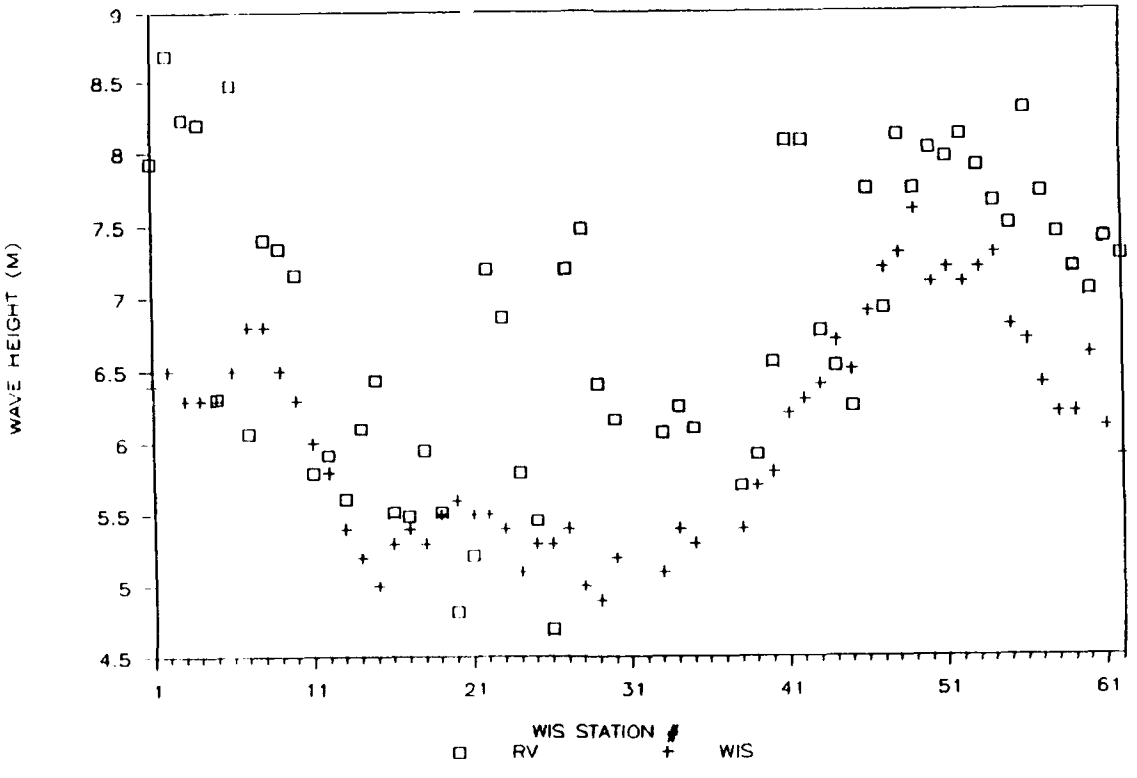


Figure 32. Estimated 50-year return period wave heights at stations around Lake Michigan

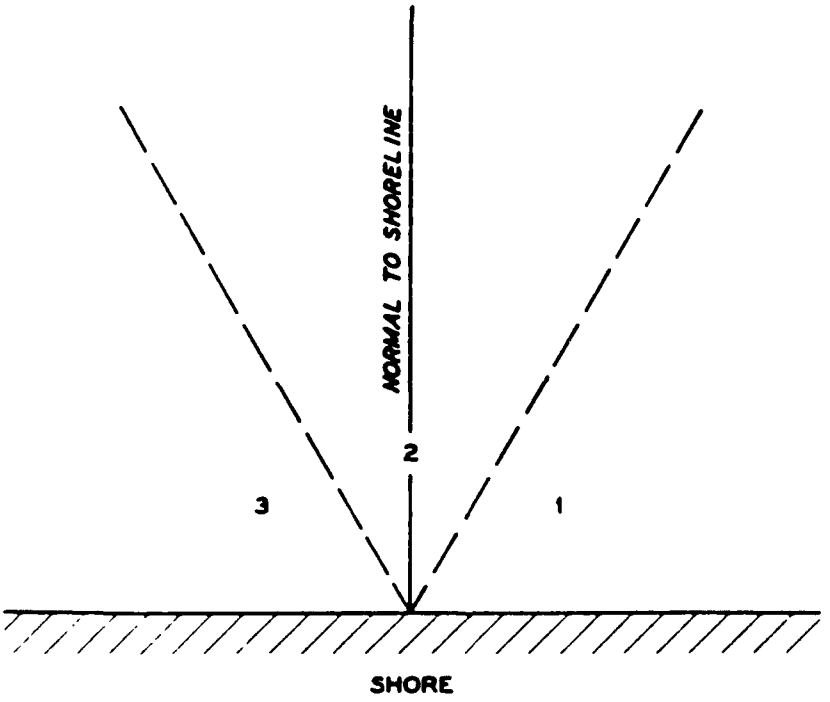


Figure 33. Schematic of angle classes used in return period calculations

APPENDIX A

SUMMARY TABLES

STATION M01 41.81N 87.38W 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	
0.00-0.24	434	189	36	13	2	.	.	.	.	.	674
0.25-0.49	90	499	191	95	9	.	.	.	.	.	884
0.50-0.74	.	422	495	335	40	2	.	.	.	.	1294
0.75-0.99	.	6	251	248	91	.	.	.	.	.	596
1.00-1.24	.	.	173	274	222	12	.	.	.	.	681
1.25-1.49	.	.	17	157	156	34	.	.	.	.	364
1.50-1.74	.	.	.	117	135	63	5	.	.	.	320
1.75-1.99	.	.	.	11	85	47	8	.	.	.	151
2.00-2.24	.	.	.	1	57	71	24	.	.	.	153
2.25-2.49	.	.	.	.	23	26	17	1	.	.	67
2.50-2.74	.	.	.	.	4	38	23	2	.	.	67
2.75-2.99	.	.	.	.	1	17	10	3	1	.	32
3.00-3.24	.	.	.	.	.	16	23	5	2	.	46
3.25-3.49	.	.	.	.	.	4	14	2	1	.	21
3.50+	.	.	.	.	.	2	35	25	23	1	86
TOTAL	524	1116	1163	1251	825	332	159	38	27	1	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 5107.

STATION M01 41.81N 87.38W 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	
0.00-0.24	417	178	44	10	.	.	.	.	.	.	649
0.25-0.49	101	784	231	72	7	.	.	.	.	.	1195
0.50-0.74	.	452	624	337	39	.	.	.	.	.	1452
0.75-0.99	.	10	259	271	79	3	.	.	.	.	622
1.00-1.24	.	.	210	336	181	11	2	.	.	.	740
1.25-1.49	.	.	13	136	121	37	.	.	.	.	307
1.50-1.74	.	.	.	131	122	48	1	.	.	.	302
1.75-1.99	.	.	.	9	67	28	6	.	.	.	110
2.00-2.24	.	.	.	1	81	31	11	.	.	.	124
2.25-2.49	.	.	.	.	31	18	4	.	.	.	53
2.50-2.74	.	.	.	.	8	28	18	.	.	.	54
2.75-2.99	.	.	.	.	1	31	3	.	.	.	35
3.00-3.24	.	.	.	.	.	19	5	1	.	.	25
3.25-3.49	.	.	.	.	.	3	5	.	.	.	8
3.50+	.	.	.	.	.	.	28	1	1	.	30
TOTAL	518	1424	1381	1303	737	257	83	2	1	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 5360.

STATION M01 41.81N 87.38W 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	
0.00-0.24	597	248	48	12	.	.	.	.	.	.	905
0.25-0.49	75	1053	411	88	4	.	.	.	.	.	1631
0.50-0.74	.	588	835	404	45	5	.	.	.	.	1677
0.75-0.99	.	5	318	228	124	3	.	.	.	.	678
1.00-1.24	.	.	182	258	135	13	.	.	.	.	588
1.25-1.49	.	.	11	151	82	18	2	.	.	.	264
1.50-1.74	.	.	.	118	115	28	7	.	.	.	268
1.75-1.99	.	.	.	5	106	8	2	.	.	.	121
2.00-2.24	.	.	.	.	100	16	4	.	.	.	120
2.25-2.49	.	.	.	.	21	12	3	.	.	.	36
2.50-2.74	.	.	.	.	8	39	1	.	.	.	48
2.75-2.99	.	.	.	.	1	28	2	.	.	.	31
3.00-3.24	.	.	.	.	.	27	.	.	.	.	27
3.25-3.49	.	.	.	.	.	10	6	.	.	.	16
3.50+	.	.	.	.	.	.	16	.	.	.	16
TOTAL	672	1894	1805	1264	741	207	43	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 6220.

STATION M01 41.81N 87.38W 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	
0.00-0.24	403	148	18	10	1	.	.	.	.	.	580
0.25-0.49	101	683	216	75	8	.	.	.	.	.	1083
0.50-0.74	.	424	417	211	38	2	.	.	.	.	1092
0.75-0.99	.	5	218	68	28	3	.	.	.	.	322
1.00-1.24	.	.	220	120	40	5	1	.	.	.	386
1.25-1.49	.	.	16	104	18	10	1	.	.	.	149
1.50-1.74	.	.	.	102	22	7	.	.	.	.	131
1.75-1.99	.	.	.	16	28	3	2	.	.	.	49
2.00-2.24	.	.	.	1	18	5	1	.	.	.	25
2.25-2.49	.	.	.	.	9	1	1	.	.	.	11
2.50-2.74	.	.	.	.	3	7	.	.	.	.	10
2.75-2.99	.	.	.	.	.	8	.	.	.	.	8
3.00-3.24	.	.	.	.	.	3	.	.	.	.	3
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	4	.	.	.	4
TOTAL	504	1260	1105	707	213	54	11	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 3621.

STATION M01 41.81N 87.38W 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	
0.00-0.24	428	183	33	7	.	1	.	.	.	.	652
0.25-0.49	90	649	203	74	3	.	.	.	.	.	1019
0.50-0.74	.	391	332	147	33	1	.	.	.	.	904
0.75-0.99	.	1	226	18	28	4	.	.	.	.	277
1.00-1.24	.	.	265	29	10	7	.	.	.	.	311
1.25-1.49	.	.	14	116	3	3	.	.	.	.	136
1.50-1.74	.	.	.	68	5	1	1	.	.	.	75
1.75-1.99	.	.	.	13	.	3	1	.	.	.	17
2.00-2.24	.	.	.	3	4	.	.	.	.	.	7
2.25-2.49	.	.	.	.	1	2	.	.	.	.	3
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	518	1224	1073	475	87	22	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.6 NO. OF CASES= 3195.

STATION M01 41.81N 87.38W 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	
0.00-0.24	467	157	36	8	1	.	.	.	.	.	669
0.25-0.49	85	602	164	54	5	.	.	.	.	.	910
0.50-0.74	.	490	198	81	21	2	.	.	.	.	792
0.75-0.99	.	4	155	6	17	5	1	.	.	.	188
1.00-1.24	.	.	118	13	9	8	.	.	.	.	148
1.25-1.49	.	.	9	41	3	.	.	.	.	.	53
1.50-1.74	.	.	1	38	.	3	1	.	.	.	43
1.75-1.99	.	.	.	5	.	3	.	.	.	.	8
2.00-2.24	.	.	.	1	2	.	.	.	.	.	3
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	552	1253	681	247	59	21	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 2645.

STATION M01 41.81N 87.38W 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	
0.00-0.24	726	242	65	13	3	.	.	.	.	.	1049
0.25-0.49	108	777	188	73	3	1	.	.	.	.	1150
0.50-0.74	.	1051	112	83	22	2	.	.	.	.	1270
0.75-0.99	.	28	179	7	16	.	.	.	.	.	230
1.00-1.24	.	.	73	1	12	4	.	.	.	.	90
1.25-1.49	.	.	17	.	2	1	.	.	.	.	20
1.50-1.74	.	.	1	7	.	.	.	.	.	.	8
1.75-1.99	.	.	.	1	.	.	1	.	.	.	2
2.00-2.24	.	.	.	.	.	1	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	834	2098	635	185	58	9	1	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 3582.

STATION M01 41.81N 87.38W 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	
0.00-0.24	977	222	70	18	3	.	.	.	.	.	1290
0.25-0.49	319	1264	176	112	8	.	.	.	.	.	1879
0.50-0.74	.	1332	50	117	26	4	.	.	.	.	1529
0.75-0.99	.	111	174	17	14	5	.	.	.	.	321
1.00-1.24	.	.	55	3	7	5	.	.	.	.	70
1.25-1.49	.	.	13	.	.	2	.	.	.	.	15
1.50-1.74	.	.	4	4	.	2	2	.	.	.	12
1.75-1.99	.	.	.	.	.	.	1	.	.	.	1
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1296	2929	542	272	58	18	3	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 4797.

STATION M01 41.81N 87.38W 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	
0.00-0.24	1551	302	101	39	1	.	.	.	.	.	1994
0.25-0.49	624	2027	223	216	18	.	.	.	.	.	3108
0.50-0.74	.	2619	27	143	54	7	.	.	.	.	2850
0.75-0.99	.	274	352	28	19	3	.	.	.	.	676
1.00-1.24	.	.	183	2	8	6	1	.	.	.	200
1.25-1.49	.	.	62	.	1	1	1	.	.	.	65
1.50-1.74	.	.	20	8	.	.	.	.	.	.	28
1.75-1.99	.	.	.	3	.	.	.	.	.	.	3
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2175	5222	968	439	101	17	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.0 NO. OF CASES= 8357.

STATION M01 41.81N 87.38W 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	
0.00-0.24	1285	260	83	44	2	.	.	.	.	.	1674
0.25-0.49	371	1644	171	198	20	.	.	.	.	.	2404
0.50-0.74	.	3075	186	167	68	5	.	.	.	.	3501
0.75-0.99	.	254	732	60	60	7	.	.	.	.	1113
1.00-1.24	.	.	459	4	13	14	2	.	.	.	492
1.25-1.49	.	.	170	.	.	2	.	.	.	.	172
1.50-1.74	.	.	22	63	.	.	.	.	.	.	85
1.75-1.99	.	.	.	7	.	.	.	.	.	.	7
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	2	.	.	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1656	5233	1823	543	165	28	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 8851.

STATION M01 41.81N 87.38W 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	
0.00-0.24	1313	326	120	59	3	.	.	.	.	.	1821
0.25-0.49	158	1348	188	272	43	3	.	.	.	.	2012
0.50-0.74	.	2518	290	205	104	7	.	.	.	.	3124
0.75-0.99	.	29	632	73	96	8	2	.	.	.	840
1.00-1.24	.	.	432	6	19	17	3	.	.	.	477
1.25-1.49	.	.	182	.	.	7	.	.	.	.	189
1.50-1.74	.	.	10	78	.	.	.	.	.	.	88
1.75-1.99	.	.	.	13	.	.	.	.	.	.	13
2.00-2.24	.	.	.	20	.	.	.	.	.	.	20
2.25-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1471	4221	1854	727	265	42	5	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.3 NO OF CASES= 8042.

STATION M01 41.81N 87.38W 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	
0.00-0.24	1050	272	89	39	4	.	.	.	.	.	1454
0.25-0.49	222	1025	205	335	60	2	.	.	.	.	1849
0.50-0.74	.	1627	134	315	213	10	.	.	.	.	2299
0.75-0.99	.	164	406	114	150	17	1	.	.	.	852
1.00-1.24	.	.	258	9	51	29	3	.	.	.	350
1.25-1.49	.	.	141	.	5	4	3	.	.	.	153
1.50-1.74	.	.	22	62	.	.	4	.	.	.	88
1.75-1.99	.	.	.	24	.	.	.	.	.	.	24
2.00-2.24	.	.	.	12	.	.	.	.	.	.	12
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1272	3088	1255	910	484	62	11	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 6639.

STATION M01 41.81N 87.38W 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	
0.00-0.24	1007	309	109	60	3	.	.	.	.	.	1488
0.25-0.49	345	1067	320	513	88	2	.	.	.	.	2335
0.50-0.74	.	1373	95	541	327	11	.	.	.	.	2347
0.75-0.99	.	355	327	193	330	20	5	.	.	.	1230
1.00-1.24	.	.	241	71	195	73	9	.	.	.	589
1.25-1.49	.	.	101	4	42	14	11	.	.	.	172
1.50-1.74	.	.	47	19	10	10	5	.	.	.	91
1.75-1.99	.	.	.	13	.	1	4	.	.	.	18
2.00-2.24	.	.	.	4	.	1	.	1	.	.	6
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	1	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	1352	3104	1240	1418	995	132	35	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 7757.

STATION M01 41.81N 87.38W 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	
0.00-0.24	747	210	57	37	4	.	.	.	.	.	1055
0.25-0.49	297	1121	232	335	29	1	.	.	.	.	2015
0.50-0.74	.	1350	206	507	194	1	2	.	.	.	2260
0.75-0.99	.	442	429	159	271	19	.	.	.	.	1320
1.00-1.24	.	.	355	72	247	55	4	.	.	.	733
1.25-1.49	.	.	132	39	83	31	3	.	.	.	288
1.50-1.74	.	.	57	67	66	21	10	1	.	.	222
1.75-1.99	.	.	1	27	12	6	6	.	.	.	52
2.00-2.24	.	.	.	11	5	2	5	1	.	.	24
2.25-2.49	.	.	.	1	1	1	2	.	.	.	5
2.50-2.74	.	.	.	.	2	1	3	1	.	.	7
2.75-2.99	.	.	.	.	.	.	.	2	.	.	2
3.00-3.24	.	.	.	.	1	.	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	1	.	.	1
3.50+											0
TOTAL	1044	3123	1469	1255	915	138	35	6	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 7488.

STATION M01 41.81N 87.38W 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	
0.00-0.24	409	180	52	22	.	.	.	.	.	.	663
0.25-0.49	94	792	217	151	6	1	.	.	.	.	1261
0.50-0.74	.	1011	466	456	125	3	.	.	.	.	2061
0.75-0.99	.	216	426	189	198	6	.	.	.	.	1035
1.00-1.24	.	.	676	73	209	40	1	.	.	.	999
1.25-1.49	.	.	207	208	106	40	7	.	.	.	568
1.50-1.74	.	.	26	302	125	64	14	1	.	.	532
1.75-1.99	.	.	2	88	49	21	19	.	.	.	179
2.00-2.24	.	.	.	27	38	14	31	1	.	.	111
2.25-2.49	.	.	.	1	18	7	11	1	.	.	38
2.50-2.74	.	.	.	.	5	5	13	2	.	.	25
2.75-2.99	.	.	.	.	2	1	3	.	1	.	7
3.00-3.24	.	.	.	.	.	1	.	4	1	.	6
3.25-3.49	.	.	.	.	.	1	1	2	1	.	5
3.50+									2		2
TOTAL	503	2199	2072	1517	881	204	100	11	5	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 7030.

STATION M01 41.81N 87.38W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

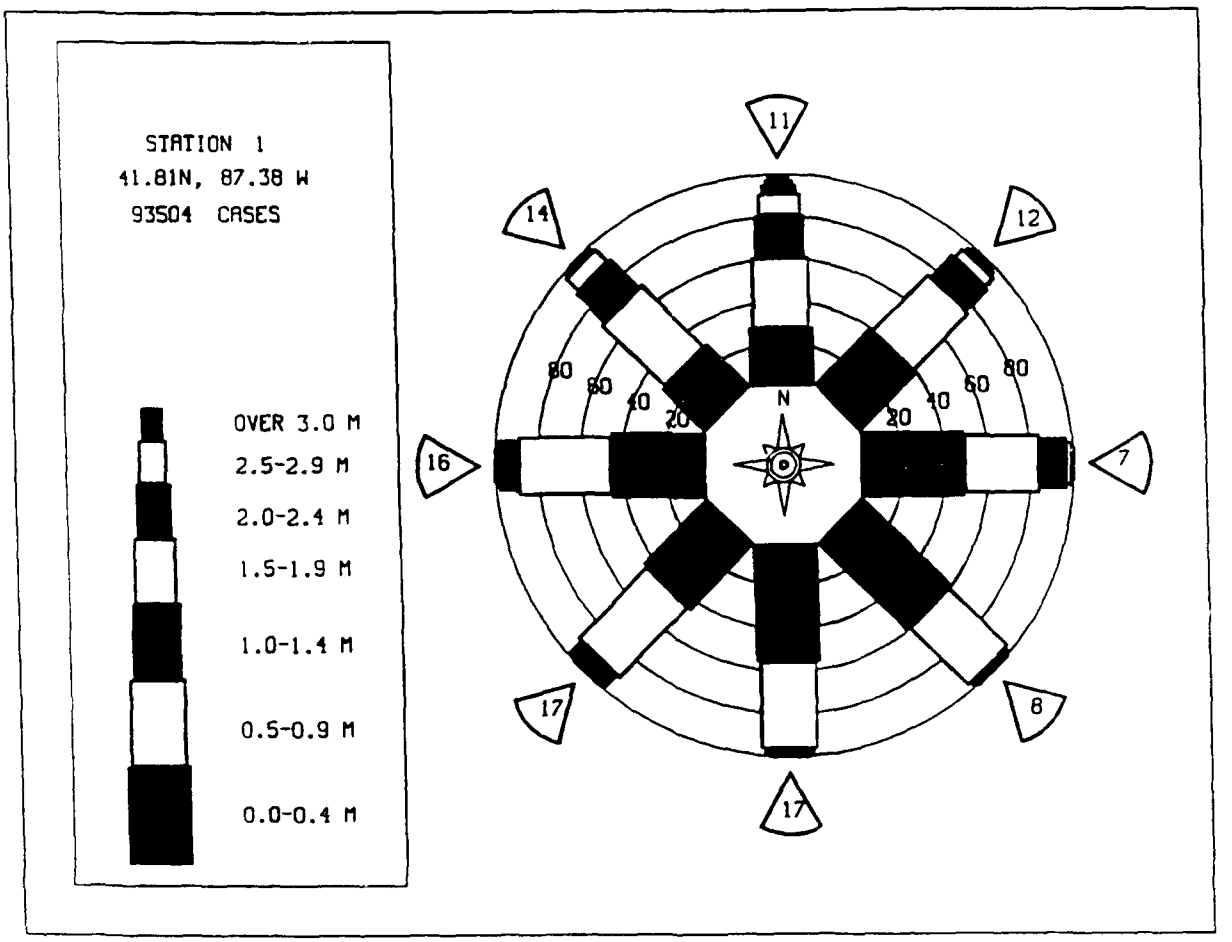
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	289	109	20	11	2	.	.	.	.	.	431
0.25-0.49	79	416	148	78	6	.	.	.	.	.	727
0.50-0.74	.	333	377	305	43	.	.	.	.	.	1058
0.75-0.99	.	6	257	204	129	1	1	.	.	.	598
1.00-1.24	.	.	296	211	236	22	.	.	.	.	765
1.25-1.49	.	.	44	181	116	42	1	.	.	.	384
1.50-1.74	.	.	2	212	160	80	13	.	.	.	467
1.75-1.99	.	.	.	34	95	47	28	.	.	.	204
2.00-2.24	.	.	.	8	97	51	28	.	.	.	184
2.25-2.49	.	.	.	.	40	19	20	2	.	.	81
2.50-2.74	.	.	.	.	17	48	32	2	.	.	99
2.75-2.99	.	.	.	.	.	12	7	2	.	.	21
3.00-3.24	.	.	.	.	.	18	12	10	2	.	42
3.25-3.49	.	.	.	.	.	3	10	5	1	.	19
3.50+						1	19	13	6	1	40
TOTAL	368	864	1144	1244	941	344	171	34	9	1	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.7 NO. OF CASES= 4813.

STATION M01 41.81N 87.38W 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	
0.00-0.24	1210	354	98	41	3						1706
0.25-0.49	316	1575	348	275	32	1					2547
0.50-0.74		1906	485	436	140	6					2973
0.75-0.99		191	534	189	165	10	1				1090
1.00-1.24			420	149	160	33	2				764
1.25-1.49			115	114	74	25	3				331
1.50-1.74			21	140	76	33	6				276
1.75-1.99				27	44	17	8				96
2.00-2.24				9	40	19	10				78
2.25-2.49					14	8	5				27
2.50-2.74					5	16	9				30
2.75-2.99						9	2				11
3.00-3.24						8	4	2			14
3.25-3.49						2	3	1			6
3.50+							10	4	3		17
TOTAL	1526	4026	2021	1380	753	187	63	7	3	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M01 (41.81N 87.38W)

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M01 (41.81N 87.38W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
						MONTH						
1956	2.4	1.8	1.9	1.4	1.4	0.9	0.8	1.1	1.5	1.5	1.8	2.2
1957	2.8	2.9	2.6	1.2	1.1	1.0	0.8	0.8	1.4	2.7	2.1	3.4
1958	2.5	2.0	1.6	1.8	1.5	1.0	0.8	1.4	1.6	1.6	2.0	2.7
1959	4.7	3.0	3.3	1.9	2.1	1.4	1.4	1.6	2.1	3.2	3.0	2.4
1960	3.5	3.7	3.0	1.9	1.7	1.6	1.8	1.3	2.3	2.2	2.4	3.4
1961	3.3	3.8	3.9	2.2	1.6	1.9	1.2	1.4	2.3	2.2	3.1	2.7
1962	4.1	3.3	3.2	3.5	1.7	1.7	1.0	1.2	2.0	1.8	2.5	2.6
1963	3.6	3.6	3.0	2.6	1.9	1.2	1.4	1.5	2.1	1.6	1.9	1.6
1964	5.0	2.5	4.4	2.9	1.7	1.3	2.5	1.3	1.6	1.7	2.0	3.7
1965	3.6	6.3	2.2	1.7	1.5	1.1	1.1	1.1	1.3	2.3	2.5	4.6
1966	2.1	2.3	1.6	1.8	2.2	1.1	1.3	1.3	1.7	1.6	4.8	2.5
1967	4.5	3.3	2.3	1.5	1.5	1.2	1.0	1.6	2.3	2.2	3.0	2.5
1968	3.2	2.4	3.9	1.6	1.3	1.1	0.8	1.3	1.1	1.6	2.8	3.8
1969	1.7	2.4	4.0	2.8	1.3	1.1	1.1	0.7	1.4	1.4	1.7	2.3
1970	1.6	2.9	3.1	2.5	1.3	1.8	1.8	1.0	1.4	1.4	4.1	2.3
1971	2.9	3.4	3.4	2.2	1.3	1.6	1.1	1.7	1.6	1.9	4.0	2.6
1972	3.4	2.8	3.2	2.7	1.7	2.3	1.1	1.2	1.6	1.5	4.4	2.2
1973	4.9	4.2	3.5	2.1	1.4	0.9	1.2	1.5	1.3	2.1	2.7	4.0
1974	1.9	4.8	3.0	2.4	1.4	1.8	1.0	1.1	1.7	2.8	2.1	3.9
1975	2.6	3.7	2.8	3.6	1.4	1.3	1.2	1.4	3.0	3.6	3.6	3.4
1976	3.6	5.2	2.4	3.7	1.9	1.3	1.5	1.9	2.1	2.3	2.7	3.6
1977	2.7	2.5	3.2	2.4	1.6	2.1	1.6	1.2	1.5	2.8	2.8	3.1
1978	3.6	3.7	3.2	2.7	2.5	1.2	1.2	1.2	1.5	2.1	2.9	2.3
1979	4.2	5.4	2.7	2.1	2.8	1.4	1.7	1.8	1.8	2.2	2.4	5.9
1980	1.8	4.3	3.3	2.4	1.0	1.4	1.1	0.8	1.3	1.9	2.1	4.3
1981	2.4	2.7	2.6	2.1	3.6	1.1	1.5	1.2	1.8	2.0	4.1	1.9
1982	3.1	3.3	2.6	2.6	1.9	1.2	1.1	1.4	2.0	2.0	2.0	2.0
1983	4.1	2.2	2.9	2.0	2.5	0.9	1.0	2.2	1.6	2.4	4.7	2.9
1984	3.1	5.6	4.2	2.3	2.1	1.1	0.9	1.5	2.2	1.5	3.1	2.4
1985	3.7	5.5	2.0	1.8	1.9	1.2	0.9	1.2	1.5	1.5	2.5	2.4
1986	3.3	3.9	2.5	1.4	2.0	2.5	1.1	1.4	1.6	2.0	2.5	2.9
1987	3.4	5.5	3.8	3.1	1.4	1.2	1.0	1.7	1.5	2.3	2.1	2.9

32 YR. STATISTICS FOR WIS STATION M01

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	6.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	341.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		65022518

STATION M02 41.95N 87.55W 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	
0.00-0.24	335	151	40	4	.	.	.	.	.	.	530
0.25-0.49	78	539	234	57	5	.	.	.	.	.	913
0.50-0.74	.	452	486	331	24	5	.	.	.	.	1298
0.75-0.99	.	9	279	260	93	1	.	.	.	.	642
1.00-1.24	.	.	186	291	199	11	3	.	.	.	690
1.25-1.49	.	.	24	156	135	31	2	.	.	.	348
1.50-1.74	.	.	1	148	156	65	5	.	.	.	375
1.75-1.99	.	.	.	13	82	39	12	.	.	.	146
2.00-2.24	.	.	.	3	64	79	29	.	.	.	175
2.25-2.49	.	.	.	.	22	32	19	.	.	.	73
2.50-2.74	.	.	.	.	8	43	38	2	1	.	92
2.75-2.99	.	.	.	.	1	16	17	2	.	.	36
3.00-3.24	.	.	.	.	.	22	20	12	.	.	54
3.25-3.49	.	.	.	.	.	3	18	7	.	.	28
3.50+	.	.	.	.	.	1	44	32	24	2	103
TOTAL	413	1151	1250	1263	789	348	207	55	25	2	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.6 NO. OF CASES= 5170.

STATION M02 41.95N 87.55W 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	
0.00-0.24	342	142	31	5	.	.	.	.	.	.	520
0.25-0.49	93	724	227	40	3	.	.	.	.	.	1087
0.50-0.74	.	433	652	322	18	.	.	.	.	.	1425
0.75-0.99	.	9	245	260	72	3	.	.	.	.	589
1.00-1.24	.	.	207	349	199	12	.	.	.	.	767
1.25-1.49	.	.	11	152	142	28	2	.	.	.	335
1.50-1.74	.	.	1	130	141	78	3	.	.	.	353
1.75-1.99	.	.	.	3	86	31	10	.	.	.	130
2.00-2.24	.	.	.	1	67	47	8	1	.	.	124
2.25-2.49	.	.	.	.	39	22	18	.	.	.	79
2.50-2.74	.	.	.	.	7	40	22	.	.	.	69
2.75-2.99	.	.	.	.	.	27	6	.	.	.	33
3.00-3.24	.	.	.	.	.	20	7	1	.	.	28
3.25-3.49	.	.	.	.	.	5	20	1	.	.	26
3.50+	.	.	.	.	.	2	37	9	4	.	52
TOTAL	435	1308	1374	1262	774	315	133	12	4	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 5275.

STATION M02 41.95N 87.55W 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	
0.00-0.24	470	197	42	5	.	.	.	.	.	.	714
0.25-0.49	86	1009	315	49	3	.	.	.	.	.	1462
0.50-0.74	.	605	921	429	29	3	1	.	.	.	1988
0.75-0.99	.	4	343	315	99	5	.	.	.	.	766
1.00-1.24	.	.	203	310	190	20	.	.	.	.	723
1.25-1.49	.	.	12	127	112	17	.	.	.	.	268
1.50-1.74	.	.	.	105	144	48	7	.	.	.	304
1.75-1.99	.	.	.	6	95	35	4	1	.	.	141
2.00-2.24	.	.	.	.	86	51	11	.	.	.	148
2.25-2.49	.	.	.	.	22	22	6	.	.	.	50
2.50-2.74	.	.	.	.	7	50	11	.	.	.	68
2.75-2.99	.	.	.	.	1	31	3	.	.	.	35
3.00-3.24	.	.	.	.	.	31	5	1	.	.	37
3.25-3.49	.	.	.	.	.	4	11	.	.	.	15
3.50+	.	.	.	.	.	.	35	4	.	.	39
TOTAL	556	1815	1836	1346	788	317	94	6	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 6340.

STATION M02 41.95N 87.55W 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	
0.00-0.24	306	130	13	1	.	.	.	.	.	.	450
0.25-0.49	73	725	191	37	6	.	.	.	.	.	1032
0.50-0.74	.	439	582	190	18	2	1	.	.	.	1232
0.75-0.99	.	3	205	133	36	2	.	.	.	.	379
1.00-1.24	.	.	114	233	47	8	.	.	.	.	402
1.25-1.49	.	.	2	105	62	8	2	.	.	.	179
1.50-1.74	.	.	.	73	66	19	1	.	.	.	159
1.75-1.99	.	.	.	2	68	5	1	.	.	.	76
2.00-2.24	.	.	.	.	47	6	4	.	.	.	57
2.25-2.49	.	.	.	.	18	5	1	.	.	.	24
2.50-2.74	.	.	.	.	2	11	1	.	.	.	14
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	1	5	2	.	.	.	8
3.25-3.49	.	.	.	.	.	2	1	.	.	.	3
3.50+	.	.	.	.	.	.	7	.	.	.	7
TOTAL	379	1297	1107	774	371	76	21	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 3786.

STATION M02 41.95N 87.55W 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	
0.00-0.24	343	158	28	2	.	1	.	.	.	.	532
0.25-0.49	70	696	171	35	.	.	.	.	.	.	972
0.50-0.74	.	364	421	132	26	.	.	.	.	.	943
0.75-0.99	.	4	185	101	22	4	.	.	.	.	316
1.00-1.24	.	.	71	192	19	5	.	.	.	.	287
1.25-1.49	.	.	3	106	8	4	.	.	.	.	121
1.50-1.74	.	.	.	116	25	3	.	.	.	.	144
1.75-1.99	.	.	.	2	33	1	.	.	.	.	36
2.00-2.24	.	.	.	.	38	.	2	.	.	.	40
2.25-2.49	.	.	.	.	7	.	.	.	.	.	7
2.50-2.74	.	.	.	.	6	.	.	.	.	.	6
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	413	1222	879	686	184	22	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 3200.

STATION M02 41.95N 87.55W 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	
0.00-0.24	351	139	29	4	.	.	.	.	.	.	523
0.25-0.49	69	658	145	21	3	.	.	.	.	.	896
0.50-0.74	.	314	360	83	11	3	.	.	.	.	771
0.75-0.99	.	3	119	54	17	.	.	.	.	.	193
1.00-1.24	.	.	109	85	7	4	2	.	.	.	207
1.25-1.49	.	.	4	65	4	2	.	.	.	.	75
1.50-1.74	.	.	.	51	6	.	.	.	.	.	57
1.75-1.99	.	.	.	7	13	1	2	.	.	.	23
2.00-2.24	.	.	.	1	14	.	.	.	.	.	15
2.25-2.49	.	.	.	.	3	.	.	.	.	.	3
2.50-2.74	.	.	.	.	3	1	1	.	.	.	5
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	420	1114	766	371	81	11	5	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 2602.

STATION M02 41.95N 87.55W 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	
0.00-0.24	577	257	42	4	.	.	.	.	.	.	880
0.25-0.49	93	929	170	34	3	1	.	.	.	.	1230
0.50-0.74	.	556	502	70	11	.	.	.	.	.	1139
0.75-0.99	.	57	290	29	9	.	.	.	.	.	385
1.00-1.24	.	.	355	21	.	1	.	.	.	.	377
1.25-1.49	.	.	10	122	1	4	1	.	.	.	138
1.50-1.74	.	.	1	41	1	2	.	.	.	.	45
1.75-1.99	.	.	.	6	1	1	.	.	.	.	8
2.00-2.24	.	.	.	1	4	.	1	.	.	.	6
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	1	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	670	1799	1370	328	30	9	3	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 3948.

STATION M02 41.95N 87.55W 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	
0.00-0.24	955	228	60	8	1	.	.	.	.	.	1252
0.25-0.49	347	1844	196	72	5	1	.	.	.	.	2465
0.50-0.74	.	1367	222	89	19	3	.	.	.	.	1700
0.75-0.99	.	503	345	22	6	2	.	.	.	.	878
1.00-1.24	.	.	196	17	2	6	.	.	.	.	221
1.25-1.49	.	.	21	36	.	.	1	.	.	.	58
1.50-1.74	.	.	6	14	.	2	1	.	.	.	23
1.75-1.99	.	.	.	10	1	1	2	1	.	.	15
2.00-2.24	.	.	.	1	3	.	.	.	.	.	4
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1302	3942	1046	269	38	15	4	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 6202.

STATION M02 41.95N 87.55W 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	
0.00-0.24	1388	303	87	14	1	.	.	.	.	.	1793
0.25-0.49	594	2003	308	129	12	1	.	.	.	.	3047
0.50-0.74	.	2551	93	128	24	6	.	.	.	.	2802
0.75-0.99	.	436	440	16	11	5	.	.	.	.	908
1.00-1.24	.	.	226	5	6	3	2	.	.	.	242
1.25-1.49	.	.	81	.	1	.	2	.	.	.	84
1.50-1.74	.	.	34	9	.	.	1	.	.	.	44
1.75-1.99	.	.	.	3	.	1	.	.	.	.	4
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1982	5293	1269	304	55	16	5	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.0 NO. OF CASES= 8356.

STATION M02 41.95N 87.55W 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	
0.00-0.24	1172	252	97	23	.	.	.	.	.	.	1544
0.25-0.49	356	1460	243	130	9	1	.	.	.	.	2199
0.50-0.74	.	2569	244	130	45	7	.	.	.	.	2995
0.75-0.99	.	163	625	48	33	6	.	.	.	.	875
1.00-1.24	.	.	418	2	5	11	3	.	.	.	439
1.25-1.49	.	.	189	.	1	1	.	.	.	.	191
1.50-1.74	.	.	12	67	.	.	.	.	.	.	79
1.75-1.99	.	.	.	7	.	.	.	.	.	.	7
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.74	.	.	.	.	2	.	.	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1528	4444	1828	409	95	26	3	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 7805.

STATION M02 41.95N 87.55W 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	
0.00-0.24	1204	280	144	44	3	.	.	.	.	.	1675
0.25-0.49	137	1360	321	171	16	3	.	.	.	.	2008
0.50-0.74	.	2490	305	158	62	7	.	.	.	.	3022
0.75-0.99	.	32	648	54	36	14	.	.	.	.	784
1.00-1.24	.	.	434	3	16	9	2	.	.	.	464
1.25-1.49	.	.	186	.	1	3	3	.	.	.	193
1.50-1.74	.	.	3	81	.	.	.	.	.	.	84
1.75-1.99	.	.	.	17	.	.	.	.	.	.	17
2.00-2.24	.	.	.	20	.	.	.	.	.	.	20
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1341	4162	2041	548	135	36	5	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 7742.

STATION M02 41.95N 87.55W 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	
0.00-0.24	1054	235	120	23	.	.	.	.	.	.	1432
0.25-0.49	226	1075	389	247	20	5	.	.	.	.	1962
0.50-0.74	.	1835	176	350	87	10	.	.	.	.	2458
0.75-0.99	.	190	419	95	67	13	2	.	.	.	786
1.00-1.24	.	.	275	7	18	20	6	.	.	.	326
1.25-1.49	.	.	142	.	.	2	2	1	.	.	147
1.50-1.74	.	.	31	62	1	2	3	.	.	.	99
1.75-1.99	.	.	.	28	.	.	.	.	.	.	28
2.00-2.24	.	.	.	13	1	.	.	.	.	.	14
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1280	3335	1552	825	195	52	13	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 6796.

STATION M02 41.95N 87.55W 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	
0.00-0.24	989	248	158	27	3	1	.	.	.	.	1426
0.25-0.49	388	1131	643	372	32	3	.	.	.	.	2569
0.50-0.74	.	1686	226	643	148	25	1	.	.	.	2729
0.75-0.99	.	414	427	222	160	28	5	.	.	.	1256
1.00-1.24	.	.	282	81	102	42	17	.	.	.	524
1.25-1.49	.	.	113	3	9	12	4	1	.	.	142
1.50-1.74	.	.	45	21	6	6	6	.	.	.	84
1.75-1.99	.	.	.	13	.	.	1	.	.	.	14
2.00-2.24	.	.	.	4	.	.	1	.	.	.	5
2.25-2.49	.	.	.	.	.	.	1	1	.	.	2
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	1	.	.	1
3.00-3.24	.	.	.	.	.	.	.	1	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1377	3479	1894	1386	460	117	36	4	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 8203.

STATION M02 41.95N 87.55W 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	
0.00-0.24	684	168	75	21	.	.	.	.	.	.	948
0.25-0.49	301	1048	426	214	17	2	.	.	.	.	2008
0.50-0.74	.	1593	228	540	91	7	3	.	.	.	2462
0.75-0.99	.	374	526	407	136	14	2	.	.	.	1459
1.00-1.24	.	.	242	330	160	41	10	1	.	.	784
1.25-1.49	.	.	115	40	31	32	7	3	.	.	228
1.50-1.74	.	.	40	37	24	26	7	1	2	.	137
1.75-1.99	.	.	2	9	5	4	3	.	.	.	23
2.00-2.24	.	.	.	1	1	4	5	.	.	.	11
2.25-2.49	.	.	.	.	.	.	6	.	.	.	6
2.50-2.74	.	.	.	.	.	.	4	.	.	.	4
2.75-2.99	.	.	.	.	.	.	2	1	.	.	3
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	1	.	1
TOTAL	985	3183	1654	1599	465	130	49	6	3	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 7571.

STATION M02 41.95N 87.55W 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	
0.00-0.24	408	128	62	12	.	.	.	.	.	.	610
0.25-0.49	86	726	278	94	7	1	.	.	.	.	1192
0.50-0.74	.	1119	296	419	66	4	.	.	.	.	1904
0.75-0.99	.	133	601	294	122	9	1	.	.	.	1160
1.00-1.24	.	.	226	417	194	37	3	.	.	.	877
1.25-1.49	.	.	96	117	51	56	13	.	.	.	333
1.50-1.74	.	.	25	89	60	51	16	.	.	.	241
1.75-1.99	.	.	.	5	32	24	16	.	.	.	77
2.00-2.24	.	.	.	3	9	9	22	1	.	1	45
2.25-2.49	.	.	.	1	1	4	5	1	.	1	13
2.50-2.74	.	.	.	.	.	1	11	4	1	.	17
2.75-2.99	.	.	.	.	.	.	6	.	.	.	6
3.00-3.24	.	.	.	.	.	.	2	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	1	.	.	1
3.50+	.	.	.	.	.	.	.	3	.	.	3
TOTAL	494	2106	1584	1451	542	196	95	10	1	2	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.1 NO. OF CASES= 6080.

STATION M02 41.95N 87.55W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

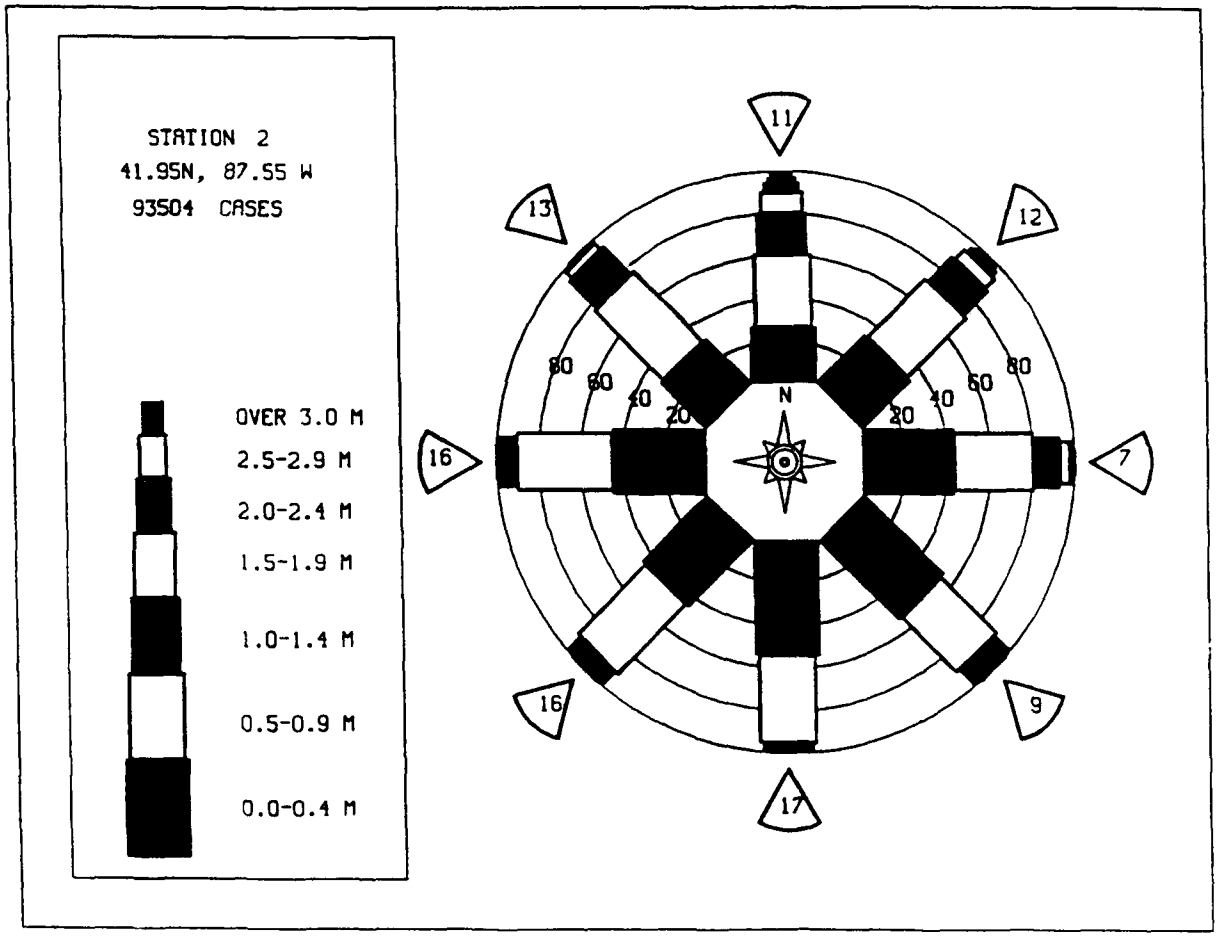
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	282	88	28	6	.	.	.	.	.	.	404
0.25-0.49	63	432	178	43	5	.	.	.	.	.	721
0.50-0.74	.	488	282	295	14	2	.	.	.	.	1081
0.75-0.99	.	24	337	210	81	3	.	.	.	.	655
1.00-1.24	.	.	183	301	213	19	1	.	.	.	717
1.25-1.49	.	.	33	148	94	49	4	.	.	.	328
1.50-1.74	.	.	7	143	94	82	7	.	.	.	333
1.75-1.99	.	.	.	26	68	26	13	.	.	.	133
2.00-2.24	.	.	.	2	59	33	31	.	.	.	125
2.25-2.49	.	.	.	.	35	19	16	2	.	.	72
2.50-2.74	.	.	.	.	14	22	20	1	1	.	58
2.75-2.99	.	.	.	.	3	10	10	.	.	.	23
3.00-3.24	.	.	.	.	.	9	8	11	1	.	29
3.25-3.49	.	.	.	.	.	2	6	.	.	.	8
3.50+	.	.	.	.	.	.	11	11	5	.	27
TOTAL	345	1032	1048	1174	680	276	127	25	7	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.5 NO. OF CASES= 4434.

STATION M02 41.95N 87.55W 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	
0.00-0.24	1086	311	106	21	.	.	.	.	.	.	1524
0.25-0.49	306	1636	444	175	15	1	.	.	.	.	2577
0.50-0.74	.	1886	600	431	70	8	.	.	.	.	2995
0.75-0.99	.	236	604	252	100	11	1	.	.	.	1204
1.00-1.24	.	.	373	265	138	25	5	.	.	.	806
1.25-1.49	.	.	104	118	65	25	4	.	.	.	316
1.50-1.74	.	.	21	119	72	38	5	.	.	.	255
1.75-1.99	.	.	.	16	48	17	6	.	.	.	87
2.00-2.24	.	.	.	5	39	23	11	.	.	.	78
2.25-2.49	.	.	.	.	15	10	7	.	.	.	32
2.50-2.74	.	.	.	.	5	17	11	.	.	.	33
2.75-2.99	.	.	.	.	.	9	4	.	.	.	13
3.00-3.24	.	.	.	.	.	8	4	2	.	.	14
3.25-3.49	.	.	.	.	.	1	5	.	.	.	6
3.50+	.	.	.	.	.	.	13	6	3	.	22
TOTAL	1392	4069	2252	1402	587	193	76	8	3	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M02 (41.95N 87.55W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M02 (41.95N 87.55W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.5	2.0	1.9	1.5	1.3	0.9	0.9	1.1	1.6	1.6	2.2	2.3
1957	3.1	3.1	2.6	1.6	1.3	0.9	1.0	1.0	1.5	3.2	2.1	3.1
1958	2.9	2.1	1.8	2.3	1.6	1.1	0.8	1.0	1.5	1.6	1.7	3.2
1959	5.4	2.8	3.7	1.8	1.8	1.5	1.1	2.0	2.1	3.1	3.1	2.4
1960	3.6	4.1	2.6	2.0	2.1	1.5	1.8	1.3	2.0	2.1	2.4	3.3
1961	2.8	4.0	4.0	2.4	1.6	2.1	1.4	1.4	2.6	2.9	3.1	2.7
1962	4.2	3.0	3.3	3.7	1.7	1.7	1.1	1.1	1.9	1.9	2.7	2.5
1963	3.9	3.9	2.7	2.6	2.2	1.2	1.6	1.4	2.5	1.8	1.7	1.3
1964	5.4	2.6	4.5	3.3	1.8	1.3	2.8	1.2	1.7	1.7	2.0	3.8
1965	3.8	6.2	2.4	1.8	1.5	1.1	1.1	1.0	1.5	2.8	2.4	4.9
1966	2.6	2.3	1.6	1.9	2.5	1.2	1.3	1.4	1.7	1.6	4.6	2.5
1967	4.9	3.3	2.5	1.3	1.7	1.2	0.9	1.7	2.3	1.9	3.1	2.6
1968	3.1	2.6	4.1	1.5	1.5	1.1	0.8	1.2	1.5	1.4	3.3	3.3
1969	2.1	2.5	4.3	3.2	1.6	1.4	1.4	0.8	1.5	1.6	1.9	2.4
1970	1.7	2.8	3.3	2.7	2.0	2.2	2.0	1.1	1.6	1.9	4.3	2.5
1971	2.3	3.5	3.5	2.4	1.4	1.7	1.2	1.7	1.7	1.9	4.1	2.1
1972	3.4	3.1	3.7	3.2	1.8	2.5	1.3	1.3	1.6	1.6	4.6	2.3
1973	5.0	4.5	3.8	2.6	1.8	0.9	1.2	1.6	1.5	2.2	2.7	4.2
1974	1.9	5.8	3.2	2.5	1.5	1.9	0.9	1.2	1.5	2.9	2.2	4.0
1975	2.7	3.7	2.8	3.8	1.6	1.3	1.1	1.5	3.3	3.7	3.3	3.6
1976	3.5	5.4	2.2	3.8	2.0	1.3	1.5	2.1	2.1	2.2	2.8	3.7
1977	2.8	2.5	3.4	2.4	1.7	2.2	1.7	1.3	1.5	2.7	2.9	3.4
1978	3.9	3.6	3.4	2.9	3.4	1.2	1.4	1.2	1.4	2.1	3.1	2.4
1979	4.2	5.5	2.9	2.2	3.0	1.4	1.7	2.0	1.8	2.8	2.4	6.1
1980	1.8	4.6	3.5	2.6	0.9	1.5	1.2	1.0	1.3	1.8	2.1	4.3
1981	2.5	2.6	2.6	2.4	4.6	1.0	1.5	1.4	1.9	1.9	4.2	1.9
1982	3.3	3.3	2.3	2.6	1.9	1.3	1.2	1.4	1.7	1.7	1.5	2.0
1983	4.2	2.2	3.1	2.2	2.6	1.0	1.1	2.1	1.7	2.6	4.9	3.0
1984	3.1	5.7	4.4	2.3	2.3	1.1	0.8	1.4	2.0	1.7	3.6	2.5
1985	4.2	5.4	2.5	1.8	1.9	1.2	1.1	1.3	1.5	1.5	2.7	2.4
1986	3.2	3.9	2.6	1.4	2.2	2.6	1.3	1.5	1.8	2.3	2.5	3.3
1987	3.4	5.3	4.1	3.4	1.6	1.3	1.1	1.5	1.4	2.2	2.1	3.2

32 YR. STATISTICS FOR WIS STATION M02

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	6.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	351.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		65022515

STATION M03 42.10N 87.55W 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	
0.00-0.24	357	207	41	6	.	.	.	.	.	.	611
0.25-0.49	64	501	231	43	3	.	.	.	.	.	842
0.50-0.74	.	358	520	311	19	4	.	.	.	.	1212
0.75-0.99	.	13	228	294	62	.	.	.	.	.	597
1.00-1.24	.	.	161	268	214	10	1	.	.	.	654
1.25-1.49	.	.	19	166	137	23	5	.	.	.	350
1.50-1.74	.	.	.	134	177	72	3	.	.	.	386
1.75-1.99	.	.	.	14	81	49	11	.	.	.	155
2.00-2.24	.	.	.	4	68	69	28	.	.	.	169
2.25-2.49	.	.	.	.	18	25	26	.	.	.	69
2.50-2.74	.	.	.	.	6	49	33	2	.	.	90
2.75-2.99	.	.	.	.	2	17	17	3	.	.	39
3.00-3.24	.	.	.	.	.	14	29	5	.	.	48
3.25-3.49	.	.	.	.	.	3	16	6	.	.	25
3.50+	.	.	.	.	.	1	36	36	19	2	94
TOTAL	421	1079	1200	1240	787	336	205	52	19	2	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.6 NO. OF CASES= 5019.

STATION M03 42.10N 87.55W 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	
0.00-0.24	349	183	39	3	.	.	.	.	.	.	574
0.25-0.49	88	735	238	37	4	.	.	.	.	.	1102
0.50-0.74	.	418	712	309	13	.	.	.	.	.	1452
0.75-0.99	.	9	266	305	71	3	.	.	.	.	654
1.00-1.24	.	.	181	337	201	4	1	.	.	.	724
1.25-1.49	.	.	16	146	174	28	1	.	.	.	365
1.50-1.74	.	.	2	125	146	63	2	.	.	.	338
1.75-1.99	.	.	.	12	65	33	6	.	.	.	116
2.00-2.24	.	.	.	1	77	51	12	.	.	.	141
2.25-2.49	.	.	.	.	31	23	12	.	.	.	66
2.50-2.74	.	.	.	.	5	33	25	.	.	.	63
2.75-2.99	.	.	.	.	.	25	7	.	.	.	32
3.00-3.24	.	.	.	.	.	21	16	2	.	.	39
3.25-3.49	.	.	.	.	.	3	11	.	.	.	14
3.50+	.	.	.	.	.	2	37	8	3	0	50
TOTAL	437	1345	1454	1275	787	289	130	10	3	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 5380.

STATION M03 42.10N 87.55W 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	
0.00-0.24	546	257	43	5	.	.	.	.	.	.	851
0.25-0.49	69	1081	346	41	2	.	.	.	.	.	1539
0.50-0.74	.	496	911	405	19	3	.	.	.	.	1834
0.75-0.99	.	4	272	327	100	3	.	.	.	.	706
1.00-1.24	.	.	162	258	195	14	.	.	.	.	629
1.25-1.49	.	.	7	114	132	16	.	.	.	.	269
1.50-1.74	.	.	1	87	128	50	2	.	.	.	268
1.75-1.99	.	.	.	2	84	38	7	.	.	.	131
2.00-2.24	.	.	.	.	67	55	9	1	.	.	132
2.25-2.49	.	.	.	.	19	22	6	.	.	.	47
2.50-2.74	.	.	.	.	6	51	11	.	.	.	68
2.75-2.99	.	.	.	.	1	23	3	.	.	.	27
3.00-3.24	.	.	.	.	.	27	5	1	.	.	33
3.25-3.49	.	.	.	.	.	6	10	.	.	.	16
3.50+	.	.	.	.	.	.	31	2	.	.	33
TOTAL	615	1838	1742	1239	753	308	84	4	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 6177.

STATION M03 42.10N 87.55W 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	
0.00-0.24	333	162	19	1	.	.	.	.	.	.	515
0.25-0.49	86	690	185	31	3	.	.	.	.	.	995
0.50-0.74	.	370	507	185	17	1	1	.	.	.	1081
0.75-0.99	.	5	175	149	31	2	.	.	.	.	362
1.00-1.24	.	.	96	209	52	6	.	.	.	.	363
1.25-1.49	.	.	4	84	67	8	1	.	.	.	164
1.50-1.74	.	.	.	42	83	12	1	.	.	.	138
1.75-1.99	.	.	.	2	66	8	1	.	.	.	77
2.00-2.24	.	.	.	.	63	11	1	.	.	.	75
2.25-2.49	.	.	.	.	20	4	3	.	.	.	27
2.50-2.74	.	.	.	.	1	16	2	.	.	.	19
2.75-2.99	.	.	.	.	.	5	.	.	.	.	5
3.00-3.24	.	.	.	.	.	9	2	.	.	.	11
3.25-3.49	.	.	.	.	.	2	1	.	.	.	3
3.50+	.	.	.	.	.	.	7	.	.	.	7
TOTAL	419	1227	986	703	403	84	20	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 3608.

STATION M03 42.10N 87.55W 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	
0.00-0.24	343	216	34	2	.	1	.	.	.	.	596
0.25-0.49	90	683	155	26	2	.	.	.	.	.	956
0.50-0.74	.	299	443	116	10	.	.	.	.	.	868
0.75-0.99	.	2	175	115	24	.	.	.	.	.	316
1.00-1.24	.	.	67	220	25	3	.	.	.	.	315
1.25-1.49	.	.	2	72	47	3	1	.	.	.	125
1.50-1.74	.	.	.	52	67	7	.	.	.	.	126
1.75-1.99	.	.	.	1	41	2	.	.	.	.	44
2.00-2.24	.	.	.	.	38	1	2	.	.	.	41
2.25-2.49	.	.	.	.	11	1	.	.	.	.	12
2.50-2.74	.	.	.	.	1	5	.	.	.	.	6
2.75-2.99	.	.	.	.	.	7	.	.	.	.	7
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	433	1200	876	604	266	30	3	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 3204.

STATION M03 42.10N 87.55W 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	
0.00-0.24	383	177	24	5	.	.	.	.	.	.	589
0.25-0.49	63	622	130	13	4	.	.	.	.	.	832
0.50-0.74	.	267	351	77	11	2	.	.	.	.	708
0.75-0.99	.	3	121	104	10	.	.	.	.	.	238
1.00-1.24	.	.	52	142	6	1	2	.	.	.	203
1.25-1.49	.	.	1	71	21	2	.	.	.	.	95
1.50-1.74	.	.	.	60	23	.	.	.	.	.	83
1.75-1.99	.	.	.	2	26	.	1	.	.	.	29
2.00-2.24	.	.	.	.	28	1	1	.	.	.	30
2.25-2.49	.	.	.	.	6	2	.	.	.	.	8
2.50-2.74	.	.	.	.	1	3	1	.	.	.	5
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	446	1069	679	474	136	13	5	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 2654.

STATION M03 42.10N 87.55W 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	
0.00-0.24	547	262	40	4	.	.	.	.	.	.	853
0.25-0.49	93	922	156	23	3	.	.	.	.	.	1197
0.50-0.74	.	402	628	64	12	1	.	.	.	.	1107
0.75-0.99	.	3	271	97	7	.	.	.	.	.	378
1.00-1.24	.	.	126	163	4	.	.	.	.	.	295
1.25-1.49	.	.	5	131	3	.	.	.	.	.	141
1.50-1.74	.	.	1	118	7	.	.	.	.	.	129
1.75-1.99	.	.	.	2	19	.	.	.	.	.	21
2.00-2.24	.	.	.	.	17	.	1	.	.	.	18
2.25-2.49	.	.	.	.	5	.	.	.	.	.	5
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	1	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	640	1589	1227	602	77	8	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 3887.

STATION M03 42.10N 87.55W 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	
0.00-0.24	794	298	54	13	.	.	.	.	.	.	1159
0.25-0.49	135	1388	158	44	5	.	.	.	.	.	1730
0.50-0.74	.	1205	882	74	16	1	.	.	.	.	2178
0.75-0.99	.	5	675	38	5	2	.	.	.	.	725
1.00-1.24	.	.	570	77	2	7	.	.	.	.	656
1.25-1.49	.	.	99	124	.	.	.	.	.	.	223
1.50-1.74	.	.	.	106	1	1	2	.	.	.	110
1.75-1.99	.	.	.	9	14	1	1	.	.	.	25
2.00-2.24	.	.	.	5	10	.	1	1	.	.	17
2.25-2.49	.	.	.	.	6	.	.	.	.	.	6
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	929	2896	2438	490	60	13	4	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 6461.

STATION M03 42.10N 87.55W 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	
0.00-0.24	1338	426	86	11	.	.	.	.	.	.	1861
0.25-0.49	170	1561	192	67	8	.	.	.	.	.	1998
0.50-0.74	.	2437	955	95	12	.	.	.	.	.	3499
0.75-0.99	.	10	1083	11	4	4	.	.	.	.	1112
1.00-1.24	.	.	1264	5	6	3	2	.	.	.	1280
1.25-1.49	.	.	316	235	1	.	1	.	.	.	553
1.50-1.74	.	.	1	233	.	.	2	.	.	.	236
1.75-1.99	.	.	.	48	.	.	.	.	.	.	48
2.00-2.24	.	.	.	21	8	.	.	.	.	.	29
2.25-2.49	.	.	.	.	6	.	.	.	.	.	6
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1508	4434	3897	726	45	7	5	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 9944.

STATION M03 42.10N 87.55W 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	
0.00-0.24	1094	330	77	19	.	.	.	.	.	.	1520
0.25-0.49	180	1575	217	111	6	.	.	.	.	.	2089
0.50-0.74	.	2904	402	118	38	6	.	.	.	.	3468
0.75-0.99	.	23	867	35	25	7	.	.	.	.	957
1.00-1.24	.	.	641	9	4	3	1	.	.	.	658
1.25-1.49	.	.	251	72	1	2	.	.	.	.	326
1.50-1.74	.	.	28	159	.	.	.	.	.	.	187
1.75-1.99	.	.	.	27	.	.	.	.	.	.	27
2.00-2.24	.	.	.	14	4	.	.	.	.	.	18
2.25-2.49	.	.	.	.	2	.	.	.	.	.	2
2.50-2.74	.	.	.	.	4	.	.	.	.	.	4
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1274	4832	2483	564	84	18	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 8668.

STATION M03 42.10N 87.55W 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	
0.00-0.24	1134	348	124	31	3	.	.	.	.	.	1640
0.25-0.49	135	1255	316	157	17	2	.	.	.	.	1882
0.50-0.74	.	2157	276	155	49	5	.	.	.	.	2642
0.75-0.99	.	51	564	74	35	13	1	.	.	.	738
1.00-1.24	.	.	390	7	14	9	2	.	.	.	422
1.25-1.49	.	.	168	.	1	3	4	.	.	.	176
1.50-1.74	.	.	9	77	.	1	.	.	.	.	87
1.75-1.99	.	.	.	23	.	1	.	.	.	.	24
2.00-2.24	.	.	.	24	.	.	.	.	.	.	24
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1269	3811	1847	548	119	34	7	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 7153.

STATION M03 42.10N 87.55W 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	
0.00-0.24	896	280	99	17	.	.	.	.	.	.	1292
0.25-0.49	219	955	394	236	19	4	.	.	.	.	1827
0.50-0.74	.	1373	142	299	84	9	.	.	.	.	1907
0.75-0.99	.	187	279	104	62	17	1	.	.	.	650
1.00-1.24	.	.	178	9	16	21	6	.	.	.	230
1.25-1.49	.	.	96	1	.	2	3	1	.	.	103
1.50-1.74	.	.	21	47	1	1	2	.	.	.	72
1.75-1.99	.	.	.	18	.	.	.	.	.	.	18
2.00-2.24	.	.	.	8	.	.	.	.	.	.	8
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1115	2795	1209	739	183	54	12	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 6721.

STATION M03 42.10N 87.55W 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	
0.00-0.24	879	301	132	22	4	1	.	.	.	.	1339
0.25-0.49	285	989	592	305	21	2	.	.	.	.	2194
0.50-0.74	.	1315	250	545	122	18	.	.	.	.	2250
0.75-0.99	.	413	340	220	122	21	3	.	.	.	1119
1.00-1.24	.	.	222	75	87	35	16	.	.	.	435
1.25-1.49	.	.	90	7	12	12	5	.	1	.	127
1.50-1.74	.	.	33	21	5	5	5	.	.	.	69
1.75-1.99	.	.	.	8	1	2	.	.	.	.	11
2.00-2.24	.	.	.	4	.	.	1	.	.	.	5
2.25-2.49	.	.	.	.	.	.	1	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	1	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	1	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1164	3018	1659	1207	374	96	31	2	1	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 7079.

STATION M03 42.10N 87.55W 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	
0.00-0.24	593	217	75	8	.	.	.	.	.	.	893
0.25-0.49	222	1082	449	179	12	2	.	.	.	.	1946
0.50-0.74	.	1292	374	505	89	11	1	.	.	.	2272
0.75-0.99	.	425	469	265	101	10	2	.	.	.	1272
1.00-1.24	.	.	443	139	114	20	5	.	.	.	721
1.25-1.49	.	.	84	73	11	13	5	.	.	.	186
1.50-1.74	.	.	49	63	20	12	7	.	.	.	151
1.75-1.99	.	.	.	18	1	5	.	.	1	.	25
2.00-2.24	.	.	.	3	5	2	2	.	.	.	12
2.25-2.49	.	.	.	.	1	.	2	1	.	.	4
2.50-2.74	.	.	.	.	.	.	2	.	.	.	2
2.75-2.99	.	.	.	.	1	.	1	.	.	.	2
3.00-3.24	.	.	.	.	1	.	.	1	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	815	3016	1943	1253	356	75	27	2	1	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 7021.

STATION M03 42.10N 87.55W 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	
0.00-0.24	362	196	60	7	.	.	.	.	.	.	625
0.25-0.49	74	731	296	73	7	1	.	.	.	.	1182
0.50-0.74	.	858	605	438	53	8	.	.	.	.	1962
0.75-0.99	.	225	519	227	98	10	1	.	.	.	1080
1.00-1.24	.	.	904	101	131	21	.	.	.	.	1157
1.25-1.49	.	.	162	333	43	33	4	.	.	.	576
1.50-1.74	.	.	14	346	28	53	10	.	.	.	451
1.75-1.99	.	.	.	81	11	21	16	2	1	.	132
2.00-2.24	.	.	.	9	41	10	20	.	1	.	81
2.25-2.49	.	.	.	.	6	7	10	.	.	.	23
2.50-2.74	.	.	.	.	3	2	6	2	.	1	14
2.75-2.99	.	.	.	.	1	.	2	3	.	.	6
3.00-3.24	.	.	.	.	1	1	3	.	.	1	6
3.25-3.49	.	.	.	.	.	.	3	.	.	.	3
3.50+	.	.	.	.	.	.	.	2	1	.	3
TOTAL	436	2010	2560	1615	423	167	75	10	3	2	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.1 NO. OF CASES= 6853.

STATION M03 42.10N 87.55W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

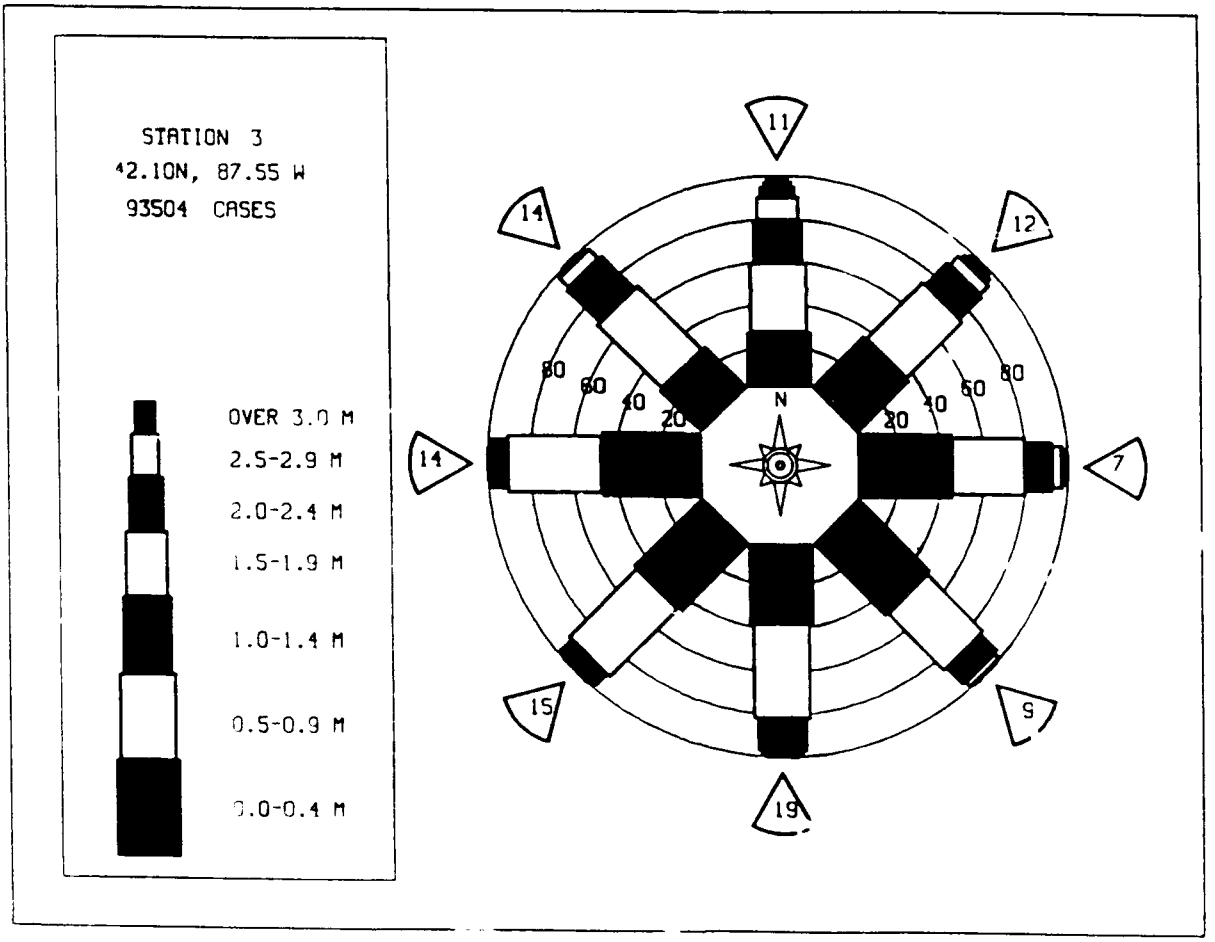
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	273	98	27	5	.	.	.	.	.	.	403
0.25-0.49	71	417	181	36	5	.	.	.	.	.	710
0.50-0.74	.	311	480	278	16	1	.	.	.	.	1086
0.75-0.99	.	7	278	199	67	3	.	.	.	.	554
1.00-1.24	.	.	378	225	197	16	1	.	.	.	817
1.25-1.49	.	.	50	254	103	34	2	.	.	.	443
1.50-1.74	.	.	2	259	93	86	6	.	.	.	446
1.75-1.99	.	.	.	38	64	36	17	.	.	.	155
2.00-2.24	.	.	.	6	101	44	35	.	.	.	186
2.25-2.49	.	.	.	.	35	13	18	.	.	.	66
2.50-2.74	.	.	.	.	20	20	23	2	.	.	65
2.75-2.99	.	.	.	.	.	11	18	2	.	.	31
3.00-3.24	.	.	.	.	1	8	14	10	2	.	35
3.25-3.49	.	.	.	.	.	3	5	2	1	.	11
3.50+	.	.	.	.	.	.	9	16	5	0	31
TOTAL	344	833	1396	1300	702	276	148	32	8		

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.6 NO. OF CASES= 4735

STATION M03 42.10N 87.55W 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	
0.00-0.24	1022	396	98	16							1532
0.25-0.49	205	1519	424	143	12	1					2304
0.50-0.74		1646	844	397	58	7					2952
0.75-0.99		139	659	257	83	9					1147
1.00-1.24			584	225	127	18	3				957
1.25-1.49			137	189	75	18	3				422
1.50-1.74			16	193	78	37	4				328
1.75-1.99				31	47	19	6				103
2.00-2.24				10	53	24	11				98
2.25-2.49					17	10	8				35
2.50-2.74					5	18	10				33
2.75-2.99						9	5				14
3.00-3.24						8	7	2			17
3.25-3.49						1	4				5
3.50+							12	6	2		20
TOTAL	1227	3700	2762	1461	555	179	73	8	2	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M03 (42.10N 87.55W)

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M03 (42.10N 87.55W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
						MONTH						
1956	2.6	2.1	2.1	1.6	1.3	1.0	0.9	1.2	1.7	1.7	2.2	2.2
1957	3.0	3.1	2.7	1.6	1.4	1.0	1.1	1.0	1.5	3.3	2.0	3.4
1958	3.0	2.2	1.8	2.5	1.7	1.1	0.8	1.2	1.6	1.6	1.9	3.2
1959	5.3	2.7	4.2	1.9	1.9	1.4	1.4	2.0	2.2	2.9	3.1	2.4
1960	3.5	4.2	2.7	2.2	2.1	1.5	1.7	1.3	2.0	2.2	2.2	3.4
1961	2.6	4.0	4.2	2.2	1.6	1.9	1.2	1.4	2.4	3.0	3.1	2.6
1962	3.9	2.9	3.1	3.5	1.5	1.6	1.0	1.4	1.8	1.9	2.7	2.7
1963	3.9	3.6	2.8	2.6	2.2	1.2	1.7	1.5	2.6	1.8	1.7	1.4
1964	5.1	2.4	4.5	3.4	1.9	1.3	2.6	1.3	2.0	1.8	2.3	3.6
1965	3.6	6.1	2.5	1.7	1.5	1.1	1.1	1.0	1.5	3.0	2.6	4.7
1966	2.9	2.1	1.7	2.1	2.4	1.2	1.3	1.4	1.7	1.6	4.8	2.5
1967	4.9	3.2	2.5	1.3	1.6	1.2	1.0	1.6	2.3	2.1	2.9	2.5
1968	3.3	2.4	3.7	1.7	1.7	1.1	1.1	1.2	1.7	1.9	3.0	3.2
1969	2.4	2.4	4.2	3.2	1.7	1.4	1.5	1.0	1.4	1.6	1.9	2.3
1970	1.7	3.0	3.2	2.8	2.0	2.5	2.2	1.3	1.5	2.1	4.1	2.6
1971	2.8	3.6	3.4	2.4	1.5	1.6	1.1	1.6	2.2	2.3	4.0	2.5
1972	3.2	2.9	4.0	3.2	1.7	2.3	1.4	1.3	1.6	1.8	4.5	2.2
1973	4.9	4.4	3.8	2.6	1.9	1.0	1.2	1.6	1.7	2.2	3.0	4.2
1974	1.9	5.6	3.1	2.4	1.5	1.8	1.1	1.1	1.5	2.8	2.3	4.0
1975	3.1	3.4	2.8	3.6	1.5	1.3	1.2	1.5	3.2	3.6	3.3	3.5
1976	3.5	5.3	2.6	3.7	1.9	1.4	1.5	1.9	2.1	2.3	2.9	3.1
1977	3.0	2.5	3.2	2.4	1.6	2.1	1.6	1.6	1.5	2.9	2.9	3.3
1978	3.8	3.8	3.3	2.8	3.4	1.3	1.2	1.3	1.6	2.1	3.2	2.4
1979	4.2	5.4	2.7	2.1	2.8	1.4	1.8	1.8	1.6	3.0	2.4	6.1
1980	2.0	4.3	3.3	2.6	1.1	1.6	1.1	1.1	1.3	1.8	2.1	4.2
1981	2.2	2.8	2.8	2.3	4.7	1.1	1.6	1.2	1.8	1.9	4.2	2.2
1982	3.3	3.2	2.4	2.7	1.9	1.2	1.0	1.4	2.0	1.8	1.9	2.0
1983	4.1	2.0	3.1	2.2	2.5	1.0	1.1	2.2	1.6	2.5	4.8	3.1
1984	3.1	5.7	4.3	2.2	2.0	1.3	0.9	1.5	2.0	1.8	3.7	2.5
1985	4.1	5.3	2.6	1.8	2.0	1.3	1.4	1.4	1.5	1.9	2.6	2.5
1986	3.1	3.7	2.6	1.6	2.3	2.4	1.3	1.5	1.6	2.0	2.5	3.4
1987	3.3	5.5	3.9	3.2	1.4	1.2	1.0	1.6	1.5	2.3	2.1	3.4

32 YR. STATISTICS FOR WIS STATION M03

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.2
LARGEST WAVE HS	(METERS)	6.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	350.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		85022515

STATION M04 42.25N 87.73W 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	
0.00-0.24	356	263	33	12	4	.	.	.	.	.	668
0.25-0.49	65	591	182	28	9	2	.	.	.	.	877
0.50-0.74	.	371	521	241	22	10	.	.	.	.	1165
0.75-0.99	.	9	247	226	59	2	1	.	.	.	544
1.00-1.24	.	1	201	231	221	11	.	.	.	.	665
1.25-1.49	.	.	16	162	177	17	4	.	.	.	376
1.50-1.74	.	.	2	115	158	84	3	.	.	.	362
1.75-1.99	.	.	.	16	66	67	6	.	.	.	155
2.00-2.24	.	.	.	2	62	101	26	.	.	.	191
2.25-2.49	.	.	.	.	23	38	24	1	1	.	87
2.50-2.74	.	.	.	.	8	38	47	.	1	.	94
2.75-2.99	.	.	.	.	1	20	25	1	.	.	47
3.00-3.24	.	.	.	.	.	19	34	9	1	.	63
3.25-3.49	.	.	.	.	.	3	25	6	1	.	35
3.50+	.	.	.	.	.	1	49	33	20	2	105
TOTAL	421	1235	1202	1033	810	413	244	50	24	2	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 5104.

STATION M04 42.25N 87.73W 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	
0.00-0.24	385	254	34	4	3	.	.	.	.	.	680
0.25-0.49	75	787	206	34	6	1	.	.	.	.	1109
0.50-0.74	.	377	764	270	21	6	.	.	.	.	1438
0.75-0.99	.	19	270	388	58	1	.	.	.	.	736
1.00-1.24	.	.	172	348	209	1	.	.	.	.	730
1.25-1.49	.	.	12	156	194	22	1	.	.	.	385
1.50-1.74	.	.	.	108	187	86	3	.	.	.	384
1.75-1.99	.	.	.	7	69	56	4	.	.	.	136
2.00-2.24	.	.	.	2	68	56	14	.	.	.	140
2.25-2.49	.	.	.	.	19	37	19	.	.	.	75
2.50-2.74	.	.	.	.	7	32	25	1	.	.	65
2.75-2.99	.	.	.	.	.	13	28	.	.	.	41
3.00-3.24	.	.	.	.	.	13	18	2	.	.	33
3.25-3.49	.	.	.	.	.	3	13	2	.	.	18
3.50+	.	.	.	.	.	2	42	14	2	.	60
TOTAL	460	1437	1458	1317	841	329	167	19	2	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.4 NO. OF CASES= 5662.

STATION M04 42.25N 87.73W 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	
0.00-0.24	557	392	54	5	2	.	.	.	.	.	1010
0.25-0.49	83	1043	258	29	9	.	.	.	.	.	1422
0.50-0.74	.	386	919	315	22	1	.	.	.	.	1643
0.75-0.99	.	3	238	358	80	4	.	.	.	.	683
1.00-1.24	.	.	141	271	221	7	2	.	.	.	642
1.25-1.49	.	.	6	95	131	16	1	.	.	.	249
1.50-1.74	.	.	1	71	148	49	1	.	.	.	270
1.75-1.99	.	.	.	6	69	54	3	.	.	.	132
2.00-2.24	.	.	.	.	56	63	6	1	.	.	126
2.25-2.49	.	.	.	.	11	36	17	.	.	.	64
2.50-2.74	.	.	.	.	3	49	13	.	.	.	65
2.75-2.99	.	.	.	.	.	26	7	.	.	.	33
3.00-3.24	.	.	.	.	.	27	9	.	.	.	36
3.25-3.49	.	.	.	.	.	1	20	1	.	.	22
3.50+	.	.	.	.	.	.	31	4	1	.	36
TOTAL	640	1824	1617	1150	752	333	110	6	1	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 6036.

STATION M04 42.25N 87.73W 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	
0.00-0.24	366	272	20	10	.	.	.	.	.	.	668
0.25-0.49	86	700	165	22	8	.	.	.	.	.	981
0.50-0.74	.	303	504	146	22	.	.	.	.	.	975
0.75-0.99	.	3	137	162	29	1	.	.	.	.	332
1.00-1.24	.	.	84	218	69	3	.	.	.	.	374
1.25-1.49	.	.	4	62	77	6	.	.	.	.	149
1.50-1.74	.	.	.	35	94	24	.	.	.	.	153
1.75-1.99	.	.	.	.	57	18	.	.	.	.	75
2.00-2.24	.	.	.	.	45	24	3	.	.	.	72
2.25-2.49	.	.	.	.	10	16	2	.	.	.	28
2.50-2.74	.	.	.	.	2	24	5	.	.	.	31
2.75-2.99	.	.	.	.	.	5	3	.	.	.	8
3.00-3.24	.	.	.	.	.	7	4	.	.	.	11
3.25-3.49	.	.	.	.	.	1	5	.	.	.	6
3.50+	.	.	.	.	.	.	8	.	.	.	8
TOTAL	452	1278	914	655	413	129	30	0	0	0	

MEAN HS(M) = 1.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.0 NO. OF CASES= 3639.

STATION M04 42.25N 87.73W 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	
0.00-0.24	396	297	35	3	1	1	.	.	.	.	733
0.25-0.49	79	658	150	25	16	1	.	.	.	.	929
0.50-0.74	.	231	397	109	18	.	.	.	.	.	755
0.75-0.99	.	1	144	129	20	1	.	.	.	.	295
1.00-1.24	.	.	63	181	35	3	.	.	.	.	282
1.25-1.49	.	.	1	50	83	2	1	.	.	.	137
1.50-1.74	.	.	.	34	86	5	.	.	.	.	125
1.75-1.99	.	.	.	3	41	4	.	.	.	.	48
2.00-2.24	.	.	.	.	33	5	.	.	.	.	38
2.25-2.49	.	.	.	.	20	5	1	.	.	.	26
2.50-2.74	.	.	.	.	2	11	.	.	.	.	13
2.75-2.99	.	.	.	.	.	13	.	.	.	.	13
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	475	1187	790	534	355	52	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 3188.

STATION M04 42.25N 87.73W 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	
0.00-0.24	423	247	34	8	.	.	.	.	.	.	712
0.25-0.49	94	589	120	18	5	1	.	.	.	.	827
0.50-0.74	.	226	312	69	3	1	.	.	.	.	611
0.75-0.99	.	1	98	125	3	1	.	.	.	.	228
1.00-1.24	.	.	38	147	20	1	.	.	.	.	206
1.25-1.49	.	.	1	50	32	1	.	.	.	.	84
1.50-1.74	.	.	.	29	52	1	.	.	.	.	82
1.75-1.99	.	.	.	3	29	2	.	.	.	.	34
2.00-2.24	.	.	.	.	18	.	1	.	.	.	19
2.25-2.49	.	.	.	.	8	1	.	.	.	.	9
2.50-2.74	.	.	.	.	1	6	1	.	.	.	8
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	517	1063	603	449	171	17	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 2650.

STATION M04 42.25N 87.73W 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	
0.00-0.24	583	429	62	13	1	.	.	.	.	.	1188
0.25-0.49	134	953	332	47	10	.	.	.	.	.	1476
0.50-0.74	.	528	560	149	8	.	.	.	.	.	1245
0.75-0.99	.	80	278	282	8	.	.	.	.	.	648
1.00-1.24	.	.	139	239	51	3	.	.	.	.	432
1.25-1.49	.	.	4	91	22	2	.	.	.	.	119
1.50-1.74	.	.	.	65	54	1	3	.	.	.	123
1.75-1.99	.	.	.	3	39	1	.	.	.	.	43
2.00-2.24	.	.	.	.	24	.	.	.	.	.	24
2.25-2.49	.	.	.	.	9	.	.	.	.	.	9
2.50-2.74	.	.	.	.	3	2	.	.	.	.	5
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	817	1990	1375	889	229	10	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.6 NO. OF CASES= 4983.

STATION M04 42.25N 87.73W 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	
0.00-0.24	994	489	140	11	3	.	.	.	.	.	1637
0.25-0.49	455	1856	463	65	23	2	.	.	.	.	2864
0.50-0.74	.	1627	297	150	18	5	.	.	.	.	2097
0.75-0.99	.	896	199	434	16	2	1	.	.	.	1548
1.00-1.24	.	.	168	104	34	2	.	.	.	.	308
1.25-1.49	.	.	34	24	12	.	.	.	.	.	70
1.50-1.74	.	.	23	18	20	1	.	.	.	.	62
1.75-1.99	.	.	1	6	9	.	.	.	.	.	16
2.00-2.24	.	.	.	.	13	.	1	.	.	.	14
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	3	.	.	.	.	3
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1449	4868	1325	812	149	16	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 8076.

STATION M04 42.25N 87.73W 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	
0.00-0.24	1464	490	118	23	4	1	.	.	.	.	2100
0.25-0.49	618	1645	234	75	27	6	.	.	.	.	2605
0.50-0.74	.	1733	122	94	19	3	.	.	.	.	1971
0.75-0.99	.	278	364	33	8	.	.	.	.	.	684
1.00-1.24	.	.	235	3	12	2	3	.	.	.	255
1.25-1.49	.	.	58	1	3	.	1	.	.	.	63
1.50-1.74	.	.	40	5	.	.	1	.	.	.	46
1.75-1.99	.	.	.	2	.	.	.	.	.	.	2
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2082	4147	1171	236	73	12	5	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.0 NO. OF CASES= 7237.

STATION M04 42.25N 87.73W 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	
0.00-0.24	1344	433	97	29	4	1	.	.	.	.	1908
0.25-0.49	316	1256	186	69	42	1	1	.	.	.	1871
0.50-0.74	.	2131	236	94	29	12	2	.	.	.	2504
0.75-0.99	.	69	573	20	23	2	3	.	.	.	690
1.00-1.24	.	.	382	6	10	3	1	.	.	.	402
1.25-1.49	.	.	183	.	2	2	1	.	.	.	188
1.50-1.74	.	.	7	55	1	.	.	.	.	.	63
1.75-1.99	.	.	.	10	.	.	.	.	.	.	10
2.00-2.24	.	.	.	3	.	.	.	.	.	.	3
2.25-2.49	.	.	.	1	1	.	.	.	.	.	2
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1660	3889	1664	287	113	21	8	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.1 NO. OF CASES= 7160.

STATION M04 42.25N 87.73W 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	
0.00-0.24	1406	482	140	28	17	3	.	.	.	.	2076
0.25-0.49	160	1286	202	99	54	10	.	.	.	.	1811
0.50-0.74	.	2315	275	91	40	16	1	.	.	.	2738
0.75-0.99	.	31	594	12	31	7	2	.	.	.	677
1.00-1.24	.	.	393	1	14	4	1	.	.	.	413
1.25-1.49	.	.	170	.	2	1	.	.	.	.	173
1.50-1.74	.	.	3	80	.	1	.	.	.	.	84
1.75-1.99	.	.	.	19	.	1	.	.	.	.	20
2.00-2.24	.	.	.	9	1	.	.	.	.	.	10
2.25-2.49	.	.	.	1	1	.	.	.	.	.	2
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1566	4114	1777	340	160	43	4	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 7497.

STATION M04 42.25N 87.73W 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	
0.00-0.24	1060	404	109	23	10	.	.	.	.	.	1606
0.25-0.49	238	1121	201	108	102	16	1	.	.	.	1787
0.50-0.74	.	1848	174	145	67	22	5	.	.	.	2261
0.75-0.99	.	176	423	24	27	17	3	1	.	.	671
1.00-1.24	.	.	229	2	9	7	7	.	.	.	254
1.25-1.49	.	.	141	.	.	2	2	2	.	.	147
1.50-1.74	.	.	21	47	.	.	1	.	.	.	69
1.75-1.99	.	.	.	22	.	.	.	.	.	.	22
2.00-2.24	.	.	.	10	.	1	.	.	.	.	11
2.25-2.49	.	.	.	1	1	.	.	.	.	.	2
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1298	3549	1298	382	216	65	19	3	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 6400.

STATION M04 42.25N 87.73W 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	
0.00-0.24	1076	433	132	27	14	.	.	.	.	.	1682
0.25-0.49	408	1436	359	145	119	18	.	.	.	.	2485
0.50-0.74	.	2021	104	189	105	65	3	.	.	.	2487
0.75-0.99	.	341	391	32	60	33	9	.	.	.	866
1.00-1.24	.	.	258	4	28	27	13	1	.	.	331
1.25-1.49	.	.	97	.	2	8	2	.	.	.	109
1.50-1.74	.	.	51	11	.	2	2	.	1	.	67
1.75-1.99	.	.	.	9	.	1	2	.	.	.	12
2.00-2.24	.	.	.	3	.	1	.	.	.	.	4
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	1	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	1	.	1
TOTAL	1484	4231	1392	420	328	155	32	1	2	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 7540.

STATION M04 42.25N 87.73W 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	
0.00-0.24	689	342	80	13	3	.	.	.	.	.	1127
0.25-0.49	288	1497	280	87	74	6	.	.	.	.	2232
0.50-0.74	.	2060	176	218	111	48	6	.	.	.	2619
0.75-0.99	.	320	550	87	98	71	11	.	.	.	1137
1.00-1.24	.	.	267	12	80	37	27	2	.	.	425
1.25-1.49	.	.	112	.	12	8	6	2	.	.	140
1.50-1.74	.	.	27	16	3	12	7	3	.	.	68
1.75-1.99	.	.	.	3	.	2	1	1	.	.	7
2.00-2.24	.	.	.	1	.	1	1	.	1	.	4
2.25-2.49	.	.	.	1	.	1	2	.	1	1	6
2.50-2.74	.	.	.	.	.	.	2	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	1	.	1
TOTAL	977	4219	1492	438	381	186	63	8	3	1	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 7283.

STATION M04 42.25N 87.73W 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	
0.00-0.24	437	269	50	7	4	.	.	.	.	.	767
0.25-0.49	77	951	219	45	35	1	.	.	.	.	1328
0.50-0.74	.	1868	344	236	67	25	1	.	.	.	2541
0.75-0.99	.	127	681	145	102	50	10	.	.	.	1115
1.00-1.24	.	.	410	60	149	39	32	1	.	.	691
1.25-1.49	.	.	192	6	40	31	10	1	.	.	280
1.50-1.74	.	.	16	57	16	36	2	4	.	.	131
1.75-1.99	.	.	.	8	6	8	11	4	.	.	37
2.00-2.24	.	.	.	1	3	11	14	.	1	.	30
2.25-2.49	.	.	.	.	.	7	3	.	2	.	12
2.50-2.74	.	.	.	.	.	.	5	.	.	.	5
2.75-2.99	.	.	.	.	.	.	6	2	1	.	9
3.00-3.24	.	.	.	.	.	.	3	2	1	.	6
3.25-3.49	.	.	.	.	.	.	1	2	.	.	3
3.50+	.	.	.	.	.	.	1	1	1	.	3
TOTAL	514	3215	1912	565	422	208	99	17	6	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 6528.

STATION M04 42.25N 87.73W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

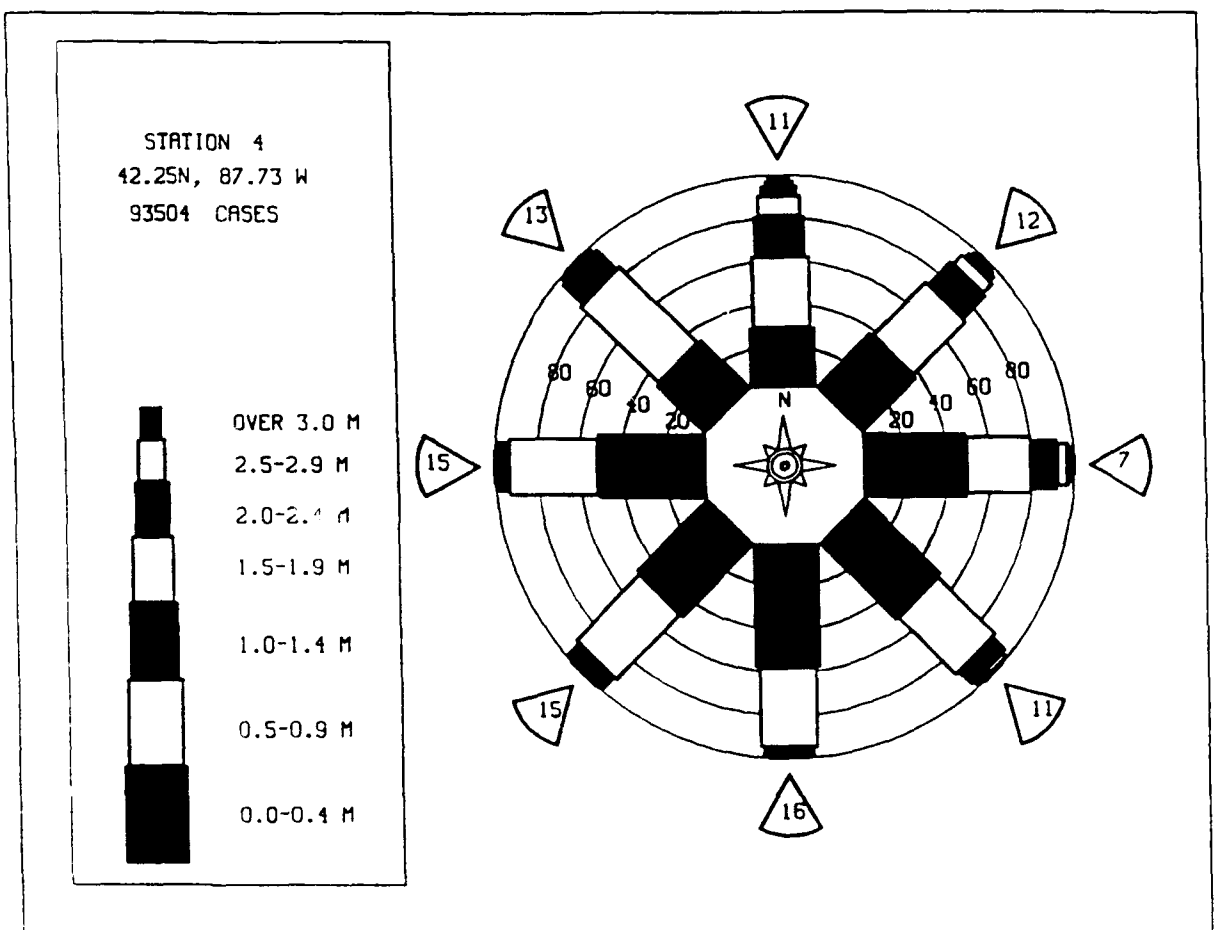
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	311	209	40	2	3	1	.	.	.	.	566
0.25-0.49	63	307	164	22	11	2	.	.	.	.	769
0.50-0.74	.	744	366	203	39	9	.	.	.	.	1361
0.75-0.99	.	49	393	165	78	12	.	.	.	.	697
1.00-1.24	.	.	279	132	182	20	5	.	.	.	618
1.25-1.49	.	.	70	66	79	42	3	.	.	.	260
1.50-1.74	.	.	12	100	62	62	6	.	.	.	242
1.75-1.99	.	.	.	20	33	24	10	.	.	.	87
2.00-2.24	.	.	.	8	29	35	11	1	1	.	85
2.25-2.49	.	.	.	.	8	14	10	.	.	.	32
2.50-2.74	.	.	.	.	5	20	12	1	1	.	39
2.75-2.99	.	.	.	.	.	6	13	.	1	.	20
3.00-3.24	.	.	.	.	.	3	9	3	.	.	15
3.25-3.49	.	.	.	.	.	1	4	1	1	.	7
3.50+	.	.	.	.	.	.	1	8	.	.	9
TOTAL	374	1509	1324	718	529	251	84	14	4	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 4521

STATION M04 42.25N 87.73W 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	
0.00-0.24	1195	571	118	22	7	.	.	.	.	.	1913
0.25-0.49	324	1688	372	92	55	6	.	.	.	.	2537
0.50-0.74	.	1877	608	272	61	22	1	.	.	.	2841
0.75-0.99	.	240	558	262	70	20	4	.	.	.	1154
1.00-1.24	.	.	346	196	135	17	9	.	.	.	703
1.25-1.49	.	.	110	76	87	16	3	.	.	.	292
1.50-1.74	.	.	20	85	88	36	3	.	.	.	232
1.75-1.99	.	.	.	14	42	24	3	.	.	.	83
2.00-2.24	.	.	.	4	35	30	8	.	.	.	77
2.25-2.49	.	.	.	.	11	15	8	.	.	.	34
2.50-2.74	.	.	.	.	3	18	11	.	.	.	32
2.75-2.99	.	.	.	.	.	8	8	.	.	.	16
3.00-3.24	.	.	.	.	.	7	7	1	.	.	15
3.25-3.49	.	.	.	.	.	1	7	1	.	.	9
3.50+	.	.	.	.	.	.	13	6	2	.	21
TOTAL	1519	4376	2132	1023	594	220	85	8	2	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.



STATION M05 42.35N 87.73W 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	
0.00-0.24	318	286	38	7	2	.	.	.	.	.	651
0.25-0.49	51	619	148	23	10	1	.	.	.	.	852
0.50-0.74	.	379	557	208	22	12	.	.	.	.	1178
0.75-0.99	.	10	226	256	40	5	.	.	.	.	537
1.00-1.24	.	.	183	272	206	5	2	.	.	.	668
1.25-1.49	.	.	20	175	171	12	1	.	.	.	379
1.50-1.74	.	.	.	119	183	90	3	.	.	.	395
1.75-1.99	.	.	.	19	77	78	4	.	.	.	178
2.00-2.24	.	.	.	1	73	125	24	.	.	.	223
2.25-2.49	.	.	.	.	25	50	27	.	1	.	103
2.50-2.74	.	.	.	.	9	45	53	.	1	.	108
2.75-2.99	.	.	.	.	.	25	22	.	.	.	47
3.00-3.24	.	.	.	.	.	12	42	9	.	.	63
3.25-3.49	.	.	.	.	.	.	18	8	2	.	28
3.50+	.	.	.	.	.	2	64	36	18	2	122
TOTAL	369	1294	1172	1080	818	462	260	53	22	2	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 5200.

STATION M05 42.35N 87.73W 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	
0.00-0.24	355	242	32	4	1	.	.	.	.	.	634
0.25-0.49	78	807	168	26	7	1	.	.	.	.	1087
0.50-0.74	.	362	801	235	22	2	.	.	.	.	1422
0.75-0.99	.	6	309	426	42	2	.	.	.	.	785
1.00-1.24	.	.	148	398	268	1	1	.	.	.	816
1.25-1.49	.	.	11	142	209	16	2	.	.	.	380
1.50-1.74	.	.	.	101	214	63	.	.	.	.	378
1.75-1.99	.	.	.	5	84	50	2	.	.	.	141
2.00-2.24	.	.	.	3	74	60	12	.	.	.	149
2.25-2.49	.	.	.	.	14	39	21	.	.	.	74
2.50-2.74	.	.	.	.	3	43	27	.	.	.	73
2.75-2.99	.	.	.	.	.	20	22	.	.	.	42
3.00-3.24	.	.	.	.	.	19	26	1	.	.	46
3.25-3.49	.	.	.	.	.	1	10	.	.	.	11
3.50+	.	.	.	.	.	.	48	12	.	.	60
TOTAL	433	1417	1469	1340	938	317	171	13	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.4 NO. OF CASES= 5725.

STATION M05 42.35N 87.73W 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	
0.00-0.24	486	386	34	8	.	.	.	.	.	.	914
0.25-0.49	77	997	226	40	9	.	.	.	.	.	1349
0.50-0.74	.	327	885	265	11	1	.	.	.	.	1489
0.75-0.99	.	5	225	350	43	2	.	.	.	.	625
1.00-1.24	.	.	96	317	171	5	2	.	.	.	591
1.25-1.49	.	.	10	82	159	4	1	.	.	.	256
1.50-1.74	.	.	.	53	149	37	.	.	.	.	239
1.75-1.99	.	.	.	7	75	45	2	.	.	.	129
2.00-2.24	.	.	.	.	49	79	1	.	.	.	129
2.25-2.49	.	.	.	.	17	49	7	.	.	.	73
2.50-2.74	.	.	.	.	3	49	12	.	.	.	64
2.75-2.99	.	.	.	.	.	32	6	.	.	.	38
3.00-3.24	.	.	.	.	.	20	12	.	.	.	32
3.25-3.49	.	.	.	.	.	4	18	1	.	.	23
3.50+	.	.	.	.	.	.	33	5	.	.	38
TOTAL	563	1715	1476	1122	686	327	94	6	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.2 NO. OF CASES= 5620.

STATION M05 42.35N 87.73W 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	
0.00-0.24	365	311	31	9	1	.	.	.	.	.	717
0.25-0.49	78	670	155	33	5	.	.	.	.	.	941
0.50-0.74	.	193	459	127	14	2	.	.	.	.	795
0.75-0.99	.	4	127	185	24	3	.	.	.	.	343
1.00-1.24	.	.	65	189	44	2	.	.	.	.	300
1.25-1.49	.	.	1	43	94	2	.	.	.	.	140
1.50-1.74	.	.	.	27	88	8	1	.	.	.	124
1.75-1.99	.	.	.	5	40	22	.	.	.	.	67
2.00-2.24	.	.	.	.	48	38	2	.	.	.	88
2.25-2.49	.	.	.	.	4	17	2	.	.	.	23
2.50-2.74	.	.	.	.	.	28	2	.	.	.	30
2.75-2.99	.	.	.	.	.	6	1	.	.	.	7
3.00-3.24	.	.	.	.	.	8	7	.	.	.	15
3.25-3.49	.	.	.	.	.	1	4	.	.	.	5
3.50+	.	.	.	.	.	.	6	.	.	.	6
TOTAL	443	1178	838	618	362	137	25	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 3384.

MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M04 (42.25N 87.73W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.8	0.6	0.6	0.6	0.5	0.3	0.3	0.3	0.4	0.5	0.7	0.6	0.5
1957	0.7	0.6	0.7	0.5	0.5	0.3	0.3	0.3	0.4	0.5	0.7	0.8	0.5
1958	0.8	0.8	0.7	0.6	0.5	0.3	0.2	0.4	0.5	0.6	0.7	0.7	0.6
1959	0.9	0.9	0.8	0.7	0.5	0.4	0.3	0.4	0.6	0.7	0.8	0.8	0.6
1960	0.8	1.2	0.8	0.6	0.6	0.5	0.4	0.4	0.5	0.5	0.8	0.9	0.7
1961	0.7	1.0	1.0	0.6	0.5	0.4	0.3	0.4	0.5	0.7	0.7	0.9	0.6
1962	0.8	1.0	0.8	0.8	0.6	0.4	0.3	0.4	0.6	0.6	0.7	0.8	0.6
1963	0.8	0.8	0.8	0.6	0.5	0.3	0.4	0.4	0.6	0.5	0.6	0.6	0.6
1964	1.0	0.8	1.0	0.8	0.5	0.4	0.4	0.5	0.5	0.6	0.6	0.8	0.7
1965	0.9	1.1	0.9	0.7	0.5	0.4	0.3	0.3	0.5	0.7	0.6	0.8	0.6
1966	0.7	0.6	0.6	0.5	0.5	0.3	0.3	0.3	0.5	0.6	0.9	0.7	0.5
1967	0.9	0.9	0.7	0.5	0.5	0.3	0.3	0.4	0.5	0.7	0.7	0.7	0.6
1968	0.9	0.8	0.8	0.6	0.5	0.3	0.3	0.4	0.5	0.6	0.7	0.9	0.6
1969	0.7	0.8	0.8	0.7	0.4	0.4	0.3	0.3	0.5	0.5	0.5	0.8	0.6
1970	0.6	0.8	0.7	0.6	0.5	0.4	0.4	0.4	0.5	0.6	1.0	0.9	0.6
1971	0.8	1.0	0.8	0.7	0.5	0.4	0.4	0.5	0.6	0.6	0.9	0.8	0.7
1972	1.0	0.8	1.1	0.7	0.5	0.6	0.4	0.4	0.6	0.6	0.8	0.7	0.7
1973	0.9	1.0	0.9	0.8	0.6	0.4	0.4	0.5	0.6	0.6	0.8	1.0	0.7
1974	0.7	1.1	0.8	0.7	0.5	0.5	0.4	0.4	0.6	0.7	0.7	0.9	0.7
1975	0.9	1.0	0.9	0.8	0.4	0.3	0.3	0.5	0.6	0.7	0.8	0.9	0.7
1976	1.0	1.0	0.9	0.7	0.6	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.7
1977	0.8	0.8	0.8	0.7	0.4	0.5	0.5	0.4	0.5	0.8	0.9	0.9	0.7
1978	1.0	0.8	0.8	0.8	0.7	0.4	0.4	0.4	0.5	0.7	0.8	0.9	0.7
1979	0.8	1.0	0.7	0.6	0.6	0.5	0.4	0.5	0.5	0.7	0.7	0.8	0.7
1980	0.7	0.8	0.9	0.7	0.3	0.4	0.3	0.3	0.4	0.6	0.7	0.7	0.6
1981	0.6	0.8	0.7	0.6	0.7	0.3	0.5	0.4	0.7	0.6	0.7	0.6	0.6
1982	0.9	0.7	0.8	0.7	0.4	0.4	0.4	0.4	0.6	0.6	0.7	0.7	0.6
1983	0.8	0.6	0.9	0.6	0.5	0.3	0.3	0.4	0.5	0.8	1.1	0.8	0.6
1984	0.7	0.8	0.8	0.7	0.4	0.3	0.3	0.4	0.6	0.5	0.7	0.8	0.6
1985	0.9	0.9	0.8	0.5	0.4	0.3	0.3	0.3	0.5	0.5	0.8	0.7	0.6
1986	0.8	0.9	0.8	0.7	0.5	0.4	0.3	0.4	0.4	0.6	0.7	0.7	0.6
1987	0.7	0.9	0.9	0.6	0.3	0.3	0.3	0.4	0.4	0.6	0.8	0.9	0.6
MEAN	0.8	0.9	0.8	0.7	0.5	0.4	0.3	0.4	0.5	0.6	0.7	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M04 (42.25N 87.73W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.5	2.1	2.5	1.9	1.5	1.1	1.1	1.2	1.9	1.9	2.4	2.1
1957	3.4	3.5	2.9	2.0	1.6	0.8	1.3	1.1	1.5	3.8	1.9	3.1
1958	3.5	2.5	2.0	2.6	2.1	1.3	0.8	1.0	1.7	1.6	2.3	3.4
1959	4.8	2.7	4.6	2.0	2.1	1.3	1.0	2.0	2.2	2.8	3.0	2.4
1960	3.5	4.7	3.1	2.5	2.5	1.4	1.9	1.3	2.1	2.0	2.1	3.3
1961	2.3	4.0	4.0	2.1	1.9	2.0	1.2	1.4	2.3	3.6	2.9	2.6
1962	3.4	3.1	3.0	3.3	1.4	1.6	1.0	1.2	1.7	1.9	2.7	2.6
1963	4.2	3.4	2.5	2.7	2.7	1.1	1.7	1.4	2.8	2.1	1.4	1.3
1964	4.9	2.4	4.4	3.3	2.1	1.3	2.5	1.2	1.6	1.7	2.0	3.5
1965	3.6	5.7	2.6	1.6	1.4	1.2	1.1	1.0	1.8	3.4	2.5	4.7
1966	2.9	2.2	2.2	2.1	2.4	1.4	1.3	1.5	1.8	1.7	4.8	2.6
1967	5.0	3.3	2.5	1.2	1.7	1.1	0.9	1.8	2.2	2.0	2.9	2.4
1968	3.2	2.4	3.8	1.5	1.7	1.3	0.9	1.1	1.5	1.5	3.2	3.0
1969	2.5	2.5	4.2	3.6	1.8	1.2	1.5	1.0	1.6	1.7	2.0	2.4
1970	1.8	3.2	3.2	3.0	2.3	2.7	2.3	1.1	1.6	2.5	3.8	2.9
1971	2.6	3.6	3.4	2.4	1.6	1.5	1.3	1.6	1.8	2.1	3.9	2.3
1972	3.2	3.0	4.3	3.2	1.9	2.3	1.6	1.2	1.6	1.8	4.6	2.2
1973	4.9	4.2	3.6	3.0	2.0	1.0	1.4	1.7	1.7	2.1	2.8	4.9
1974	1.9	5.7	3.1	2.5	1.5	1.9	0.8	1.1	1.5	2.7	2.6	4.2
1975	3.4	3.6	2.6	3.5	1.8	1.3	0.9	1.6	3.5	3.4	2.6	3.4
1976	3.4	5.2	2.6	3.7	1.8	1.2	1.5	2.0	1.9	2.1	2.9	2.8
1977	3.1	2.6	3.0	2.4	1.7	2.2	1.5	1.2	1.5	3.0	2.8	3.2
1978	3.6	3.5	3.4	2.7	4.1	1.1	1.2	1.2	1.4	2.2	3.7	2.7
1979	4.2	5.5	3.0	2.0	2.8	1.4	1.8	1.7	1.5	3.4	2.3	6.4
1980	1.8	4.3	3.4	2.6	0.9	1.7	1.0	1.1	1.3	1.6	2.0	3.9
1981	2.2	3.1	2.8	2.3	4.5	1.3	1.9	1.1	1.8	1.7	4.1	1.9
1982	3.3	2.9	2.4	2.7	1.6	1.1	1.0	1.2	1.8	1.7	1.8	1.9
1983	3.8	1.8	3.0	2.5	2.6	1.0	1.1	2.0	1.5	2.2	4.7	3.4
1984	3.0	5.5	4.3	2.1	1.9	0.8	0.7	1.4	1.8	2.1	3.5	2.5
1985	4.2	4.9	2.8	1.8	1.9	1.2	1.6	1.5	1.6	1.5	3.1	2.6
1986	2.9	3.6	2.7	1.8	2.3	2.2	0.9	1.5	1.8	1.9	2.5	3.4
1987	3.0	5.0	4.1	3.2	1.1	1.0	0.8	1.5	1.4	2.3	2.3	3.8

32 YR. STATISTICS FOR WIS STATION M04

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.6
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)	6.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	11.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		79122503

STATION M05 42.35N 87.73W 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	
0.00-0.24	406	366	52	21	1	.	.	.	.	.	846
0.25-0.49	45	623	151	29	16	1	.	.	.	.	865
0.50-0.74	.	186	403	103	13	.	.	.	.	.	705
0.75-0.99	.	2	108	126	13	1	.	.	.	.	250
1.00-1.24	.	.	50	188	38	2	1	.	.	.	279
1.25-1.49	.	.	2	33	70	3	.	.	.	.	108
1.50-1.74	.	.	.	28	82	4	.	.	.	.	114
1.75-1.99	.	.	.	1	52	9	.	.	.	.	62
2.00-2.24	.	.	.	.	40	13	.	.	.	.	53
2.25-2.49	.	.	.	.	10	12	1	.	.	.	23
2.50-2.74	.	.	.	.	.	20	.	.	.	.	20
2.75-2.99	.	.	.	.	.	3	1	.	.	.	4
3.00-3.24	.	.	.	.	.	8	.	.	.	.	8
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	451	1177	766	529	335	76	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 3138.

STATION M05 42.35N 87.73W 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	
0.00-0.24	447	288	38	10	.	.	.	.	.	.	783
0.25-0.49	97	537	97	11	10	1	.	.	.	.	753
0.50-0.74	.	191	300	43	7	1	.	.	.	.	542
0.75-0.99	.	.	104	114	7	.	.	.	.	.	225
1.00-1.24	.	.	48	165	13	1	1	.	.	.	228
1.25-1.49	.	.	3	45	55	.	.	.	.	.	103
1.50-1.74	.	.	.	29	57	2	1	.	.	.	89
1.75-1.99	.	.	.	2	33	3	1	.	.	.	39
2.00-2.24	.	.	.	.	21	11	1	.	.	.	33
2.25-2.49	.	.	.	.	2	10	.	.	.	.	12
2.50-2.74	.	.	.	.	.	7	.	.	.	.	7
2.75-2.99	.	.	.	.	.	7	.	.	.	.	7
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	544	1016	590	419	205	44	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 2656.

STATION M05 42.35N 87.73W 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	
0.00-0.24	694	465	73	18	2	.	.	.	.	.	1252
0.25-0.49	147	1002	219	27	14	1	.	.	.	.	1410
0.50-0.74	.	428	647	118	8	.	.	.	.	.	1201
0.75-0.99	.	8	293	183	2	1	.	.	.	.	487
1.00-1.24	.	.	144	234	20	.	.	.	.	.	398
1.25-1.49	.	.	7	86	63	.	1	.	.	.	157
1.50-1.74	.	.	1	65	80	.	.	.	.	.	146
1.75-1.99	.	.	.	7	33	.	.	.	.	.	40
2.00-2.24	.	.	.	.	35	2	.	.	.	.	37
2.25-2.49	.	.	.	.	21	3	.	.	.	.	24
2.50-2.74	.	.	.	.	3	11	.	.	.	.	14
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	841	1903	1384	738	281	23	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 4848.

STATION M05 42.35N 87.73W 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	
0.00-0.24	973	678	133	28	1	.	.	.	.	.	1813
0.25-0.49	185	1590	333	92	24	1	.	.	.	.	2215
0.50-0.74	.	1532	938	256	11	3	.	.	.	.	2740
0.75-0.99	.	14	747	272	10	1	.	.	.	.	1044
1.00-1.24	.	.	642	163	37	1	.	.	.	.	843
1.25-1.49	.	.	199	71	48	1	.	.	.	.	319
1.50-1.74	.	.	22	121	70	.	1	.	.	.	214
1.75-1.99	.	.	.	11	23	2	1	.	.	.	37
2.00-2.24	.	.	.	8	23	3	1	.	.	.	35
2.25-2.49	.	.	.	.	6	2	.	.	.	.	8
2.50-2.74	.	.	.	.	1	4	.	.	.	.	5
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1158	3814	3014	1012	254	19	3	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 8690.

STATION M05 42.35N 87.73W 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	
0.00-0.24	1482	683	106	20	6	.	.	.	.	.	2297
0.25-0.49	199	1593	145	71	31	4	.	.	.	.	2043
0.50-0.74	.	2328	612	48	17	9	.	.	.	.	3014
0.75-0.99	.	66	912	38	9	3	.	.	.	.	1028
1.00-1.24	.	.	1003	7	3	1	.	1	.	.	1015
1.25-1.49	.	.	314	133	3	.	.	.	.	.	450
1.50-1.74	.	.	24	208	1	1	.	.	.	.	234
1.75-1.99	.	.	.	52	.	.	.	.	.	.	52
2.00-2.24	.	.	.	22	4	1	.	.	.	.	27
2.25-2.49	.	.	.	.	2	.	.	.	.	.	2
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1681	4670	3116	599	76	19	0	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 9515.

STATION M05 42.35N 87.73W 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	
0.00-0.24	1174	487	91	29	4	.	.	.	.	.	1785
0.25-0.49	176	1378	132	60	38	2	1	.	.	.	1787
0.50-0.74	.	2491	296	64	21	12	2	.	.	.	2886
0.75-0.99	.	44	710	10	17	1	.	.	.	.	782
1.00-1.24	.	.	495	5	2	1	.	.	.	.	503
1.25-1.49	.	.	236	21	2	.	1	.	.	.	260
1.50-1.74	.	.	24	84	1	.	.	.	.	.	109
1.75-1.99	.	.	.	20	.	.	.	.	.	.	20
2.00-2.24	.	.	.	10	5	.	.	.	.	.	15
2.25-2.49	.	.	.	1	3	.	.	.	.	.	4
2.50-2.74	.	.	.	.	2	.	.	.	.	.	2
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1350	4400	1984	304	96	16	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 7639.

STATION M05 42.35N 87.73W 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	
0.00-0.24	1069	525	132	14	9	1	.	.	.	.	1750
0.25-0.49	126	1161	149	79	72	8	.	.	.	.	1595
0.50-0.74	.	2026	248	66	25	13	1	.	.	.	2379
0.75-0.99	.	82	551	17	26	4	1	.	.	.	681
1.00-1.24	.	.	331	2	9	2	.	.	.	.	344
1.25-1.49	.	.	199	.	1	1	.	.	.	.	201
1.50-1.74	.	.	9	73	.	1	.	.	.	.	83
1.75-1.99	.	.	.	20	.	.	.	.	.	.	20
2.00-2.24	.	.	.	11	.	.	.	.	.	.	11
2.25-2.49	.	.	.	.	2	.	.	.	.	.	2
2.50-2.74	.	.	.	.	4	.	.	.	.	.	4
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1195	3794	1619	282	148	30	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.2 NO. OF CASES= 6626.

STATION M05 42.35N 87.73W 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	
0.00-0.24	832	340	77	25	6	2	.	.	.	.	1282
0.25-0.49	198	981	188	101	80	9	1	.	.	.	1558
0.50-0.74	.	1625	111	114	68	22	3	.	.	.	1943
0.75-0.99	.	204	317	14	21	14	4	.	.	.	574
1.00-1.24	.	.	222	1	6	7	6	.	.	.	242
1.25-1.49	.	.	103	.	2	1	1	.	.	.	107
1.50-1.74	.	.	22	35	.	.	.	.	.	.	57
1.75-1.99	.	.	.	14	.	.	.	.	.	.	14
2.00-2.24	.	.	.	5	.	.	.	.	.	.	5
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	2	.	.	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1030	3150	1040	309	186	55	15	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 5424.

STATION M05 42.35N 87.73W 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	
0.00-0.24	784	422	131	29	6	.	.	.	.	.	1372
0.25-0.49	366	1281	289	109	104	11	.	.	.	.	2160
0.50-0.74	.	1842	98	164	115	52	5	.	.	.	2276
0.75-0.99	.	339	331	24	56	44	5	.	.	.	799
1.00-1.24	.	.	213	4	23	18	12	1	.	.	271
1.25-1.49	.	.	75	1	.	4	2	1	.	.	83
1.50-1.74	.	.	35	11	1	3	3	.	.	.	53
1.75-1.99	.	.	.	4	.	1	.	.	.	.	5
2.00-2.24	.	.	.	1	.	2	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	1	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1151	3884	1172	347	305	135	28	2	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 6585.

STATION M05 42.35N 87.73W 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	
0.00-0.24	536	295	63	17	4	.	.	.	.	.	915
0.25-0.49	280	1368	214	75	100	5	.	.	.	.	2042
0.50-0.74	.	2138	163	180	102	47	2	.	.	.	2632
0.75-0.99	.	346	571	84	88	63	7	.	.	.	1159
1.00-1.24	.	.	332	17	63	37	17	1	.	.	467
1.25-1.49	.	.	116	1	10	5	10	.	.	.	142
1.50-1.74	.	.	28	18	4	10	7	2	1	.	70
1.75-1.99	.	.	.	7	.	1	1	1	.	.	10
2.00-2.24	.	.	.	2	.	1	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	1	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	1	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	1	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	816	4147	1487	401	371	169	45	5	2	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 6977.

STATION M05 42.35N 87.73W 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	
0.00-0.24	353	313	65	5	11	.	.	.	.	.	747
0.25-0.49	69	884	207	53	21	2	.	.	.	.	1236
0.50-0.74	.	2028	357	232	65	25	1	.	.	.	2708
0.75-0.99	.	166	858	156	91	45	7	.	.	.	1323
1.00-1.24	.	.	502	60	135	37	29	1	.	.	764
1.25-1.49	.	.	242	5	37	21	11	.	.	.	316
1.50-1.74	.	.	28	64	26	28	6	1	.	.	153
1.75-1.99	.	.	1	8	3	13	8	5	.	.	38
2.00-2.24	.	.	.	2	3	12	9	2	.	.	28
2.25-2.49	.	.	.	.	.	4	6	1	1	.	12
2.50-2.74	.	.	.	1	.	2	7	.	1	.	11
2.75-2.99	.	.	.	.	.	.	3	.	1	.	4
3.00-3.24	.	.	.	.	.	.	2	1	1	.	4
3.25-3.49	.	.	.	.	.	.	.	1	.	.	1
3.50+	.	.	.	.	.	.	1	1	1	.	3
TOTAL	422	3391	2260	586	392	189	90	13	5	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 6897.

STATION M05 42.35N 87.73W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

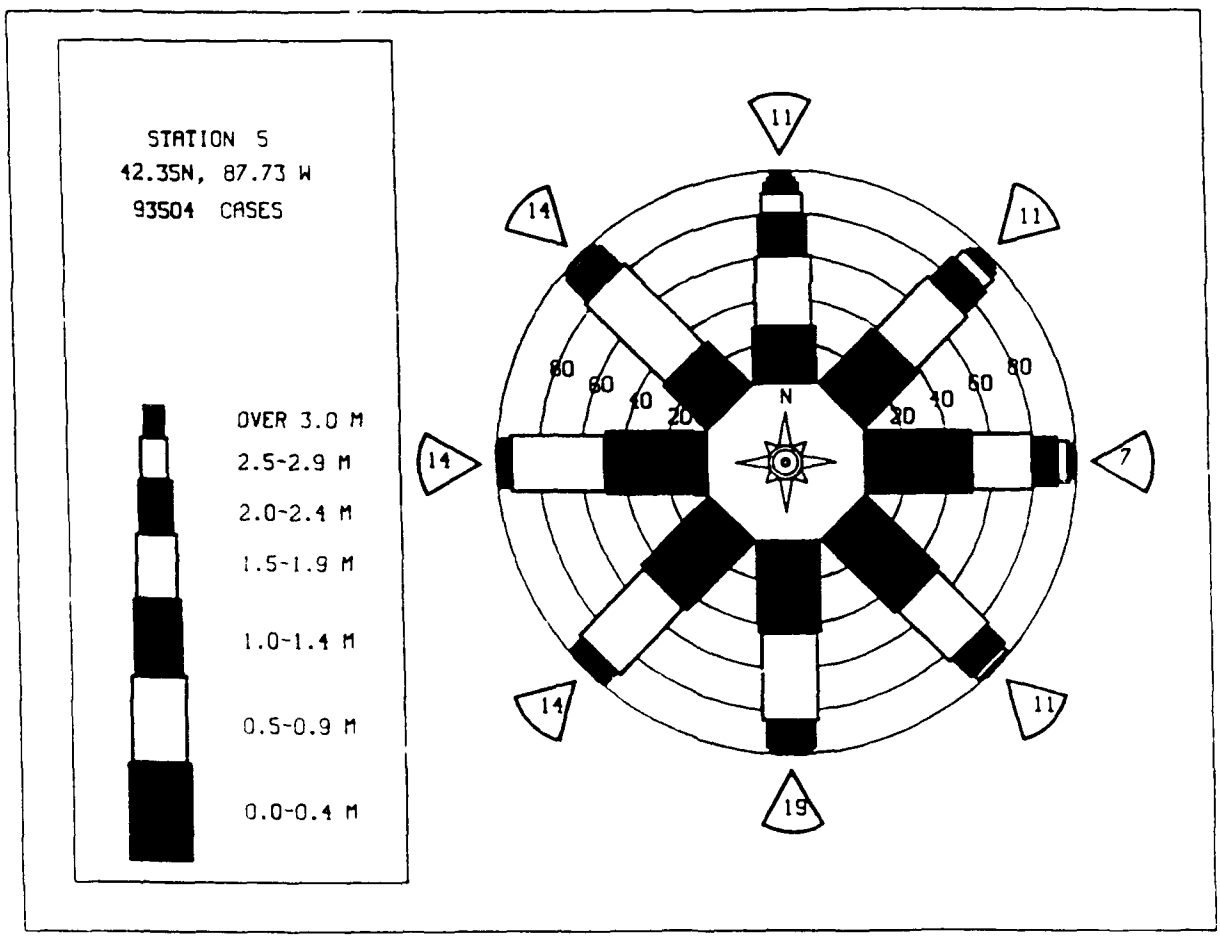
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	247	241	37	5	5	.	.	.	.	.	535
0.25-0.49	44	552	135	27	14	2	.	.	.	.	774
0.50-0.74	.	764	401	190	34	16	.	.	.	.	1405
0.75-0.99	.	35	428	193	73	14	3	.	.	.	746
1.00-1.24	.	.	245	132	180	20	10	.	.	.	587
1.25-1.49	.	.	98	65	94	29	4	.	.	.	290
1.50-1.74	.	.	17	83	71	58	9	1	.	.	239
1.75-1.99	.	.	.	16	33	35	6	.	.	.	90
2.00-2.24	.	.	.	2	28	36	12	.	.	.	78
2.25-2.49	.	.	.	.	10	11	12	1	.	.	34
2.50-2.74	.	.	.	.	6	21	11	1	.	.	39
2.75-2.99	.	.	.	.	.	9	6	.	1	.	16
3.00-3.24	.	.	.	.	.	2	12	2	.	.	16
3.25-3.49	.	.	.	.	.	.	4	1	.	.	5
3.50+	.	.	.	.	.	.	5	9	.	.	14
TOTAL	291	1592	1361	713	548	253	94	15	1	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 4580.

STATION M05 42.35N 87.73W 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	
0.00-0.24	1052	633	114	25	6	.	.	.	.	.	1830
0.25-0.49	222	1605	296	85	56	5	.	.	.	.	2269
0.50-0.74	.	1884	728	242	56	22	1	.	.	.	2933
0.75-0.99	.	133	682	245	57	20	2	.	.	.	1139
1.00-1.24	.	.	472	216	122	14	8	.	.	.	832
1.25-1.49	.	.	164	90	102	10	3	.	.	.	369
1.50-1.74	.	.	21	112	103	31	3	.	.	.	270
1.75-1.99	.	.	.	20	45	26	2	.	.	.	93
2.00-2.24	.	.	.	7	40	38	6	.	.	.	91
2.25-2.49	.	.	.	.	12	20	8	.	.	.	40
2.50-2.74	.	.	.	.	3	23	11	.	.	.	37
2.75-2.99	.	.	.	.	.	10	6	.	.	.	16
3.00-3.24	.	.	.	.	.	7	10	1	.	.	18
3.25-3.49	.	.	.	.	.	.	5	1	.	.	6
3.50+	.	.	.	.	.	.	15	6	1	.	22
TOTAL	1274	4255	2477	1042	602	226	80	8	1	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M05 (42.35N 87.73W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M05 (42.35N 87.73W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.6	2.4	2.6	2.2	1.5	1.1	1.2	1.4	2.0	2.1	2.5	2.2
1957	3.7	3.7	3.2	2.2	1.6	1.1	1.4	1.3	1.4	3.9	2.0	3.6
1958	3.7	2.7	2.2	2.8	2.3	1.4	0.8	1.2	1.8	1.6	2.3	3.4
1959	4.5	3.1	4.8	2.1	2.4	1.2	1.3	2.2	2.2	2.9	3.0	2.6
1960	3.2	5.5	3.3	2.7	2.6	1.3	1.8	1.5	2.3	1.6	2.1	3.1
1961	2.1	4.0	4.1	2.1	2.1	1.9	1.3	1.2	2.3	3.6	2.9	2.6
1962	3.0	3.4	2.7	2.9	1.4	1.7	1.1	1.3	1.9	1.7	2.7	2.9
1963	4.2	3.3	2.4	2.9	2.9	0.9	1.8	1.5	3.1	2.1	1.9	1.3
1964	4.5	2.2	4.6	3.2	2.1	1.2	2.5	1.2	2.0	1.7	2.2	3.3
1965	3.6	5.3	2.7	1.6	1.5	1.3	1.1	1.0	1.8	3.5	2.6	4.9
1966	3.1	2.3	2.4	2.3	1.9	1.6	1.2	1.6	2.1	1.7	4.7	2.8
1967	5.1	3.5	2.2	1.3	1.6	1.1	0.9	1.8	2.4	2.1	2.4	2.4
1968	3.4	2.7	3.5	1.7	1.7	1.3	1.0	1.1	1.7	1.8	3.1	3.0
1969	2.6	2.4	4.4	3.6	1.9	1.3	1.7	1.1	1.7	1.8	2.1	2.5
1970	2.0	3.2	3.7	3.3	2.4	2.7	2.2	1.3	1.7	2.7	3.6	3.4
1971	2.8	3.9	3.2	2.3	1.8	1.3	1.4	1.5	2.0	2.3	3.9	2.5
1972	2.6	2.9	4.3	3.0	2.0	2.2	1.6	1.3	1.8	1.8	4.4	2.5
1973	4.7	4.3	3.9	3.2	2.3	1.2	1.5	1.7	1.7	2.1	2.9	5.1
1974	2.3	5.7	3.4	2.4	1.5	2.1	0.9	1.1	1.7	2.6	2.7	4.4
1975	3.2	3.4	2.9	3.1	1.9	1.3	1.0	1.6	3.3	2.9	2.6	3.2
1976	3.2	4.8	2.4	3.5	1.8	1.4	1.6	1.8	1.9	2.1	3.1	2.6
1977	3.4	2.7	2.8	2.5	1.8	2.3	1.5	1.5	1.4	3.2	2.8	3.0
1978	3.2	3.3	3.0	2.5	4.1	1.4	1.3	1.2	1.5	2.2	3.9	3.0
1979	4.4	5.3	3.0	1.8	2.6	1.2	1.8	1.6	1.4	3.6	2.5	6.6
1980	2.1	4.1	3.4	2.7	1.2	1.7	0.9	1.2	1.4	1.4	2.2	3.8
1981	2.0	3.3	2.9	2.3	4.4	1.6	2.0	1.3	2.1	1.9	4.1	2.2
1982	3.3	2.8	2.4	3.1	1.6	1.1	1.0	1.4	2.0	2.1	2.2	1.8
1983	3.5	1.8	3.1	2.7	2.6	1.0	1.2	2.1	1.8	2.4	4.5	3.4
1984	2.8	5.7	4.3	2.3	1.5	1.2	0.8	1.5	2.0	2.4	3.7	2.7
1985	4.2	4.6	3.0	1.8	2.1	1.2	1.7	1.5	1.6	1.7	3.4	2.7
1986	2.9	3.4	2.9	1.9	2.4	1.9	1.2	1.4	1.8	1.8	2.3	3.2
1987	2.6	4.9	3.9	3.2	1.0	0.9	0.7	1.6	1.4	2.3	2.3	4.0

32 YR. STATISTICS FOR WIS STATION M05

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.2
LARGEST WAVE HS	(METERS)	6.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	2.0
DATE OF LARGEST HS OCCURRENCE IS (YR.MO.DA.HR)		79122506

STATION M06 42.54N 87.73W 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	
0.00-0.24	288	209	24	5	1	.	.	.	.	.	527
0.25-0.49	53	608	95	19	5	2	.	.	.	.	782
0.50-0.74	.	440	542	137	20	11	.	.	.	.	1150
0.75-0.99	.	11	274	255	34	2	.	.	.	.	576
1.00-1.24	.	.	223	317	165	4	1	.	.	.	71
1.25-1.49	.	.	29	207	195	9	1	.	.	.	441
1.50-1.74	.	.	.	155	223	66	2	.	.	.	446
1.75-1.99	.	.	.	16	128	91	3	.	.	.	238
2.00-2.24	.	.	.	2	93	152	13	1	.	.	261
2.25-2.49	.	.	.	.	23	70	35	.	.	.	128
2.50-2.74	.	.	.	.	17	67	48	.	1	.	133
2.75-2.99	.	.	.	.	1	23	34	1	.	.	59
3.00-3.24	.	.	.	.	.	31	35	4	1	.	71
3.25-3.49	.	.	.	.	.	3	31	2	.	.	36
3.50+	.	.	.	.	.	1	103	36	12	2	154
TOTAL	341	1268	1187	1113	905	532	306	44	14	2	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.7 NO. OF CASES= 5365.

STATION M06 42.54N 87.73W 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	
0.00-0.24	343	204	24	5	2	.	.	.	.	.	578
0.25-0.49	84	814	121	22	3	1	.	.	.	.	1045
0.50-0.74	.	417	813	203	16	1	.	.	.	.	1450
0.75-0.99	.	7	327	458	26	4	1	.	.	.	823
1.00-1.24	.	.	182	437	210	3	3	.	.	.	835
1.25-1.49	.	.	20	129	214	3	2	.	.	.	368
1.50-1.74	.	.	.	114	206	41	.	.	.	.	361
1.75-1.99	.	.	.	13	78	50	.	.	.	.	141
2.00-2.24	.	.	.	2	88	56	7	.	.	.	153
2.25-2.49	.	.	.	.	24	31	17	.	.	.	72
2.50-2.74	.	.	.	.	3	47	14	.	.	.	64
2.75-2.99	.	.	.	.	.	23	11	.	.	.	34
3.00-3.24	.	.	.	.	.	19	26	.	.	.	45
3.25-3.49	.	.	.	.	.	6	18	.	.	.	24
3.50+	.	.	.	.	.	1	42	13	.	.	56
TOTAL	427	1442	1487	1383	870	286	141	13	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 5679.

STATION M06 42.54N 87.73W 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	
0.00-0.24	491	310	18	8	1	.	.	.	.	.	828
0.25-0.49	85	1089	199	40	9	.	.	.	.	.	1422
0.50-0.74	.	374	906	207	16	.	.	.	.	.	1503
0.75-0.99	.	4	240	362	29	3	.	.	.	.	638
1.00-1.24	.	.	135	330	142	3	2	.	.	.	612
1.25-1.49	.	.	11	110	172	5	1	.	.	.	299
1.50-1.74	.	.	.	74	175	27	.	.	.	.	276
1.75-1.99	.	.	.	7	101	21	3	.	.	.	132
2.00-2.24	.	.	.	.	80	65	.	.	.	.	145
2.25-2.49	.	.	.	.	31	41	6	.	.	.	78
2.50-2.74	.	.	.	.	4	78	5	.	.	.	87
2.75-2.99	.	.	.	.	.	44	3	.	.	.	47
3.00-3.24	.	.	.	.	.	24	13	.	.	.	37
3.25-3.49	.	.	.	.	.	2	16	.	.	.	18
3.50+	.	.	.	.	.	.	51	5	1	.	57
TOTAL	576	1777	1509	1138	760	313	100	5	1	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 5799.

STATION M06 42.54N 87.73W 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	
0.00-0.24	328	210	18	6	.	.	.	.	.	.	562
0.25-0.49	39	581	103	31	3	.	.	.	.	.	757
0.50-0.74	.	181	401	78	10	1	.	.	.	.	671
0.75-0.99	.	3	124	164	12	2	.	.	.	.	305
1.00-1.24	.	.	50	163	31	1	.	.	.	.	245
1.25-1.49	.	.	2	52	85	.	1	.	.	.	140
1.50-1.74	.	.	.	31	85	1	.	.	.	.	117
1.75-1.99	.	.	.	1	56	9	1	.	.	.	67
2.00-2.24	.	.	.	.	45	36	.	.	.	.	81
2.25-2.49	.	.	.	.	7	27	2	.	.	.	36
2.50-2.74	.	.	.	.	1	35	3	.	.	.	39
2.75-2.99	.	.	.	.	.	5	.	.	.	.	5
3.00-3.24	.	.	.	.	.	10	2	.	.	.	12
3.25-3.49	.	.	.	.	.	.	6	.	.	.	6
3.50+	.	.	.	.	.	.	7	.	.	.	7
TOTAL	367	975	698	526	335	127	22	0	0	0	

MEAN HS(M) = [illegible] LARGEST HS(M)= [illegible] MEAN TP(SEC)= [illegible] NO. OF CASES= 3868.

STATION M06 42.54N 87.73W 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	
0.00-0.24	358	280	26	6	1	.	.	.	.	.	671
0.25-0.49	54	551	114	35	14	.	.	.	.	.	768
0.50-0.74	.	198	371	77	14	3	.	.	.	.	663
0.75-0.99	.	1	137	98	10	.	1	.	.	.	247
1.00-1.24	.	.	40	176	33	.	1	.	.	.	250
1.25-1.49	.	.	1	51	81	1	.	.	.	.	134
1.50-1.74	.	.	.	31	81	3	.	.	.	.	115
1.75-1.99	.	.	.	2	45	8	.	.	.	.	55
2.00-2.24	.	.	.	.	48	21	.	.	.	.	69
2.25-2.49	.	.	.	.	27	10	1	.	.	.	38
2.50-2.74	.	.	.	.	2	20	.	.	.	.	22
2.75-2.99	.	.	.	.	.	4	.	.	.	.	4
3.00-3.24	.	.	.	.	.	7	.	.	.	.	7
3.25-3.49	.	.	.	.	.	2	3	.	.	.	5
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	412	1030	689	476	356	79	7	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 2867.

STATION M06 42.54N 87.73W 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	
0.00-0.24	448	279	28	12	1	.	.	.	.	.	768
0.25-0.49	116	570	95	23	11	.	.	.	.	.	815
0.50-0.74	.	236	347	44	7	2	.	.	.	.	636
0.75-0.99	.	2	113	90	1	5	.	.	.	.	211
1.00-1.24	.	.	68	165	17	.	1	.	.	.	251
1.25-1.49	.	.	2	56	62	.	1	.	.	.	121
1.50-1.74	.	.	.	35	56	.	1	.	.	.	92
1.75-1.99	.	.	.	2	36	1	.	.	.	.	39
2.00-2.24	.	.	.	.	25	12	.	.	.	.	37
2.25-2.49	.	.	.	.	7	12	.	.	.	.	19
2.50-2.74	.	.	.	.	.	13	.	.	.	.	13
2.75-2.99	.	.	.	.	.	5	.	.	.	.	5
3.00-3.24	.	.	.	.	.	5	2	.	.	.	7
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	564	1087	653	427	223	55	5	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 2834.

STATION M06 42.54N 87.73W 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	
0.00-0.24	664	436	64	21	.	.	.	.	.	.	1185
0.25-0.49	193	1048	179	48	7	2	.	.	.	.	1477
0.50-0.74	.	535	711	97	7	.	.	.	.	.	1350
0.75-0.99	.	4	263	201	3	.	.	.	.	.	471
1.00-1.24	.	.	155	271	20	1	.	.	.	.	447
1.25-1.49	.	.	11	100	58	.	.	.	.	.	169
1.50-1.74	.	.	.	91	84	.	1	.	.	.	176
1.75-1.99	.	.	.	5	58	1	.	.	.	.	64
2.00-2.24	.	.	.	.	53	3	1	.	.	.	57
2.25-2.49	.	.	.	.	14	5	.	.	.	.	19
2.50-2.74	.	.	.	.	5	22	.	.	.	.	27
2.75-2.99	.	.	.	.	.	9	.	.	.	.	9
3.00-3.24	.	.	.	.	.	3	.	.	.	.	3
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	857	2023	1383	834	309	46	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 5114.

STATION M06 42.54N 87.73W 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	
0.00-0.24	930	706	88	21	.	.	.	.	.	.	1745
0.25-0.49	178	1851	343	96	23	1	.	.	.	.	2492
0.50-0.74	.	910	1278	304	18	2	.	.	.	.	2512
0.75-0.99	.	27	603	256	17	1	.	.	.	.	904
1.00-1.24	.	.	611	217	64	.	.	.	.	.	892
1.25-1.49	.	.	63	284	56	.	1	.	.	.	404
1.50-1.74	.	.	1	218	81	.	.	1	.	.	301
1.75-1.99	.	.	.	27	68	1	.	.	.	.	96
2.00-2.24	.	.	.	1	48	5	.	.	.	.	54
2.25-2.49	.	.	.	.	13	4	.	.	.	.	17
2.50-2.74	.	.	.	.	3	9	.	.	.	.	12
2.75-2.99	.	.	.	.	1	2	.	.	.	.	3
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1108	3494	2987	1424	392	25	1	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 8833.

STATION M06 42.54N 87.73W 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	
0.00-0.24	1147	686	122	21	5	.	.	.	.	.	1981
0.25-0.49	206	1776	178	67	39	1	.	.	.	.	2267
0.50-0.74	.	1737	958	54	21	7	.	.	.	.	2777
0.75-0.99	.	118	1221	62	12	4	.	.	.	.	1417
1.00-1.24	.	.	1353	139	36	1	.	1	.	.	1530
1.25-1.49	.	.	130	592	7	1	.	.	.	.	730
1.50-1.74	.	.	29	470	5	3	.	.	.	.	507
1.75-1.99	.	.	.	119	8	4	.	.	.	.	131
2.00-2.24	.	.	.	10	78	.	.	.	.	.	88
2.25-2.49	.	.	.	1	21	.	.	.	.	.	22
2.50-2.74	.	.	.	.	14	1	.	.	.	.	15
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	1353	4317	3991	1535	247	22	0	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 10739.

STATION M06 42.54N 87.73W 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	
0.00-0.24	872	421	82	19	5	.	.	.	.	.	1399
0.25-0.49	154	1403	99	69	38	2	.	.	.	.	1765
0.50-0.74	.	2261	355	45	25	9	2	.	.	.	2697
0.75-0.99	.	93	775	8	7	2	.	.	.	.	885
1.00-1.24	.	.	589	11	1	1	.	.	.	.	602
1.25-1.49	.	.	242	35	1	.	.	.	.	.	278
1.50-1.74	.	.	27	140	.	.	.	.	.	.	167
1.75-1.99	.	.	.	34	2	.	.	.	.	.	36
2.00-2.24	.	.	.	11	9	.	.	.	.	.	20
2.25-2.49	.	.	.	.	6	.	.	.	.	.	6
2.50-2.74	.	.	.	3	3	.	.	.	.	.	6
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	1	.	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	1026	4178	2169	375	98	14	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.3 NO. OF CASES= 7365.

STATION M06 42.54N 87.73W 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	
0.00-0.24	859	414	80	19	8	.	.	.	.	.	1380
0.25-0.49	156	1010	136	88	64	3	.	.	.	.	1457
0.50-0.74	.	1971	242	49	33	19	1	.	.	.	2315
0.75-0.99	.	116	547	13	10	7	1	.	.	.	694
1.00-1.24	.	.	395	1	5	1	.	.	.	.	402
1.25-1.49	.	.	209	1	.	.	.	.	.	.	210
1.50-1.74	.	.	25	108	.	.	.	.	.	.	133
1.75-1.99	.	.	.	32	.	.	.	.	.	.	32
2.00-2.24	.	.	.	12	.	.	.	.	.	.	12
2.25-2.49	.	.	.	1	4	.	.	.	.	.	5
2.50-2.74	.	.	.	.	2	.	.	.	.	.	2
2.75-2.99	.	.	.	.	2	.	.	.	.	.	2
3.00-3.24	.	.	.	.	1	.	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	1015	3511	1634	324	129	30	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 6227.

STATION M06 42.54N 87.73W 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	
0.00-0.24	675	274	63	19	6	2	.	.	.	.	1039
0.25-0.49	222	963	140	88	79	5	.	.	.	.	1497
0.50-0.74	.	1667	108	90	60	16	2	.	.	.	1943
0.75-0.99	.	181	379	18	20	17	4	.	.	.	619
1.00-1.24	.	.	233	1	7	7	4	.	.	.	252
1.25-1.49	.	.	101	.	.	.	.	.	.	.	101
1.50-1.74	.	.	26	41	.	.	.	.	.	.	67
1.75-1.99	.	.	.	14	.	.	.	.	.	.	14
2.00-2.24	.	.	.	16	.	.	.	.	.	.	16
2.25-2.49	.	.	.	1	1	.	.	.	.	.	2
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	2	.	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	897	3085	1050	288	175	47	10	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 5205.

STATION M06 42.54N 87.73W 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	
0.00-0.24	672	310	83	28	8	.	.	.	.	.	1101
0.25-0.49	278	1199	214	103	91	9	.	.	.	.	1894
0.50-0.74	.	1839	106	117	105	38	5	.	.	.	2210
0.75-0.99	.	327	392	26	50	36	4	.	.	.	835
1.00-1.24	.	.	254	4	17	20	8	.	.	.	303
1.25-1.49	.	.	96	.	1	.	1	1	.	.	99
1.50-1.74	.	.	34	10	.	2	1	.	.	.	47
1.75-1.99	.	.	.	8	.	.	1	.	.	.	9
2.00-2.24	.	.	.	3	.	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	1	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	950	3675	1179	299	272	105	21	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 6096.

STATION M06 42.54N 87.73W 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	
0.00-0.24	444	214	49	6	3	.	.	.	.	.	716
0.25-0.49	287	1310	201	64	79	5	.	.	.	.	1946
0.50-0.74	.	2305	188	158	101	48	.	.	.	.	2800
0.75-0.99	.	382	676	68	89	53	12	.	.	.	1280
1.00-1.24	.	.	481	10	42	36	17	1	.	.	587
1.25-1.49	.	.	149	2	13	5	11	.	.	.	180
1.50-1.74	.	.	51	40	3	7	7	2	.	.	110
1.75-1.99	.	.	1	12	.	1	1	2	1	.	18
2.00-2.24	.	.	.	3	.	.	1	.	1	.	5
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	1	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	731	4211	1796	363	330	155	50	5	2	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 7165.

STATION M06 42.54N 87.73W 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	
0.00-0.24	272	209	24	8	6	.	.	.	.	.	519
0.25-0.49	70	794	159	44	27	2	.	.	.	.	1096
0.50-0.74	.	2220	388	194	65	14	.	.	.	.	2881
0.75-0.99	.	131	949	176	82	54	3	.	.	.	1395
1.00-1.24	.	.	672	70	118	28	27	1	.	.	916
1.25-1.49	.	.	344	10	47	17	16	.	.	.	434
1.50-1.74	.	.	39	118	22	12	10	2	.	.	203
1.75-1.99	.	.	.	14	4	16	3	2	.	.	39
2.00-2.24	.	.	.	6	.	12	5	7	.	.	30
2.25-2.49	.	.	.	.	.	6	2	.	.	.	8
2.50-2.74	.	.	.	.	.	2	5	.	2	.	9
2.75-2.99	.	.	.	.	.	.	2	.	3	.	5
3.00-3.24	.	.	.	.	.	.	.	.	1	.	1
3.25-3.49	.	.	.	.	.	.	2	.	.	.	2
3.50+	.	.	.	.	.	.	.	2	.	.	2
TOTAL	342	3354	2575	640	371	163	75	14	6	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 7074.

STATION M06 42.54N 87.73W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

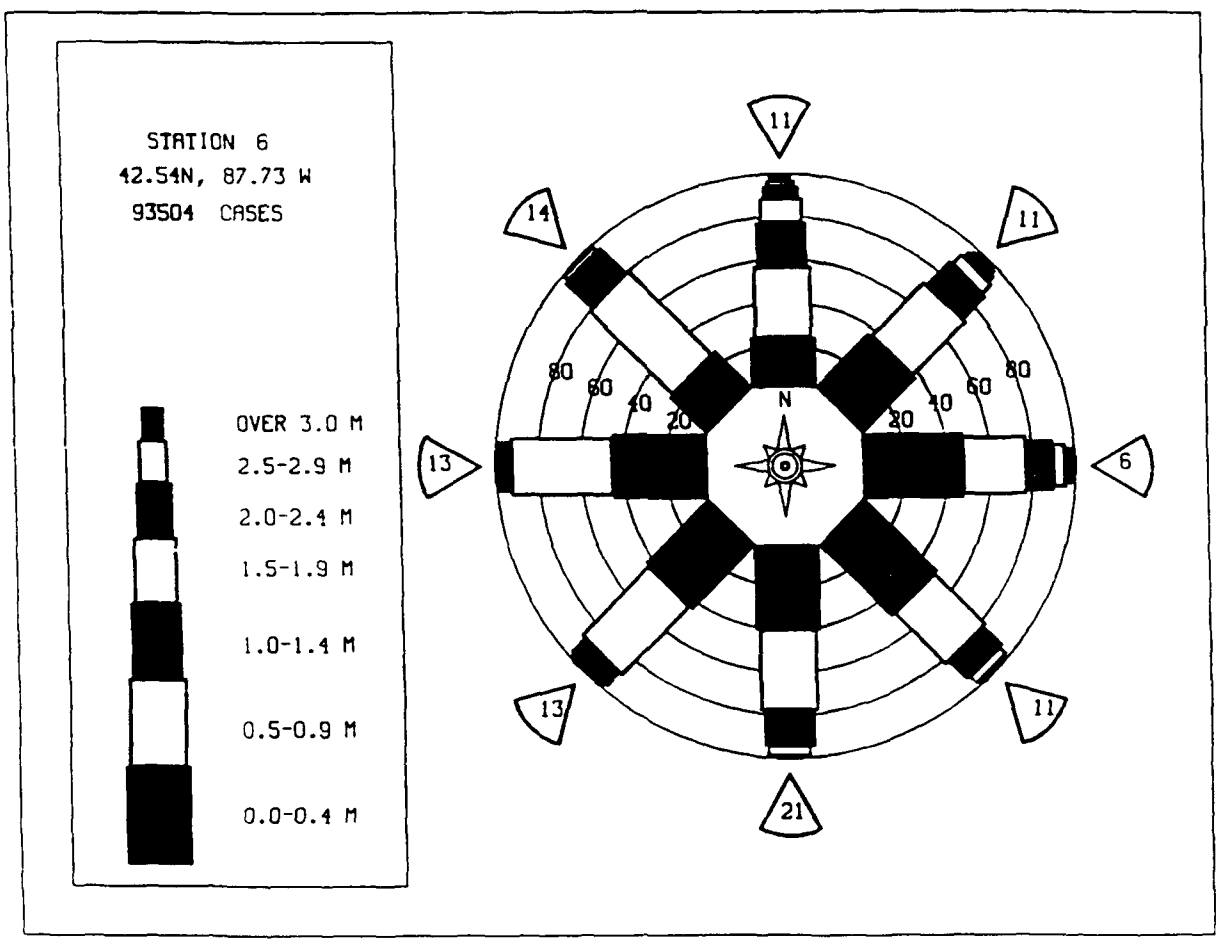
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	199	134	23	7	2	.	.	.	.	.	365
0.25-0.49	37	472	101	20	21	.	.	.	.	.	651
0.50-0.74	.	814	348	141	41	10	.	.	.	.	1354
0.75-0.99	.	50	412	164	54	20	.	.	.	.	700
1.00-1.24	.	.	276	148	156	24	6	.	.	.	610
1.25-1.49	.	.	89	81	98	12	3	1	.	.	284
1.50-1.74	.	.	17	88	103	50	12	1	.	.	271
1.75-1.99	.	.	.	24	27	31	3	.	.	.	85
2.00-2.24	.	.	.	2	26	40	5	.	.	.	73
2.25-2.49	.	.	.	.	17	14	9	.	.	.	40
2.50-2.74	.	.	.	.	9	19	11	1	.	.	40
2.75-2.99	.	.	.	.	.	18	8	1	.	.	27
3.00-3.24	.	.	.	.	.	8	11	2	.	.	21
3.25-3.49	.	.	.	.	.	.	8	.	.	.	8
3.50+	.	.	.	.	.	.	8	3	1	.	12
TOTAL	236	1470	1266	675	554	246	84	9	1	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 4274.

STATION M06 42.54N 87.73W 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	
0.00-0.24	899	530	82	21	5	.	.	.	.	.	1537
0.25-0.49	221	1604	248	86	52	3	.	.	.	.	2214
0.50-0.74	.	1811	806	200	56	18	1	.	.	.	2892
0.75-0.99	.	146	744	242	46	21	2	.	.	.	1201
1.00-1.24	.	.	572	246	106	13	7	.	.	.	944
1.25-1.49	.	.	150	171	109	5	3	.	.	.	438
1.50-1.74	.	.	25	177	112	21	3	.	.	.	338
1.75-1.99	.	.	.	33	61	23	1	.	.	.	118
2.00-2.24	.	.	.	7	59	40	3	.	.	.	109
2.25-2.49	.	.	.	.	20	22	7	.	.	.	49
2.50-2.74	.	.	.	.	6	31	8	.	.	.	45
2.75-2.99	.	.	.	.	.	13	6	.	.	.	19
3.00-3.24	.	.	.	.	.	11	9	.	.	.	20
3.25-3.49	.	.	.	.	.	1	8	.	.	.	9
3.50+							21	6	1	0	28
TOTAL	1120	4091	2627	1183	632	222	79	6	1	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M06 (42.54N 87.73W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M06 (42.54N 87.73W)

MONTH

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

32 YR. STATISTICS FOR WIS STATION M06

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.2
LARGEST WAVE HS	(METERS)	6.6
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)		79122503

STATION M07 42.68N 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	
0.00-0.24	259	144	21	4	.	.	.	.	.	.	428
0.25-0.49	60	606	74	21	5	1	.	.	.	.	767
0.50-0.74	.	478	558	111	19	7	.	.	.	.	1173
0.75-0.99	.	14	302	250	17	7	.	.	.	.	590
1.00-1.24	.	.	285	337	130	3	.	.	.	.	755
1.25-1.49	.	.	37	198	208	3	1	.	.	.	447
1.50-1.74	.	.	1	192	249	24	2	.	.	.	468
1.75-1.99	.	.	.	20	146	82	2	.	.	.	250
2.00-2.24	.	.	.	3	137	168	6	.	.	.	314
2.25-2.49	.	.	.	.	44	78	19	.	.	.	141
2.50-2.74	.	.	.	.	8	114	26	.	.	.	148
2.75-2.99	.	.	.	.	3	56	23	1	.	.	83
3.00-3.24	.	.	.	.	.	40	35	5	1	.	81
3.25-3.49	.	.	.	.	.	6	37	1	.	.	44
3.50+	.	.	.	.	.	3	143	31	10	2	189
TOTAL	319	1242	1278	1136	966	592	294	37	12	2	

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.8 NO. OF CASES= 5521.

STATION M07 42.68N 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	
0.00-0.24	303	166	10	4	.	.	.	.	.	.	483
0.25-0.49	86	797	87	24	5	.	.	.	.	.	999
0.50-0.74	.	482	827	125	24	5	.	.	.	.	1463
0.75-0.99	.	7	370	388	14	3	.	.	.	.	782
1.00-1.24	.	.	226	485	150	5	2	.	.	.	868
1.25-1.49	.	.	16	178	212	1	.	.	.	.	407
1.50-1.74	.	.	.	114	213	20	2	.	.	.	349
1.75-1.99	.	.	.	13	117	36	.	.	.	.	166
2.00-2.24	.	.	.	.	88	58	2	.	.	.	148
2.25-2.49	.	.	.	.	27	31	8	.	.	.	66
2.50-2.74	.	.	.	.	6	55	16	.	.	.	77
2.75-2.99	.	.	.	.	1	38	10	.	.	.	49
3.00-3.24	.	.	.	.	.	23	13	1	.	.	37
3.25-3.49	.	.	.	.	.	5	10	.	.	.	15
3.50+	.	.	.	.	.	.	48	4	.	.	52
TOTAL	389	1452	1536	1331	857	280	111	5	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.4 NO. OF CASES= 5598.

STATION M07 42.68N 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	
0.00-0.24	467	233	13	7	.	.	.	.	.	.	720
0.25-0.49	74	1073	129	49	7	.	.	.	.	.	1332
0.50-0.74	.	424	890	150	14	1	.	.	.	.	1479
0.75-0.99	.	5	272	337	11	6	.	.	.	.	631
1.00-1.24	.	.	165	389	94	1	1	.	.	.	650
1.25-1.49	.	.	6	128	175	1	1	.	.	.	311
1.50-1.74	.	.	.	110	186	7	.	.	.	.	303
1.75-1.99	.	.	.	6	120	14	1	.	.	.	141
2.00-2.24	.	.	.	.	127	35	1	.	.	.	163
2.25-2.49	.	.	.	.	49	39	.	.	.	.	88
2.50-2.74	.	.	.	.	11	97	4	.	.	.	112
2.75-2.99	.	.	.	.	1	47	2	.	.	.	50
3.00-3.24	.	.	.	.	.	51	2	.	.	.	53
3.25-3.49	.	.	.	.	.	10	12	.	.	.	22
3.50+	.	.	.	.	.	1	44	4	.	.	49
TOTAL	541	1735	1475	1176	795	310	68	4	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 5729.

STATION M07 42.68N 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	
0.00-0.24	260	132	13	2	1	.	.	.	.	.	408
0.25-0.49	57	576	98	28	4	.	.	.	.	.	763
0.50-0.74	.	238	387	55	14	2	.	.	.	.	696
0.75-0.99	.	6	129	156	7	2	.	.	.	.	300
1.00-1.24	.	.	57	155	24	1	.	.	.	.	237
1.25-1.49	.	.	1	50	77	.	1	.	.	.	129
1.50-1.74	.	.	.	34	97	.	.	.	.	.	131
1.75-1.99	.	.	.	2	62	12	.	.	.	.	76
2.00-2.24	.	.	.	.	50	28	.	.	.	.	78
2.25-2.49	.	.	.	.	25	22	.	.	.	.	47
2.50-2.74	.	.	.	.	2	40	2	.	.	.	44
2.75-2.99	.	.	.	.	.	20	1	.	.	.	21
3.00-3.24	.	.	.	.	.	13	.	.	.	.	13
3.25-3.49	.	.	.	.	.	1	7	.	.	.	8
3.50+	.	.	.	.	.	.	7	.	.	.	7
TOTAL	317	952	685	482	363	141	18	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.0 NO. OF CASES= 2783.

STATION M07 42.68N 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	
0.00-0.24	300	160	13	7	.	.	.	.	.	.	480
0.25-0.49	84	559	74	37	11	.	.	.	.	.	765
0.50-0.74	.	226	355	59	10	1	.	.	.	.	651
0.75-0.99	.	3	128	79	5	1	1	.	.	.	217
1.00-1.24	.	.	53	188	19	3	.	.	.	.	263
1.25-1.49	.	.	2	54	77	.	1	.	.	.	134
1.50-1.74	.	.	.	36	90	3	.	.	.	.	129
1.75-1.99	.	.	.	.	49	7	.	.	.	.	56
2.00-2.24	.	.	.	.	41	25	.	.	.	.	66
2.25-2.49	.	.	.	.	23	17	.	.	.	.	40
2.50-2.74	.	.	.	.	2	27	.	.	.	.	29
2.75-2.99	.	.	.	.	.	4	.	.	.	.	4
3.00-3.24	.	.	.	.	.	7	.	.	.	.	7
3.25-3.49	.	.	.	.	.	2	2	.	.	.	4
3.50+	.	.	.	.	.	.	3	.	.	.	3
TOTAL	384	948	625	460	327	97	7	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.9 NO. OF CASES= 2679.

STATION M07 42.68N 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	
0.00-0.24	355	188	7	6	1	.	.	.	.	.	557
0.25-0.49	110	632	74	28	8	.	.	.	.	.	852
0.50-0.74	.	309	366	31	10	2	.	.	.	.	718
0.75-0.99	.	2	136	102	2	1	.	.	.	.	243
1.00-1.24	.	.	80	149	18	.	.	.	.	.	247
1.25-1.49	.	.	5	69	63	.	.	.	.	.	137
1.50-1.74	.	.	.	41	65	1	2	.	.	.	109
1.75-1.99	.	.	.	.	37	3	1	.	.	.	41
2.00-2.24	.	.	.	.	24	20	.	.	.	.	44
2.25-2.49	.	.	.	.	14	13	.	.	.	.	27
2.50-2.74	.	.	.	.	.	18	.	.	.	.	18
2.75-2.99	.	.	.	.	.	12	.	.	.	.	12
3.00-3.24	.	.	.	.	.	7	1	.	.	.	8
3.25-3.49	.	.	.	.	.	1	1	.	.	.	2
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	465	1131	668	426	242	78	5	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 2834.

STATION M07 42.68N 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	
0.00-0.24	547	276	27	12	.	.	.	.	.	.	862
0.25-0.49	176	1071	130	34	6	.	.	.	.	.	1417
0.50-0.74	.	704	750	85	12	1	.	.	.	.	1552
0.75-0.99	.	12	291	203	1	2	.	.	.	.	509
1.00-1.24	.	.	207	285	23	1	.	.	.	.	516
1.25-1.49	.	.	9	135	85	.	.	.	.	.	229
1.50-1.74	.	.	.	83	86	1	.	.	.	.	170
1.75-1.99	.	.	.	7	69	4	.	.	.	.	80
2.00-2.24	.	.	.	.	56	14	.	.	.	.	70
2.25-2.49	.	.	.	.	19	7	.	.	.	.	26
2.50-2.74	.	.	.	.	3	23	.	.	.	.	26
2.75-2.99	.	.	.	.	.	13	.	.	.	.	13
3.00-3.24	.	.	.	.	.	13	.	.	.	.	13
3.25-3.49	.	.	.	.	.	3	1	.	.	.	4
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	723	2063	1414	844	360	82	2	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.7 NO. OF CASES= 5152.

STATION M07 42.68N 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	
0.00-0.24	678	547	49	18	1	.	.	.	.	.	1293
0.25-0.49	177	1912	310	108	18	1	.	.	.	.	2526
0.50-0.74	.	882	1423	351	23	3	.	.	.	.	2682
0.75-0.99	.	19	535	409	26	1	.	.	.	.	990
1.00-1.24	.	.	324	386	88	.	.	.	.	.	798
1.25-1.49	.	.	17	276	83	.	1	1	.	.	378
1.50-1.74	.	.	.	250	73	.	.	1	.	.	324
1.75-1.99	.	.	.	40	94	4	.	.	.	.	138
2.00-2.24	.	.	.	.	102	10	.	.	.	.	112
2.25-2.49	.	.	.	.	19	7	.	.	.	.	26
2.50-2.74	.	.	.	.	11	14	.	.	.	.	25
2.75-2.99	.	.	.	.	.	5	.	.	.	.	5
3.00-3.24	.	.	.	.	.	10	.	.	.	.	10
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	855	3360	2658	1838	539	56	1	2	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 8719.

STATION M07 42.68N 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	
0.00-0.24	932	579	82	19	3	.	.	.	.	.	1615
0.25-0.49	186	1851	185	84	41	.	.	.	.	.	2347
0.50-0.74	.	1683	1068	97	27	7	.	.	.	.	2882
0.75-0.99	.	192	1316	218	32	3	.	.	.	.	1761
1.00-1.24	.	.	949	561	69	4	.	.	.	.	1583
1.25-1.49	.	.	113	664	18	3	.	.	.	.	798
1.50-1.74	.	.	24	660	33	8	.	.	.	.	725
1.75-1.99	.	.	2	90	152	2	.	.	.	.	246
2.00-2.24	.	.	.	5	173	2	1	.	.	.	181
2.25-2.49	.	.	.	.	51	.	.	.	.	.	51
2.50-2.74	.	.	.	.	49	1	.	.	.	.	50
2.75-2.99	.	.	.	.	1	8	.	.	.	.	9
3.00-3.24	.	.	.	.	.	6	.	.	.	.	6
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+											0
TOTAL	1118	4305	3739	2398	649	45	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 11475.

STATION M07 42.68N 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	
0.00-0.24	658	357	41	17	1	.	.	.	.	.	1074
0.25-0.49	165	1274	74	58	31	2	.	.	.	.	1604
0.50-0.74	.	2268	366	39	36	7	1	.	.	.	2717
0.75-0.99	.	132	806	13	6	2	1	.	.	.	960
1.00-1.24	.	.	648	31	1	1	.	.	.	.	681
1.25-1.49	.	.	253	75	1	.	.	.	.	.	329
1.50-1.74	.	.	49	174	1	.	.	.	.	.	224
1.75-1.99	.	.	.	52	8	.	.	.	.	.	60
2.00-2.24	.	.	.	14	24	.	.	.	.	.	38
2.25-2.49	.	.	.	3	16	.	.	.	.	.	19
2.50-2.74	.	.	.	2	5	.	.	.	.	.	7
2.75-2.99	.	.	.	.	2	2	.	.	.	.	4
3.00-3.24	.	.	.	.	1	1	.	.	.	.	2
3.25-3.49	.	.	.	.	.	2	.	.	.	.	2
3.50+											0
TOTAL	823	4031	2237	478	133	17	2	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 7235.

STATION M07 42.68N 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	
0.00-0.24	697	278	56	17	3	.	.	.	.	.	1051
0.25-0.49	151	1023	109	74	53	4	.	.	.	.	1414
0.50-0.74	.	2080	229	51	39	17	1	.	.	.	2417
0.75-0.99	.	134	643	9	9	5	.	.	.	.	800
1.00-1.24	.	.	460	1	2	1	.	.	.	.	464
1.25-1.49	.	.	231	1	.	.	.	.	.	.	232
1.50-1.74	.	.	23	154	.	.	.	.	.	.	177
1.75-1.99	.	.	.	40	.	.	.	.	.	.	40
2.00-2.24	.	.	.	24	.	.	.	.	.	.	24
2.25-2.49	.	.	.	2	3	.	.	.	.	.	5
2.50-2.74	.	.	.	.	4	.	.	.	.	.	4
2.75-2.99	.	.	.	.	2	.	.	.	.	.	2
3.00-3.24	.	.	.	.	2	.	.	.	.	.	2
3.25-3.49	.	.	.	.	1	.	.	.	.	.	1
3.50+											0
TOTAL	848	3515	1751	373	118	27	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 6215.

STATION M07 42.68N 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	
0.00-0.24	562	216	44	18	2	2	.	.	.	.	844
0.25-0.49	205	955	133	93	83	6	.	.	.	.	1475
0.50-0.74	.	1648	95	66	74	16	1	.	.	.	1900
0.75-0.99	.	212	388	16	19	17	3	.	.	.	655
1.00-1.24	.	.	270	3	8	6	4	.	.	.	291
1.25-1.49	.	.	111	1	1	.	.	.	.	.	113
1.50-1.74	.	.	31	42	.	.	1	.	.	.	74
1.75-1.99	.	.	.	23	.	.	.	.	.	.	23
2.00-2.24	.	.	.	11	.	.	.	.	.	.	11
2.25-2.49	.	.	.	.	3	.	.	.	.	.	3
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	2	.	.	.	.	.	2
3.50+											0
TOTAL	767	3031	1072	273	194	47	9	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 5054.

STATION M07 42.68N 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	
0.00-0.24	588	232	43	22	7	.	.	.	.	.	892
0.25-0.49	280	1214	175	113	89	5	.	.	.	.	1876
0.50-0.74	.	1981	108	114	134	36	4	.	.	.	2377
0.75-0.99	.	342	399	27	45	44	5	.	.	.	862
1.00-1.24	.	.	286	6	11	18	4	.	.	.	325
1.25-1.49	.	.	125	.	.	.	1	1	.	.	127
1.50-1.74	.	.	48	14	1	1	.	.	.	.	64
1.75-1.99	.	.	.	13	.	.	1	.	.	.	14
2.00-2.24	.	.	.	2	.	.	1	.	1	.	4
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	868	3769	1184	311	287	104	16	1	1	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 6132.

STATION M07 42.68N 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	
0.00-0.24	361	174	24	4	2	.	.	.	.	.	565
0.25-0.49	253	1285	137	57	47	3	.	.	.	.	1782
0.50-0.74	.	2445	192	130	114	31	.	.	.	.	2912
0.75-0.99	.	341	799	81	96	63	7	.	.	.	1387
1.00-1.24	.	.	539	14	39	36	19	.	.	.	647
1.25-1.49	.	.	225	1	10	4	17	.	.	.	257
1.50-1.74	.	.	53	53	4	3	7	.	.	.	120
1.75-1.99	.	.	.	14	.	1	1	1	.	.	17
2.00-2.24	.	.	.	7	.	1	1	2	1	.	12
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	1	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	1	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	614	4245	1969	361	312	142	53	3	2	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 7217.

STATION M07 42.68N 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	
0.00-0.24	239	140	14	6	4	.	.	.	.	.	403
0.25-0.49	63	775	115	42	29	1	.	.	.	.	1025
0.50-0.74	.	2270	385	137	59	10	.	.	.	.	2861
0.75-0.99	.	125	977	155	63	43	2	.	.	.	1365
1.00-1.24	.	.	761	87	102	43	22	.	.	.	1015
1.25-1.49	.	.	412	10	47	16	12	1	.	.	498
1.50-1.74	.	.	45	151	38	14	12	2	.	.	262
1.75-1.99	.	.	.	22	5	17	6	2	.	.	52
2.00-2.24	.	.	.	12	1	13	4	8	.	.	38
2.25-2.49	.	.	.	1	.	5	3	1	.	.	10
2.50-2.74	.	.	.	.	.	2	4	2	.	.	8
2.75-2.99	.	.	.	.	.	.	2	.	2	.	4
3.00-3.24	.	.	.	.	.	.	.	.	2	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	2	.	.	2
TOTAL	302	3310	2709	623	348	164	67	18	4	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 7079.

STATION M07 42.68N 87.72W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

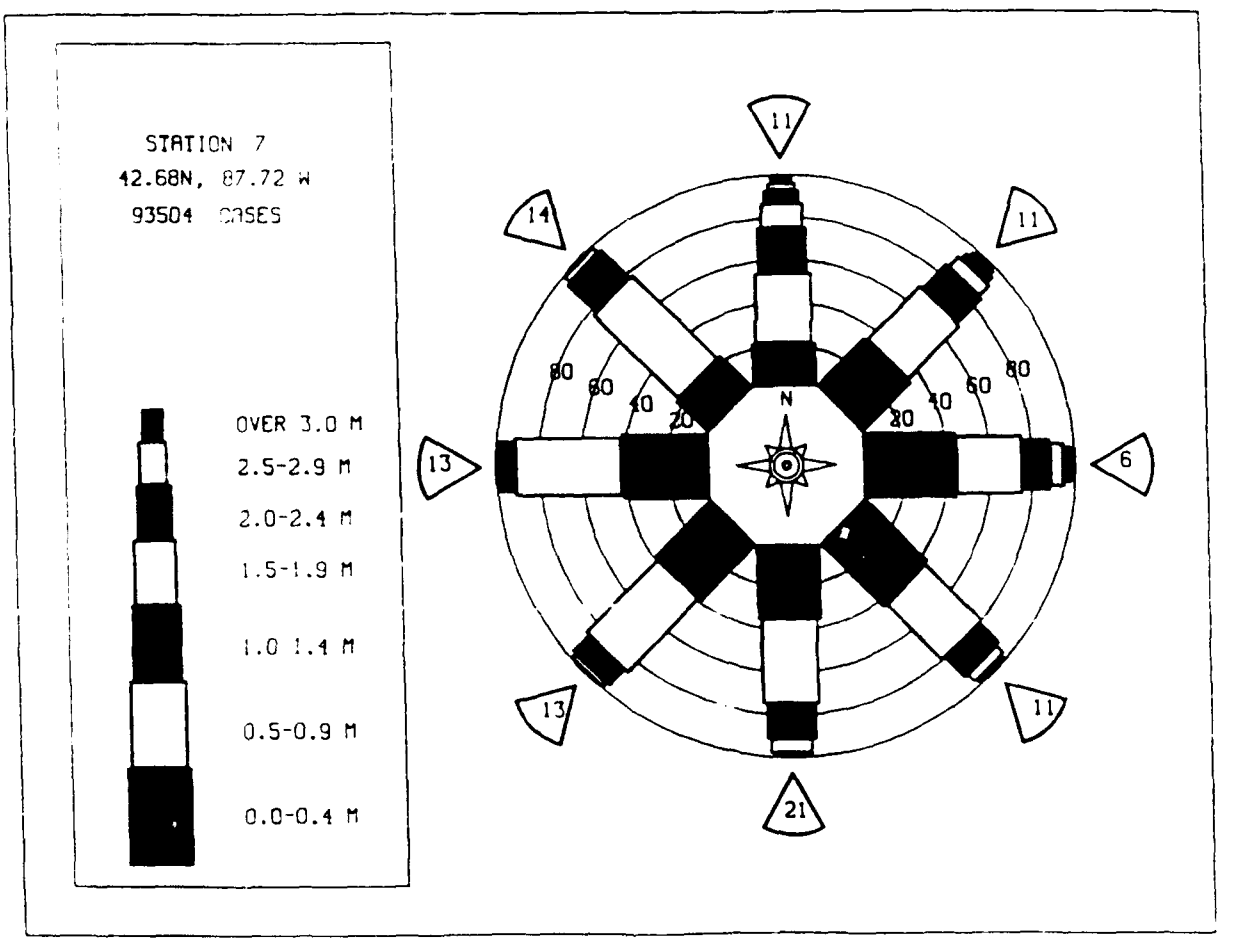
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	174	103	11	2	.	.	.	.	.	.	290
0.25-0.49	48	396	56	29	12	.	.	.	.	.	541
0.50-0.74	.	822	325	100	45	6	.	.	.	.	1298
0.75-0.99	.	33	432	155	47	19	.	.	.	.	686
1.00-1.24	.	.	280	172	126	29	2	.	.	.	609
1.25-1.49	.	.	97	94	103	17	5	.	.	.	316
1.50-1.74	.	.	17	111	94	29	11	1	.	.	263
1.75-1.99	.	.	.	22	38	28	3	.	.	.	91
2.00-2.24	.	.	.	6	38	39	2	1	.	.	86
2.25-2.49	.	.	.	.	11	20	2	.	.	.	33
2.50-2.74	.	.	.	.	10	27	9	.	.	.	46
2.75-2.99	.	.	.	.	.	16	7	.	.	.	23
3.00-3.24	.	.	.	.	.	13	8	2	.	.	23
3.25-3.49	.	.	.	.	.	1	11	.	.	.	12
3.50+	.	.	.	.	.	.	19	4	1	.	24
TOTAL	222	1354	1218	691	524	244	79	8	1	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 4082.

STATION M07 42.68N 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	
0.00-0.24	738	393	47	17	2	.	.	.	.	.	1197
0.25-0.49	218	1600	196	88	45	2	.	.	.	.	2149
0.50-0.74	.	1894	833	170	66	15	.	.	.	.	2978
0.75-0.99	.	158	793	260	40	22	2	.	.	.	1275
1.00-1.24	.	.	559	325	91	15	5	.	.	.	995
1.25-1.49	.	.	166	194	116	4	4	.	.	.	484
1.50-1.74	.	.	29	222	123	11	3	.	.	.	388
1.75-1.99	.	.	.	37	90	21	1	.	.	.	149
2.00-2.24	.	.	.	8	86	42	1	1	.	.	138
2.25-2.49	.	.	.	.	31	24	3	.	.	.	58
2.50-2.74	.	.	.	.	11	42	6	.	.	.	59
2.75-2.99	.	.	.	.	1	22	4	.	.	.	27
3.00-3.24	.	.	.	.	.	19	6	.	.	.	25
3.25-3.49	.	.	.	.	.	3	8	.	.	.	11
3.50+	.	.	.	.	.	.	26	4	1	.	31
TOTAL	956	4045	2623	1321	702	242	69	5	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 M07 (42.68N 87.72W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M07 (42.68N 87.72W)

MONTH

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

32 YR STATISTICS FOR WIS STATION M07

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.2
LARGEST WAVE HS	(METERS)	6.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	4.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		79122503

STATION M08 42.83N 87.70W 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	
0.00-0.24	263	129	13	2	.	.	.	.	.	.	407
0.25-0.49	68	614	65	32	6	.	.	.	.	.	785
0.50-0.74	.	509	552	91	22	3	.	.	.	.	1177
0.75-0.99	.	10	324	201	14	8	.	.	.	.	557
1.00-1.24	.	.	282	365	105	4	.	.	.	.	756
1.25-1.49	.	.	36	222	217	1	1	.	.	.	477
1.50-1.74	.	.	.	195	239	14	2	.	.	.	450
1.75-1.99	.	.	.	23	175	44	3	.	.	.	245
2.00-2.24	.	.	.	4	191	132	5	.	.	.	332
2.25-2.49	.	.	.	.	59	80	9	.	.	.	148
2.50-2.74	.	.	.	.	10	128	21	.	.	.	159
2.75-2.99	.	.	.	.	.	75	9	2	.	.	86
3.00-3.24	.	.	.	.	.	58	26	.	1	.	85
3.25-3.49	.	.	.	.	.	16	34	.	.	.	50
3.50+	.	.	.	.	.	2	144	29	9	.	184
TOTAL	331	1262	1272	1135	1038	565	254	31	10	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.7 NO. OF CASES= 5540.

STATION M08 42.83N 87.70W 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	
0.00-0.24	308	144	6	3	.	.	.	.	.	.	461
0.25-0.49	93	777	60	28	6	.	.	.	.	.	964
0.50-0.74	.	516	819	100	21	5	.	.	.	.	1461
0.75-0.99	.	6	378	359	12	5	.	.	.	.	760
1.00-1.24	.	.	257	551	97	6	1	.	.	.	912
1.25-1.49	.	.	12	174	194	1	1	.	.	.	382
1.50-1.74	.	.	.	142	208	7	2	.	.	.	357
1.75-1.99	.	.	.	13	130	28	.	.	.	.	171
2.00-2.24	.	.	.	1	104	47	1	.	.	.	153
2.25-2.49	.	.	.	.	43	42	4	.	.	.	89
2.50-2.74	.	.	.	.	7	63	5	.	.	.	75
2.75-2.99	.	.	.	.	.	48	9	.	.	.	57
3.00-3.24	.	.	.	.	.	31	7	.	.	.	38
3.25-3.49	.	.	.	.	.	5	19	.	.	.	24
3.50+	.	.	.	.	.	.	44	3	.	.	47
TOTAL	401	1443	1532	1371	820	288	93	3	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.3 NO. OF CASES= 5586.

STATION M08 42.83N 87.70W 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	
0.00-0.24	385	167	7	9	.	.	.	.	.	.	568
0.25-0.49	88	1058	96	50	7	.	.	.	.	.	1299
0.50-0.74	.	452	880	127	19	3	.	.	.	.	1481
0.75-0.99	.	5	316	284	11	4	.	.	.	.	620
1.00-1.24	.	.	185	448	60	4	.	.	.	.	697
1.25-1.49	.	.	10	145	152	.	2	.	.	.	309
1.50-1.74	.	.	.	132	190	5	1	.	.	.	328
1.75-1.99	.	.	.	7	135	11	1	.	.	.	154
2.00-2.24	.	.	.	1	140	26	.	.	.	.	167
2.25-2.49	.	.	.	.	62	34	.	.	.	.	96
2.50-2.74	.	.	.	.	20	93	3	.	.	.	116
2.75-2.99	.	.	.	.	.	53	2	.	.	.	55
3.00-3.24	.	.	.	.	.	54	2	.	.	.	56
3.25-3.49	.	.	.	.	.	18	5	.	.	.	23
3.50+	.	.	.	.	.	2	47	4	.	.	53
TOTAL	473	1682	1494	1203	796	307	63	4	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.2 NO. OF CASES= 5649.

STATION M08 42.83N 87.70W 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	
0.00-0.24	241	102	7	4	.	.	.	.	.	.	354
0.25-0.49	53	599	68	27	4	.	.	.	.	.	751
0.50-0.74	.	259	422	50	19	1	.	.	.	.	751
0.75-0.99	.	2	121	133	3	2	.	.	.	.	261
1.00-1.24	.	.	69	160	18	2	.	.	.	.	249
1.25-1.49	.	.	4	66	70	.	.	.	.	.	140
1.50-1.74	.	.	.	39	89	1	.	.	.	.	129
1.75-1.99	.	.	.	2	65	8	.	.	.	.	75
2.00-2.24	.	.	.	.	52	22	.	.	.	.	74
2.25-2.49	.	.	.	.	28	21	.	.	.	.	49
2.50-2.74	.	.	.	.	3	35	.	.	.	.	38
2.75-2.99	.	.	.	.	.	23	.	.	.	.	23
3.00-3.24	.	.	.	.	.	13	1	.	.	.	14
3.25-3.49	.	.	.	.	.	6	8	.	.	.	14
3.50+	.	.	.	.	.	.	6	.	.	.	6
TOTAL	294	962	691	481	351	134	15	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.0 NO. OF CASES= 2756.

STATION M08 42.83N 87.70W 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	
0.00-0.24	286	103	9	2	.	.	.	.	.	.	400
0.25-0.49	79	604	57	34	7	.	.	.	.	.	781
0.50-0.74	.	258	350	40	10	1	.	.	.	.	659
0.75-0.99	.	2	130	88	3	2	1	.	.	.	226
1.00-1.24	.	.	63	179	17	2	.	.	.	.	261
1.25-1.49	.	.	2	59	69	.	1	.	.	.	131
1.50-1.74	.	.	.	39	84	4	.	.	.	.	127
1.75-1.99	.	.	.	1	51	11	.	.	.	.	63
2.00-2.24	.	.	.	.	41	24	.	.	.	.	65
2.25-2.49	.	.	.	.	17	21	.	.	.	.	38
2.50-2.74	.	.	.	.	3	27	.	.	.	.	30
2.75-2.99	.	.	.	.	.	13	.	.	.	.	13
3.00-3.24	.	.	.	.	.	5	1	.	.	.	6
3.25-3.49	.	.	.	.	.	1	2	.	.	.	3
3.50+	.	.	.	.	.	.	3	.	.	.	3
TOTAL	365	967	611	442	302	111	8	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.9 NO. OF CASES= 2641.

STATION M08 42.83N 87.70W 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	
0.00-0.24	279	122	10	8	.	.	.	.	.	.	419
0.25-0.49	111	605	43	24	9	.	.	.	.	.	792
0.50-0.74	.	378	371	26	8	1	.	.	.	.	784
0.75-0.99	.	2	158	111	4	1	.	.	.	.	276
1.00-1.24	.	.	82	158	17	1	.	.	.	.	258
1.25-1.49	.	.	1	66	63	.	.	.	.	.	130
1.50-1.74	.	.	.	49	63	.	1	.	.	.	113
1.75-1.99	.	.	.	1	39	4	1	.	.	.	45
2.00-2.24	.	.	.	.	34	19	.	.	.	.	53
2.25-2.49	.	.	.	.	11	8	.	.	.	.	19
2.50-2.74	.	.	.	.	2	16	.	.	.	.	8
2.75-2.99	.	.	.	.	.	11	.	.	.	.	11
3.00-3.24	.	.	.	.	.	8	1	.	.	.	9
3.25-3.49	.	.	.	.	.	2	3	.	.	.	5
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	390	1107	665	443	250	71	7	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 2756.

STATION M08 42.83N 87.70W 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	
0.00-0.24	437	217	16	6	.	.	.	.	.	.	676
0.25-0.49	139	1020	97	32	2	.	.	.	.	.	1290
0.50-0.74	.	762	843	70	16	.	.	.	.	.	1691
0.75-0.99	.	8	335	214	3	1	.	.	.	.	561
1.00-1.24	.	.	237	308	36	.	.	.	.	.	581
1.25-1.49	.	.	11	127	88	1	1	.	.	.	228
1.50-1.74	.	.	1	80	104	1	.	.	.	.	186
1.75-1.99	.	.	.	6	67	7	.	.	.	.	80
2.00-2.24	.	.	.	1	64	20	.	.	.	.	85
2.25-2.49	.	.	.	.	12	16	.	.	.	.	28
2.50-2.74	.	.	.	.	4	19	1	.	.	.	24
2.75-2.99	.	.	.	.	.	12	.	.	.	.	12
3.00-3.24	.	.	.	.	.	12	.	.	.	.	12
3.25-3.49	.	.	.	.	.	9	1	.	.	.	10
3.50+	.	.	.	.	.	1	2	.	.	.	3
TOTAL	576	2007	1540	844	396	99	5	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 5127.

STATION M08 42.83N 87.70W 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	
0.00-0.24	564	470	39	16	1	.	.	.	.	.	1090
0.25-0.49	152	1929	303	135	19	.	.	.	.	.	2538
0.50-0.74	.	824	1530	381	39	2	.	.	.	.	2776
0.75-0.99	.	28	482	479	43	1	.	.	.	.	1033
1.00-1.24	.	1	330	438	118	1	.	.	.	.	888
1.25-1.49	.	.	11	213	113	1	1	.	.	.	339
1.50-1.74	.	.	.	198	136	2	.	1	.	.	337
1.75-1.99	.	.	1	17	128	9	.	.	.	.	155
2.00-2.24	.	.	.	1	124	20	.	.	.	.	145
2.25-2.49	.	.	.	.	34	10	1	.	.	.	45
2.50-2.74	.	.	.	.	11	21	.	.	.	.	32
2.75-2.99	.	.	.	.	1	10	.	.	.	.	11
3.00-3.24	.	.	.	.	.	11	.	.	.	.	11
3.25-3.49	.	.	.	.	.	2	.	.	.	.	2
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	716	3252	2696	1878	767	90	3	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 8812.

STATION M08 42.83N 87.70W 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	
0.00-0.24	788	520	59	12	3	.	.	.	.	.	1382
0.25-0.49	189	1869	224	98	38	.	.	.	.	.	2418
0.50-0.74	.	1641	1244	130	34	4	.	.	.	.	3053
0.75-0.99	.	207	1223	423	66	2	.	.	.	.	1921
1.00-1.24	.	.	813	763	102	8	.	.	.	.	1686
1.25-1.49	.	.	111	616	56	8	.	.	.	.	791
1.50-1.74	.	.	20	607	162	11	.	.	.	.	800
1.75-1.99	.	.	.	59	259	2	.	.	.	.	320
2.00-2.24	.	.	.	4	288	2	1	.	.	.	295
2.25-2.49	.	.	.	.	91	2	1	.	.	.	94
2.50-2.74	.	.	.	.	50	29	.	.	.	.	79
2.75-2.99	.	.	.	.	7	31	.	.	.	.	38
3.00-3.24	.	.	.	.	.	20	.	.	.	.	20
3.25-3.49	.	.	.	.	.	6	.	.	.	.	6
3.50+	.	.	.	.	.	4	.	.	.	.	4
TOTAL	977	4237	3694	2712	1156	129	2	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 12090.

STATION M08 42.83N 87.70W 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	
0.00-0.24	549	273	31	19	.	.	.	.	.	.	872
0.25-0.49	149	1294	80	66	27	1	.	.	.	.	1617
0.50-0.74	.	2208	361	33	37	9	1	.	.	.	2649
0.75-0.99	.	164	884	25	3	3	.	.	.	.	1079
1.00-1.24	.	.	641	66	2	.	.	.	.	.	709
1.25-1.49	.	.	284	80	2	.	.	.	.	.	366
1.50-1.74	.	.	54	190	14	.	.	.	.	.	258
1.75-1.99	.	.	.	50	39	.	.	.	.	.	89
2.00-2.24	.	.	.	23	36	2	.	.	.	.	61
2.25-2.49	.	.	.	3	8	1	.	.	.	.	12
2.50-2.74	.	.	.	1	11	3	.	.	.	.	15
2.75-2.99	.	.	.	.	.	4	.	.	.	.	4
3.00-3.24	.	.	.	.	1	2	.	.	.	.	3
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	2	1	.	.	.	3
TOTAL	698	3939	2335	556	180	28	2	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 7251.

STATION M08 42.83N 87.70W 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	
0.00-0.24	590	233	35	12	1	.	.	.	.	.	871
0.25-0.49	165	1045	73	80	50	3	1	.	.	.	1417
0.50-0.74	.	2236	229	32	45	9	.	.	.	.	2551
0.75-0.99	.	144	670	6	10	7	.	.	.	.	837
1.00-1.24	.	.	491	1	.	1	1	.	.	.	494
1.25-1.49	.	.	260	3	.	.	.	.	.	.	263
1.50-1.74	.	.	27	154	1	.	.	.	.	.	182
1.75-1.99	.	.	.	56	.	.	.	.	.	.	56
2.00-2.24	.	.	.	31	.	.	.	.	.	.	31
2.25-2.49	.	.	.	5	1	.	.	.	.	.	6
2.50-2.74	.	.	.	.	7	.	.	.	.	.	7
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	2	.	.	.	.	.	2
3.25-3.49	.	.	.	.	2	.	.	.	.	.	2
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	755	3658	1785	380	120	20	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 6298.

STATION M08 42.83N 87.70W 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	
0.00-0.24	493	158	26	11	6	2	.	.	.	.	696
0.25-0.49	194	929	99	95	71	4	.	.	.	.	1392
0.50-0.74	.	1633	96	65	78	22	.	.	.	.	1894
0.75-0.99	.	196	385	12	17	18	3	.	.	.	631
1.00-1.24	.	.	304	2	7	5	3	.	.	.	321
1.25-1.49	.	.	124	2	.	1	.	.	.	.	127
1.50-1.74	.	.	38	37	.	.	.	.	.	.	75
1.75-1.99	.	.	.	19	.	.	.	.	.	.	19
2.00-2.24	.	.	.	10	.	.	.	.	.	.	10
2.25-2.49	.	.	.	3	3	.	.	.	.	.	6
2.50-2.74	.	.	.	.	2	.	.	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	1	.	.	.	.	.	1
3.25-3.49	.	.	.	.	2	.	.	.	.	.	2
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	687	2916	1072	256	187	52	6	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 4852.

STATION M08 42.83N 87.70W 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	
0.00-0.24	511	194	28	12	5	.	.	.	.	.	750
0.25-0.49	295	1180	145	124	86	7	.	.	.	.	1837
0.50-0.74	.	2031	97	95	143	29	3	.	.	.	2398
0.75-0.99	.	382	419	25	49	42	4	.	.	.	921
1.00-1.24	.	.	296	7	9	21	1	.	.	.	334
1.25-1.49	.	.	114	.	.	1	1	1	.	.	117
1.50-1.74	.	.	37	20	.	.	3	.	.	.	60
1.75-1.99	.	.	.	17	.	.	1	.	.	.	18
2.00-2.24	.	.	.	1	.	.	.	.	1	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	806	3787	1136	301	292	100	13	1	1	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 6033.

STATION M08 42.83N 87.70W 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	
0.00-0.24	341	140	19	4	2	.	.	.	.	.	506
0.25-0.49	239	1206	116	78	47	1	.	.	.	.	1687
0.50-0.74	.	2535	197	97	131	34	.	.	.	.	2994
0.75-0.99	.	377	818	83	84	62	4	.	.	.	1428
1.00-1.24	.	.	571	12	42	49	20	.	.	.	694
1.25-1.49	.	.	250	.	8	7	17	.	.	.	282
1.50-1.74	.	.	60	47	4	4	7	1	.	.	123
1.75-1.99	.	.	.	18	.	2	.	1	.	.	21
2.00-2.24	.	.	.	8	.	1	1	6	.	.	16
2.25-2.49	.	.	.	.	.	1	1	.	.	.	2
2.50-2.74	.	.	.	.	.	.	1	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	1	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	580	4258	2031	347	318	161	51	8	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 7265.

STATION M08 42.83N 87.70W 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	
0.00-0.24	236	99	11	4	3	.	.	.	.	.	353
0.25-0.49	62	699	88	49	26	.	.	.	.	.	924
0.50-0.74	.	2243	383	111	65	10	.	.	.	.	2812
0.75-0.99	.	132	945	141	60	49	2	.	.	.	1329
1.00-1.24	.	.	767	101	81	50	14	.	.	.	1013
1.25-1.49	.	.	387	10	35	17	18	.	.	.	467
1.50-1.74	.	.	53	172	31	14	16	1	.	.	287
1.75-1.99	.	.	.	21	6	14	7	2	.	.	50
2.00-2.24	.	.	.	13	.	10	7	5	.	.	35
2.25-2.49	.	.	.	.	1	2	2	2	.	.	7
2.50-2.74	.	.	.	1	.	3	1	2	.	.	7
2.75-2.99	.	.	.	.	.	.	.	1	.	.	1
3.00-3.24	.	.	.	.	.	.	1	1	3	.	5
3.25-3.49	.	.	.	.	.	.	.	1	1	.	2
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	298	3173	2634	623	308	169	69	15	4	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 6840.

STATION M08 42.83N 87.70W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

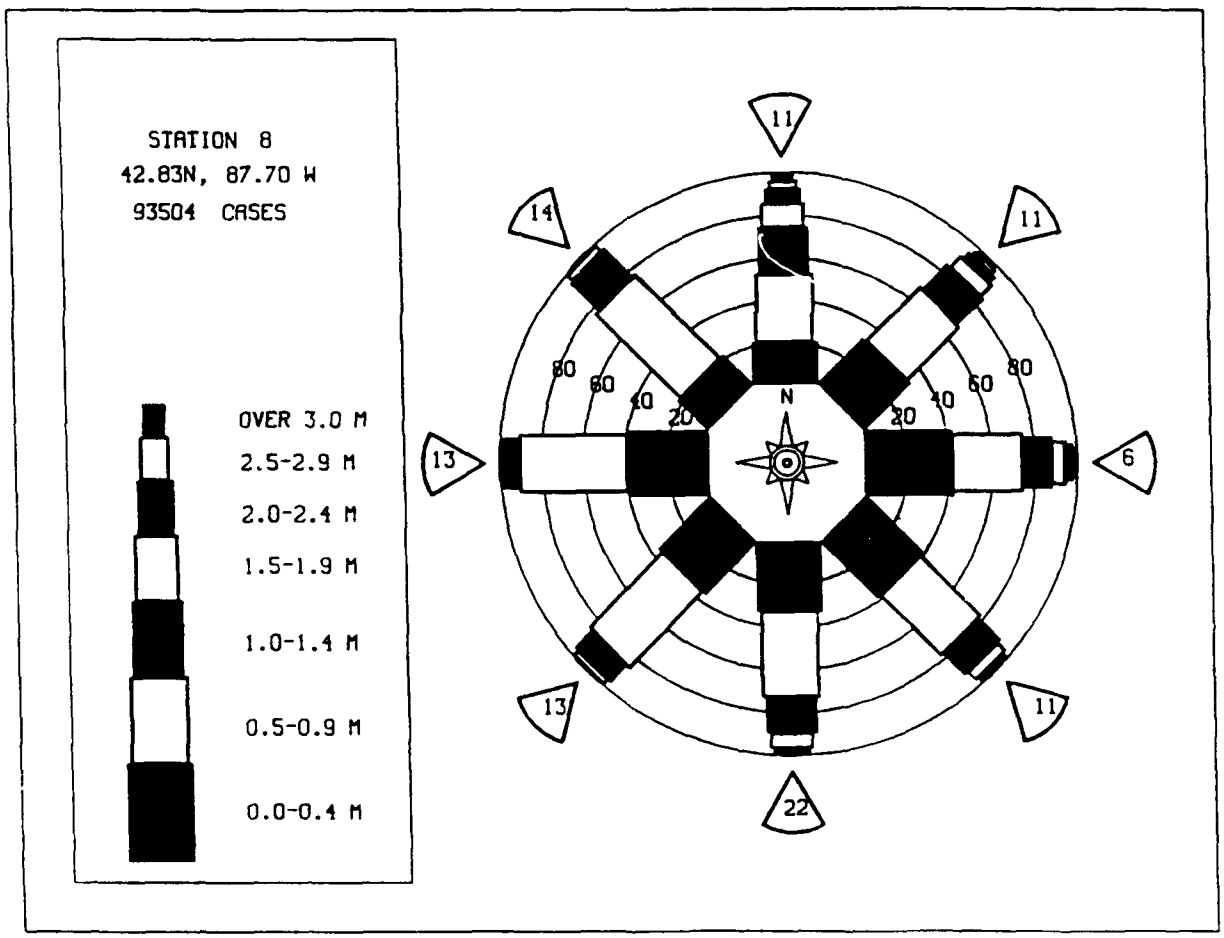
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	157	81	8	2	.	.	.	.	.	.	248
0.25-0.49	39	389	39	27	10	.	.	.	.	.	504
0.50-0.74	.	825	318	80	42	4	.	.	.	.	1269
0.75-0.99	.	35	423	139	42	24	.	.	.	.	663
1.00-1.24	.	.	290	176	110	29	4	.	.	.	609
1.25-1.49	.	.	101	90	112	6	3	.	.	.	312
1.50-1.74	.	.	19	120	94	29	12	1	.	.	275
1.75-1.99	.	.	.	26	48	14	3	.	.	.	91
2.00-2.24	.	.	.	7	49	41	5	1	.	.	103
2.25-2.49	.	.	.	.	25	17	4	.	.	.	46
2.50-2.74	.	.	.	.	7	38	6	.	.	.	51
2.75-2.99	.	.	.	.	1	24	2	.	.	.	27
3.00-3.24	.	.	.	.	.	19	5	1	.	.	25
3.25-3.49	.	.	.	.	.	2	10	1	.	.	13
3.50+	.	.	.	.	.	.	21	2	1	.	24
TOTAL	196	1330	1198	667	540	247	75	6	1	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.3 NO. OF CASES= 4008.

STATION M08 42.83N 87.70W 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	
0.00-0.24	643	316	33	13	2	.	.	.	.	.	1007
0.25-0.49	212	1582	166	98	42	1	.	.	.	.	2101
0.50-0.74	.	1931	870	153	73	14	.	.	.	.	3041
0.75-0.99	.	170	801	273	43	23	1	.	.	.	1311
1.00-1.24	.	.	568	374	82	18	4	.	.	.	1046
1.25-1.49	.	.	172	187	118	4	4	.	.	.	485
1.50-1.74	.	.	31	222	142	9	4	.	.	.	408
1.75-1.99	.	.	.	34	114	16	1	.	.	.	165
2.00-2.24	.	.	.	10	112	37	2	1	.	.	162
2.25-2.49	.	.	.	1	40	25	2	.	.	.	68
2.50-2.74	.	.	.	.	14	47	3	.	.	.	64
2.75-2.99	.	.	.	.	1	31	2	.	.	.	34
3.00-3.24	.	.	.	.	.	23	4	.	.	.	27
3.25-3.49	.	.	.	.	.	7	8	.	.	.	15
3.50+	.	.	.	.	.	1	27	3	1	.	32
TOTAL	855	3999	2641	1365	783	256	62	4	1	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M08 (42.83N 87.70W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M08 (42.83N 87.70W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.1	3.3	3.3	2.5	2.0	1.6	1.5	2.3	2.4	2.9	3.0	3.5
1957	4.0	4.8	3.4	2.8	2.3	1.7	1.8	1.7	1.9	4.2	3.1	3.6
1958	4.0	3.5	2.8	3.3	2.8	1.7	1.2	1.8	2.9	2.0	3.4	4.1
1959	4.1	4.2	5.6	2.5	2.8	1.9	2.0	2.8	2.5	2.8	3.5	3.5
1960	3.0	6.5	3.6	2.9	3.3	2.0	2.4	1.9	2.4	2.0	2.7	3.4
1961	2.4	3.8	4.0	2.4	2.6	2.2	1.8	1.3	2.4	4.0	3.4	2.9
1962	3.1	3.6	2.5	2.7	1.8	2.0	1.3	1.9	2.2	2.1	3.5	3.3
1963	3.7	3.4	2.9	3.3	3.2	1.2	2.0	2.2	3.7	2.9	2.9	1.9
1964	4.3	2.6	4.8	3.6	2.8	1.5	2.9	1.8	3.0	2.1	2.8	3.3
1965	3.5	4.9	3.2	2.1	1.8	1.7	1.3	1.2	2.1	3.9	3.1	4.9
1966	3.3	2.8	2.5	2.4	2.3	2.0	1.4	1.9	2.3	2.3	4.5	3.1
1967	5.1	4.5	2.3	1.9	1.9	1.2	1.4	2.2	2.7	2.4	2.3	2.5
1968	3.7	3.0	3.1	2.4	2.0	1.7	1.5	1.4	2.1	2.1	3.7	3.4
1969	2.7	2.3	4.6	3.7	2.1	1.4	1.9	1.6	2.2	2.1	2.4	3.0
1970	2.6	3.6	4.3	3.7	2.8	3.3	2.6	2.2	2.4	2.9	4.2	3.8
1971	3.4	4.2	3.5	2.4	2.0	1.5	2.0	1.8	3.0	3.8	4.0	2.9
1972	3.4	2.7	5.0	2.8	2.6	2.4	2.2	1.7	2.5	2.4	4.4	3.1
1973	4.3	4.2	4.2	3.3	2.8	1.5	1.8	2.2	2.7	2.5	3.2	5.2
1974	2.9	6.2	3.8	2.8	1.7	2.4	1.6	1.5	1.8	3.0	2.9	4.6
1975	3.4	3.6	3.2	2.8	2.4	1.4	1.8	2.1	3.2	2.9	2.9	3.3
1976	3.5	5.1	2.7	3.5	2.2	1.7	1.9	1.9	2.2	2.3	3.3	2.9
1977	3.6	2.9	3.5	3.0	2.2	2.5	1.5	2.1	1.8	3.2	3.1	3.3
1978	3.3	3.4	3.2	2.9	4.6	1.9	1.4	1.8	2.5	2.6	4.2	3.5
1979	4.8	4.9	3.1	2.0	3.0	1.7	2.0	1.6	1.9	3.9	3.3	6.6
1980	2.9	4.0	3.7	3.3	1.9	1.9	1.3	1.8	1.9	2.3	2.6	4.0
1981	2.2	3.5	3.0	2.5	4.3	2.2	2.3	1.5	2.3	1.9	3.6	2.8
1982	3.6	3.0	2.4	2.9	1.7	1.3	1.2	1.2	2.5	2.6	2.2	2.1
1983	3.4	2.1	3.3	2.6	2.8	1.1	1.8	2.3	2.1	2.6	4.7	3.3
1984	2.5	6.1	3.8	2.9	1.8	1.7	1.3	1.3	2.6	2.7	3.9	3.4
1985	4.3	4.1	3.3	2.1	2.0	1.6	1.7	1.8	2.0	2.5	3.6	3.0
1986	3.2	3.1	3.0	2.1	3.0	2.1	1.7	1.7	2.2	2.2	2.6	2.9
1987	2.8	4.8	4.0	3.3	1.6	1.2	1.9	1.8	1.7	2.8	2.8	5.1

32 YR. STATISTICS FOR WIS STATION M08

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.2
LARGEST WAVE HS	(METERS)	6.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	4.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		79122503

STATION M09 42.98N 87.70W 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	
0.00-0.24	257	130	11	3	.	.	.	.	.	.	401
0.25-0.49	66	634	50	40	4	.	.	.	.	.	794
0.50-0.74	.	496	535	80	27	3	.	.	.	.	1141
0.75-0.99	.	12	348	185	17	7	.	.	.	.	570
1.00-1.24	.	.	279	401	71	5	.	.	.	.	756
1.25-1.49	.	.	38	240	176	1	2	.	.	.	457
1.50-1.74	.	.	.	201	235	8	1	.	.	.	445
1.75-1.99	.	.	.	21	222	18	1	.	.	.	262
2.00-2.24	.	.	.	2	235	67	4	.	.	.	308
2.25-2.49	.	.	.	.	94	56	8	.	.	.	158
2.50-2.74	.	.	.	.	20	136	6	.	.	.	162
2.75-2.99	.	.	.	.	.	65	5	1	.	.	71
3.00-3.24	.	.	.	.	.	73	13	.	.	.	86
3.25-3.49	.	.	.	.	.	20	26	.	.	.	46
3.50+	.	.	.	.	.	1	129	13	7	.	150
TOTAL	323	1272	1262	1173	1101	460	195	14	7	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 5451.

STATION M09 42.98N 87.70W 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	
0.00-0.24	311	149	6	2	.	.	.	.	.	.	468
0.25-0.49	82	787	66	34	6	.	.	.	.	.	975
0.50-0.74	.	515	823	77	27	4	.	.	.	.	1446
0.75-0.99	.	8	410	330	12	2	.	.	.	.	762
1.00-1.24	.	.	270	563	63	7	2	.	.	.	905
1.25-1.49	.	.	13	185	187	.	1	.	.	.	386
1.50-1.74	.	.	.	152	197	2	2	.	.	.	353
1.75-1.99	.	.	.	16	142	18	1	.	.	.	177
2.00-2.24	.	.	.	1	119	37	1	.	.	.	158
2.25-2.49	.	.	.	.	57	34	.	.	.	.	91
2.50-2.74	.	.	.	.	11	65	5	.	.	.	81
2.75-2.99	.	.	.	.	.	48	4	.	.	.	52
3.00-3.24	.	.	.	.	.	36	6	.	.	.	42
3.25-3.49	.	.	.	.	.	6	10	.	.	.	16
3.50+	.	.	.	.	.	1	41	4	.	.	46
TOTAL	393	1459	1588	1360	821	260	73	4	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.3 NO. OF CASES= 5590.

STATION M09 42.98N 87.70W 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	
0.00-0.24	364	164	5	8	.	.	.	.	.	.	541
0.25-0.49	88	1045	73	52	5	.	.	.	.	.	1263
0.50-0.74	.	484	875	115	22	3	.	.	.	.	1499
0.75-0.99	.	5	333	284	5	6	.	.	.	.	633
1.00-1.24	.	.	205	452	38	2	.	.	.	.	697
1.25-1.49	.	.	10	161	120	1	1	.	.	.	293
1.50-1.74	.	.	.	152	170	5	1	.	.	.	328
1.75-1.99	.	.	.	11	133	3	1	.	.	.	148
2.00-2.24	.	.	.	1	163	23	.	.	.	.	187
2.25-2.49	.	.	.	.	59	32	.	.	.	.	91
2.50-2.74	.	.	.	.	20	87	2	.	.	.	109
2.75-2.99	.	.	.	.	.	51	1	.	.	.	52
3.00-3.24	.	.	.	.	.	50	2	.	.	.	52
3.25-3.49	.	.	.	.	.	25	2	.	.	.	27
3.50+	.	.	.	.	.	3	41	4	.	.	48
TOTAL	452	1698	1501	1236	735	291	51	4	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.2 NO. OF CASES= 5602.

STATION M09 42.98N 87.70W 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	
0.00-0.24	239	87	9	4	.	.	.	.	.	.	339
0.25-0.49	62	607	54	34	3	.	.	.	.	.	760
0.50-0.74	.	283	410	42	14	1	.	.	.	.	750
0.75-0.99	.	2	127	125	5	2	.	.	.	.	261
1.00-1.24	.	.	68	170	13	3	.	.	.	.	254
1.25-1.49	.	.	6	63	72	.	.	.	.	.	141
1.50-1.74	.	.	.	45	93	1	.	.	.	.	139
1.75-1.99	.	.	.	3	62	6	.	.	.	.	71
2.00-2.24	.	.	.	.	60	16	.	.	.	.	76
2.25-2.49	.	.	.	.	32	14	1	.	.	.	47
2.50-2.74	.	.	.	.	3	43	.	.	.	.	46
2.75-2.99	.	.	.	.	.	18	.	.	.	.	18
3.00-3.24	.	.	.	.	.	19	.	.	.	.	19
3.25-3.49	.	.	.	.	.	7	3	.	.	.	10
3.50+	.	.	.	.	.	.	5	.	.	.	5
TOTAL	301	979	674	486	357	130	9	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 2761.

STATION M09 42.98N 87.70W 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	
0.00-0.24	266	95	10								371
0.25-0.49	74	605	49	39	8						775
0.50-0.74		281	352	33	14						680
0.75-0.99		2	133	94	4	2	1				236
1.00-1.24			57	178	16	2					253
1.25-1.49			4	66	68						138
1.50-1.74				41	88	2	1				132
1.75-1.99				1	51	8					60
2.00-2.24					39	27					66
2.25-2.49					25	16					41
2.50-2.74					1	28					29
2.75-2.99						12					12
3.00-3.24						7					7
3.25-3.49						1	2				3
3.50+							3				3
TOTAL	340	983	605	452	314	105	7	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 2640.

STATION M09 42.98N 87.70W 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	
0.00-0.24	245	131	8	8							392
0.25-0.49	103	590	32	27	8						760
0.50-0.74		374	380	22	9						785
0.75-0.99		2	170	95	2	1					270
1.00-1.24			79	168	18	1					266
1.25-1.49			3	59	70						132
1.50-1.74				48	66						114
1.75-1.99				1	40	7	1				49
2.00-2.24					31	19	2				52
2.25-2.49					9	8					17
2.50-2.74					2	14					16
2.75-2.99						10					10
3.00-3.24						9	2				11
3.25-3.49						2	3				5
3.50+						1	1				2
TOTAL	348	1097	672	428	255	72	9	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 2710.

STATION M09 42.98N 87.70W 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	
0.00-0.24	394	180	16	7							597
0.25-0.49	140	960	72	31	2						1205
0.50-0.74		726	854	55	17	1					1653
0.75-0.99		5	336	233	5	2					581
1.00-1.24			242	321	40						603
1.25-1.49			12	125	89	1	1				228
1.50-1.74			1	75	105	2					183
1.75-1.99				4	67	8					79
2.00-2.24				1	56	29					86
2.25-2.49					8	21					29
2.50-2.74					3	16	2				21
2.75-2.99						6					6
3.00-3.24						11	2				13
3.25-3.49						4	4				8
3.50+							10				10
TOTAL	534	1871	1533	852	392	101	19	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 4976.

STATION M09 42.98N 87.70W 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	
0.00-0.24	501	454	35	20	4						1014
0.25-0.49	139	1945	350	143	19						2596
0.50-0.74		834	1589	429	66	1					2919
0.75-0.99		36	480	529	70						1115
1.00-1.24			334	470	133						937
1.25-1.49			16	189	158	4	1				368
1.50-1.74				136	159	7		1			303
1.75-1.99				14	121	19					154
2.00-2.24					86	41					127
2.25-2.49					51	22					73
2.50-2.74					11	29	1				41
2.75-2.99					1	13					14
3.00-3.24						10					10
3.25-3.49						2	3				5
3.50+							6				6
TOTAL	640	3269	2804	1930	879	148	11	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 9072.

STATION M09 42.98N 87.70W 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	
0.00-0.24	688	505	55	13	4	.	.	.	.	.	1265
0.25-0.49	172	1965	311	114	29	.	.	.	.	.	2592
0.50-0.74	.	1661	1368	222	57	3	.	.	.	.	3311
0.75-0.99	.	241	1153	555	83	9	.	.	.	.	2041
1.00-1.24	.	.	787	836	170	21	.	.	.	.	1814
1.25-1.49	.	.	105	547	188	10	1	.	.	.	851
1.50-1.74	.	.	14	427	315	10	1	.	.	.	767
1.75-1.99	.	.	1	50	294	11	.	.	.	.	356
2.00-2.24	.	.	.	4	332	18	1	.	.	.	355
2.25-2.49	.	.	.	.	134	9	.	.	.	.	143
2.50-2.74	.	.	.	.	37	70	1	.	.	.	108
2.75-2.99	.	.	.	.	3	45	1	.	.	.	49
3.00-3.24	.	.	.	.	.	47	.	.	.	.	47
3.25-3.49	.	.	.	.	.	8	1	.	.	.	9
3.50+	.	.	.	.	.	5	9	.	.	.	14
TOTAL	861	4372	3794	2768	1646	266	15	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.1 NO. OF CASES= 12855.

STATION M09 42.98N 87.70W 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	
0.00-0.24	490	269	31	13	1	.	.	.	.	.	804
0.25-0.49	155	1328	74	81	25	1	.	.	.	.	1664
0.50-0.74	.	2199	333	23	41	8	1	.	.	.	2605
0.75-0.99	.	170	914	50	2	1	.	.	.	.	1137
1.00-1.24	.	.	634	85	8	1	.	.	.	.	728
1.25-1.49	.	.	285	72	16	.	.	.	.	.	373
1.50-1.74	.	.	57	194	34	1	.	.	.	.	286
1.75-1.99	.	.	1	43	39	.	.	.	.	.	83
2.00-2.24	.	.	.	16	53	3	.	.	.	.	72
2.25-2.49	.	.	.	2	17	4	.	.	.	.	23
2.50-2.74	.	.	.	3	12	7	.	.	.	.	22
2.75-2.99	.	.	.	.	.	8	.	.	.	.	8
3.00-3.24	.	.	.	.	1	8	1	.	.	.	10
3.25-3.49	.	.	.	.	.	2	1	.	.	.	3
3.50+	.	.	.	.	.	2	2	.	.	.	4
TOTAL	645	3966	2329	582	249	46	5	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 7332.

STATION M09 42.98N 87.70W 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	
0.00-0.24	553	190	27	13	1	.	.	.	.	.	784
0.25-0.49	154	1042	70	85	38	3	.	.	.	.	1392
0.50-0.74	.	2246	214	31	44	9	1	.	.	.	2545
0.75-0.99	.	132	652	7	13	6	.	.	.	.	810
1.00-1.24	.	.	500	4	.	.	1	.	.	.	505
1.25-1.49	.	.	278	2	.	.	.	.	.	.	280
1.50-1.74	.	.	29	152	.	.	.	.	.	.	181
1.75-1.99	.	.	1	54	.	.	.	.	.	.	55
2.00-2.24	.	.	.	35	.	.	.	.	.	.	35
2.25-2.49	.	.	.	3	1	.	.	.	.	.	4
2.50-2.74	.	.	.	.	7	.	.	.	.	.	7
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	2	.	.	.	.	.	2
3.25-3.49	.	.	.	.	2	.	.	.	.	.	2
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	707	3610	1771	386	109	18	2	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 6190.

STATION M09 42.98N 87.70W 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	
0.00-0.24	429	145	25	16	6	1	.	.	.	.	622
0.25-0.49	175	910	84	100	58	3	.	.	.	.	1330
0.50-0.74	.	1626	91	53	85	20	.	.	.	.	1875
0.75-0.99	.	210	389	11	23	12	2	.	.	.	647
1.00-1.24	.	.	285	4	7	6	3	.	.	.	305
1.25-1.49	.	.	114	2	.	1	.	.	.	.	117
1.50-1.74	.	.	34	36	.	.	.	.	.	.	70
1.75-1.99	.	.	.	20	.	.	.	.	.	.	20
2.00-2.24	.	.	.	11	.	.	.	.	.	.	11
2.25-2.49	.	.	.	3	3	.	.	.	.	.	6
2.50-2.74	.	.	.	.	2	.	.	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	1	.	.	.	.	.	1
3.25-3.49	.	.	.	.	2	.	.	.	.	.	2
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	604	2891	1022	256	187	43	5	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 4698.

STATION M09 42.98N 87.70W 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	
0.00-0.24	482	171	17	9	6	.	.	.	.	.	685
0.25-0.49	295	1142	125	132	81	5	.	.	.	.	1780
0.50-0.74	.	1990	78	89	158	19	3	.	.	.	2337
0.75-0.99	.	371	389	21	43	36	2	.	.	.	862
1.00-1.24	.	.	299	6	11	17	3	.	.	.	336
1.25-1.49	.	.	115	.	.	2	3	.	.	.	120
1.50-1.74	.	.	39	17	.	1	1	.	.	.	58
1.75-1.99	.	.	.	17	.	.	.	.	.	.	17
2.00-2.24	.	.	.	.	.	.	.	1	.	.	1
2.25-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	777	3674	1062	292	299	80	12	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 5805.

STATION M09 42.98N 87.70W 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	
0.00-0.24	353	117	11	5	2	.	.	.	.	.	488
0.25-0.49	237	1192	105	100	40	1	.	.	.	.	1675
0.50-0.74	.	2504	172	100	152	39	.	.	.	.	2967
0.75-0.99	.	395	798	69	83	57	2	.	.	.	1404
1.00-1.24	.	.	560	22	43	56	24	.	.	.	705
1.25-1.49	.	.	264	2	4	6	11	.	.	.	287
1.50-1.74	.	.	55	48	2	4	7	.	.	.	116
1.75-1.99	.	.	.	18	.	2	1	2	.	.	23
2.00-2.24	.	.	.	11	.	3	1	5	.	.	20
2.25-2.49	.	.	.	.	.	1	1	1	.	.	3
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	1	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	590	4208	1965	375	326	169	47	9	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 7209.

STATION M09 42.98N 87.70W 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	
0.00-0.24	213	99	12	4	2	.	.	.	.	.	330
0.25-0.49	59	672	64	55	26	.	.	.	.	.	876
0.50-0.74	.	2180	356	85	72	7	.	.	.	.	2700
0.75-0.99	.	148	950	122	64	49	.	.	.	.	1333
1.00-1.24	.	.	737	96	63	57	11	.	.	.	964
1.25-1.49	.	.	380	21	31	21	13	.	.	.	466
1.50-1.74	.	.	48	182	28	9	16	1	.	.	284
1.75-1.99	.	.	.	22	8	7	13	1	.	.	51
2.00-2.24	.	.	.	11	1	5	11	.	.	.	28
2.25-2.49	.	.	.	.	1	5	3	4	.	.	13
2.50-2.74	.	.	.	.	.	2	.	2	1	.	5
2.75-2.99	.	.	.	.	.	.	2	1	.	.	3
3.00-3.24	.	.	.	.	.	.	1	3	2	.	6
3.25-3.49	.	.	.	.	.	.	.	.	1	.	1
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	272	3099	2547	598	296	162	71	12	4	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 6626.

STATION M09 42.98N 87.70W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

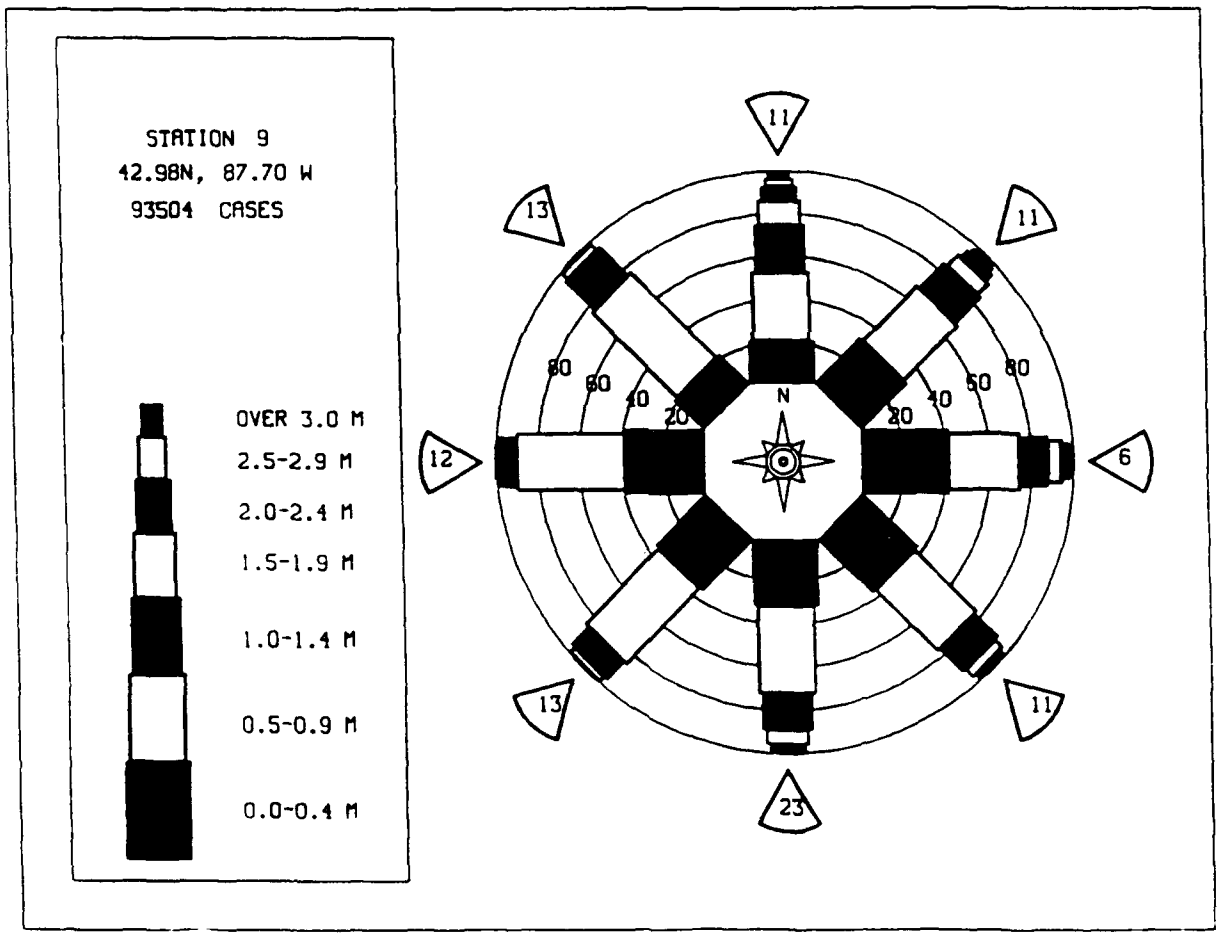
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	162	82	6	2	.	.	.	.	.	.	252
0.25-0.49	37	396	36	27	10	.	.	.	.	.	506
0.50-0.74	.	809	316	79	41	4	.	.	.	.	1249
0.75-0.99	.	34	433	103	54	22	.	.	.	.	646
1.00-1.24	.	.	291	201	85	27	4	.	.	.	608
1.25-1.49	.	.	102	105	94	7	3	.	.	.	311
1.50-1.74	.	.	14	128	109	16	8	1	.	.	276
1.75-1.99	.	.	.	25	59	10	5	.	.	.	99
2.00-2.24	.	.	.	9	71	17	5	1	.	.	103
2.25-2.49	.	.	.	1	33	12	1	.	.	.	47
2.50-2.74	.	.	.	.	7	42	2	.	.	.	51
2.75-2.99	.	.	.	.	2	27	.	.	.	.	29
3.00-3.24	.	.	.	.	.	27	2	2	.	.	31
3.25-3.49	.	.	.	.	.	4	5	1	.	.	10
3.50+	.	.	.	.	.	.	18	1	1	.	20
TOTAL	199	1321	1198	680	565	215	53	6	1	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.2 NO. OF CASES= 3987.

STATION M09 42.98N 87.70W 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	
0.00-0.24	595	297	29	13	2	.	.	.	.	.	936
0.25-0.49	204	1582	162	110	37	1	.	.	.	.	2096
0.50-0.74	.	1921	875	154	85	12	.	.	.	.	3047
0.75-0.99	.	177	802	281	49	21	.	.	.	.	1330
1.00-1.24	.	.	563	398	78	20	5	.	.	.	1064
1.25-1.49	.	.	175	184	127	5	3	.	.	.	494
1.50-1.74	.	.	29	204	160	7	3	.	.	.	403
1.75-1.99	.	.	.	32	124	12	2	.	.	.	170
2.00-2.24	.	.	.	10	125	31	2	.	.	.	168
2.25-2.49	.	.	.	1	52	23	1	.	.	.	77
2.50-2.74	.	.	.	.	14	54	2	.	.	.	70
2.75-2.99	.	.	.	.	.	30	1	.	.	.	31
3.00-3.24	.	.	.	.	.	30	3	.	.	.	33
3.25-3.49	.	.	.	.	.	8	6	.	.	.	14
3.50+	.	.	.	.	.	1	27	2	.	.	30
TOTAL	799	3977	2635	1387	853	255	55	2	0	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M09 (42.98N 87.70W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M09 (42.98N 87 70W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.0	3.5	3.3	2.4	2.2	1.6	1.5	2.6	2.4	3.1	3.3	3.9
1957	3.8	4.7	3.3	2.8	2.2	1.7	1.8	1.8	2.1	4.1	3.3	3.3
1958	4.0	3.3	2.9	3.3	2.7	1.7	1.3	1.9	3.2	2.1	3.8	4.0
1959	3.9	4.1	5.2	2.5	2.7	2.1	2.2	2.6	2.7	2.7	3.6	3.8
1960	3.0	6.5	3.6	2.8	3.2	2.0	2.3	1.9	2.3	2.3	3.0	3.1
1961	2.4	3.7	4.0	2.3	2.5	2.2	1.8	1.3	2.3	3.8	3.2	3.1
1962	3.1	3.7	2.5	2.5	1.8	2.0	1.3	2.0	2.3	2.1	3.8	3.2
1963	3.7	3.5	2.9	3.1	3.1	1.2	2.0	2.4	3.6	2.9	3.2	2.1
1964	4.2	2.8	4.5	3.8	2.7	1.5	2.8	1.8	3.2	2.2	3.2	3.3
1965	3.5	4.6	3.2	2.1	1.8	1.8	1.5	1.2	2.3	3.8	3.1	4.9
1966	3.3	2.8	2.4	2.5	2.3	2.0	1.4	1.9	2.3	2.5	4.5	3.1
1967	4.9	4.4	2.3	2.0	1.9	1.3	1.6	2.1	2.5	2.4	2.2	2.5
1968	3.6	3.0	3.1	2.5	2.0	1.7	1.5	1.5	2.1	2.2	3.7	3.6
1969	2.8	2.4	4.5	3.6	2.1	1.4	1.9	1.8	2.0	2.3	2.6	2.7
1970	2.6	3.6	4.0	3.5	2.7	3.0	2.5	2.2	2.6	3.0	4.0	4.1
1971	3.4	4.3	3.4	2.5	2.0	1.5	2.1	1.8	3.2	3.5	3.9	2.9
1972	3.8	2.5	4.7	2.8	2.4	2.4	2.0	1.7	2.5	2.7	4.3	3.4
1973	4.0	4.3	4.0	3.2	2.8	1.5	1.9	2.3	2.9	2.4	3.3	5.1
1974	3.0	5.9	3.8	2.9	1.7	2.4	1.7	1.5	2.0	3.0	2.8	4.4
1975	3.6	3.6	3.3	2.8	2.2	1.4	1.9	2.0	3.1	3.0	3.0	3.5
1976	3.7	4.9	2.9	3.5	2.2	1.6	1.9	1.9	2.2	2.3	3.2	2.9
1977	3.6	3.0	3.8	3.0	2.2	2.5	1.5	2.3	2.0	3.4	3.4	3.4
1978	3.4	3.4	3.1	2.7	4.4	1.9	1.4	1.8	2.5	2.5	4.1	3.8
1979	4.6	4.6	3.0	1.9	2.8	1.8	2.0	1.6	1.9	3.8	3.6	6.4
1980	3.2	3.8	3.6	3.1	2.1	1.9	1.3	1.9	1.9	2.4	2.5	4.0
1981	2.1	3.3	2.9	2.5	4.1	2.2	2.3	1.5	2.3	1.9	3.4	2.9
1982	3.6	3.0	2.4	3.0	1.7	1.3	1.2	1.2	2.4	2.5	2.3	2.4
1983	3.4	2.1	3.3	2.5	2.8	1.1	2.0	2.4	2.1	2.5	4.6	3.2
1984	2.5	6.1	3.9	2.7	1.8	1.9	1.2	1.4	2.8	2.6	3.7	3.7
1985	4.2	3.9	3.3	1.9	2.0	1.7	1.6	1.8	2.3	2.8	3.5	2.8
1986	3.6	3.2	3.0	2.1	2.9	2.1	1.8	1.9	2.3	2.2	2.7	2.9
1987	2.8	4.7	4.0	3.1	1.8	1.2	2.3	1.9	1.9	3.2	2.8	5.0

32 YR. STATISTICS FOR WIS STATION M09

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.2
LARGEST WAVE HS	(METERS)	6.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	39.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		60021018

STATION M10 43.12N 87.68W 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	
0.00-0.24	268	144	5	2	.	.	.	.	.	.	419
0.25-0.49	58	624	49	38	7	.	.	.	.	.	776
0.50-0.74	.	490	521	82	31	2	.	.	.	.	1126
0.75-0.99	.	12	363	174	17	9	.	.	.	.	575
1.00-1.24	.	.	288	423	45	7	.	.	.	.	763
1.25-1.49	.	.	38	293	91	2	2	.	.	.	426
1.50-1.74	.	.	.	265	202	5	.	.	.	.	472
1.75-1.99	.	.	.	19	209	9	2	.	.	.	239
2.00-2.24	.	.	.	4	267	26	2	.	.	.	299
2.25-2.49	.	.	.	.	125	27	2	.	.	.	154
2.50-2.74	.	.	.	.	29	85	3	.	.	.	117
2.75-2.99	.	.	.	.	1	81	4	1	.	.	87
3.00-3.24	.	.	.	.	.	47	6	1	.	.	54
3.25-3.49	.	.	.	.	.	29	16	.	.	.	45
3.50+	.	.	.	.	.	14	73	13	5	.	105
TOTAL	326	1270	1264	1300	1024	343	110	15	5	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.5 NO. OF CASES= 5313.

STATION M10 43.12N 87.68W 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	
0.00-0.24	328	179	8	2	.	.	.	.	.	.	517
0.25-0.49	85	795	63	36	5	.	.	.	.	.	984
0.50-0.74	.	525	855	74	23	4	.	.	.	.	1481
0.75-0.99	.	8	436	311	18	2	.	.	.	.	775
1.00-1.24	.	.	276	547	41	7	1	.	.	.	872
1.25-1.49	.	.	11	225	136	1	2	.	.	.	375
1.50-1.74	.	.	.	171	177	2	1	.	.	.	351
1.75-1.99	.	.	.	13	141	7	3	.	.	.	164
2.00-2.24	.	.	.	1	148	20	1	.	.	.	170
2.25-2.49	.	.	.	.	57	26	.	.	.	.	83
2.50-2.74	.	.	.	.	12	63	3	.	.	.	78
2.75-2.99	.	.	.	.	.	50	3	.	.	.	53
3.00-3.24	.	.	.	.	.	34	.	.	.	.	34
3.25-3.49	.	.	.	.	.	9	11	.	.	.	20
3.50+	.	.	.	.	.	1	44	2	.	.	47
TOTAL	413	1507	1649	1380	758	226	69	2	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 5635.

STATION M10 43.12N 87.68W 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	
0.00-0.24	389	190	9	11	.	.	.	.	.	.	599
0.25-0.49	91	1071	77	56	5	.	.	.	.	.	1300
0.50-0.74	.	515	827	116	24	2	.	.	.	.	1484
0.75-0.99	.	3	333	258	7	6	.	.	.	.	607
1.00-1.24	.	.	218	422	35	1	.	.	.	.	676
1.25-1.49	.	.	11	182	105	2	1	.	.	.	301
1.50-1.74	.	.	.	161	167	2	1	.	.	.	331
1.75-1.99	.	.	.	10	130	3	1	.	.	.	144
2.00-2.24	.	.	.	1	151	13	.	.	.	.	165
2.25-2.49	.	.	.	.	74	26	.	.	.	.	100
2.50-2.74	.	.	.	.	20	86	3	.	.	.	109
2.75-2.99	.	.	.	.	.	52	.	.	.	.	52
3.00-3.24	.	.	.	.	.	43	1	.	.	.	44
3.25-3.49	.	.	.	.	.	19	4	.	.	.	23
3.50+	.	.	.	.	.	4	36	4	.	.	44
TOTAL	480	1779	1475	1217	718	259	47	4	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 5613.

STATION M10 43.12N 87.68W 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	
0.00-0.24	245	102	8	3	.	.	.	.	.	.	358
0.25-0.49	65	570	54	43	3	.	.	.	.	.	735
0.50-0.74	.	300	391	39	16	1	.	.	.	.	747
0.75-0.99	.	2	135	110	8	1	.	.	.	.	256
1.00-1.24	.	.	70	170	17	3	.	.	.	.	260
1.25-1.49	.	.	7	67	66	1	.	.	.	.	141
1.50-1.74	.	.	.	48	86	2	.	.	.	.	136
1.75-1.99	.	.	.	4	64	5	.	.	.	.	73
2.00-2.24	.	.	.	.	72	11	.	.	.	.	83
2.25-2.49	.	.	.	.	33	10	.	.	.	.	43
2.50-2.74	.	.	.	.	4	40	1	.	.	.	45
2.75-2.99	.	.	.	.	.	11	.	.	.	.	11
3.00-3.24	.	.	.	.	.	19	.	.	.	.	19
3.25-3.49	.	.	.	.	.	6	1	.	.	.	7
3.50+	.	.	.	.	.	.	5	.	.	.	5
TOTAL	310	974	665	484	369	110	7	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 2745.

STATION M10 43.12N 87.68W 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	
0.00-0.24	269	121	9	2	.	.	.	.	.	.	401
0.25-0.49	73	579	44	48	6	.	.	.	.	.	750
0.50-0.74	.	280	318	34	11	1	.	.	.	.	644
0.75-0.99	.	1	134	102	4	3	.	.	.	.	244
1.00-1.24	.	.	62	166	18	1	.	.	.	.	247
1.25-1.49	.	.	3	66	69	.	.	.	.	.	138
1.50-1.74	.	.	.	42	82	2	1	.	.	.	127
1.75-1.99	.	.	.	.	53	8	.	.	.	.	61
2.00-2.24	.	.	.	.	39	27	.	.	.	.	66
2.25-2.49	.	.	.	.	22	16	.	.	.	.	38
2.50-2.74	.	.	.	.	3	23	1	.	.	.	27
2.75-2.99	.	.	.	.	.	13	.	.	.	.	13
3.00-3.24	.	.	.	.	.	8	.	.	.	.	8
3.25-3.49	.	.	.	.	.	1	2	.	.	.	3
3.50+							3				3
TOTAL	342	981	570	460	307	103	7	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 2607.

STATION M10 43.12N 87.68W 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	
0.00-0.24	260	115	12	6	.	.	.	.	.	.	393
0.25-0.49	108	556	42	34	7	.	.	.	.	.	747
0.50-0.74	.	391	327	27	8	.	.	.	.	.	753
0.75-0.99	.	2	151	91	2	2	.	.	.	.	248
1.00-1.24	.	.	71	166	16	1	.	.	.	.	254
1.25-1.49	.	.	2	67	74	.	.	.	.	.	143
1.50-1.74	.	.	.	47	67	1	.	.	.	.	115
1.75-1.99	.	.	.	1	36	8	.	.	.	.	45
2.00-2.24	.	.	.	.	34	21	1	.	.	.	56
2.25-2.49	.	.	.	.	9	5	1	.	.	.	15
2.50-2.74	.	.	.	.	2	16	.	.	.	.	18
2.75-2.99	.	.	.	.	.	9	1	.	.	.	10
3.00-3.24	.	.	.	.	.	10	2	.	.	.	12
3.25-3.49	.	.	.	.	.	3	2	.	.	.	5
3.50+							2				2
TOTAL	368	1064	605	439	255	76	9	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 2649.

STATION M10 43.12N 87.68W 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	
0.00-0.24	397	170	13	6	1	.	.	.	.	.	587
0.25-0.49	137	931	80	37	1	.	.	.	.	.	1186
0.50-0.74	.	693	806	59	20	.	.	.	.	.	1578
0.75-0.99	.	11	304	214	2	2	.	.	.	.	533
1.00-1.24	.	.	219	303	54	.	.	.	.	.	576
1.25-1.49	.	.	11	116	89	1	.	.	.	.	217
1.50-1.74	.	.	.	68	97	7	.	.	.	.	172
1.75-1.99	.	.	.	5	49	17	.	.	.	.	71
2.00-2.24	.	.	.	1	45	26	.	.	.	.	72
2.25-2.49	.	.	.	.	8	21	1	.	.	.	30
2.50-2.74	.	.	.	.	5	11	3	.	.	.	19
2.75-2.99	.	.	.	.	.	5	.	.	.	.	5
3.00-3.24	.	.	.	.	.	7	2	.	.	.	9
3.25-3.49	.	.	.	.	.	1	7	.	.	.	8
3.50+							9				9
TOTAL	534	1805	1433	809	371	98	22	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 4762.

STATION M10 43.12N 87.68W 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	
0.00-0.24	490	494	57	27	4	.	.	.	.	.	1072
0.25-0.49	135	1926	407	178	20	.	.	.	.	.	2666
0.50-0.74	.	823	1673	460	96	2	.	.	.	.	3054
0.75-0.99	.	48	465	617	82	2	.	.	.	.	1215
1.00-1.24	.	.	357	501	166	7	.	.	.	.	1031
1.25-1.49	.	.	14	189	167	5	.	.	.	.	375
1.50-1.74	.	.	.	137	167	20	2	.	.	.	326
1.75-1.99	.	.	.	16	106	32	.	.	.	.	154
2.00-2.24	.	.	.	.	86	43	.	.	.	.	129
2.25-2.49	.	.	.	.	35	26	3	.	.	.	64
2.50-2.74	.	.	.	.	8	33	2	.	.	.	43
2.75-2.99	.	.	.	.	1	14	1	.	.	.	16
3.00-3.24	.	.	.	.	.	13	1	.	.	.	14
3.25-3.49	.	.	.	.	.	1	6	.	.	.	7
3.50+							5				5
TOTAL	625	3292	2973	2125	938	198	20	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 9532.

STATION M10 43.12N 87.68W 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	
0.00-0.24	649	571	58	16	3	.	.	.	.	.	1297
0.25-0.49	177	2024	407	135	28	.	.	.	.	.	2771
0.50-0.74	.	1690	1502	334	70	4	.	.	.	.	3600
0.75-0.99	.	237	1146	691	103	18	1	.	.	.	2196
1.00-1.24	.	.	772	789	276	28	1	.	.	.	1866
1.25-1.49	.	.	119	491	317	13	1	.	.	.	941
1.50-1.74	.	.	18	372	365	16	1	.	.	.	772
1.75-1.99	.	.	.	40	285	22	2	.	.	.	349
2.00-2.24	.	.	.	5	298	57	1	.	.	.	361
2.25-2.49	.	.	.	.	116	48	1	.	.	.	165
2.50-2.74	.	.	.	.	29	118	2	.	.	.	149
2.75-2.99	.	.	.	.	3	58	4	.	.	.	65
3.00-3.24	.	.	.	.	.	52	2	.	.	.	54
3.25-3.49	.	.	.	.	.	11	10	.	.	.	21
3.50+	.	.	.	.	.	4	32	1	.	.	37
TOTAL	826	4522	4022	2873	1893	449	58	1	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.1 NO. OF CASES= 13718.

STATION M10 43.12N 87.68W 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	
0.00-0.24	486	257	35	14	1	.	.	.	.	.	793
0.25-0.49	171	1321	75	80	25	.	.	.	.	.	1672
0.50-0.74	.	2207	326	23	40	7	.	.	.	.	2603
0.75-0.99	.	188	884	45	4	2	.	.	.	.	1123
1.00-1.24	.	.	612	83	13	1	.	.	.	.	709
1.25-1.49	.	.	284	58	32	.	1	.	.	.	375
1.50-1.74	.	.	65	181	45	2	.	.	.	.	293
1.75-1.99	.	.	.	48	45	3	.	.	.	.	96
2.00-2.24	.	.	.	19	41	4	1	.	.	.	65
2.25-2.49	.	.	.	2	24	8	.	.	.	.	34
2.50-2.74	.	.	.	1	7	14	.	.	.	.	22
2.75-2.99	.	.	.	.	.	9	2	.	.	.	11
3.00-3.24	.	.	.	.	1	7	.	.	.	.	8
3.25-3.49	.	.	.	.	.	3	.	.	.	.	3
3.50+	.	.	.	.	.	1	5	.	.	.	6
TOTAL	657	3973	2281	554	278	61	9	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 7327.

STATION M10 43.12N 87.68W 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	
0.00-0.24	524	202	26	18	3	.	.	.	.	.	773
0.25-0.49	154	993	66	89	35	3	.	.	.	.	1340
0.50-0.74	.	2192	212	27	41	9	.	.	.	.	2481
0.75-0.99	.	148	641	8	12	6	.	.	.	.	815
1.00-1.24	.	.	488	4	.	.	1	.	.	.	493
1.25-1.49	.	.	257	2	.	.	.	.	.	.	259
1.50-1.74	.	.	37	136	.	.	.	.	.	.	173
1.75-1.99	.	.	2	49	.	.	.	.	.	.	51
2.00-2.24	.	.	.	29	.	.	.	.	.	.	29
2.25-2.49	.	.	.	4	1	.	.	.	.	.	5
2.50-2.74	.	.	.	.	7	.	.	.	.	.	7
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	2	.	.	.	.	.	2
3.25-3.49	.	.	.	.	2	.	.	.	.	.	2
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	678	3535	1729	366	104	18	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 6028.

STATION M10 43.12N 87.68W 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	
0.00-0.24	401	155	20	20	5	1	.	.	.	.	602
0.25-0.49	188	851	77	105	52	3	.	.	.	.	1276
0.50-0.74	.	1572	80	52	84	17	.	.	.	.	1805
0.75-0.99	.	213	356	19	13	12	1	.	.	.	614
1.00-1.24	.	.	267	6	7	6	2	.	.	.	288
1.25-1.49	.	.	108	1	.	.	1	.	.	.	110
1.50-1.74	.	.	34	33	.	.	.	.	.	.	67
1.75-1.99	.	.	.	21	.	.	.	.	.	.	21
2.00-2.24	.	.	.	12	.	.	.	.	.	.	12
2.25-2.49	.	.	.	3	3	.	.	.	.	.	6
2.50-2.74	.	.	.	.	2	.	.	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	1	.	.	.	.	.	1
3.25-3.49	.	.	.	.	2	.	.	.	.	.	2
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	589	2791	942	272	169	39	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 4505.

STATION M10 43.12N 87.68W 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	
0.00-0.24	470	175	20	10	5	.	.	.	.	.	680
0.25-0.49	290	1105	115	148	80	4	.	.	.	.	1742
0.50-0.74	.	1888	63	75	155	19	1	.	.	.	2201
0.75-0.99	.	352	380	21	45	33	2	.	.	.	833
1.00-1.24	.	.	280	4	12	8	4	.	.	.	308
1.25-1.49	.	.	105	.	2	4	1	.	.	.	112
1.50-1.74	.	.	39	18	.	1	2	.	.	.	60
1.75-1.99	.	.	.	14	.	.	.	.	.	.	14
2.00-2.24	.	.	.	1	.	.	.	1	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	760	3520	1002	291	299	69	10	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 5581.

STATION M10 43.12N 87.68W 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	
0.00-0.24	329	128	9	6	3	.	.	.	.	.	475
0.25-0.49	221	1159	78	101	41	1	.	.	.	.	1601
0.50-0.74	.	2445	154	93	146	27	.	.	.	.	2865
0.75-0.99	.	383	773	54	81	62	.	.	.	.	1353
1.00-1.24	.	.	531	22	27	63	16	.	.	.	659
1.25-1.49	.	.	247	2	3	3	10	.	.	.	265
1.50-1.74	.	.	53	50	1	5	3	.	.	.	112
1.75-1.99	.	.	.	17	.	.	3	1	.	.	21
2.00-2.24	.	.	.	8	1	.	2	4	.	.	15
2.25-2.49	.	.	.	.	.	.	1	2	.	.	3
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	550	4115	1845	353	303	161	35	7	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 6904.

STATION M10 43.12N 87.68W 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	
0.00-0.24	214	111	9	5	1	.	.	.	.	.	340
0.25-0.49	66	701	59	62	29	.	.	.	.	.	917
0.50-0.74	.	2179	340	86	81	7	1	.	.	.	2694
0.75-0.99	.	131	914	96	68	52	.	.	.	.	1261
1.00-1.24	.	.	772	106	34	60	8	.	.	.	980
1.25-1.49	.	.	386	26	19	26	10	.	.	.	467
1.50-1.74	.	.	51	171	29	13	17	1	.	.	282
1.75-1.99	.	.	.	21	9	2	14	.	.	.	46
2.00-2.24	.	.	.	13	1	6	14	1	.	.	35
2.25-2.49	.	.	.	1	1	3	5	2	.	.	12
2.50-2.74	.	.	.	.	.	1	1	3	.	.	5
2.75-2.99	.	.	.	.	.	2	1	4	.	.	7
3.00-3.24	.	.	.	.	.	.	1	2	1	.	4
3.25-3.49	.	.	.	.	.	.	.	.	1	.	1
3.50+	.	.	.	.	.	.	1	.	1	.	2
TOTAL	280	3122	2531	587	272	172	73	13	3	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 6617.

STATION M10 43.12N 87.68W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

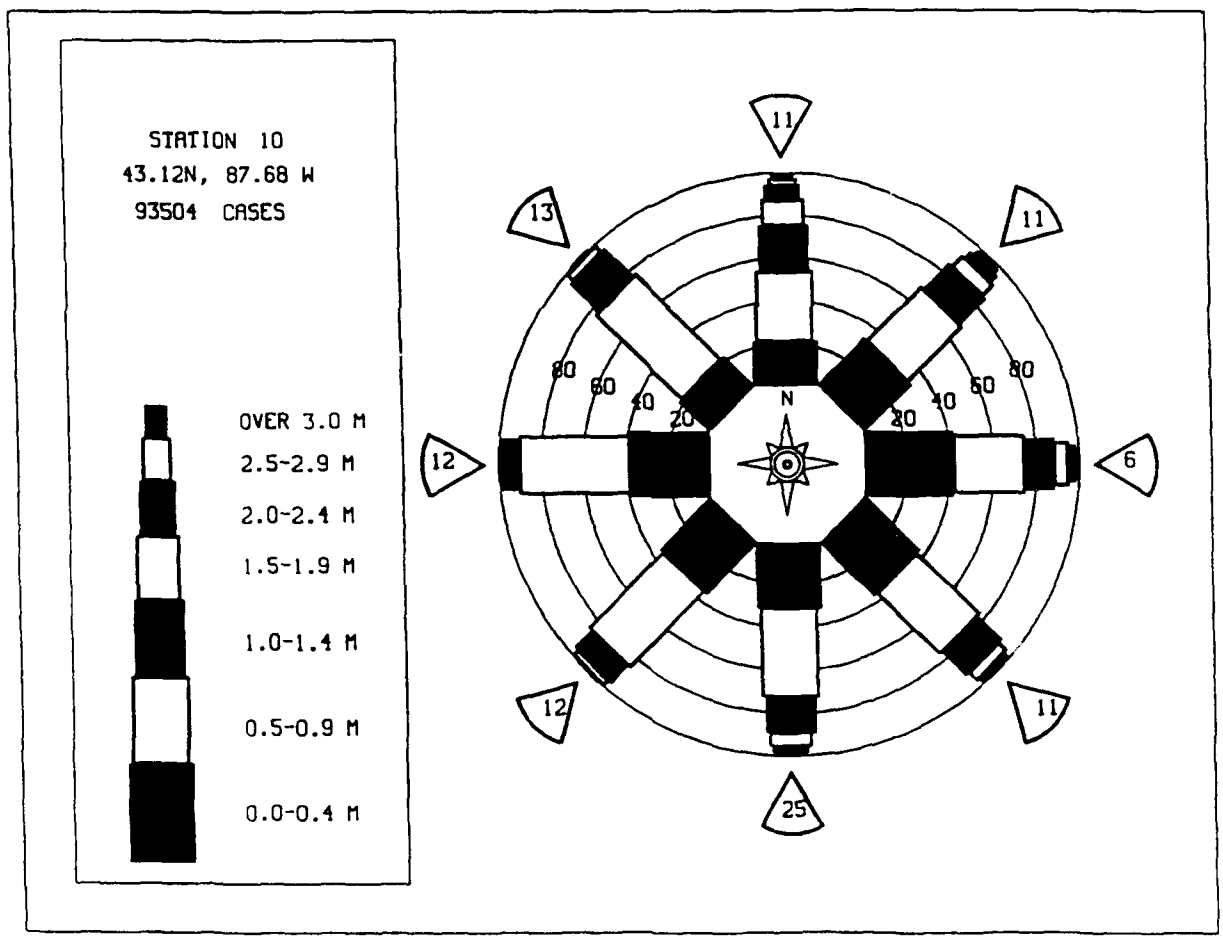
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	156	101	4	2	1	.	.	.	.	.	263
0.25-0.49	37	396	41	31	11	.	.	.	.	.	516
0.50-0.74	.	813	304	72	50	5	.	.	.	.	1244
0.75-0.99	.	33	435	113	58	21	.	.	.	.	660
1.00-1.24	.	.	290	199	53	34	2	.	.	.	578
1.25-1.49	.	.	106	121	57	8	1	.	.	.	293
1.50-1.74	.	.	11	149	100	13	8	1	.	.	282
1.75-1.99	.	.	.	23	89	5	2	.	.	.	119
2.00-2.24	.	.	.	8	79	6	4	1	.	.	98
2.25-2.49	.	.	.	.	37	12	.	.	.	.	49
2.50-2.74	.	.	.	.	18	29	1	.	.	.	48
2.75-2.99	.	.	.	.	2	24	.	.	.	.	26
3.00-3.24	.	.	.	.	.	20	.	2	.	.	22
3.25-3.49	.	.	.	.	.	4	4	.	.	.	8
3.50+	.	.	.	.	.	1	9	1	.	.	11
TOTAL	193	1343	1191	718	554	182	31	5	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 3968.

STATION M10 43.12N 87.68W 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	
0.00-0.24	588	322	31	15	2	.	.	.	.	.	958
0.25-0.49	206	1561	174	122	36	1	.	.	.	.	2100
0.50-0.74	.	1901	870	166	90	11	.	.	.	.	3038
0.75-0.99	.	178	785	293	53	23	.	.	.	.	1332
1.00-1.24	.	.	558	391	82	23	3	.	.	.	1057
1.25-1.49	.	.	171	191	123	6	3	.	.	.	494
1.50-1.74	.	.	31	205	159	9	3	.	.	.	407
1.75-1.99	.	.	.	30	122	12	2	.	.	.	166
2.00-2.24	.	.	.	10	126	26	2	.	.	.	164
2.25-2.49	.	.	.	1	55	23	1	.	.	.	80
2.50-2.74	.	.	.	.	15	52	2	.	.	.	69
2.75-2.99	.	.	.	.	.	33	1	.	.	.	34
3.00-3.24	.	.	.	.	.	26	1	.	.	.	27
3.25-3.49	.	.	.	.	.	9	6	.	.	.	15
3.50+	.	.	.	.	.	2	22	2	.	.	26
TOTAL	794	3962	2620	1424	863	256	46	2	0	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M10 (43.12N 87.68W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.9	0.8	0.8	0.7	0.7	0.[illegible]	0.5	0.5	0.7	0.9	1.0	0.9	0.7
1957	1.0	0.9	0.8	0.7	0.8	0.4	0.5	0.5	0.6	0.8	1.0	1.2	0.8
1958	1.0	1.0	0.8	0.8	0.7	0.5	0.4	0.6	0.8	0.8	1.0	0.9	0.8
1959	0.9	1.0	1.0	0.8	0.7	0.5	0.5	0.6	0.8	0.8	1.0	1.1	0.8
1960	0.9	1.4	1.1	0.9	0.7	0.5	0.5	0.6	0.6	0.7	1.0	1.1	0.8
1961	0.9	1.0	1.1	0.7	0.6	0.6	0.4	0.5	0.8	1.0	0.9	1.0	0.8
1962	1.0	1.0	0.8	0.8	0.7	0.5	0.5	0.6	0.7	0.8	0.9	1.0	0.8
1963	1.0	1.0	0.9	0.7	0.6	0.4	0.5	0.6	0.8	0.7	0.9	0.7	0.7
1964	1.2	1.0	1.1	1.0	0.7	0.4	0.5	0.6	0.7	0.7	0.8	1.0	0.8
1965	1.0	1.2	1.0	0.8	0.6	0.5	0.4	0.4	0.7	0.8	0.9	1.0	0.8
1966	0.9	0.8	0.8	0.7	0.7	0.4	0.4	0.5	0.6	0.9	1.2	0.9	0.7
1967	1.1	1.1	0.9	0.7	0.6	0.4	0.4	0.6	0.6	1.0	0.8	0.9	0.8
1968	1.1	0.9	0.9	0.8	0.5	0.5	0.5	0.6	0.7	0.8	0.8	1.1	0.8
1969	0.9	0.9	0.9	0.8	0.5	0.5	0.5	0.5	0.8	0.9	0.8	1.1	0.7
1970	0.9	1.2	0.9	0.9	0.7	0.7	0.6	0.6	0.8	0.9	1.2	1.2	0.9
1971	1.1	1.3	1.0	0.8	0.6	0.5	0.6	0.6	0.8	0.8	1.0	0.9	0.8
1972	1.2	0.9	1.2	0.8	0.5	0.7	0.6	0.6	0.9	0.9	0.9	1.0	0.8
1973	1.1	1.2	1.1	1.0	0.7	0.5	0.6	0.7	0.8	0.8	0.9	1.2	0.9
1974	0.9	1.2	0.9	0.8	0.6	0.6	0.5	0.5	0.7	0.9	0.9	1.0	0.8
1975	1.0	1.1	0.9	0.8	0.5	0.5	0.5	0.6	0.7	1.0	1.0	1.1	0.8
1976	1.2	1.1	1.1	0.9	0.7	0.5	0.6	0.7	0.8	0.8	0.8	0.9	0.8
1977	0.9	0.9	1.0	0.8	0.5	0.6	0.6	0.6	0.7	1.0	1.0	1.0	0.8
1978	1.1	0.8	0.8	0.9	0.7	0.5	0.5	0.6	0.7	0.9	1.0	1.1	0.8
1979	0.9	1.1	0.8	0.7	0.7	0.6	0.5	0.6	0.7	0.9	0.9	1.0	0.8
1980	0.9	0.9	1.0	0.7	0.4	0.5	0.4	0.5	0.7	0.8	0.9	0.9	0.7
1981	0.7	1.0	0.8	0.8	0.8	0.5	0.5	0.5	0.7	0.8	0.7	0.7	0.7
1982	1.1	0.8	0.9	0.8	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8	0.7
1983	0.9	0.7	1.0	0.6	0.5	0.4	0.4	0.5	0.6	0.8	1.1	0.8	0.7
1984	0.8	0.9	0.9	0.8	0.5	0.5	0.4	0.5	0.8	0.7	1.0	1.0	0.7
1985	1.0	1.0	1.0	0.6	0.6	0.5	0.4	0.5	0.8	0.7	1.0	0.8	0.8
1986	1.0	1.0	1.0	0.8	0.6	0.5	0.5	0.6	0.7	0.8	0.9	0.8	0.8
1987	0.8	0.9	0.9	0.7	0.5	0.4	0.5	0.7	0.6	0.8	1.0	1.1	0.7
MEAN	1.0	1.0	0.9	0.8	0.6	0.5	0.5	0.6	0.7	0.8	0.9	1.0	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M10 (43.12N 87.68W)

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

32 YR. STATISTICS FOR WIS STATION M10

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.2
LARGEST WAVE HS	(METERS)	6.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	38.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		60021018

STATION M11 43.27N 87.68W 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	
0.00-0.24	280	181	8	7	.	.	.	.	.	.	476
0.25-0.49	63	585	53	52	8	.	.	.	.	.	761
0.50-0.74	.	489	511	81	39	2	.	.	.	.	1122
0.75-0.99	.	17	398	149	22	10	.	.	.	.	596
1.00-1.24	.	.	306	402	36	12	.	.	.	.	756
1.25-1.49	.	.	36	348	40	7	1	.	.	.	432
1.50-1.74	.	.	2	333	142	9	2	.	.	.	488
1.75-1.99	.	.	.	25	222	4	1	.	.	.	252
2.00-2.24	.	.	.	6	241	14	3	.	.	.	264
2.25-2.49	.	.	.	.	95	11	.	.	.	.	106
2.50-2.74	.	.	.	.	55	58	.	1	.	.	114
2.75-2.99	.	.	.	.	1	38	6	2	.	.	47
3.00-3.24	.	.	.	.	.	71	6	.	.	.	77
3.25-3.49	.	.	.	.	.	16	5	.	.	.	21
3.50+	.	.	.	.	.	8	34	12	1	.	55
TOTAL	343	1272	1314	1403	901	260	58	15	1	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.4 NO. OF CASES= 5229.

STATION M11 43.27N 87.68W 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	
0.00-0.24	379	177	14	3	.	.	.	.	.	.	573
0.25-0.49	83	833	79	55	3	.	.	.	.	.	1053
0.50-0.74	.	528	852	95	34	2	.	.	.	.	1511
0.75-0.99	.	8	498	243	20	2	.	.	.	.	771
1.00-1.24	.	.	281	463	29	8	.	.	.	.	781
1.25-1.49	.	.	12	272	90	4	1	.	.	.	379
1.50-1.74	.	.	.	183	144	3	.	.	.	.	330
1.75-1.99	.	.	.	16	120	4	3	.	.	.	143
2.00-2.24	.	.	.	1	149	11	.	.	.	.	161
2.25-2.49	.	.	.	.	47	23	.	.	.	.	70
2.50-2.74	.	.	.	.	13	71	.	.	.	.	84
2.75-2.99	.	.	.	.	.	38	1	.	.	.	39
3.00-3.24	.	.	.	.	.	32	2	.	.	.	34
3.25-3.49	.	.	.	.	.	9	8	.	.	.	17
3.50+	.	.	.	.	.	5	38	2	1	.	46
TOTAL	462	1546	1736	1331	649	212	53	2	1	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 5623.

STATION M11 43.27N 87.68W 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	
0.00-0.24	491	283	16	13	1	.	.	.	.	.	804
0.25-0.49	100	1096	90	77	3	.	.	.	.	.	1366
0.50-0.74	.	535	761	114	26	2	.	.	.	.	1438
0.75-0.99	.	4	365	199	16	4	.	.	.	.	588
1.00-1.24	.	.	204	382	25	6	.	.	.	.	617
1.25-1.49	.	.	11	180	91	4	.	.	.	.	286
1.50-1.74	.	.	.	168	152	1	2	.	.	.	323
1.75-1.99	.	.	.	13	113	3	1	.	.	.	130
2.00-2.24	.	.	.	.	154	10	.	.	.	.	164
2.25-2.49	.	.	.	.	78	24	.	.	.	.	102
2.50-2.74	.	.	.	.	14	79	2	.	.	.	95
2.75-2.99	.	.	.	.	2	50	.	.	.	.	52
3.00-3.24	.	.	.	.	.	35	.	.	.	.	35
3.25-3.49	.	.	.	.	.	20	3	.	.	.	23
3.50+	.	.	.	.	.	5	28	2	.	.	35
TOTAL	591	1918	1447	1146	675	243	36	2	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.1 NO. OF CASES= 5686.

STATION M11 43.27N 87.68W 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	
0.00-0.24	290	126	12	5	.	.	.	.	.	.	433
0.25-0.49	62	551	71	42	4	.	.	.	.	.	730
0.50-0.74	.	260	353	44	19	1	.	.	.	.	677
0.75-0.99	.	3	154	108	8	1	.	.	.	.	274
1.00-1.24	.	.	59	165	12	1	.	.	.	.	237
1.25-1.49	.	.	2	67	60	.	.	.	.	.	129
1.50-1.74	.	.	.	52	86	2	.	.	.	.	140
1.75-1.99	.	.	.	2	58	3	.	.	.	.	63
2.00-2.24	.	.	.	.	71	9	.	.	.	.	80
2.25-2.49	.	.	.	.	35	8	.	.	.	.	43
2.50-2.74	.	.	.	.	7	32	.	.	.	.	39
2.75-2.99	.	.	.	.	.	14	.	.	.	.	14
3.00-3.24	.	.	.	.	.	12	.	.	.	.	12
3.25-3.49	.	.	.	.	.	3	1	.	.	.	4
3.50+	.	.	.	.	.	.	4	.	.	.	4
TOTAL	352	940	651	485	360	86	5	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 2711.

STATION M11 43.27N 87.68W 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	
0.00-0.24	336	132	17	6	.	.	.	.	.	.	491
0.25-0.49	79	512	53	59	5	.	.	.	.	.	708
0.50-0.74	.	210	313	35	13	.	.	.	.	.	571
0.75-0.99	.	.	125	108	2	3	.	.	.	.	238
1.00-1.24	.	.	57	171	18	2	.	.	.	.	248
1.25-1.49	.	.	2	69	60	1	.	.	.	.	132
1.50-1.74	.	.	.	40	75	4	1	.	.	.	120
1.75-1.99	.	.	.	2	44	6	1	.	.	.	53
2.00-2.24	.	.	.	.	57	14	.	.	.	.	71
2.25-2.49	.	.	.	.	28	7	.	.	.	.	35
2.50-2.74	.	.	.	.	1	21	.	.	.	.	22
2.75-2.99	.	.	.	.	.	6	.	.	.	.	6
3.00-3.24	.	.	.	.	.	6	.	.	.	.	6
3.25-3.49	.	.	.	.	.	1	1	.	.	.	2
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	415	854	567	490	303	71	4	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 2545.

STATION M11 43.27N 87.68W 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	
0.00-0.24	333	134	13	4	1	.	.	.	.	.	485
0.25-0.49	102	545	56	48	4	.	.	.	.	.	755
0.50-0.74	.	328	290	25	8	.	.	.	.	.	651
0.75-0.99	.	3	137	89	2	1	.	.	.	.	232
1.00-1.24	.	.	66	141	23	.	.	.	.	.	230
1.25-1.49	.	.	5	64	82	1	.	.	.	.	152
1.50-1.74	.	.	.	42	62	1	.	.	.	.	105
1.75-1.99	.	.	.	.	31	4	1	.	.	.	36
2.00-2.24	.	.	.	.	36	16	.	1	.	.	53
2.25-2.49	.	.	.	.	12	9	.	.	.	.	21
2.50-2.74	.	.	.	.	2	11	.	.	.	.	13
2.75-2.99	.	.	.	.	.	9	.	.	.	.	9
3.00-3.24	.	.	.	.	.	8	1	.	.	.	9
3.25-3.49	.	.	.	.	.	2	1	.	.	.	3
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	435	1010	567	413	263	62	3	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 2591.

STATION M11 43.27N 87.68W 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	
0.00-0.24	467	205	17	12	.	.	.	.	.	.	701
0.25-0.49	156	887	103	50	2	.	.	.	.	.	1198
0.50-0.74	.	632	674	65	19	1	.	.	.	.	1391
0.75-0.99	.	14	241	208	6	1	.	.	.	.	470
1.00-1.24	.	.	172	285	50	.	.	.	.	.	507
1.25-1.49	.	.	9	112	90	1	.	.	.	.	212
1.50-1.74	.	.	.	63	89	5	1	.	.	.	158
1.75-1.99	.	.	.	4	41	21	.	.	.	.	66
2.00-2.24	.	.	.	.	34	23	.	.	.	.	57
2.25-2.49	.	.	.	.	11	14	2	.	.	.	27
2.50-2.74	.	.	.	.	2	14	1	.	.	.	17
2.75-2.99	.	.	.	.	.	6	2	.	.	.	8
3.00-3.24	.	.	.	.	.	6	2	.	.	.	8
3.25-3.49	.	.	.	.	.	1	4	.	.	.	5
3.50+	.	.	.	.	.	.	9	.	.	.	9
TOTAL	623	1738	1216	799	344	93	21	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 4538.

STATION M11 43.27N 87.68W 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	
0.00-0.24	478	587	73	31	5	.	.	.	.	.	1174
0.25-0.49	146	2004	486	210	27	.	.	.	.	.	2873
0.50-0.74	.	836	1722	526	115	2	.	.	.	.	3201
0.75-0.99	.	52	495	642	100	7	.	.	.	.	1296
1.00-1.24	.	.	315	496	204	23	.	.	.	.	1038
1.25-1.49	.	.	20	194	170	6	1	.	.	.	391
1.50-1.74	.	.	1	122	180	25	1	.	.	.	329
1.75-1.99	.	.	.	14	91	39	.	.	.	.	144
2.00-2.24	.	.	.	.	71	47	1	.	.	.	119
2.25-2.49	.	.	.	.	21	22	5	.	.	.	48
2.50-2.74	.	.	.	.	3	34	5	.	.	.	42
2.75-2.99	.	.	.	.	2	12	3	.	.	.	17
3.00-3.24	.	.	.	.	.	12	2	.	.	.	14
3.25-3.49	.	.	.	.	.	1	5	.	.	.	6
3.50+	.	.	.	.	.	.	7	.	.	.	7
TOTAL	624	3479	3112	2235	989	230	30	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 10025.

STATION M11 43.27N 87.68W 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	
0.00-0.24	681	709	95	31	6	.	.	.	.	.	1522
0.25-0.49	195	2150	598	168	33	1	.	.	.	.	3145
0.50-0.74	.	1758	1603	499	82	4	.	.	.	.	3946
0.75-0.99	.	241	1124	799	136	31	.	.	.	.	2331
1.00-1.24	.	.	784	791	389	45	3	.	.	.	2012
1.25-1.49	.	.	120	432	385	19	2	.	.	.	958
1.50-1.74	.	.	19	394	358	41	2	.	.	.	814
1.75-1.99	.	.	.	44	241	51	3	.	.	.	339
2.00-2.24	.	.	.	4	253	96	5	.	.	.	358
2.25-2.49	.	.	.	.	68	86	4	.	.	.	158
2.50-2.74	.	.	.	.	19	136	3	.	.	.	158
2.75-2.99	.	.	.	.	1	65	5	.	.	.	71
3.00-3.24	.	.	.	.	.	48	4	.	.	.	52
3.25-3.49	.	.	.	.	.	9	18	.	.	.	27
3.50+	.	.	.	.	.	2	48	1	.	.	51
TOTAL	876	4858	4343	3162	1971	634	97	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 14928.

STATION M11 43.27N 87.68W 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	
0.00-0.24	474	270	34	19	3	.	.	.	.	.	800
0.25-0.49	175	1338	86	89	18	.	.	.	.	.	1706
0.50-0.74	.	2175	312	26	37	7	.	.	.	.	2557
0.75-0.99	.	183	827	42	7	.	.	.	.	.	1059
1.00-1.24	.	.	591	60	11	2	.	.	.	.	664
1.25-1.49	.	.	276	56	33	1	1	.	.	.	367
1.50-1.74	.	.	59	165	55	.	.	.	.	.	279
1.75-1.99	.	.	1	36	36	5	.	.	.	.	78
2.00-2.24	.	.	.	20	47	11	.	.	.	.	78
2.25-2.49	.	.	.	2	16	10	.	.	.	.	28
2.50-2.74	.	.	.	1	5	16	.	.	.	.	22
2.75-2.99	.	.	.	.	.	5	1	.	.	.	6
3.00-3.24	.	.	.	.	1	11	4	.	.	.	16
3.25-3.49	.	.	.	.	.	3	2	.	.	.	5
3.50+	.	.	.	.	.	.	10	.	.	.	10
TOTAL	649	3966	2186	516	269	71	18	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 7198.

STATION M11 43.27N 87.68W 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	
0.00-0.24	510	224	29	13	3	.	.	.	.	.	779
0.25-0.49	159	952	69	112	32	3	.	.	.	.	1327
0.50-0.74	.	2023	207	17	35	5	.	.	.	.	2287
0.75-0.99	.	177	602	9	11	4	.	.	.	.	803
1.00-1.24	.	.	462	2	1	.	.	.	.	.	465
1.25-1.49	.	.	222	2	.	.	.	.	.	.	224
1.50-1.74	.	.	32	124	.	.	.	.	.	.	156
1.75-1.99	.	.	1	42	.	.	1	.	.	.	44
2.00-2.24	.	.	.	28	1	.	.	.	.	.	29
2.25-2.49	.	.	.	3	2	.	.	.	.	.	5
2.50-2.74	.	.	.	.	3	.	.	.	.	.	3
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	3	.	.	.	.	.	3
3.25-3.49	.	.	.	.	1	.	.	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	669	3376	1624	352	93	12	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 5741.

STATION M11 43.27N 87.68W 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	
0.00-0.24	440	175	26	27	5	1	.	.	.	.	674
0.25-0.49	190	852	57	120	54	3	.	.	.	.	1276
0.50-0.74	.	1480	55	45	70	18	1	.	.	.	1669
0.75-0.99	.	189	330	16	11	7	.	.	.	.	553
1.00-1.24	.	.	238	5	5	4	2	.	.	.	254
1.25-1.49	.	.	90	.	1	.	.	.	.	.	91
1.50-1.74	.	.	32	24	.	.	1	.	.	.	57
1.75-1.99	.	.	.	9	.	.	.	.	.	.	9
2.00-2.24	.	.	.	12	.	.	.	.	.	.	12
2.25-2.49	.	.	.	1	2	.	.	.	.	.	3
2.50-2.74	.	.	.	.	2	.	.	.	.	.	2
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	2	.	.	.	.	.	2
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	630	2696	828	259	153	33	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 4319.

STATION M11 43.27N 87.68W 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	
0.00-0.24	480	163	28	21	6	.	.	.	.	.	698
0.25-0.49	263	1067	105	144	77	2	.	.	.	.	1658
0.50-0.74	.	1781	59	77	143	20	.	.	.	.	2080
0.75-0.99	.	325	381	14	44	33	1	.	.	.	798
1.00-1.24	.	.	255	6	11	6	4	.	.	.	282
1.25-1.49	.	.	96	.	1	2	.	.	.	.	99
1.50-1.74	.	.	41	18	.	1	1	.	.	.	61
1.75-1.99	.	.	.	12	.	.	.	.	.	.	12
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	743	3336	965	293	282	64	6	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 5333.

STATION M11 43.27N 87.68W 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	
0.00-0.24	362	151	8	16	2	.	.	.	.	.	539
0.25-0.49	192	1128	74	114	48	1	.	.	.	.	1557
0.50-0.74	.	2378	142	72	161	21	.	.	.	.	2774
0.75-0.99	.	297	731	38	73	51	.	.	.	.	1190
1.00-1.24	.	.	507	13	17	47	14	.	.	.	598
1.25-1.49	.	.	222	.	.	8	6	.	.	.	236
1.50-1.74	.	.	44	45	.	5	2	.	.	.	96
1.75-1.99	.	.	.	14	.	.	4	.	.	.	18
2.00-2.24	.	.	.	8	.	.	2	1	.	.	11
2.25-2.49	.	.	.	.	.	.	2	3	.	.	5
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	554	3954	1728	320	301	133	30	4	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 6585.

STATION M11 43.27N 87.68W 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	
0.00-0.24	262	126	11	10	.	.	.	.	.	.	409
0.25-0.49	60	684	70	87	37	.	.	.	.	.	938
0.50-0.74	.	2164	309	91	89	10	.	.	.	.	2663
0.75-0.99	.	142	903	87	96	43	1	.	.	.	1272
1.00-1.24	.	.	753	80	38	65	6	.	.	.	942
1.25-1.49	.	.	390	29	16	29	11	.	.	.	475
1.50-1.74	.	.	54	166	18	17	14	.	.	.	269
1.75-1.99	.	.	1	24	8	4	16	1	.	.	54
2.00-2.24	.	.	.	9	10	5	18	.	.	.	42
2.25-2.49	.	.	.	2	.	.	5	2	.	.	9
2.50-2.74	.	.	.	.	.	.	.	4	.	.	4
2.75-2.99	.	.	.	.	.	.	1	1	1	.	3
3.00-3.24	.	.	.	.	.	.	2	1	.	.	3
3.25-3.49	.	.	.	.	.	1	.	1	.	.	2
3.50+	.	.	.	.	.	.	.	.	1	.	1
TOTAL	322	3116	2491	585	312	174	74	10	2	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 6648.

STATION M11 43.27N 87.68W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

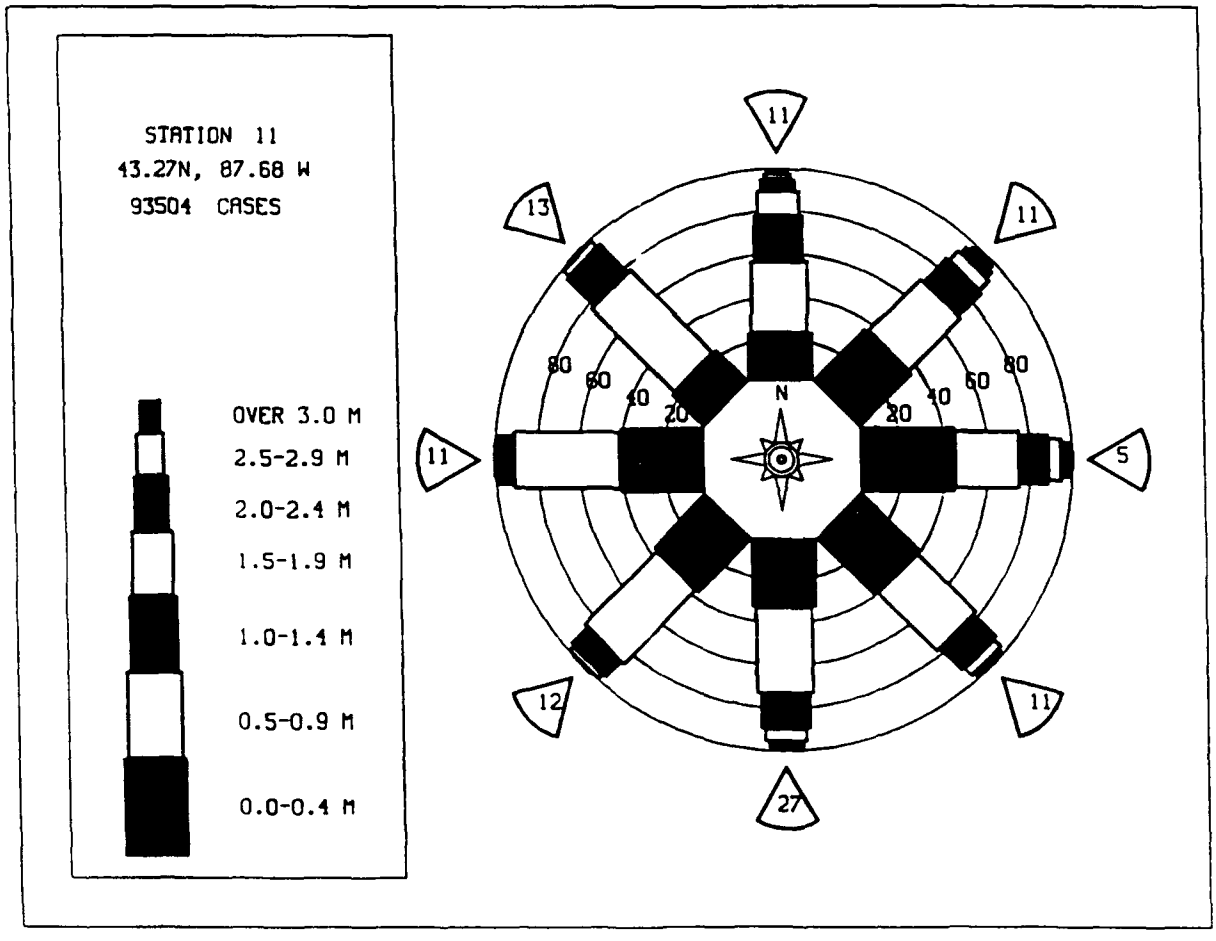
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	172	106	5	2	.	.	.	.	.	.	285
0.25-0.49	39	419	41	42	11	.	.	.	.	.	552
0.50-0.74	.	788	286	69	62	6	.	.	.	.	1211
0.75-0.99	.	33	434	81	58	23	.	.	.	.	629
1.00-1.24	.	.	268	185	35	39	2	.	.	.	529
1.25-1.49	.	.	109	157	19	11	3	.	.	.	299
1.50-1.74	.	.	14	168	55	10	5	.	.	.	252
1.75-1.99	.	.	1	24	63	6	2	.	.	.	96
2.00-2.24	.	.	.	5	72	4	2	.	.	.	83
2.25-2.49	.	.	.	.	27	1	1	.	.	.	29
2.50-2.74	.	.	.	.	23	14	1	.	.	.	38
2.75-2.99	.	.	.	.	1	14	.	.	.	.	15
3.00-3.24	.	.	.	.	.	13	1	2	.	.	16
3.25-3.49	.	.	.	.	.	1	1	.	.	.	2
3.50+	.	.	.	.	.	7	2	.	.	.	9
TOTAL	211	1346	1158	733	426	149	20	2	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 3804.

STATION M11 43.27N 87.68W 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	
0.00-0.24	644	375	41	22	3	.	.	.	.	.	1085
0.25-0.49	207	1561	210	147	37	1	.	.	.	.	2163
0.50-0.74	.	1837	845	188	95	10	.	.	.	.	2975
0.75-0.99	.	169	775	284	62	22	.	.	.	.	1312
1.00-1.24	.	.	532	365	91	26	3	.	.	.	1017
1.25-1.49	.	.	162	198	114	9	2	.	.	.	485
1.50-1.74	.	.	30	211	142	12	3	.	.	.	398
1.75-1.99	.	.	.	28	107	15	3	.	.	.	153
2.00-2.24	.	.	.	9	120	26	3	.	.	.	158
2.25-2.49	.	.	.	.	44	22	2	.	.	.	68
2.50-2.74	.	.	.	.	15	49	1	.	.	.	65
2.75-2.99	.	.	.	.	.	26	2	.	.	.	28
3.00-3.24	.	.	.	.	.	25	2	.	.	.	27
3.25-3.49	.	.	.	.	.	6	5	.	.	.	11
3.50+	.	.	.	.	.	2	18	1	.	.	21
TOTAL	851	3942	2595	1452	830	251	44	1	0	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M11 (43.27N 87.68W)

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M11 (43.27N 87.68W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.8	3.2	3.2	2.2	2.1	1.5	1.4	2.6	2.2	3.0	3.0	4.0
1957	3.2	4.0	3.3	2.5	2.1	1.6	1.8	1.7	2.0	3.7	4.1	3.3
1958	3.7	3.0	2.5	3.0	2.6	1.6	1.3	2.0	3.2	2.2	4.1	3.5
1959	3.3	3.6	4.3	2.4	2.4	2.1	2.5	2.4	2.5	2.3	3.4	3.8
1960	3.0	6.1	3.4	3.6	2.8	1.6	2.0	1.7	1.9	2.2	3.4	3.4
1961	2.3	3.6	3.6	2.1	2.2	2.0	1.6	1.3	2.4	3.5	3.5	3.3
1962	2.9	3.5	2.4	2.4	1.9	1.9	1.3	1.8	2.3	2.1	4.1	3.0
1963	3.6	3.3	2.5	3.2	2.8	1.0	1.9	2.7	3.2	2.6	3.5	2.2
1964	4.0	3.2	4.0	4.3	2.8	1.6	2.5	1.8	3.7	2.4	3.3	3.2
1965	3.4	3.7	3.1	2.0	1.7	1.8	1.5	1.3	2.4	3.4	3.2	4.9
1966	3.1	2.6	2.6	2.3	2.2	1.9	1.4	1.8	2.0	2.8	4.2	2.9
1967	4.5	3.7	2.4	2.0	1.8	1.2	1.6	2.0	2.1	2.4	2.1	2.3
1968	3.0	2.9	3.0	2.7	2.0	1.6	1.5	1.5	2.2	2.3	3.2	4.0
1969	2.6	3.0	3.9	3.2	1.9	1.4	1.8	1.8	1.7	2.6	3.0	2.5
1970	2.3	3.6	3.5	3.0	2.4	2.5	2.1	2.2	3.0	3.3	3.7	4.6
1971	3.3	4.9	3.1	2.7	1.9	1.4	1.9	1.6	3.5	3.6	4.8	2.8
1972	4.4	2.9	4.1	2.7	2.1	2.3	1.6	1.5	2.6	3.0	3.7	3.4
1973	3.4	3.5	3.6	3.2	2.5	1.5	1.6	2.1	2.9	2.5	3.3	4.4
1974	2.7	5.1	3.5	3.1	1.7	2.2	1.6	1.6	2.5	2.6	2.8	3.9
1975	4.0	3.6	3.3	2.6	1.9	1.3	2.0	1.7	2.7	3.4	3.1	4.1
1976	4.1	4.3	3.2	3.3	1.9	1.4	1.8	1.7	2.0	2.3	2.9	3.0
1977	3.4	3.0	3.7	2.7	2.2	2.3	1.4	2.5	2.1	3.4	3.8	3.4
1978	3.5	3.0	3.1	2.6	3.8	1.9	1.4	1.9	2.4	2.5	3.6	3.8
1979	3.9	4.2	2.6	1.7	2.7	1.7	1.8	1.5	1.9	3.4	3.6	5.8
1980	3.5	3.1	3.1	2.8	2.2	1.7	1.2	1.9	1.9	2.9	2.3	3.7
1981	1.6	3.0	2.7	2.2	3.6	2.3	1.9	1.4	2.2	1.9	3.3	2.7
1982	3.4	2.8	2.3	2.8	1.4	1.3	1.2	1.2	2.1	2.5	2.4	2.5
1983	3.0	1.9	3.0	2.4	2.4	1.1	2.1	2.3	1.8	2.3	3.7	3.1
1984	2.4	5.9	3.5	2.7	1.7	1.9	1.2	1.4	3.0	2.6	3.1	4.4
1985	3.9	3.3	3.2	2.1	1.9	1.8	1.6	1.8	2.7	3.2	3.3	2.6
1986	3.5	2.9	2.9	2.0	2.5	2.1	1.8	1.7	2.2	2.1	3.2	2.7
1987	2.7	4.3	3.7	2.5	1.6	1.1	2.0	2.1	1.7	3.6	2.7	4.5

32 YR. STATISTICS FOR WIS STATION M11

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.2
LARGEST WAVE HS	(METERS)	6.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	37.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		60021018

STATION M12 43.42N 87.67W 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	
0.00-0.24	331	208	16	8	.	.	.	.	.	.	563
0.25-0.49	73	552	66	62	11	.	.	.	.	.	764
0.50-0.74	.	478	484	101	52	4	.	.	.	.	1119
0.75-0.99	.	12	388	130	29	7	.	.	.	.	566
1.00-1.24	.	.	324	351	29	14	.	.	.	.	718
1.25-1.49	.	.	29	349	17	7	1	.	.	.	403
1.50-1.74	.	.	1	407	50	8	3	.	.	.	469
1.75-1.99	.	.	.	40	146	3	1	.	.	.	190
2.00-2.24	.	.	.	6	172	8	1	.	.	.	187
2.25-2.49	.	.	.	.	69	5	1	.	.	.	75
2.50-2.74	.	.	.	.	62	21	2	.	.	.	85
2.75-2.99	.	.	.	.	4	27	6	2	.	.	39
3.00-3.24	.	.	.	.	.	28	6	.	.	.	34
3.25-3.49	.	.	.	.	.	5	5	1	.	.	11
3.50+	.	.	.	.	.	4	11	11	.	.	26
TOTAL	404	1250	1308	1454	641	141	37	14	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.3 NO. OF CASES= 4932.

STATION M12 43.42N 87.67W 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	
0.00-0.24	416	239	24	7	.	.	.	.	.	.	686
0.25-0.49	96	928	91	73	3	.	.	.	.	.	1191
0.50-0.74	.	581	811	128	40	.	.	.	.	.	1560
0.75-0.99	.	9	500	192	25	5	.	.	.	.	731
1.00-1.24	.	.	270	412	36	8	1	.	.	.	727
1.25-1.49	.	.	19	242	66	4	.	.	.	.	331
1.50-1.74	.	.	.	197	95	4	.	.	.	.	296
1.75-1.99	.	.	.	21	136	3	.	.	.	.	160
2.00-2.24	.	.	.	1	97	13	1	.	.	.	112
2.25-2.49	.	.	.	.	47	32	.	.	.	.	79
2.50-2.74	.	.	.	.	17	47	.	.	.	.	64
2.75-2.99	.	.	.	.	.	28	1	.	.	.	29
3.00-3.24	.	.	.	.	.	38	7	.	.	.	45
3.25-3.49	.	.	.	.	.	6	11	.	.	.	17
3.50+	.	.	.	.	.	3	28	2	1	.	34
TOTAL	512	1757	1715	1273	562	191	49	2	1	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 5689.

STATION M12 43.42N 87.67W 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	
0.00-0.24	612	386	43	16	.	.	.	.	.	.	1057
0.25-0.49	94	1119	147	90	6	.	.	.	.	.	1456
0.50-0.74	.	451	752	122	31	.	.	.	.	.	1356
0.75-0.99	.	.	337	182	16	2	.	.	.	.	537
1.00-1.24	.	.	154	366	38	5	.	.	.	.	563
1.25-1.49	.	.	9	175	104	4	.	.	.	.	292
1.50-1.74	.	.	.	142	118	1	2	.	.	.	263
1.75-1.99	.	.	.	8	112	5	1	.	.	.	126
2.00-2.24	.	.	.	.	108	36	3	.	.	.	147
2.25-2.49	.	.	.	.	49	32	.	.	.	.	81
2.50-2.74	.	.	.	.	14	80	.	1	.	.	95
2.75-2.99	.	.	.	.	.	34	2	.	.	.	36
3.00-3.24	.	.	.	.	.	32	1	.	.	.	33
3.25-3.49	.	.	.	.	.	9	14	.	.	.	23
3.50+	.	.	.	.	.	1	34	3	.	.	38
TOTAL	706	1956	1442	1101	596	241	57	4	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 5725.

STATION M12 43.42N 87.67W 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	
0.00-0.24	342	217	25	10	.	.	.	.	.	.	594
0.25-0.49	55	450	75	53	5	.	.	.	.	.	638
0.50-0.74	.	213	339	51	21	.	.	.	.	.	624
0.75-0.99	.	1	142	106	5	2	.	.	.	.	256
1.00-1.24	.	.	63	170	13	.	.	.	.	.	246
1.25-1.49	.	.	2	70	56	1	.	.	.	.	129
1.50-1.74	.	.	.	52	80	5	.	.	.	.	137
1.75-1.99	.	.	.	.	51	3	.	.	.	.	54
2.00-2.24	.	.	.	.	68	10	1	.	.	.	79
2.25-2.49	.	.	.	.	21	14	.	.	.	.	35
2.50-2.74	.	.	.	.	5	20	.	.	.	.	25
2.75-2.99	.	.	.	.	.	12	1	.	.	.	13
3.00-3.24	.	.	.	.	.	9	.	.	.	.	9
3.25-3.49	.	.	.	.	.	2	2	.	.	.	4
3.50+	.	.	.	.	.	.	3	.	.	.	3
TOTAL	397	881	646	512	325	78	7	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.9 NO. OF CASES= 2677.

STATION M12 43.42N 87.67W 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	
0.00-0.24	370	219	39	11	2	.	.	.	.	.	641
0.25-0.49	54	381	66	67	7	.	.	.	.	.	575
0.50-0.74	.	178	299	45	20	1	.	.	.	.	543
0.75-0.99	.	1	144	99	6	2	.	.	.	.	252
1.00-1.24	.	.	50	173	12	3	.	.	.	.	238
1.25-1.49	.	.	1	64	66	1	.	.	.	.	132
1.50-1.74	.	.	.	53	72	.	1	.	.	.	126
1.75-1.99	.	.	.	1	47	6	1	.	.	.	55
2.00-2.24	.	.	.	.	60	16	.	.	.	.	76
2.25-2.49	.	.	.	.	13	3	.	.	.	.	16
2.50-2.74	.	.	.	.	4	17	.	.	.	.	21
2.75-2.99	.	.	.	.	.	6	.	.	.	.	6
3.00-3.24	.	.	.	.	.	7	.	.	.	.	7
3.25-3.49	.	.	.	.	.	1	1	.	.	.	2
3.50+							1				1
TOTAL	424	779	599	513	309	63	4	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 2531.

STATION M12 43.42N 87.67W 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	
0.00-0.24	390	202	37	10	.	.	.	.	.	.	639
0.25-0.49	89	450	62	49	4	.	.	.	.	.	654
0.50-0.74	.	244	257	26	9	.	.	.	.	.	536
0.75-0.99	.	1	139	82	3	1	.	.	.	.	226
1.00-1.24	.	.	54	147	25	.	.	.	.	.	226
1.25-1.49	.	.	.	52	65	.	.	.	.	.	117
1.50-1.74	.	.	.	29	54	2	1	.	.	.	86
1.75-1.99	.	.	.	.	27	8	.	.	.	.	35
2.00-2.24	.	.	.	.	35	14	1	.	.	.	50
2.25-2.49	.	.	.	.	8	9	1	1	.	.	19
2.50-2.74	.	.	.	.	2	12	1	.	.	.	15
2.75-2.99	.	.	.	.	.	7	.	.	.	.	7
3.00-3.24	.	.	.	.	.	4	2	.	.	.	6
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	479	897	549	395	232	57	6	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.7 NO. OF CASES= 2462.

STATION M12 43.42N 87.67W 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	
0.00-0.24	543	300	39	20	.	.	.	.	.	.	902
0.25-0.49	161	806	133	68	3	.	.	.	.	.	1171
0.50-0.74	.	484	519	94	16	.	.	.	.	.	1113
0.75-0.99	.	16	213	205	10	1	.	.	.	.	445
1.00-1.24	.	.	109	275	52	.	.	.	.	.	436
1.25-1.49	.	.	2	83	94	1	.	.	.	.	180
1.50-1.74	.	.	.	55	87	8	1	.	.	.	151
1.75-1.99	.	.	.	2	34	14	.	.	.	.	50
2.00-2.24	.	.	.	.	19	22	.	.	.	.	41
2.25-2.49	.	.	.	.	4	11	3	.	.	.	18
2.50-2.74	.	.	.	.	.	7	4	.	.	.	11
2.75-2.99	.	.	.	.	.	3	1	.	.	.	4
3.00-3.24	.	.	.	.	.	2	6	.	.	.	8
3.25-3.49	.	.	.	.	.	.	2	.	.	.	2
3.50+							3				3
TOTAL	704	1606	1015	802	319	69	20	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.7 NO. OF CASES= 4256.

STATION M12 43.42N 87.67W 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	
0.00-0.24	506	783	143	69	4	.	.	.	.	.	1505
0.25-0.49	152	2143	665	244	44	.	.	.	.	.	3248
0.50-0.74	.	788	1709	588	155	6	.	.	.	.	3246
0.75-0.99	.	43	455	676	122	22	.	.	.	.	1318
1.00-1.24	.	.	280	479	229	39	1	.	.	.	1028
1.25-1.49	.	.	17	183	183	12	3	.	.	.	398
1.50-1.74	.	.	1	116	175	40	1	.	.	.	333
1.75-1.99	.	.	.	10	68	44	.	.	.	.	122
2.00-2.24	.	.	.	1	57	62	.	.	.	.	120
2.25-2.49	.	.	.	.	8	13	5	.	.	.	26
2.50-2.74	.	.	.	.	6	25	7	.	.	.	38
2.75-2.99	.	.	.	.	.	9	3	.	.	.	12
3.00-3.24	.	.	.	.	.	4	4	.	.	.	8
3.25-3.49	.	.	.	.	.	.	7	.	.	.	7
3.50+							10				10
TOTAL	658	3757	3270	2366	1051	276	41	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 10702.

STATION M12 43.42N 87.67W 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	
0.00-0.24	752	935	173	53	7	.	.	.	.	.	1920
0.25-0.49	185	2406	901	233	33	1	.	.	.	.	3759
0.50-0.74	.	1728	1768	747	97	10	.	.	.	.	4350
0.75-0.99	.	245	1180	854	187	43	.	.	.	.	2509
1.00-1.24	.	.	758	799	512	62	5	.	.	.	2136
1.25-1.49	.	.	117	413	393	28	2	.	.	.	953
1.50-1.74	.	.	24	337	370	79	8	.	.	.	818
1.75-1.99	.	.	1	45	223	79	4	.	.	.	352
2.00-2.24	.	.	.	6	202	136	8	.	.	.	352
2.25-2.49	.	.	.	.	48	80	9	.	.	.	137
2.50-2.74	.	.	.	.	31	116	9	.	.	.	156
2.75-2.99	.	.	.	.	.	49	12	.	.	.	61
3.00-3.24	.	.	.	.	.	35	13	.	.	.	48
3.25-3.49	.	.	.	.	.	10	19	.	.	.	29
3.50+	.	.	.	.	.	2	54	.	.	.	56
TOTAL	937	5314	4922	3487	2103	730	143	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 16516.

STATION M12 43.42N 87.67W 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	
0.00-0.24	541	346	51	24	4	.	.	.	.	.	966
0.25-0.49	174	1329	110	89	24	1	.	.	.	.	1727
0.50-0.74	.	2045	308	20	26	2	.	.	.	.	2401
0.75-0.99	.	188	712	37	8	.	.	.	.	.	945
1.00-1.24	.	.	563	52	11	1	.	.	.	.	627
1.25-1.49	.	.	234	40	22	.	.	.	.	.	296
1.50-1.74	.	.	62	116	41	9	1	.	.	.	229
1.75-1.99	.	.	.	33	22	10	.	.	.	.	65
2.00-2.24	.	.	.	13	27	25	.	.	.	.	65
2.25-2.49	.	.	.	.	12	13	1	.	.	.	26
2.50-2.74	.	.	.	1	7	9	2	.	.	.	19
2.75-2.99	.	.	.	.	.	6	1	.	.	.	7
3.00-3.24	.	.	.	.	1	6	4	.	.	.	11
3.25-3.49	.	.	.	.	.	1	3	.	.	.	4
3.50+	.	.	.	.	.	.	9	.	.	.	9
TOTAL	715	3908	2040	425	205	83	21	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 6937.

STATION M12 43.42N 87.67W 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	
0.00-0.24	528	262	49	33	7	.	.	.	.	.	879
0.25-0.49	165	895	60	115	33	.	.	.	.	.	1268
0.50-0.74	.	1860	192	21	41	8	.	.	.	.	2122
0.75-0.99	.	178	529	9	7	2	.	.	.	.	725
1.00-1.24	.	.	389	5	1	.	.	.	.	.	395
1.25-1.49	.	.	173	1	.	.	.	.	.	.	174
1.50-1.74	.	.	36	86	.	.	.	.	.	.	122
1.75-1.99	.	.	3	32	.	1	.	.	.	.	36
2.00-2.24	.	.	.	20	1	.	.	.	.	.	21
2.25-2.49	.	.	.	2	2	.	.	.	.	.	4
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	2	.	.	.	.	.	2
3.00-3.24	.	.	.	.	2	.	.	.	.	.	2
3.25-3.49	.	.	.	.	1	.	.	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	693	3195	1431	324	97	11	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 5389.

STATION M12 43.42N 87.67W 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	
0.00-0.24	470	207	34	32	7	1	.	.	.	.	751
0.25-0.49	204	759	51	134	49	5	.	.	.	.	1202
0.50-0.74	.	1298	50	31	66	10	.	.	.	.	1455
0.75-0.99	.	158	295	10	8	7	.	.	.	.	478
1.00-1.24	.	.	186	6	6	4	1	.	.	.	203
1.25-1.49	.	.	67	.	.	.	.	.	.	.	67
1.50-1.74	.	.	25	14	.	.	.	.	.	.	39
1.75-1.99	.	.	.	7	.	.	.	.	.	.	7
2.00-2.24	.	.	.	7	.	.	.	.	.	.	7
2.25-2.49	.	.	.	3	1	.	.	.	.	.	4
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	2	.	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	674	2422	708	244	141	27	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 3955.

STATION M12 43.42N 87.67W 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	
0.00-0.24	490	231	48	37	9	.	.	.	.	.	815
0.25-0.49	234	1054	88	167	84	.	.	.	.	.	1627
0.50-0.74	.	1650	40	59	116	23	.	.	.	.	1888
0.75-0.99	.	303	352	12	36	16	.	.	.	.	719
1.00-1.24	.	.	214	6	5	3	3	.	.	.	231
1.25-1.49	.	.	85		1			.	.	.	86
1.50-1.74	.	.	40	11	.	1	1	.	.	.	53
1.75-1.99	.	.	.	8	.	.	.	.	.	.	8
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	724	3238	867	301	251	43	4	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 5090.

STATION M12 43.42N 87.67W 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	
0.00-0.24	407	195	22	21	5	.	.	.	.	.	650
0.25-0.49	206	1093	79	141	68	1	.	.	.	.	1588
0.50-0.74	.	2210	137	81	151	21	.	.	.	.	2600
0.75-0.99	.	269	644	25	69	39	1	.	.	.	1047
1.00-1.24	.	.	454	8	17	32	9	.	.	.	520
1.25-1.49	.	.	186	.	.	11	3	.	.	.	200
1.50-1.74	.	.	28	52	.	2	3	.	.	.	85
1.75-1.99	.	.	.	11	.	.	5	.	.	.	16
2.00-2.24	.	.	.	5	.	.	.	2	.	.	7
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	613	3767	1550	344	310	106	21	2	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 6292.

STATION M12 43.42N 87.67W 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	
0.00-0.24	290	165	27	20	1	.	.	.	.	.	503
0.25-0.49	53	702	83	132	35	.	.	.	.	.	1005
0.50-0.74	.	2075	284	112	130	9	.	.	.	.	2610
0.75-0.99	.	115	886	50	118	45	.	.	.	.	1214
1.00-1.24	.	.	693	45	26	69	7	.	.	.	840
1.25-1.49	.	.	336	21	9	27	12	.	.	.	405
1.50-1.74	.	.	42	136	2	22	14	.	.	.	216
1.75-1.99	.	.	1	20	8	9	11	.	.	.	49
2.00-2.24	.	.	.	4	2	5	17	.	.	.	28
2.25-2.49	.	.	.	1	.	.	7	2	.	.	10
2.50-2.74	.	.	.	.	1	.	3	.	.	.	4
2.75-2.99	.	.	.	.	.	.	1	2	.	.	3
3.00-3.24	.	.	.	.	.	.	.	1	.	.	1
3.25-3.49	.	.	.	.	.	.	.	1	1	.	2
3.50+											0
TOTAL	343	3057	2352	541	332	186	72	6	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 6466.

STATION M12 43.42N 87.67W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

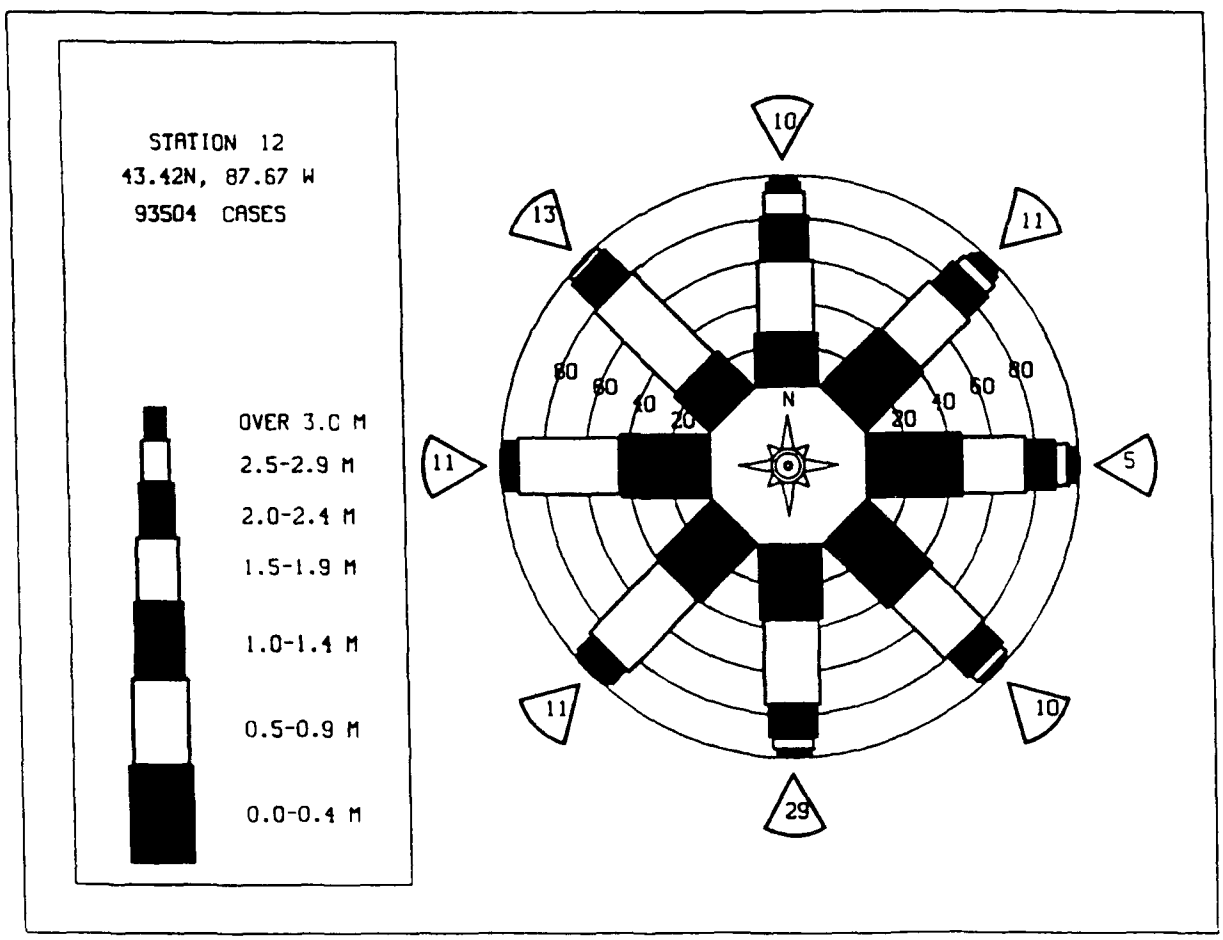
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	202	134	9	8	1	.	.	.	.	.	354
0.25-0.49	39	418	62	66	12	.	.	.	.	.	597
0.50-0.74	.	795	286	83	74	9	.	.	.	.	1247
0.75-0.99	.	27	429	71	63	22	.	.	.	.	612
1.00-1.24	.	.	304	161	53	42	1	.	.	.	561
1.25-1.49	.	.	84	175	14	14	3	.	.	.	290
1.50-1.74	.	.	14	179	17	13	3	.	.	.	226
1.75-1.99	.	.	.	38	37	5	4	.	.	.	84
2.00-2.24	.	.	.	6	69	.	3	.	.	.	78
2.25-2.49	.	.	.	.	25	.	2	2	.	.	29
2.50-2.74	.	.	.	.	21	3	1	1	.	.	26
2.75-2.99	.	.	.	.	4	5	1	1	.	.	11
3.00-3.24	.	.	.	.	.	5	2	1	.	.	8
3.25-3.49	.	.	.	.	.	6	1	.	.	.	7
3.50+											0
TOTAL	241	1374	1188	787	390	124	21	5	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 4.1 NO. OF CASES= 3885.

STATION M12 43.42N 87.67W 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	
0.00-0.24	719	503	78	38	5	.	.	.	.	.	1343
0.25-0.49	204	1549	274	179	42	.	.	.	.	.	2248
0.50-0.74	.	1708	824	231	105	10	.	.	.	.	2878
0.75-0.99	.	157	735	274	71	22	.	.	.	.	1259
1.00-1.24	.	.	487	346	107	28	2	.	.	.	970
1.25-1.49	.	.	136	187	109	11	2	.	.	.	445
1.50-1.74	.	.	27	199	116	19	4	.	.	.	365
1.75-1.99	.	.	.	28	91	19	2	.	.	.	140
2.00-2.24	.	.	.	7	92	35	3	.	.	.	137
2.25-2.49	.	.	.	.	31	21	3	.	.	.	55
2.50-2.74	.	.	.	.	17	36	3	.	.	.	56
2.75-2.99	.	.	.	.	1	19	3	.	.	.	23
3.00-3.24	.	.	.	.	.	17	4	.	.	.	21
3.25-3.49	.	.	.	.	.	4	6	.	.	.	10
3.50+	.	.	.	.	.	1	15	1	.	.	17
TOTAL	923	3917	2561	1489	787	242	47	1	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M12 (43.42N 87.67W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M12 (43.42N 87.67W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.6	2.9	3.1	2.1	1.9	1.4	1.2	2.5	2.3	3.0	2.7	4.0
1957	3.3	3.9	3.2	2.2	2.0	1.5	1.6	1.5	1.8	3.3	3.7	3.1
1958	3.3	3.0	2.5	2.6	2.5	1.5	1.3	1.9	3.1	2.1	4.2	3.1
1959	3.0	3.7	3.8	2.4	2.2	1.9	2.3	2.1	2.4	2.0	3.1	3.8
1960	3.2	5.9	3.3	3.5	2.5	1.3	1.8	1.7	1.7	2.0	3.6	3.4
1961	2.2	3.6	3.5	2.2	1.9	2.1	1.4	1.2	2.3	3.6	3.6	3.3
1962	2.9	3.5	2.4	2.0	2.0	1.6	1.3	1.6	2.1	1.9	4.2	2.8
1963	3.7	3.3	2.3	3.2	2.4	1.0	1.7	2.4	2.9	2.6	3.3	2.2
1964	4.1	3.4	3.6	4.6	2.8	1.5	2.3	1.7	3.8	2.5	3.8	3.3
1965	3.4	3.8	3.1	1.8	1.5	1.7	1.5	1.2	2.2	3.1	3.4	5.1
1966	3.0	2.6	2.7	2.3	2.1	1.7	1.2	1.7	1.9	3.3	4.1	2.8
1967	4.2	3.5	2.4	2.0	1.7	1.2	1.4	1.8	2.3	2.4	2.2	2.3
1968	2.8	2.7	3.0	2.5	1.9	1.6	1.5	1.5	2.0	2.5	2.8	4.3
1969	2.6	2.9	3.6	2.9	1.7	1.4	1.8	1.9	1.7	2.7	3.1	2.5
1970	2.3	3.7	3.1	2.8	2.2	2.1	1.8	2.1	3.1	3.2	3.9	4.7
1971	3.2	4.6	2.9	2.6	1.6	1.4	1.8	1.4	3.3	4.0	4.1	2.6
1972	4.6	2.8	3.7	2.8	1.9	2.0	1.3	1.4	2.6	3.0	3.8	3.5
1973	3.1	3.1	3.3	3.2	2.5	1.5	1.5	1.9	2.6	2.6	3.4	4.0
1974	2.7	4.8	3.4	3.2	1.7	2.0	1.5	1.7	2.5	2.7	2.5	3.6
1975	4.1	3.6	3.2	2.6	1.8	1.3	1.9	1.6	2.4	3.5	3.0	4.2
1976	4.0	3.9	3.4	3.3	1.7	1.5	1.7	1.7	1.8	2.1	2.8	2.8
1977	3.4	2.9	3.6	2.3	2.2	2.1	1.4	2.6	2.3	3.2	4.1	3.5
1978	3.4	3.0	3.0	2.5	3.3	2.0	1.2	1.8	2.2	2.4	3.4	3.8
1979	3.8	3.8	2.5	1.7	2.5	1.6	1.6	1.4	1.9	2.8	3.6	5.4
1980	3.7	2.7	2.8	2.6	2.1	1.6	1.1	1.7	2.0	3.2	2.1	3.5
1981	1.6	2.7	2.3	2.3	3.4	2.3	1.5	1.3	2.2	1.9	3.1	2.6
1982	3.4	2.5	2.5	2.7	1.4	1.1	1.2	1.2	1.8	2.4	2.4	2.7
1983	2.7	2.1	2.7	2.4	2.1	1.0	1.9	2.0	1.8	2.1	3.6	2.8
1984	2.3	5.5	3.2	2.5	1.5	2.0	1.2	1.2	2.9	2.8	2.9	4.6
1985	3.9	3.1	3.1	2.2	1.7	1.8	1.5	1.6	2.6	3.2	3.4	3.1
1986	3.3	2.9	2.9	1.9	2.2	1.9	1.7	1.6	2.0	2.0	3.4	2.5
1987	2.5	4.1	3.4	2.4	1.5	1.0	1.5	1.9	1.5	3.3	2.6	3.9

32 YR. STATISTICS FOR WIS STATION M12

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.2
LARGEST WAVE HS	(METERS)	5.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	41.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		60021018

STATION M13 43.55N 87.67W 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	
0.00-0.24	382	260	39	22	.	.	.	.	.	.	703
0.25-0.49	83	620	99	72	16	.	.	.	.	.	890
0.50-0.74	.	455	510	137	73	2	.	.	.	.	1177
0.75-0.99	.	9	393	95	44	8	.	.	.	.	549
1.00-1.24	.	.	424	195	36	23	.	.	.	.	678
1.25-1.49	.	.	29	326	14	12	1	.	.	.	382
1.50-1.74	.	.	3	304	18	11	1	.	.	.	337
1.75-1.99	.	.	.	72	47	1	2	.	.	.	122
2.00-2.24	.	.	.	14	93	10	2	.	.	.	119
2.25-2.49	.	.	.	.	43	12	3	.	.	.	58
2.50-2.74	.	.	.	.	25	17	10	1	.	.	53
2.75-2.99	.	.	.	.	5	3	3	.	.	.	11
3.00-3.24	.	.	.	.	4	6	5	.	.	.	15
3.25-3.49	.	.	.	.	.	4	4	5	.	.	13
3.50+	.	.	.	.	.	1	3	2	.	.	6
TOTAL	465	1344	1497	1237	418	110	34	8	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 4806.

STATION M13 43.55N 87.67W 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	
0.00-0.24	486	351	52	12	.	.	.	.	.	.	901
0.25-0.49	115	980	158	99	10	.	.	.	.	.	1362
0.50-0.74	.	549	752	170	47	2	.	.	.	.	1520
0.75-0.99	.	5	409	161	41	5	.	.	.	.	621
1.00-1.24	.	.	255	368	43	8	.	.	.	.	674
1.25-1.49	.	.	11	194	66	5	.	.	.	.	276
1.50-1.74	.	.	1	172	102	6	.	.	.	.	281
1.75-1.99	.	.	.	16	74	7	1	.	.	.	98
2.00-2.24	.	.	.	.	85	31	1	.	.	.	117
2.25-2.49	.	.	.	.	23	20	.	.	.	.	43
2.50-2.74	.	.	.	.	7	40	.	.	.	.	47
2.75-2.99	.	.	.	.	1	31	.	1	.	.	33
3.00-3.24	.	.	.	.	.	23	5	.	.	.	28
3.25-3.49	.	.	.	.	.	4	4	.	.	.	8
3.50+	.	.	.	.	.	.	17	4	.	.	21
TOTAL	601	1885	1638	1192	499	182	28	5	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.0 NO. OF CASES= 5659.

STATION M13 43.55N 87.67W 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	
0.00-0.24	688	522	82	32	.	.	.	.	.	.	1324
0.25-0.49	109	959	173	112	3	.	.	.	.	.	1356
0.50-0.74	.	395	735	157	34	.	.	.	.	.	1321
0.75-0.99	.	.	317	180	14	3	.	.	.	.	514
1.00-1.24	.	.	137	350	54	3	.	.	.	.	544
1.25-1.49	.	.	8	127	116	3	.	.	.	.	254
1.50-1.74	.	.	.	93	139	9	2	.	.	.	243
1.75-1.99	.	.	.	9	99	8	.	.	.	.	116
2.00-2.24	.	.	.	.	94	35	1	1	.	.	131
2.25-2.49	.	.	.	.	31	42	3	.	.	.	76
2.50-2.74	.	.	.	.	2	65	1	.	.	.	68
2.75-2.99	.	.	.	.	.	29	1	.	.	.	30
3.00-3.24	.	.	.	.	.	34	6	.	.	.	40
3.25-3.49	.	.	.	.	.	7	16	.	.	.	23
3.50+	.	.	.	.	.	.	21	1	.	.	22
TOTAL	797	1876	1452	1060	586	238	51	2	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.0 NO. OF CASES= 5686.

STATION M13 43.55N 87.67W 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	
0.00-0.24	386	289	44	19	.	.	.	.	.	.	738
0.25-0.49	59	412	93	63	8	.	.	.	.	.	635
0.50-0.74	.	217	371	72	24	1	.	.	.	.	685
0.75-0.99	.	.	147	101	5	2	.	.	.	.	255
1.00-1.24	.	.	51	181	20	.	.	.	.	.	252
1.25-1.49	.	.	5	63	63	.	.	.	.	.	131
1.50-1.74	.	.	.	47	77	5	.	.	.	.	129
1.75-1.99	.	.	.	3	48	3	1	.	.	.	55
2.00-2.24	.	.	.	.	52	11	.	.	.	.	63
2.25-2.49	.	.	.	.	17	9	.	.	.	.	26
2.50-2.74	.	.	.	.	2	24	1	.	.	.	27
2.75-2.99	.	.	.	.	.	7	.	.	.	.	7
3.00-3.24	.	.	.	.	.	6	1	.	.	.	7
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	445	918	711	549	316	68	5	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.9 NO. OF CASES= 2830.

STATION M13 43.55N 87.67W 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	
0.00-0.24	342	297	60	18	1	.	.	.	.	.	718
0.25-0.49	44	343	64	69	4	.	.	.	.	.	524
0.50-0.74	.	170	314	47	17	1	.	.	.	.	549
0.75-0.99	.	.	127	99	5	.	.	.	.	.	231
1.00-1.24	.	.	43	195	11	1	.	.	.	.	250
1.25-1.49	.	.	.	58	48	.	.	.	.	.	106
1.50-1.74	.	.	.	35	62	2	.	.	.	.	99
1.75-1.99	.	.	.	.	50	4	1	.	.	.	55
2.00-2.24	.	.	.	.	58	2	2	.	.	.	62
2.25-2.49	.	.	.	.	11	2	.	.	.	.	13
2.50-2.74	.	.	.	.	5	5	1	.	.	.	11
2.75-2.99	.	.	.	.	.	6	.	.	.	.	6
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	386	810	608	521	272	25	4	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 2468.

STATION M13 43.55N 87.67W 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	
0.00-0.24	327	266	58	19	1	.	.	.	.	.	671
0.25-0.49	62	356	57	43	3	.	.	.	.	.	521
0.50-0.74	.	191	255	27	9	.	.	.	.	.	482
0.75-0.99	.	2	94	73	4	2	.	.	.	.	175
1.00-1.24	.	.	53	143	32	.	.	.	.	.	228
1.25-1.49	.	.	3	51	42	.	.	.	.	.	96
1.50-1.74	.	.	.	20	55	2	.	.	.	.	77
1.75-1.99	.	.	.	.	34	9	.	.	.	.	43
2.00-2.24	.	.	.	.	25	8	1	.	.	.	34
2.25-2.49	.	.	.	.	6	4	1	.	.	.	11
2.50-2.74	.	.	.	.	1	7	1	.	.	.	9
2.75-2.99	.	.	.	.	.	.	2	.	.	.	2
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	389	815	520	376	212	33	5	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 2211.

STATION M13 43.55N 87.67W 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	
0.00-0.24	528	443	85	32	.	.	.	.	.	.	1088
0.25-0.49	110	650	159	73	5	.	.	.	.	.	997
0.50-0.74	.	312	474	113	10	.	.	.	.	.	909
0.75-0.99	.	12	163	194	13	.	.	.	.	.	382
1.00-1.24	.	.	83	225	60	.	.	.	.	.	368
1.25-1.49	.	.	7	75	75	.	.	.	.	.	157
1.50-1.74	.	.	.	37	82	8	.	.	.	.	127
1.75-1.99	.	.	.	1	19	18	.	.	.	.	38
2.00-2.24	.	.	.	.	13	12	.	.	.	.	25
2.25-2.49	.	.	.	.	3	6	4	.	.	.	13
2.50-2.74	.	.	.	.	2	8	4	.	.	.	14
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	2	4	.	.	.	6
3.25-3.49	.	.	.	.	.	.	3	.	.	.	3
3.50+											0
TOTAL	638	1417	971	750	282	55	15	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 3878.

STATION M13 43.55N 87.67W 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	
0.00-0.24	605	1101	245	113	10	.	.	.	.	.	2074
0.25-0.49	160	2069	809	299	80	2	.	.	.	.	3419
0.50-0.74	.	742	1597	725	211	12	.	.	.	.	3287
0.75-0.99	.	34	399	659	155	38	.	.	.	.	1285
1.00-1.24	.	.	237	456	291	59	3	.	.	.	1046
1.25-1.49	.	.	13	141	190	17	1	.	.	.	362
1.50-1.74	.	.	.	93	170	48	8	.	.	.	319
1.75-1.99	.	.	.	9	68	48	.	.	.	.	125
2.00-2.24	.	.	.	1	38	47	3	.	.	.	89
2.25-2.49	.	.	.	.	10	13	6	.	.	.	29
2.50-2.74	.	.	.	.	4	12	6	.	.	.	22
2.75-2.99	.	.	.	.	.	5	2	.	.	.	7
3.00-3.24	.	.	.	.	.	6	6	.	.	.	12
3.25-3.49	.	.	.	.	.	1	1	.	.	.	2
3.50+							8				8
TOTAL	765	3946	3300	2496	1227	308	44	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 11323.

STATION M13 43.55N 87.67W 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	
0.00-0.24	778	1485	327	79	6	.	.	.	.	.	2675
0.25-0.49	187	2629	1360	318	38	1	.	.	.	.	4533
0.50-0.74	.	1640	1945	1001	79	13	1	.	.	.	4679
0.75-0.99	.	258	1087	947	249	59	1	.	.	.	2601
1.00-1.24	.	.	704	819	657	72	14	.	.	.	2266
1.25-1.49	.	.	106	361	390	49	9	.	.	.	915
1.50-1.74	.	.	25	290	375	143	9	.	.	.	842
1.75-1.99	.	.	.	42	199	95	9	.	.	.	345
2.00-2.24	.	.	.	7	161	150	16	.	.	.	334
2.25-2.49	.	.	.	.	57	74	17	.	.	.	148
2.50-2.74	.	.	.	.	19	88	23	.	.	.	130
2.75-2.99	.	.	.	.	.	39	21	.	.	.	60
3.00-3.24	.	.	.	.	.	32	19	.	.	.	51
3.25-3.49	.	.	.	.	.	4	18	1	.	.	23
3.50+	.	.	.	.	.	2	45	3	.	.	50
TOTAL	965	6012	5554	3864	2230	821	202	4	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 18403.

STATION M13 43.55N 87.67W 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	
0.00-0.24	546	469	68	37	6	1	.	.	.	.	1127
0.25-0.49	197	1283	124	94	27	.	.	.	.	.	1725
0.50-0.74	.	1937	259	19	21	.	.	.	.	.	2236
0.75-0.99	.	167	637	20	10	1	.	.	.	.	835
1.00-1.24	.	.	496	36	14	1	.	.	.	.	547
1.25-1.49	.	.	231	19	13	.	.	.	.	.	263
1.50-1.74	.	.	57	84	20	2	.	.	.	.	163
1.75-1.99	.	.	.	25	12	9	.	.	.	.	46
2.00-2.24	.	.	.	5	17	24	3	.	.	.	49
2.25-2.49	.	.	.	3	4	6	3	.	.	.	16
2.50-2.74	.	.	.	.	2	4	5	.	.	.	11
2.75-2.99	.	.	.	.	.	3	2	.	.	.	5
3.00-3.24	.	.	.	.	1	4	1	.	.	.	6
3.25-3.49	.	.	.	.	.	.	2	.	.	.	2
3.50+	.	.	.	.	.	.	7	.	.	.	7
TOTAL	743	3856	1872	342	147	55	23	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 6600.

STATION M13 43.55N 87.67W 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	
0.00-0.24	606	346	72	66	8	.	.	.	.	.	1098
0.25-0.49	173	817	67	114	41	.	.	.	.	.	1212
0.50-0.74	.	1641	132	10	31	6	.	.	.	.	1820
0.75-0.99	.	158	417	8	6	1	.	.	.	.	590
1.00-1.24	.	1	309	6	1	1	.	.	.	.	318
1.25-1.49	.	.	109	1	.	.	.	.	.	.	110
1.50-1.74	.	.	20	54	.	.	.	.	.	.	74
1.75-1.99	.	.	1	26	.	1	.	.	.	.	28
2.00-2.24	.	.	.	7	.	2	.	.	.	.	9
2.25-2.49	.	.	.	1	1	.	.	.	.	.	2
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	2	.	.	.	.	.	2
3.00-3.24	.	.	.	.	4	.	.	.	.	.	4
3.25-3.49	.	.	.	.	1	.	.	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	779	2963	1127	293	96	11	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 4938.

STATION M13 43.55N 87.67W 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	
0.00-0.24	501	240	54	45	7	.	.	.	.	.	847
0.25-0.49	189	665	51	122	45	4	.	.	.	.	1076
0.50-0.74	.	1228	34	35	53	5	.	.	.	.	1355
0.75-0.99	.	134	252	9	4	8	.	.	.	.	407
1.00-1.24	.	.	152	2	2	1	.	.	.	.	157
1.25-1.49	.	.	45	.	.	.	.	.	.	.	45
1.50-1.74	.	.	23	9	.	.	.	.	.	.	32
1.75-1.99	.	.	.	9	.	.	.	.	.	.	9
2.00-2.24	.	.	.	5	.	.	.	.	.	.	5
2.25-2.49	.	.	.	.	2	.	.	.	.	.	2
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	690	2267	611	236	113	18	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 3694.

STATION M13 43.55N 87.67W 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	
0.00-0.24	622	285	64	58	11	.	.	.	.	.	1040
0.25-0.49	257	912	79	174	85	2	.	.	.	.	1509
0.50-0.74	.	1561	32	59	97	18	1	.	.	.	1768
0.75-0.99	.	271	318	7	18	8	.	.	.	.	622
1.00-1.24	.	.	189	5	7	4	1	.	.	.	206
1.25-1.49	.	.	77	.	.	.	.	.	.	.	77
1.50-1.74	.	.	26	10	.	1	.	.	.	.	37
1.75-1.99	.	.	.	4	.	.	.	.	.	.	4
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	879	3029	785	318	218	33	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.3 NO. OF CASES= 4934.

STATION M13 43.55N 87.67W 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	
0.00-0.24	449	245	45	51	3	.	.	.	.	.	793
0.25-0.49	160	1026	77	161	71	1	.	.	.	.	1496
0.50-0.74	.	2098	114	65	128	18	.	.	.	.	2423
0.75-0.99	.	235	591	9	57	32	1	.	.	.	925
1.00-1.24	.	.	401	5	8	26	8	.	.	.	448
1.25-1.49	.	.	154	.	.	4	2	.	.	.	160
1.50-1.74	.	.	16	31	.	3	2	.	.	.	52
1.75-1.99	.	.	.	10	.	.	2	.	.	.	12
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	609	3604	1398	332	267	84	15	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 5911.

STATION M13 43.55N 87.67W 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	
0.00-0.24	349	227	42	38	6	.	.	.	.	.	662
0.25-0.49	48	742	115	152	51	1	.	.	.	.	1109
0.50-0.74	.	1943	264	108	155	14	.	.	.	.	2484
0.75-0.99	.	100	781	33	104	48	.	.	.	.	1066
1.00-1.24	.	.	580	42	32	67	7	.	.	.	728
1.25-1.49	.	.	283	4	6	18	10	.	.	.	321
1.50-1.74	.	.	33	95	1	23	12	.	.	.	164
1.75-1.99	.	.	.	16	.	8	12	.	.	.	36
2.00-2.24	.	.	.	2	.	8	10	1	.	.	21
2.25-2.49	.	.	.	1	.	.	5	2	.	.	8
2.50-2.74	.	.	.	.	.	.	1	1	.	.	2
2.75-2.99	.	.	.	.	.	.	.	1	.	.	1
3.00-3.24	.	.	.	.	.	.	.	1	.	.	1
3.25-3.49	.	.	.	.	.	.	.	2	.	.	2
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	397	3012	2098	491	355	187	57	8	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 6194.

STATION M13 43.55N 87.67W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

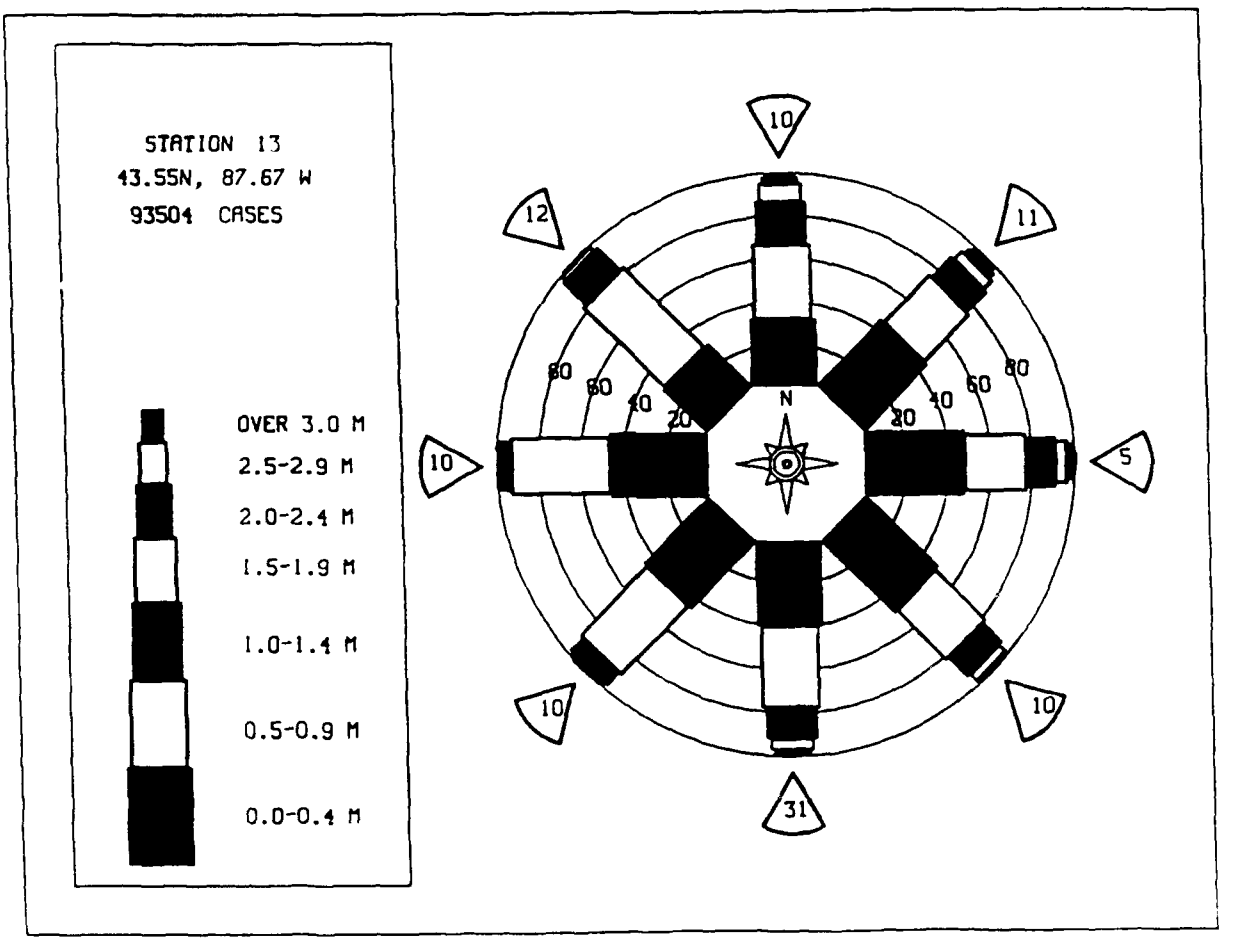
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	263	166	26	14	2	.	.	.	.	.	471
0.25-0.49	36	432	80	85	20	.	.	.	.	.	653
0.50-0.74	.	782	256	98	110	13	.	.	.	.	1259
0.75-0.99	.	37	420	38	31	22	.	.	.	.	608
1.00-1.24	.	.	368	111	43	45	.	.	.	.	567
1.25-1.49	.	.	94	146	20	14	3	.	.	.	267
1.50-1.74	.	.	11	167	9	26	5	.	.	.	218
1.75-1.99	.	.	.	40	20	4	4	.	.	.	68
2.00-2.24	.	.	.	6	49	3	3	.	.	.	61
2.25-2.49	.	.	.	.	12	.	2	1	.	.	15
2.50-2.74	.	.	.	.	16	.	.	2	.	.	18
2.75-2.99	.	.	.	.	4	1	4	1	.	.	10
3.00-3.24	.	.	.	.	2	2	1	1	.	.	6
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	299	1417	1255	705	388	130	22	5	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 4.0 NO. OF CASES= 3969.

STATION M13 43.55N 87.67W 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	
0.00-0.24	786	700	137	66	6	.	.	.	.	.	1695
0.25-0.49	199	1490	356	205	51	1	.	.	.	.	2302
0.50-0.74	.	1586	805	284	110	11	.	.	.	.	2796
0.75-0.99	.	142	656	264	82	24	.	.	.	.	1168
1.00-1.24	.	.	449	314	131	31	3	.	.	.	928
1.25-1.49	.	.	118	157	103	12	2	.	.	.	392
1.50-1.74	.	.	21	154	111	29	4	.	.	.	319
1.75-1.99	.	.	.	28	67	21	3	.	.	.	119
2.00-2.24	.	.	.	5	68	34	4	.	.	.	111
2.25-2.49	.	.	.	.	22	19	4	.	.	.	45
2.50-2.74	.	.	.	.	8	27	5	.	.	.	40
2.75-2.99	.	.	.	.	1	12	3	.	.	.	16
3.00-3.24	.	.	.	.	1	12	5	.	.	.	18
3.25-3.49	.	.	.	.	.	2	5	.	.	.	7
3.50+	.	.	.	.	.	.	10	1	.	.	11
TOTAL	985	3918	2542	1477	761	235	48	1	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M13 (43.55N 87.67W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M13 (43.55N 87.67W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.4	2.3	2.9	1.9	1.8	1.3	1.1	2.1	2.1	2.6	2.5	4.0
1957	3.2	3.5	3.1	2.2	1.9	1.4	1.5	1.3	1.6	3.0	3.4	2.7
1958	3.0	2.4	2.3	2.5	2.3	1.5	1.2	1.7	3.0	2.0	3.8	2.6
1959	2.8	3.6	3.3	2.2	2.0	1.7	2.1	1.6	2.2	1.8	3.0	3.5
1960	2.8	5.3	3.1	3.2	2.2	1.2	1.5	1.4	1.5	1.7	3.8	3.4
1961	2.0	3.3	3.3	2.0	1.5	1.8	1.2	1.2	2.3	3.6	3.6	3.1
1962	3.0	3.1	2.2	1.9	2.0	1.4	1.2	1.7	1.9	1.8	4.0	2.6
1963	3.6	3.0	2.3	3.1	2.1	1.0	1.5	2.2	2.6	2.5	3.2	2.0
1964	3.9	3.3	3.3	4.8	2.8	1.4	2.1	1.7	4.0	2.4	3.8	3.1
1965	3.2	3.7	2.8	1.7	1.4	1.7	1.5	1.0	2.0	2.7	3.6	4.6
1966	2.8	2.5	2.8	2.2	2.0	1.4	1.1	1.6	1.7	2.9	3.8	2.7
1967	3.9	3.6	2.3	2.0	1.5	1.1	1.2	1.7	2.1	2.4	2.2	2.0
1968	2.5	2.6	2.8	2.5	1.9	1.7	1.4	1.6	2.0	2.5	2.4	4.3
1969	2.6	2.9	3.3	2.8	1.5	1.3	1.6	1.9	1.6	2.6	2.9	2.4
1970	2.2	3.7	2.8	2.5	2.0	1.7	1.5	1.9	3.0	3.2	3.8	4.6
1971	3.0	4.1	2.8	2.5	1.5	1.2	1.8	1.4	3.3	3.7	4.5	2.5
1972	4.8	2.4	3.2	2.7	1.5	1.7	1.1	1.2	2.6	2.7	3.6	3.3
1973	3.0	2.9	2.9	3.0	2.2	1.4	1.4	1.7	2.3	2.8	3.1	3.8
1974	2.5	4.3	3.1	3.1	1.8	1.7	1.4	1.9	2.6	2.8	2.3	3.3
1975	4.2	3.6	3.0	2.4	1.7	1.3	1.8	1.7	2.2	3.6	2.9	4.2
1976	3.9	3.5	3.4	3.2	1.4	1.6	1.7	1.6	1.6	2.0	2.5	2.6
1977	3.2	2.5	3.7	2.0	2.2	1.9	1.3	2.8	2.4	3.1	4.1	3.4
1978	3.3	2.7	2.9	2.2	3.0	2.0	1.2	1.6	2.0	2.4	3.2	3.5
1979	3.4	3.6	2.3	1.7	2.3	1.4	1.3	1.3	1.9	2.5	3.6	4.9
1980	3.7	2.2	2.5	2.5	1.8	1.4	1.1	1.4	1.8	3.2	1.9	3.2
1981	1.6	2.5	2.0	1.9	3.0	2.1	1.4	1.2	1.7	1.9	3.0	2.6
1982	3.1	2.5	2.5	2.5	1.2	0.9	1.2	1.2	1.5	2.3	2.2	2.4
1983	2.3	2.4	2.5	2.2	1.9	1.0	2.0	1.8	1.9	1.7	3.4	2.5
1984	2.1	5.2	2.8	2.3	1.4	2.0	1.1	1.2	2.8	2.5	2.8	4.3
1985	3.5	2.8	2.8	2.0	1.6	1.8	1.5	1.5	2.4	2.9	3.2	2.7
1986	3.0	2.6	3.0	1.8	1.9	1.7	1.7	1.5	1.8	2.0	3.5	2.3
1987	2.2	3.8	3.4	2.1	1.4	0.8	1.2	1.6	1.5	2.9	2.5	3.3

32 YR. STATISTICS FOR WIS STATION M13

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.2
LARGEST WAVE HS	(METERS)	5.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	41.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		60021018

STATION M14 43.70N 87.66W 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	
0.00-0.24	437	344	83	41	3	.	.	.	.	.	908
0.25-0.49	68	634	147	140	21	.	.	.	.	.	1010
0.50-0.74	.	428	499	191	125	10	.	.	.	.	1253
0.75-0.99	.	3	328	52	66	14	.	.	.	.	463
1.00-1.24	.	.	490	57	44	29	.	.	.	.	620
1.25-1.49	.	.	83	164	11	13	2	.	.	.	273
1.50-1.74	.	.	5	197	16	18	2	.	.	.	238
1.75-1.99	.	.	.	54	10	14	3	.	.	.	81
2.00-2.24	.	.	.	32	22	25	3	.	.	.	82
2.25-2.49	.	.	.	1	9	8	9	.	.	.	27
2.50-2.74	.	.	.	.	7	3	6	.	.	.	16
2.75-2.99	.	.	.	.	2	.	6	.	.	.	8
3.00-3.24	.	.	.	.	.	3	6	2	.	.	11
3.25-3.49	.	.	.	.	1	.	1	.	.	.	2
3.50+	.	.	.	.	.	.	2	.	.	.	2
TOTAL	505	1409	1635	929	337	137	40	2	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 4693.

STATION M14 43.70N 87.66W 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	
0.00-0.24	452	332	58	32	2	.	.	.	.	.	876
0.25-0.49	103	835	146	103	8	.	.	.	.	.	1195
0.50-0.74	.	473	687	207	54	4	.	.	.	.	1425
0.75-0.99	.	4	355	179	31	5	.	.	.	.	574
1.00-1.24	.	.	258	239	45	8	.	.	.	.	550
1.25-1.49	.	.	27	156	52	5	.	.	.	.	240
1.50-1.74	.	.	.	115	87	11	.	.	.	.	213
1.75-1.99	.	.	.	11	53	7	2	.	.	.	73
2.00-2.24	.	.	.	2	50	40	3	.	.	.	95
2.25-2.49	.	.	.	.	17	16	.	.	.	.	33
2.50-2.74	.	.	.	.	.	27	.	.	.	.	27
2.75-2.99	.	.	.	.	1	12	1	.	.	.	14
3.00-3.24	.	.	.	.	.	19	3	.	.	.	22
3.25-3.49	.	.	.	.	.	1	4	.	.	.	5
3.50+	.	.	.	.	.	.	8	3	.	.	11
TOTAL	555	1644	1531	1044	400	155	21	3	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 5026.

STATION M14 43.70N 87.66W 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	
0.00-0.24	619	530	98	25	2	.	.	.	.	.	1274
0.25-0.49	98	981	176	101	8	.	.	.	.	.	1364
0.50-0.74	.	426	762	175	32	2	.	.	.	.	1397
0.75-0.99	.	2	301	233	16	2	.	.	.	.	554
1.00-1.24	.	.	155	382	70	4	.	.	.	.	611
1.25-1.49	.	.	9	93	147	1	.	.	.	.	250
1.50-1.74	.	.	.	89	155	6	1	.	.	.	251
1.75-1.99	.	.	.	3	110	19	1	.	.	.	133
2.00-2.24	.	.	.	1	78	55	2	.	.	.	136
2.25-2.49	.	.	.	.	21	23	1	1	.	.	46
2.50-2.74	.	.	.	.	7	59	2	.	.	.	68
2.75-2.99	.	.	.	.	.	29	3	.	.	.	32
3.00-3.24	.	.	.	.	.	28	3	1	.	.	32
3.25-3.49	.	.	.	.	.	2	11	.	.	.	13
3.50+	.	.	.	.	.	.	22	.	.	.	22
TOTAL	717	1939	1501	1102	646	230	46	2	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 5800.

STATION M14 43.70N 87.66W 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	
0.00-0.24	425	370	43	26	2	.	.	.	.	.	866
0.25-0.49	47	525	102	77	8	.	.	.	.	.	759
0.50-0.74	.	208	410	66	21	1	.	.	.	.	706
0.75-0.99	.	1	132	114	12	1	.	.	.	.	260
1.00-1.24	.	.	43	201	25	.	.	.	.	.	269
1.25-1.49	.	.	1	54	68	2	.	.	.	.	125
1.50-1.74	.	.	.	39	84	2	.	.	.	.	125
1.75-1.99	.	.	.	3	52	10	1	.	.	.	66
2.00-2.24	.	.	.	.	33	8	1	.	.	.	42
2.25-2.49	.	.	.	.	13	8	.	.	.	.	21
2.50-2.74	.	.	.	.	.	21	1	.	.	.	22
2.75-2.99	.	.	.	.	.	4	1	.	.	.	5
3.00-3.24	.	.	.	.	.	2	2	.	.	.	4
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	472	1104	731	580	318	59	7	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 3074.

STATION M14 43.70N 87.66W 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	
0.00-0.24	358	330	66	28	2	.	.	.	.	.	784
0.25-0.49	49	393	80	72	6	.	.	.	.	.	600
0.50-0.74	.	199	332	44	12	1	.	.	.	.	588
0.75-0.99	.	1	126	95	3	.	.	.	.	.	225
1.00-1.24	.	.	42	172	21	1	.	.	.	.	236
1.25-1.49	.	.	.	44	35	.	.	.	.	.	79
1.50-1.74	.	.	.	21	70	2	.	.	.	.	93
1.75-1.99	.	.	.	1	42	1	1	.	.	.	45
2.00-2.24	.	.	.	.	33	2	1	.	.	.	36
2.25-2.49	.	.	.	.	10	.	.	.	.	.	10
2.50-2.74	.	.	.	.	2	6	.	.	.	.	8
2.75-2.99	.	.	.	.	.	5	.	.	.	.	5
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	407	923	646	477	236	19	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 2548.

STATION M14 43.70N 87.66W 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	
0.00-0.24	284	245	53	17	.	.	.	.	.	.	599
0.25-0.49	52	308	57	35	3	.	.	.	.	.	455
0.50-0.74	.	150	219	24	5	1	.	.	.	.	399
0.75-0.99	.	1	86	78	4	.	.	.	.	.	169
1.00-1.24	.	.	39	124	22	.	.	.	.	.	185
1.25-1.49	.	.	2	47	47	1	.	.	.	.	97
1.50-1.74	.	.	.	14	42	3	.	.	.	.	59
1.75-1.99	.	.	.	1	21	10	.	.	.	.	32
2.00-2.24	.	.	.	.	18	7	2	.	.	.	27
2.25-2.49	.	.	.	.	8	3	.	.	.	.	11
2.50-2.74	.	.	.	.	.	3	2	.	.	.	5
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	336	704	456	340	170	30	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 1920.

STATION M14 43.70N 87.66W 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	
0.00-0.24	407	404	94	36	1	.	.	.	.	.	942
0.25-0.49	84	546	143	65	9	1	.	.	.	.	848
0.50-0.74	.	238	451	133	5	.	.	.	.	.	827
0.75-0.99	.	8	116	179	14	.	.	.	.	.	317
1.00-1.24	.	.	68	193	63	.	.	.	.	.	324
1.25-1.49	.	.	6	49	60	3	.	.	.	.	118
1.50-1.74	.	.	.	33	64	6	.	.	.	.	103
1.75-1.99	.	.	.	3	12	5	.	.	.	.	20
2.00-2.24	.	.	.	.	10	9	3	.	.	.	22
2.25-2.49	.	.	.	.	5	1	2	.	.	.	8
2.50-2.74	.	.	.	.	1	4	4	.	.	.	9
2.75-2.99	.	.	.	.	.	2	2	.	.	.	4
3.00-3.24	.	.	.	.	.	.	2	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	491	1196	878	691	244	31	13	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 3329.

STATION M14 43.70N 87.66W 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	
0.00-0.24	487	1210	370	126	16	.	.	.	.	.	2209
0.25-0.49	158	1827	919	317	104	2	.	.	.	.	3327
0.50-0.74	.	592	1432	821	266	32	1	.	.	.	3144
0.75-0.99	.	39	342	658	186	67	.	.	.	.	1292
1.00-1.24	.	.	209	411	309	75	11	.	.	.	1015
1.25-1.49	.	.	11	113	220	28	5	.	.	.	377
1.50-1.74	.	.	.	72	146	49	8	.	.	.	275
1.75-1.99	.	.	.	5	48	40	3	.	.	.	96
2.00-2.24	.	.	.	.	44	48	6	.	.	.	98
2.25-2.49	.	.	.	.	11	8	3	.	.	.	22
2.50-2.74	.	.	.	.	2	14	4	.	.	.	20
2.75-2.99	.	.	.	.	.	5	4	.	.	.	9
3.00-3.24	.	.	.	.	.	6	2	.	.	.	8
3.25-3.49	.	.	.	.	.	1	3	.	.	.	4
3.50+	.	.	.	.	.	.	2	.	.	.	2
TOTAL	645	3668	3283	2523	1352	375	52	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 11147.

STATION M14 43.70N 87.66W 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	
0.00-0.24	875	2044	588	101	4	.	.	.	.	.	3612
0.25-0.49	217	2720	1863	387	62	2	.	.	.	.	5251
0.50-0.74	.	1590	2070	1347	114	28	1	.	.	.	5150
0.75-0.99	.	248	953	953	345	70	6	.	.	.	2575
1.00-1.24	.	.	688	778	779	78	21	.	.	.	2345
1.25-1.49	.	.	100	318	403	66	8	.	.	.	895
1.50-1.74	.	.	31	260	365	182	10	.	.	.	848
1.75-1.99	.	.	.	37	178	96	7	.	.	.	318
2.00-2.24	.	.	.	5	157	161	24	.	.	.	347
2.25-2.49	.	.	.	1	49	71	21	.	.	.	142
2.50-2.74	.	.	.	.	9	73	29	.	.	.	111
2.75-2.99	.	.	.	.	.	37	23	.	.	.	60
3.00-3.24	.	.	.	.	.	20	26	1	.	.	47
3.25-3.49	.	.	.	.	.	4	12	1	.	.	17
3.50+	.	.	.	.	.	2	36	6	.	.	44
TOTAL	1092	6602	6294	4167	2465	890	224	8	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 20376.

STATION M14 43.70N 87.66W 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	
0.00-0.24	636	659	134	58	7	.	.	.	.	.	1494
0.25-0.49	177	1144	137	93	27	.	.	.	.	.	1578
0.50-0.74	.	1829	209	24	11	.	.	.	.	.	2073
0.75-0.99	.	186	571	27	8	.	.	.	.	.	792
1.00-1.24	.	.	441	28	12	1	.	.	.	.	482
1.25-1.49	.	.	187	29	7	.	1	.	.	.	224
1.50-1.74	.	.	43	82	17	3	2	.	.	.	147
1.75-1.99	.	.	.	17	4	7	1	.	.	.	29
2.00-2.24	.	.	.	4	14	10	3	.	.	.	31
2.25-2.49	.	.	.	1	1	5	6	.	.	.	13
2.50-2.74	.	.	.	.	2	1	4	.	.	.	7
2.75-2.99	.	.	.	.	2	1	2	.	.	.	5
3.00-3.24	.	.	.	.	1	1	5	.	.	.	7
3.25-3.49	.	.	.	.	1	.	2	.	.	.	3
3.50+	.	.	.	.	.	1	4	.	.	.	5
TOTAL	813	3818	1722	363	114	30	30	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.3 NO. OF CASES= 6463.

STATION M14 43.70N 87.66W 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	
0.00-0.24	713	506	131	88	10	1	.	.	.	.	1449
0.25-0.49	167	783	44	113	37	.	.	.	.	.	1144
0.50-0.74	.	1479	119	7	28	2	.	.	.	.	1635
0.75-0.99	.	159	350	2	4	.	.	.	.	.	515
1.00-1.24	.	.	242	2	.	.	.	.	.	.	244
1.25-1.49	.	.	105	1	.	.	.	.	.	.	106
1.50-1.74	.	.	12	39	.	.	.	.	.	.	51
1.75-1.99	.	.	.	11	.	.	.	.	.	.	11
2.00-2.24	.	.	.	5	.	.	.	.	.	.	5
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	2	.	.	.	.	.	2
2.75-2.99	.	.	.	.	3	.	.	.	.	.	3
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	880	2927	1003	268	84	3	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 4844.

STATION M14 43.70N 87.66W 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	
0.00-0.24	564	296	80	78	5	.	.	.	.	.	1023
0.25-0.49	174	597	47	137	59	3	.	.	.	.	1017
0.50-0.74	.	1082	20	22	39	7	.	.	.	.	1170
0.75-0.99	.	140	213	2	4	2	.	.	.	.	361
1.00-1.24	.	.	122	4	3	2	.	.	.	.	133
1.25-1.49	.	.	33	.	1	.	.	.	.	.	34
1.50-1.74	.	.	11	6	.	.	.	.	.	.	17
1.75-1.99	.	.	.	6	.	.	.	.	.	.	6
2.00-2.24	.	.	.	3	.	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	738	2115	526	258	111	14	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 3529.

STATION M14 43.70N 87.66W 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	
0.00-0.24	651	377	111	90	13	.	.	.	.	.	1242
0.25-0.49	247	903	74	164	75	2	.	.	.	.	1465
0.50-0.74	.	1613	26	39	69	14	.	.	.	.	1761
0.75-0.99	.	244	298	5	10	8	.	.	.	.	565
1.00-1.24	.	.	154	2	2	2	1	.	.	.	161
1.25-1.49	.	.	71	.	.	.	.	.	.	.	71
1.50-1.74	.	.	25	5	.	1	.	.	.	.	31
1.75-1.99	.	.	.	3	.	.	.	.	.	.	3
2.00-2.24	.	.	.	1	.	1	.	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	898	3137	759	309	169	28	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.2 NO. OF CASES= 4971.

STATION M14 43.70N 87.66W 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	
0.00-0.24	497	304	66	68	7	.	.	.	.	.	942
0.25-0.49	154	990	69	145	74	1	.	.	.	.	1433
0.50-0.74	.	1932	80	47	116	14	.	.	.	.	2189
0.75-0.99	.	209	533	6	53	24	.	.	.	.	825
1.00-1.24	.	.	304	1	4	20	1	.	.	.	330
1.25-1.49	.	.	124	1	1	.	2	.	.	.	128
1.50-1.74	.	.	11	32	.	2	3	.	.	.	48
1.75-1.99	.	.	.	4	.	.	.	.	.	.	4
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	651	3435	1187	305	255	61	6	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 5529.

STATION M14 43.70N 87.66W 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	
0.00-0.24	449	272	88	57	3	.	.	.	.	.	869
0.25-0.49	48	702	118	171	59	1	.	.	.	.	1099
0.50-0.74	.	1881	232	70	150	21	.	.	.	.	2354
0.75-0.99	.	75	664	24	84	53	.	.	.	.	900
1.00-1.24	.	.	503	16	38	52	10	.	.	.	619
1.25-1.49	.	.	220	2	3	14	4	.	.	.	243
1.50-1.74	.	.	18	60	1	11	17	.	.	.	107
1.75-1.99	.	.	.	9	1	5	6	.	.	.	21
2.00-2.24	.	.	.	6	.	.	7	2	.	.	15
2.25-2.49	.	.	.	.	.	.	1	1	.	.	2
2.50-2.74	.	.	.	.	.	.	.	2	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	1	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	497	2930	1843	415	339	157	45	6	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 5845.

STATION M14 43.70N 87.66W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

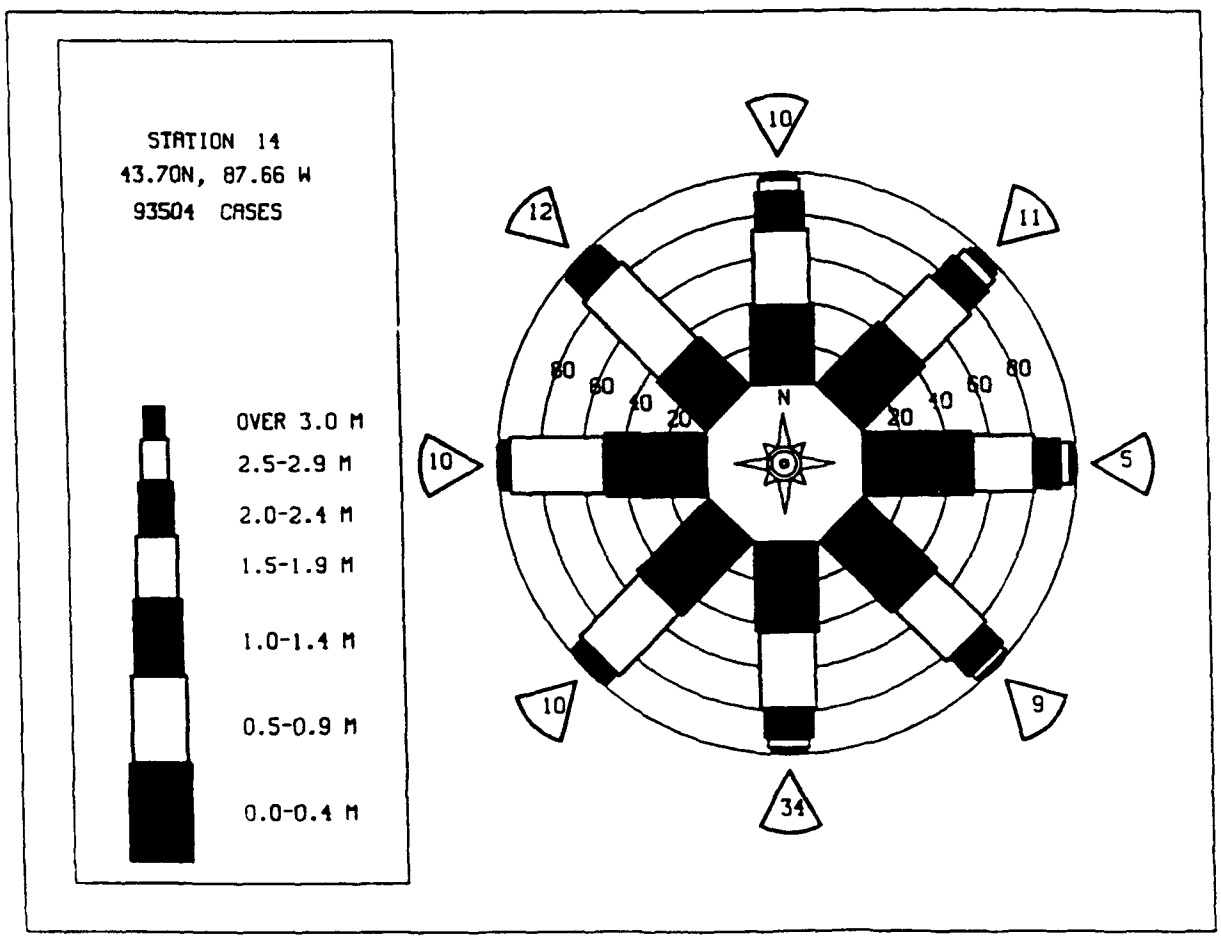
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	332	256	64	38	3	.	.	.	.	.	693
0.25-0.49	48	536	117	133	33	.	.	.	.	.	867
0.50-0.74	.	830	268	119	155	11	.	.	.	.	1383
0.75-0.99	.	38	426	25	97	26	.	.	.	.	612
1.00-1.24	.	.	435	23	38	47	2	.	.	.	545
1.25-1.49	.	.	125	99	10	28	2	.	.	.	264
1.50-1.74	.	.	11	145	4	27	10	.	.	.	197
1.75-1.99	.	.	.	41	6	9	3	.	.	.	59
2.00-2.24	.	.	.	14	12	7	8	.	.	.	41
2.25-2.49	.	.	.	1	6	.	3	1	.	.	11
2.50-2.74	.	.	.	.	4	.	4	2	.	.	10
2.75-2.99	.	.	.	.	3	.	1	2	.	.	6
3.00-3.24	.	.	.	.	1	.	1	1	.	.	3
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	380	1660	1446	638	372	156	34	6	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 4410.

STATION M14 43.70N 87.66W 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	
0.00-0.24	819	848	213	91	8	.	.	.	.	.	1979
0.25-0.49	189	1443	424	225	60	1	.	.	.	.	2342
0.50-0.74	.	1495	782	334	120	15	.	.	.	.	2746
0.75-0.99	.	136	580	263	94	27	.	.	.	.	1100
1.00-1.24	.	.	420	263	148	32	4	.	.	.	867
1.25-1.49	.	.	111	117	107	16	2	.	.	.	353
1.50-1.74	.	.	17	121	105	32	5	.	.	.	280
1.75-1.99	.	.	.	21	54	22	2	.	.	.	99
2.00-2.24	.	.	.	7	47	37	6	.	.	.	97
2.25-2.49	.	.	.	.	15	14	4	.	.	.	33
2.50-2.74	.	.	.	.	3	21	5	.	.	.	29
2.75-2.99	.	.	.	.	1	9	4	.	.	.	14
3.00-3.24	.	.	.	.	.	8	5	.	.	.	13
3.25-3.49	.	.	.	.	.	.	3	.	.	.	3
3.50+	.	.	.	.	.	.	7	.	.	.	7
TOTAL	1008	3922	2547	1442	762	234	47	0	0	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M14 (43.70N 87.66W)

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M14 (43.70N 87.66W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.3	2.3	2.9	1.6	1.7	1.2	1.1	1.8	1.8	2.2	2.2	3.4
1957	2.9	3.2	2.9	1.9	1.7	1.3	1.2	1.2	1.4	2.7	3.0	2.6
1958	2.7	2.8	1.9	2.4	2.1	1.3	1.2	1.6	2.8	1.8	3.6	2.2
1959	2.3	3.7	3.0	2.0	1.8	1.6	1.8	1.5	2.3	1.8	2.7	3.5
1960	2.4	4.7	2.7	2.5	1.7	0.9	1.2	1.3	1.3	1.7	3.9	3.4
1961	2.0	3.1	3.1	2.0	1.3	1.6	1.1	1.1	2.2	3.5	3.5	3.1
1962	3.4	3.1	2.0	1.9	1.9	1.2	1.1	1.5	1.7	1.6	3.9	2.4
1963	3.5	2.8	2.2	3.0	1.8	0.9	1.4	2.1	2.1	2.5	2.9	1.9
1964	3.8	3.1	3.0	5.3	2.6	1.4	1.6	1.6	3.9	2.2	3.7	3.0
1965	3.5	3.5	2.8	1.7	1.6	1.6	1.3	1.0	1.7	2.5	3.7	4.4
1966	2.8	2.1	2.6	2.2	1.8	1.1	1.1	1.5	1.4	3.0	3.4	2.6
1967	3.6	3.8	2.2	2.0	1.5	1.0	1.1	1.6	1.9	2.3	2.2	1.9
1968	2.5	2.4	2.5	2.4	1.9	2.0	1.6	1.7	2.0	2.5	2.2	4.3
1969	3.2	3.0	3.0	2.5	1.4	1.2	1.5	2.1	1.8	2.6	3.0	2.4
1970	2.1	3.4	2.5	2.6	1.7	1.4	1.3	1.7	3.0	2.9	3.7	4.6
1971	2.8	4.0	2.7	2.4	1.4	1.0	1.9	1.7	3.3	3.4	4.0	2.3
1972	4.8	2.2	3.0	2.7	1.4	1.4	1.1	1.1	2.6	2.4	3.5	3.1
1973	3.1	3.1	2.6	3.3	1.9	1.3	1.3	1.7	2.2	2.8	3.0	3.6
1974	2.5	3.9	2.7	2.9	1.8	1.6	1.3	2.1	2.7	2.8	2.2	3.1
1975	4.2	3.6	2.7	2.1	1.6	1.2	1.7	1.9	1.9	3.3	3.2	3.9
1976	4.0	3.3	2.8	3.1	1.4	1.7	1.8	1.4	1.7	2.0	2.1	2.4
1977	3.1	2.5	3.8	1.8	2.0	1.7	1.3	3.2	2.7	2.9	3.8	3.0
1978	3.4	2.4	2.8	2.1	2.7	2.0	1.2	1.6	1.9	2.4	3.2	3.2
1979	3.3	3.1	2.1	1.7	2.3	1.4	1.2	1.3	1.9	2.5	3.3	4.4
1980	3.5	2.2	2.2	2.1	1.6	1.2	1.0	1.4	1.7	3.2	1.7	3.1
1981	1.7	2.3	1.7	1.8	2.5	1.9	1.2	1.2	1.6	1.8	2.9	2.6
1982	3.1	2.8	2.6	2.1	1.2	0.8	1.3	1.2	1.4	2.3	2.3	2.3
1983	2.1	2.8	2.1	2.1	1.8	1.0	1.7	1.6	1.9	1.6	3.4	2.3
1984	2.0	4.8	2.5	2.1	1.2	2.0	1.0	1.3	2.6	2.4	2.5	4.0
1985	3.1	2.5	2.8	2.0	1.4	1.7	1.3	1.5	2.3	2.7	3.0	2.5
1986	2.9	2.5	2.9	1.7	1.6	1.4	1.8	1.5	1.8	2.1	3.7	2.3
1987	2.0	3.5	3.3	1.9	1.2	0.7	1.1	1.5	1.5	2.6	2.3	2.8

32 YR. STATISTICS FOR WIS STATION M14

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.2
LARGEST WAVE HS	(METERS)	5.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	189.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		64041321

STATION M15 43.85N 87.65W 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	
0.00-0.24	456	290	68	37	1	.	.	.	.	.	852
0.25-0.49	72	532	175	144	40	.	.	.	.	.	963
0.50-0.74	.	756	270	165	121	16	.	.	.	.	1328
0.75-0.99	.	1	302	93	93	26	.	.	.	.	515
1.00-1.24	.	.	311	23	57	43	1	.	.	.	435
1.25-1.49	.	.	109	20	35	16	.	.	.	.	180
1.50-1.74	.	.	22	65	38	38	5	.	.	.	168
1.75-1.99	.	.	.	32	2	28	3	.	.	.	65
2.00-2.24	.	.	.	2	4	19	7	.	.	.	32
2.25-2.49	.	.	.	3	1	3	5	.	.	.	12
2.50-2.74	.	.	.	.	.	1	12	.	.	.	13
2.75-2.99	.	.	.	.	.	.	1	.	.	.	1
3.00-3.24	.	.	.	.	.	.	2	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	528	1579	1257	584	392	190	36	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 4287.

STATION M15 43.85N 87.65W 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	
0.00-0.24	397	223	54	31	4	.	.	.	.	.	709
0.25-0.49	78	568	134	128	18	.	.	.	.	.	926
0.50-0.74	.	491	476	208	69	7	.	.	.	.	1251
0.75-0.99	.	4	267	155	34	6	.	.	.	.	466
1.00-1.24	.	.	168	182	56	19	1	.	.	.	426
1.25-1.49	.	.	25	78	53	5	.	.	.	.	161
1.50-1.74	.	.	4	52	77	7	.	.	.	.	140
1.75-1.99	.	.	.	8	29	14	2	.	.	.	53
2.00-2.24	.	.	.	2	16	32	1	.	.	.	51
2.25-2.49	.	.	.	.	6	8	3	.	.	.	17
2.50-2.74	.	.	.	.	2	14	2	.	.	.	18
2.75-2.99	.	.	.	.	.	5	1	.	.	.	6
3.00-3.24	.	.	.	.	.	3	2	.	.	.	5
3.25-3.49	.	.	.	.	.	.	3	1	.	.	4
3.50+	.	.	.	.	.	.	7	2	.	.	9
TOTAL	475	1286	1128	844	364	120	22	3	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 3987.

STATION M15 43.85N 87.65W 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	
0.00-0.24	608	432	78	43	2	.	.	.	.	.	1163
0.25-0.49	144	1126	177	117	10	.	.	.	.	.	1574
0.50-0.74	.	543	890	187	37	3	.	.	.	.	1660
0.75-0.99	.	3	374	263	14	.	.	.	.	.	654
1.00-1.24	.	.	203	434	81	1	.	.	.	.	719
1.25-1.49	.	.	12	157	176	.	.	.	.	.	345
1.50-1.74	.	.	.	114	198	8	.	.	.	.	320
1.75-1.99	.	.	.	7	106	33	1	.	.	.	147
2.00-2.24	.	.	.	.	63	70	7	.	.	.	140
2.25-2.49	.	.	.	.	26	47	1	.	.	.	74
2.50-2.74	.	.	.	.	5	47	8	.	.	.	60
2.75-2.99	.	.	.	.	.	23	3	.	.	.	26
3.00-3.24	.	.	.	.	.	20	10	.	.	.	30
3.25-3.49	.	.	.	.	.	.	9	1	.	.	10
3.50+	.	.	.	.	.	.	36	.	.	.	36
TOTAL	752	2104	1734	1322	718	252	75	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.0 NO. OF CASES= 6524.

STATION M15 43.85N 87.65W 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	
0.00-0.24	481	339	83	26	1	.	.	.	.	.	930
0.25-0.49	66	640	113	73	11	.	.	.	.	.	903
0.50-0.74	.	237	478	72	23	1	.	.	.	.	811
0.75-0.99	.	1	142	118	9	1	.	.	.	.	271
1.00-1.24	.	.	60	212	36	1	.	.	.	.	309
1.25-1.49	.	.	4	48	58	3	.	.	.	.	113
1.50-1.74	.	.	.	43	74	.	.	.	.	.	117
1.75-1.99	.	.	.	1	38	8	1	.	.	.	48
2.00-2.24	.	.	.	.	39	11	1	.	.	.	51
2.25-2.49	.	.	.	.	8	11	.	.	.	.	19
2.50-2.74	.	.	.	.	1	16	.	.	.	.	17
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	547	1217	880	593	298	56	3	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 3377.

STATION M15 43.85N 87.65W 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	
0.00-0.24	414	386	81	41	2	.	.	.	.	.	924
0.25-0.49	74	494	88	67	12	.	.	.	.	.	735
0.50-0.74	.	187	280	44	9	3	.	.	.	.	523
0.75-0.99	.	3	102	82	8	.	.	.	.	.	195
1.00-1.24	.	.	40	117	10	.	.	.	.	.	167
1.25-1.49	.	.	1	36	41	.	.	.	.	.	78
1.50-1.74	.	.	.	16	68	.	.	.	.	.	84
1.75-1.99	.	.	.	.	29	.	.	.	.	.	29
2.00-2.24	.	.	.	.	22	.	.	.	.	.	22
2.25-2.49	.	.	.	.	6	1	.	.	.	.	7
2.50-2.74	.	.	.	.	3	7	.	.	.	.	10
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	488	1070	592	403	210	12	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.6 NO. OF CASES= 2609.

STATION M15 43.85N 87.65W 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	
0.00-0.24	272	248	59	29	1	.	.	.	.	.	609
0.25-0.49	56	288	41	48	4	.	.	.	.	.	437
0.50-0.74	.	145	183	24	6	.	.	.	.	.	358
0.75-0.99	.	.	63	51	2	.	.	.	.	.	116
1.00-1.24	.	.	50	95	22	.	.	.	.	.	167
1.25-1.49	.	.	1	32	29	1	.	.	.	.	63
1.50-1.74	.	.	.	24	38	2	.	.	.	.	64
1.75-1.99	.	.	.	1	17	5	1	.	.	.	24
2.00-2.24	.	.	.	.	20	4	1	.	.	.	25
2.25-2.49	.	.	.	.	4	2	1	.	.	.	7
2.50-2.74	.	.	.	.	.	6	1	.	.	.	7
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	328	681	397	304	143	21	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 1769.

STATION M15 43.85N 87.65W 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	
0.00-0.24	362	337	79	31	1	.	.	.	.	.	810
0.25-0.49	84	498	156	48	8	.	.	.	.	.	795
0.50-0.74	.	245	404	129	10	.	.	.	.	.	788
0.75-0.99	.	5	114	132	12	.	.	.	.	.	263
1.00-1.24	.	.	67	134	59	1	.	.	.	.	261
1.25-1.49	.	.	4	45	51	2	.	.	.	.	102
1.50-1.74	.	.	.	25	40	7	.	.	.	.	72
1.75-1.99	.	.	.	3	14	4	.	.	.	.	21
2.00-2.24	.	.	.	.	9	5	4	.	.	.	18
2.25-2.49	.	.	.	.	3	1	4	.	.	.	8
2.50-2.74	.	.	.	.	.	3	2	.	.	.	5
2.75-2.99	.	.	.	.	.	1	1	.	.	.	2
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	446	1086	824	547	207	25	11	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 2958.

STATION M15 43.85N 87.65W 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	
0.00-0.24	494	1059	381	116	21	.	.	.	.	.	2071
0.25-0.49	177	1559	936	348	127	5	.	.	.	.	3152
0.50-0.74	.	552	1270	880	341	52	1	.	.	.	3096
0.75-0.99	.	40	291	668	208	90	8	.	.	.	1305
1.00-1.24	.	.	161	363	352	89	25	.	.	.	990
1.25-1.49	.	.	19	105	190	39	9	.	.	.	362
1.50-1.74	.	.	.	66	127	57	8	1	.	.	259
1.75-1.99	.	.	.	4	52	32	5	.	.	.	93
2.00-2.24	.	.	.	.	42	41	4	.	.	.	87
2.25-2.49	.	.	.	.	8	9	8	.	.	.	25
2.50-2.74	.	.	.	.	.	10	5	.	.	.	15
2.75-2.99	.	.	.	.	.	4	4	.	.	.	8
3.00-3.24	.	.	.	.	.	7	1	.	.	.	8
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	671	3210	3058	2550	1468	435	79	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 4.2 NO. OF CASES= 10752.

STATION M15 43.85N 87.65W 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	
0.00-0.24	851	2257	757	110	7	.	.	.	.	.	3982
0.25-0.49	247	2579	2210	484	69	8	.	.	.	.	5597
0.50-0.74	.	1555	1994	1623	139	33	2	.	.	.	5346
0.75-0.99	.	240	947	1003	422	86	16	.	.	.	2714
1.00-1.24	.	.	622	725	818	95	40	.	.	.	2300
1.25-1.49	.	.	95	329	367	112	12	.	.	.	915
1.50-1.74	.	.	26	280	329	179	21	.	.	.	835
1.75-1.99	.	.	1	47	166	129	21	.	.	.	364
2.00-2.24	.	.	.	5	148	141	32	1	.	.	327
2.25-2.49	.	.	.	.	54	69	32	.	.	.	155
2.50-2.74	.	.	.	.	8	67	44	.	.	.	119
2.75-2.99	.	.	.	.	.	28	22	.	.	.	50
3.00-3.24	.	.	.	.	.	13	25	2	.	.	40
3.25-3.49	.	.	.	.	.	3	11	4	.	.	18
3.50+	.	.	.	.	.	1	33	7	.	.	41
TOTAL	1098	6631	6652	4606	2527	964	311	14	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 21346.

STATION M15 43.85N 87.65W 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	
0.00-0.24	776	693	155	87	8	.	.	.	.	.	1719
0.25-0.49	262	1153	127	85	40	1	.	.	.	.	1668
0.50-0.74	.	1885	235	17	11	.	.	.	.	.	2148
0.75-0.99	.	178	601	22	10	1	.	.	.	.	812
1.00-1.24	.	.	472	28	10	1	.	.	.	.	511
1.25-1.49	.	.	181	39	9	1	.	.	.	.	230
1.50-1.74	.	.	43	95	14	7	1	.	.	.	160
1.75-1.99	.	.	.	18	6	5	.	.	.	.	29
2.00-2.24	.	.	.	6	13	3	2	.	.	.	24
2.25-2.49	.	.	.	1	6	4	3	.	.	.	14
2.50-2.74	.	.	.	.	3	3	2	.	.	.	8
2.75-2.99	.	.	.	.	1	3	2	1	.	.	7
3.00-3.24	.	.	.	.	1	3	3	.	.	.	7
3.25-3.49	.	.	.	.	2	.	2	.	.	.	4
3.50+	.	.	.	.	.	1	4	.	.	.	5
TOTAL	1038	3909	1814	398	134	33	19	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 6888.

STATION M15 43.85N 87.65W 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	
0.00-0.24	922	557	171	114	9	.	.	.	.	.	1773
0.25-0.49	178	782	47	119	38	1	.	.	.	.	1165
0.50-0.74	.	1430	103	6	17	1	.	.	.	.	1557
0.75-0.99	.	134	322	2	.	.	.	.	.	.	458
1.00-1.24	.	.	224	1	1	.	.	.	.	.	226
1.25-1.49	.	.	100	.	.	.	.	.	.	.	100
1.50-1.74	.	.	16	36	.	.	.	.	.	.	52
1.75-1.99	.	.	.	9	.	.	.	.	.	.	9
2.00-2.24	.	.	.	3	.	.	.	.	.	.	3
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	3	.	.	.	.	.	3
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1100	2903	983	290	70	2	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.1 NO. OF CASES= 5012.

STATION M15 43.85N 87.65W 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	
0.00-0.24	681	363	134	80	10	.	.	.	.	.	1268
0.25-0.49	208	609	47	116	49	2	.	.	.	.	1031
0.50-0.74	.	1006	21	7	24	5	.	.	.	.	1063
0.75-0.99	.	127	197	.	1	2	.	.	.	.	327
1.00-1.24	.	.	119	.	1	.	.	.	.	.	120
1.25-1.49	.	.	28	.	.	.	.	.	.	.	28
1.50-1.74	.	.	8	7	.	.	.	.	.	.	15
1.75-1.99	.	.	.	3	.	.	.	.	.	.	3
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	889	2105	554	213	85	9	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.1 NO. OF CASES= 3615.

STATION M15 43.85N 87.65W 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	
0.00-0.24	777	382	126	103	14	.	.	.	.	.	1402
0.25-0.49	267	1003	41	165	103	2	.	.	.	.	1581
0.50-0.74	.	1811	13	20	55	16	.	.	.	.	1915
0.75-0.99	.	227	327	1	5	5	.	.	.	.	569
1.00-1.24	.	.	173	.	.	.	1	.	.	.	174
1.25-1.49	.	.	63	.	.	.	.	.	.	.	63
1.50-1.74	.	.	14	13	.	.	.	.	.	.	27
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1044	3423	757	303	177	27	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.2 NO. OF CASES= 5372.

STATION M15 43.85N 87.65W 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	
0.00-0.24	533	269	95	69	7	.	.	.	.	.	973
0.25-0.49	190	922	54	134	69	2	.	.	.	.	1371
0.50-0.74	.	1819	66	26	100	17	.	.	.	.	2028
0.75-0.99	.	179	443	1	28	33	2	.	.	.	686
1.00-1.24	.	.	303	1	1	8	2	.	.	.	315
1.25-1.49	.	.	122	.	1	2	1	.	.	.	126
1.50-1.74	.	.	18	28	.	.	.	.	.	.	46
1.75-1.99	.	.	.	8	.	.	.	.	.	.	8
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	723	3189	1101	268	206	62	5	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 5207.

STATION M15 43.85N 87.65W 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	
0.00-0.24	482	280	89	86	4	.	.	.	.	.	941
0.25-0.49	47	635	89	135	70	.	.	.	.	.	976
0.50-0.74	.	1778	177	53	110	13	.	.	.	.	2131
0.75-0.99	.	51	577	12	72	43	.	.	.	.	755
1.00-1.24	.	.	449	2	18	34	8	.	.	.	511
1.25-1.49	.	.	191	.	1	4	6	.	.	.	202
1.50-1.74	.	.	11	54	.	10	6	.	.	.	81
1.75-1.99	.	.	.	6	.	1	3	1	.	.	11
2.00-2.24	.	.	.	3	.	.	3	3	.	.	9
2.25-2.49	.	.	.	.	.	.	.	1	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	1	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	529	2744	1583	351	275	105	26	6	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.6 NO. OF CASES= 5270.

STATION M15 43.85N 87.65W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

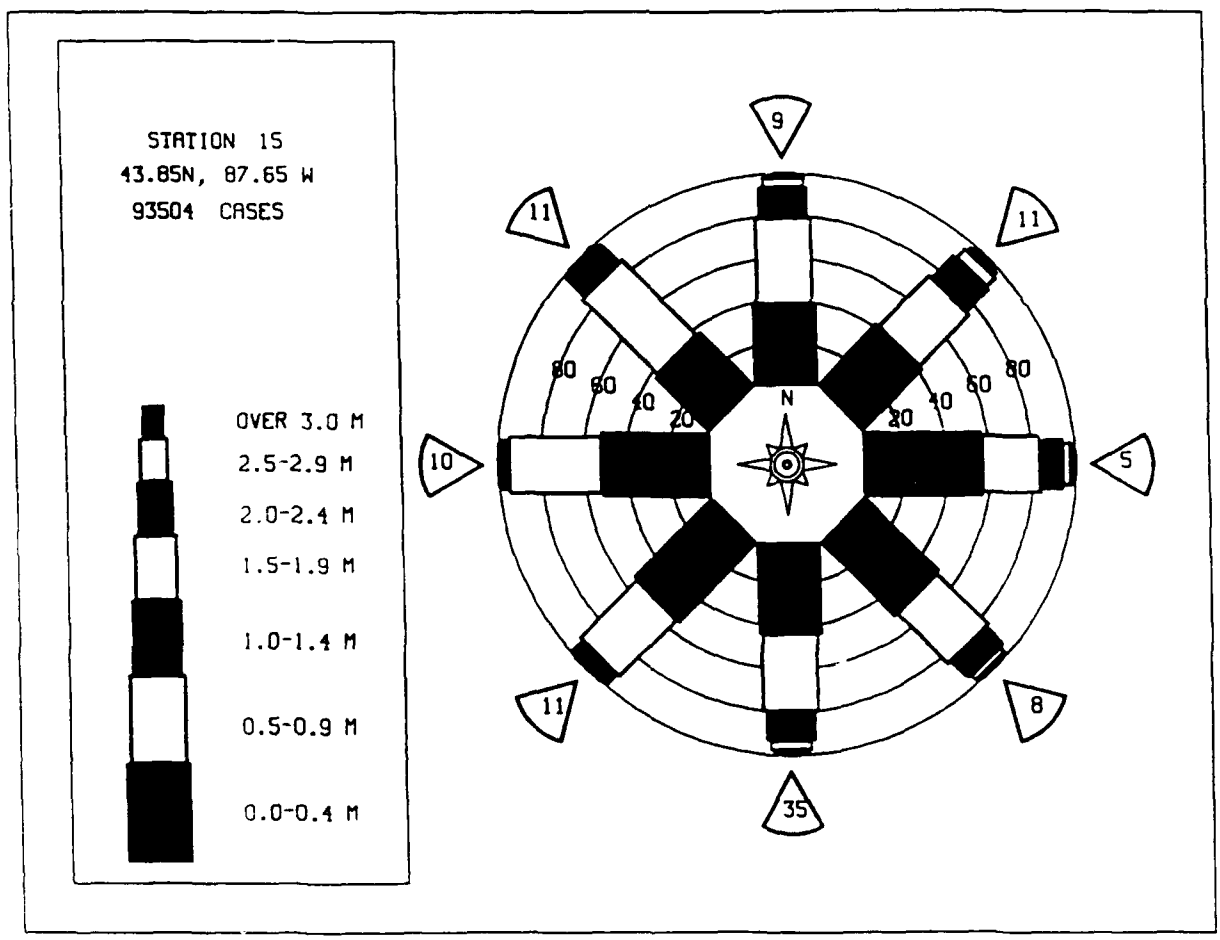
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	412	222	104	44	1	.	.	.	.	.	783
0.25-0.49	57	497	116	170	47	.	.	.	.	.	887
0.50-0.74	.	1064	214	103	160	9	.	.	.	.	1550
0.75-0.99	.	27	433	20	111	43	.	.	.	.	634
1.00-1.24	.	.	379	4	39	50	5	.	.	.	477
1.25-1.49	.	.	186	39	9	24	6	.	.	.	264
1.50-1.74	.	.	11	91	4	32	6	.	.	.	151
1.75-1.99	.	.	.	26	.	9	5	.	.	.	40
2.00-2.24	.	.	.	10	.	3	10	.	.	.	23
2.25-2.49	.	.	.	2	2	.	1	1	.	.	6
2.50-2.74	.	.	.	.	.	.	1	2	.	.	3
2.75-2.99	.	.	.	.	5	.	1	.	.	.	6
3.00-3.24	.	.	.	.	.	.	1	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	469	1810	1450	509	378	170	36	3	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 4531.

STATION M15 43.85N 87.65W 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	
0.00-0.24	892	834	252	105	9	.	.	.	.	.	2092
0.25-0.49	221	1389	455	238	72	2	.	.	.	.	2377
0.50-0.74	.	1551	708	357	123	17	.	.	.	.	2756
0.75-0.99	.	122	550	262	103	34	2	.	.	.	1073
1.00-1.24	.	.	380	232	156	34	8	.	.	.	810
1.25-1.49	.	.	114	93	102	21	3	.	.	.	333
1.50-1.74	.	.	18	101	101	35	4	.	.	.	259
1.75-1.99	.	.	.	17	46	27	4	.	.	.	94
2.00-2.24	.	.	.	3	38	33	7	.	.	.	81
2.25-2.49	.	.	.	.	12	15	5	.	.	.	32
2.50-2.74	.	.	.	.	2	17	8	.	.	.	27
2.75-2.99	.	.	.	.	.	6	3	.	.	.	9
3.00-3.24	.	.	.	.	.	5	4	.	.	.	9
3.25-3.49	.	.	.	.	.	.	2	.	.	.	2
3.50+	.	.	.	.	.	.	8	.	.	.	8
TOTAL	1113	3896	2477	1408	764	246	58	0	0	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M15 (43.85N 87.65W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M15 (43.85N 87.65W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.1	2.2	2.6	1.6	1.6	1.2	1.1	1.8	1.8	2.4	2.2	3.0
1957	2.8	3.0	2.6	1.9	1.8	1.2	1.1	1.2	1.3	2.1	2.9	2.3
1958	2.4	2.8	1.8	2.1	1.9	1.2	1.3	1.5	2.6	1.8	3.5	2.1
1959	2.1	4.0	2.7	1.8	1.7	1.5	1.8	1.6	2.6	1.7	2.5	3.9
1960	2.1	4.4	2.5	2.3	1.4	0.9	1.0	1.4	1.4	1.6	4.0	3.6
1961	2.0	2.8	3.0	2.1	1.3	1.6	1.1	1.1	2.2	3.6	3.4	2.9
1962	3.8	3.0	1.9	1.9	1.9	1.1	1.0	1.5	1.6	1.6	3.7	2.6
1963	3.6	2.8	2.2	2.9	1.8	0.9	1.3	1.9	1.8	2.6	2.8	1.8
1964	3.9	3.0	2.9	5.6	2.4	1.3	1.5	1.5	3.8	2.1	3.7	2.8
1965	3.8	3.2	2.6	1.5	1.7	1.6	1.3	1.0	1.7	2.1	3.6	4.2
1966	2.7	2.0	2.5	2.2	1.8	0.9	1.1	1.2	1.5	3.3	2.9	2.5
1967	3.5	4.1	2.1	2.2	1.6	1.0	1.1	1.5	1.9	2.3	2.2	1.8
1968	2.1	2.1	2.8	2.2	2.0	2.4	1.8	1.6	2.0	2.5	2.1	4.2
1969	3.3	2.9	2.8	2.5	1.2	1.2	1.4	2.3	1.9	2.8	3.2	2.5
1970	2.1	3.3	1.9	2.5	1.5	1.2	1.2	1.6	2.9	2.8	3.3	4.5
1971	2.6	3.9	2.8	2.4	1.5	1.1	1.9	1.8	3.3	3.1	3.7	2.3
1972	4.7	2.1	2.8	2.8	1.5	1.4	1.4	1.3	2.8	2.5	3.7	2.8
1973	3.2	3.3	2.2	3.5	1.8	1.2	1.3	1.6	2.1	2.8	3.0	3.5
1974	2.6	3.7	2.7	2.8	1.6	1.5	1.3	2.4	2.7	2.9	2.2	3.1
1975	4.1	4.0	2.7	1.8	1.6	1.3	1.7	2.1	1.7	2.9	3.3	3.5
1976	4.1	3.1	2.8	3.3	1.3	2.0	1.8	1.5	2.0	2.0	1.9	2.6
1977	2.5	2.4	3.5	1.7	2.0	1.4	1.5	3.6	2.9	2.5	3.8	2.7
1978	3.0	2.4	2.7	2.1	2.6	1.7	1.4	1.4	2.0	2.7	3.3	2.9
1979	3.3	2.7	2.3	1.7	2.2	1.7	1.2	1.4	1.7	2.3	3.1	4.0
1980	3.4	2.3	1.7	2.0	1.5	1.1	0.8	1.3	1.6	3.2	1.7	3.0
1981	1.6	2.2	1.8	1.8	2.4	1.8	0.9	1.2	1.4	1.7	2.7	2.9
1982	3.0	3.2	2.4	2.0	1.2	0.8	1.4	1.0	1.7	2.4	2.5	2.1
1983	2.0	3.5	2.0	2.2	1.8	1.1	1.9	1.4	1.8	1.6	3.4	2.3
1984	1.9	4.5	2.2	2.0	1.3	2.2	0.9	1.3	2.6	2.5	2.4	3.7
1985	2.8	2.4	2.7	1.8	1.4	1.7	1.4	1.5	2.4	2.5	2.7	2.2
1986	2.7	2.1	2.5	1.7	1.5	1.2	1.7	1.4	1.8	2.2	3.7	2.3
1987	1.7	3.0	3.5	1.8	1.2	0.7	1.0	1.5	1.3	2.6	2.2	2.6

32 YR. STATISTICS FOR WIS STATION M15

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	5.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	187.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		64041321

STATION M16 43.98N 87.64W 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	
0.00-0.24	506	314	74	43	9	.	.	.	.	.	946
0.25-0.49	199	613	224	211	93	2	.	.	.	.	1342
0.50-0.74	.	616	89	140	126	21	.	.	.	.	992
0.75-0.99	.	268	55	150	88	23	.	.	.	.	584
1.00-1.24	.	.	57	34	100	71	3	.	.	.	265
1.25-1.49	.	.	18	2	5	23	7	.	.	.	55
1.50-1.74	.	.	13	.	6	13	7	.	.	.	39
1.75-1.99	.	.	1	1	.	1	10	.	.	.	13
2.00-2.24	.	.	.	1	1	.	1	.	.	.	3
2.25-2.49	.	.	.	.	.	.	1	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	705	1811	531	582	428	154	29	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 3983.

STATION M16 43.98N 87.64W 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	
0.00-0.24	406	155	55	38	2	.	.	.	.	.	656
0.25-0.49	141	515	119	124	43	3	.	.	.	.	945
0.50-0.74	.	361	158	120	56	16	.	.	.	.	711
0.75-0.99	.	74	89	103	19	7	.	.	.	.	292
1.00-1.24	.	.	49	101	33	8	.	.	.	.	191
1.25-1.49	.	.	.	26	37	2	2	.	.	.	67
1.50-1.74	.	.	.	17	28	5	1	.	.	.	51
1.75-1.99	.	.	.	2	18	8	.	.	.	.	28
2.00-2.24	.	.	.	.	7	10	1	.	.	.	18
2.25-2.49	.	.	.	.	.	5	.	.	.	.	5
2.50-2.74	.	.	.	.	.	6	2	.	.	.	8
2.75-2.99	.	.	.	.	.	1	1	.	.	.	2
3.00-3.24	.	.	.	.	.	.	3	.	.	.	3
3.25-3.49	.	.	.	.	.	.	2	1	.	.	3
3.50+	.	.	.	.	.	.	3	2	1	.	6
TOTAL	547	1105	470	531	243	71	15	3	1	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.7 NO. OF CASES= 2809.

STATION M16 43.98N 87.64W 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	
0.00-0.24	762	433	104	66	6	.	.	.	.	.	1371
0.25-0.49	183	1071	245	125	39	3	.	.	.	.	1666
0.50-0.74	.	779	904	199	36	3	.	.	.	.	1921
0.75-0.99	.	7	502	203	17	1	.	.	.	.	730
1.00-1.24	.	.	308	453	52	2	.	.	.	.	815
1.25-1.49	.	.	25	197	190	2	.	.	.	.	414
1.50-1.74	.	.	2	149	172	2	.	.	.	.	325
1.75-1.99	.	.	.	6	113	59	.	.	.	.	178
2.00-2.24	.	.	.	2	75	68	9	.	.	.	154
2.25-2.49	.	.	.	.	19	24	13	.	.	.	56
2.50-2.74	.	.	.	.	4	45	18	.	.	.	67
2.75-2.99	.	.	.	.	.	14	13	1	.	.	28
3.00-3.24	.	.	.	.	.	7	17	1	.	.	25
3.25-3.49	.	.	.	.	.	1	14	3	.	.	18
3.50+	.	.	.	.	.	.	27	17	.	.	44
TOTAL	945	2290	2090	1400	723	231	111	22	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 7329.

STATION M16 43.98N 87.64W 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	
0.00-0.24	518	305	71	54	2	.	.	.	.	.	950
0.25-0.49	111	734	125	57	14	1	.	.	.	.	1042
0.50-0.74	.	305	490	79	8	2	.	.	.	.	884
0.75-0.99	.	1	177	99	1	.	.	.	.	.	278
1.00-1.24	.	.	78	208	23	1	.	.	.	.	310
1.25-1.49	.	.	5	57	57	.	.	.	.	.	119
1.50-1.74	.	.	.	60	71	.	.	.	.	.	131
1.75-1.99	.	.	.	2	43	9	.	.	.	.	54
2.00-2.24	.	.	.	.	42	22	2	.	.	.	66
2.25-2.49	.	.	.	.	7	8	2	.	.	.	17
2.50-2.74	.	.	.	.	2	17	.	.	.	.	19
2.75-2.99	.	.	.	.	.	9	1	.	.	.	10
3.00-3.24	.	.	.	.	.	1	2	.	.	.	3
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	629	1345	946	616	270	70	9	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 3651.

STATION M16 43.98N 87.64W 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	
0.00-0.24	551	356	89	63	4	.	.	.	.	.	1063
0.25-0.49	79	501	89	59	13	.	.	.	.	.	741
0.50-0.74	.	196	248	22	6	1	.	.	.	.	473
0.75-0.99	.	1	106	54	1	.	.	.	.	.	162
1.00-1.24	.	.	51	125	18	.	.	.	.	.	194
1.25-1.49	.	.	5	36	33	1	.	.	.	.	75
1.50-1.74	.	.	.	37	56	1	.	.	.	.	94
1.75-1.99	.	.	.	.	35	.	.	.	.	.	35
2.00-2.24	.	.	.	.	24	.	.	.	.	.	24
2.25-2.49	.	.	.	.	9	.	.	.	.	.	9
2.50-2.74	.	.	.	.	5	6	.	.	.	.	11
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	630	1054	588	396	204	10	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 2708.

STATION M16 43.98N 87.64W 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	
0.00-0.24	330	198	42	39	4	.	.	.	.	.	613
0.25-0.49	84	289	26	27	3	.	.	.	.	.	429
0.50-0.74	.	143	143	10	5	.	.	.	.	.	301
0.75-0.99	.	1	78	35	3	.	.	.	.	.	117
1.00-1.24	.	.	35	69	7	.	.	.	.	.	111
1.25-1.49	.	.	1	45	21	.	.	.	.	.	67
1.50-1.74	.	.	.	18	22	4	.	.	.	.	44
1.75-1.99	.	.	.	.	18	.	.	.	.	.	18
2.00-2.24	.	.	.	.	11	4	1	.	.	.	16
2.25-2.49	.	.	.	.	6	2	1	.	.	.	9
2.50-2.74	.	.	.	.	2	4	.	.	.	.	6
2.75-2.99	.	.	.	.	.	1	1	.	.	.	2
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	414	631	325	243	102	15	3	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 1634.

STATION M16 43.98N 87.64W 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	
0.00-0.24	387	252	84	28	4	.	.	.	.	.	755
0.25-0.49	87	478	161	50	9	.	.	.	.	.	785
0.50-0.74	.	269	337	144	13	1	.	.	.	.	764
0.75-0.99	.	12	119	108	19	.	.	.	.	.	258
1.00-1.24	.	.	74	104	40	3	.	.	.	.	221
1.25-1.49	.	.	6	52	27	8	.	.	.	.	93
1.50-1.74	.	.	.	25	34	4	.	.	.	.	63
1.75-1.99	.	.	.	3	11	3	2	.	.	.	19
2.00-2.24	.	.	.	.	13	7	3	.	.	.	23
2.25-2.49	.	.	.	.	1	.	3	.	.	.	4
2.50-2.74	.	.	.	.	.	2	.	.	.	.	2
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	474	1011	781	514	171	30	8	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 2812.

STATION M16 43.98N 87.64W 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	
0.00-0.24	594	743	385	110	26	.	.	.	.	.	1858
0.25-0.49	187	1388	951	421	157	5	.	.	.	.	3109
0.50-0.74	.	571	1163	906	353	81	1	.	.	.	3075
0.75-0.99	.	65	311	624	250	103	14	.	.	.	1367
1.00-1.24	.	.	166	321	359	93	40	.	.	.	979
1.25-1.49	.	.	11	80	177	48	12	1	.	.	329
1.50-1.74	.	.	1	79	108	52	14	.	.	.	254
1.75-1.99	.	.	.	5	42	40	8	1	.	.	96
2.00-2.24	.	.	.	.	34	29	6	.	.	.	69
2.25-2.49	.	.	.	.	6	3	1	1	.	.	11
2.50-2.74	.	.	.	.	.	11	8	.	.	.	19
2.75-2.99	.	.	.	.	1	5	.	.	.	.	6
3.00-3.24	.	.	.	.	.	7	.	.	.	.	7
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	2	.	.	.	2
TOTAL	781	2767	2988	2546	1513	477	106	3	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 10477.

STATION M16 43.98N 87.64W 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	
0.00-0.24	990	1941	819	130	18	.	.	.	.	.	3898
0.25-0.49	274	2458	2376	500	63	10	1	.	.	.	5682
0.50-0.74	.	1596	1932	1813	182	54	6	.	.	.	5583
0.75-0.99	.	250	852	1038	434	74	22	.	.	.	2670
1.00-1.24	.	.	673	703	895	111	34	.	.	.	2416
1.25-1.49	.	.	91	377	391	144	14	.	.	.	1017
1.50-1.74	.	.	24	290	275	213	32	1	.	.	835
1.75-1.99	.	.	.	54	176	127	21	1	.	.	379
2.00-2.24	.	.	.	10	176	133	42	.	.	.	361
2.25-2.49	.	.	.	.	68	49	37	1	.	.	155
2.50-2.74	.	.	.	.	14	68	41	3	.	.	126
2.75-2.99	.	.	.	.	.	32	14	.	.	.	46
3.00-3.24	.	.	.	.	.	20	39	4	.	.	63
3.25-3.49	.	.	.	.	.	3	12	1	.	.	16
3.50+	.	.	.	.	.	.	28	9	1	.	38
TOTAL	1264	6245	6767	4915	2692	1038	343	20	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.3 NO. OF CASES= 21803.

STATION M16 43.98N 87.64W 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	
0.00-0.24	1066	532	154	98	22	.	.	.	.	.	1872
0.25-0.49	300	1276	118	55	23	.	.	.	.	.	1772
0.50-0.74	.	2045	268	7	1	1	.	.	.	.	2322
0.75-0.99	.	193	651	27	9	.	.	.	.	.	880
1.00-1.24	.	.	551	32	21	.	.	.	.	.	604
1.25-1.49	.	.	216	63	13	.	.	.	.	.	292
1.50-1.74	.	.	37	146	7	8	1	.	.	.	199
1.75-1.99	.	.	.	32	17	5	1	.	.	.	55
2.00-2.24	.	.	.	10	22	16	1	.	.	.	49
2.25-2.49	.	.	.	2	4	3	2	.	.	.	11
2.50-2.74	.	.	.	.	7	2	2	.	.	.	11
2.75-2.99	.	.	.	.	.	4	2	.	.	.	6
3.00-3.24	.	.	.	.	2	4	2	.	.	.	8
3.25-3.49	.	.	.	.	1	1	1	.	.	.	3
3.50+	.	.	.	.	.	2	3	.	.	.	5
TOTAL	1366	4046	1995	472	149	46	15	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 7581.

STATION M16 43.98N 87.64W 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	
0.00-0.24	1138	465	155	113	18	.	.	.	.	.	1889
0.25-0.49	243	885	28	47	37	4	.	.	.	.	1244
0.50-0.74	.	1573	118	2	4	.	.	.	.	.	1697
0.75-0.99	.	117	381	.	1	.	.	.	.	.	499
1.00-1.24	.	.	231	.	.	.	.	.	.	.	231
1.25-1.49	.	.	115	.	.	.	.	.	.	.	115
1.50-1.74	.	.	13	28	.	.	.	.	.	.	41
1.75-1.99	.	.	2	16	.	.	.	.	.	.	18
2.00-2.24	.	.	.	2	.	.	.	.	.	.	2
2.25-2.49	.	.	.	1	2	.	.	.	.	.	3
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	1	.	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1381	3040	1043	209	64	4	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 5378.

STATION M16 43.98N 87.64W 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	
0.00-0.24	770	232	101	82	11	.	.	.	.	.	1196
0.25-0.49	268	759	18	55	40	4	.	.	.	.	1144
0.50-0.74	.	1097	20	3	2	8	.	.	.	.	1130
0.75-0.99	.	126	202	.	.	.	.	.	.	.	328
1.00-1.24	.	.	126	.	.	.	.	.	.	.	126
1.25-1.49	.	.	38	.	.	.	.	.	.	.	38
1.50-1.74	.	.	4	8	.	.	.	.	.	.	12
1.75-1.99	.	.	.	5	.	1	.	.	.	.	6
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1038	2214	509	153	53	13	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 3729.

STATION M16 43.98N 87.64W 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	
0.00-0.24	937	278	130	97	18	.	.	.	.	.	1460
0.25-0.49	391	1173	28	103	91	10	.	.	.	.	1796
0.50-0.74	.	2083	11	3	17	2	.	.	.	.	2116
0.75-0.99	.	209	381	.	.	1	.	.	.	.	591
1.00-1.24	.	.	219	.	.	.	.	.	.	.	219
1.25-1.49	.	.	74	.	.	.	.	.	.	.	74
1.50-1.74	.	.	19	5	.	.	.	.	.	.	24
1.75-1.99	.	.	.	6	.	.	.	.	.	.	6
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1328	3743	862	215	126	13	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 5889.

STATION M16 43.98N 87.64W 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	
0.00-0.24	517	185	95	73	7	1	.	.	.	.	878
0.25-0.49	164	866	27	86	75	6	.	.	.	.	1224
0.50-0.74	.	1786	100	1	22	21	2	.	.	.	1932
0.75-0.99	.	127	465	.	1	8	2	.	.	.	603
1.00-1.24	.	.	324	.	.	.	1	.	.	.	325
1.25-1.49	.	.	167	.	.	.	.	.	.	.	167
1.50-1.74	.	.	13	37	.	.	.	.	.	.	50
1.75-1.99	.	.	.	10	.	.	.	.	.	.	10
2.00-2.24	.	.	.	3	.	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	681	2964	1191	210	105	36	5	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 4866.

STATION M16 43.98N 87.64W 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	
0.00-0.24	567	209	98	95	6	.	.	.	.	.	975
0.25-0.49	65	576	44	101	73	1	.	.	.	.	860
0.50-0.74	.	1506	176	13	36	12	1	.	.	.	1744
0.75-0.99	.	26	438	1	12	36	3	.	.	.	516
1.00-1.24	.	.	360	.	1	1	3	.	.	.	365
1.25-1.49	.	.	168	.	.	.	.	.	.	.	168
1.50-1.74	.	.	11	65	.	.	.	.	.	.	76
1.75-1.99	.	.	.	10	.	.	.	.	.	.	10
2.00-2.24	.	.	.	3	.	.	.	.	.	.	3
2.25-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	632	2317	1295	289	128	50	7	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.4 NO. OF CASES= 4426.

STATION M16 43.98N 87.64W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

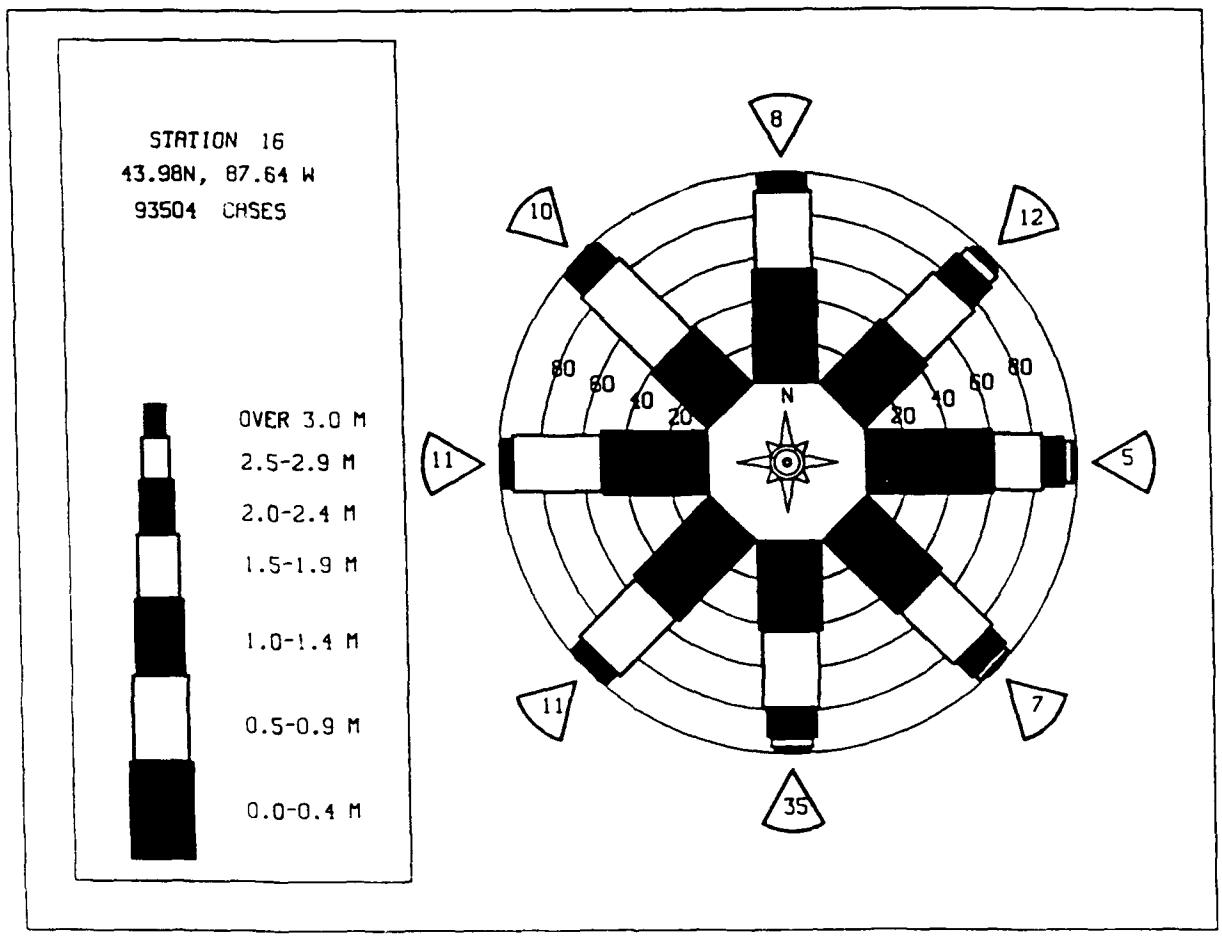
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	484	207	104	60	7	.	.	.	.	.	862
0.25-0.49	130	577	124	197	99	1	.	.	.	.	1128
0.50-0.74	.	1221	93	35	102	26	.	.	.	.	1477
0.75-0.99	.	194	329	39	81	50	5	.	.	.	698
1.00-1.24	.	.	259	2	18	41	8	.	.	.	328
1.25-1.49	.	.	140	.	2	7	5	1	.	.	155
1.50-1.74	.	.	33	23	.	.	1	1	.	.	58
1.75-1.99	.	.	.	6	.	.	.	.	.	.	6
2.00-2.24	.	.	.	7	.	.	.	.	.	.	7
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	2	.	.	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	614	2199	1082	369	311	125	19	2	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.6 NO. OF CASES= 4429.

STATION M16 43.98N 87.64W 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	
0.00-0.24	1053	681	256	119	17	.	.	.	.	.	2126
0.25-0.49	291	1416	471	222	88	5	.	.	.	.	2493
0.50-0.74	.	1615	625	350	97	25	1	.	.	.	2713
0.75-0.99	.	167	514	248	94	30	4	.	.	.	1057
1.00-1.24	.	.	356	215	157	33	9	.	.	.	770
1.25-1.49	.	.	108	94	95	23	4	.	.	.	324
1.50-1.74	.	.	17	99	78	30	5	.	.	.	229
1.75-1.99	.	.	.	16	47	25	4	.	.	.	92
2.00-2.24	.	.	.	4	41	29	6	.	.	.	80
2.25-2.49	.	.	.	.	12	9	6	.	.	.	27
2.50-2.74	.	.	.	.	3	16	7	.	.	.	26
2.75-2.99	.	.	.	.	.	7	3	.	.	.	10
3.00-3.24	.	.	.	.	.	4	6	.	.	.	10
3.25-3.49	.	.	.	.	.	.	3	.	.	.	3
3.50+	.	.	.	.	.	.	6	2	.	.	8
TOTAL	1344	3879	2347	1367	729	236	64	2	0	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M16 (43.98N 87.64W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M16 (43.98N 87.64W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.9	2.4	2.6	1.6	1.5	1.3	1.2	1.7	1.8	2.8	2.1	2.8
1957	2.7	2.7	2.5	2.0	1.8	1.2	0.9	1.2	1.4	1.8	2.9	2.4
1958	2.3	2.8	1.8	2.1	1.7	1.2	1.5	1.4	2.4	2.0	3.3	2.0
1959	2.3	4.4	3.0	1.8	1.7	1.4	1.8	1.8	2.9	1.8	2.5	4.5
1960	2.3	4.7	2.5	2.2	1.4	1.1	0.9	1.7	1.7	1.9	3.6	3.8
1961	2.1	3.0	3.0	2.3	1.4	1.7	1.2	1.2	2.1	3.6	3.2	2.9
1962	4.1	2.9	1.9	2.1	1.8	0.9	0.9	1.4	1.5	1.6	3.3	2.5
1963	3.9	2.8	2.2	2.8	1.8	0.9	1.2	1.8	1.5	2.6	2.7	1.8
1964	3.6	3.2	3.2	5.7	2.4	1.4	1.6	1.5	3.8	2.2	3.7	2.8
1965	4.6	3.2	2.5	1.5	1.9	1.5	1.2	1.2	1.7	2.2	3.2	4.0
1966	2.6	2.0	2.3	2.3	1.9	1.3	1.0	1.2	1.4	3.5	2.2	2.6
1967	3.7	4.7	1.9	2.4	1.8	0.9	1.0	1.5	1.9	2.3	2.3	1.7
1968	2.4	2.0	3.0	2.0	2.1	2.3	1.8	1.5	2.1	2.4	2.0	4.3
1969	3.3	2.9	2.6	2.5	1.2	1.2	1.2	2.3	2.2	3.1	3.6	2.7
1970	2.3	3.1	1.9	2.7	1.5	1.2	1.1	1.5	2.9	2.8	3.1	4.3
1971	2.5	3.8	3.0	2.5	1.5	1.2	2.1	1.8	3.3	3.0	3.4	2.9
1972	4.6	2.3	3.3	2.9	1.4	1.5	1.5	1.4	3.0	3.1	4.1	2.7
1973	3.1	3.3	2.3	3.6	1.6	1.2	1.4	1.5	2.0	3.0	3.0	3.5
1974	2.6	3.8	2.8	2.9	1.8	1.6	1.3	2.8	2.8	2.7	2.1	3.1
1975	4.1	4.8	2.7	1.7	1.7	1.4	1.9	2.7	1.6	3.1	3.3	3.7
1976	4.2	3.4	2.8	3.3	1.5	2.4	1.9	1.7	2.2	1.9	2.0	2.7
1977	2.3	2.3	3.2	1.6	2.0	1.3	1.6	3.7	3.1	2.4	3.6	2.5
1978	2.5	2.3	2.6	2.0	2.6	2.1	1.5	1.5	2.2	2.8	3.5	2.7
1979	3.4	2.8	2.0	2.0	2.1	1.8	1.3	1.5	1.9	2.5	3.1	3.8
1980	3.5	2.5	1.8	2.0	1.4	1.1	0.9	1.3	1.7	3.0	2.0	2.6
1981	1.5	2.4	1.9	1.8	2.1	1.7	0.9	1.3	1.4	1.6	2.6	2.9
1982	3.3	3.7	2.3	2.0	1.4	1.1	1.6	1.1	2.0	2.5	2.5	2.0
1983	2.1	4.1	2.0	2.3	1.8	1.2	2.1	1.3	1.7	1.6	3.6	2.4
1984	1.9	4.2	2.4	2.0	1.4	2.4	0.8	1.4	2.5	2.8	2.5	3.4
1985	2.9	2.4	2.8	1.6	1.6	1.8	1.6	1.8	2.3	2.4	2.0	2.2
1986	2.6	1.9	2.3	1.6	1.3	1.2	1.7	1.2	1.6	2.2	3.8	2.2
1987	1.6	2.2	3.7	1.6	1.6	0.7	1.1	1.4	1.1	2.4	2.1	2.4

32 YR. STATISTICS FOR WIS STATION M16

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	5.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	188.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		64041321

STATION M17 44.13N 87.43W 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	
0.00-0.24	375	216	53	12	.	.	.	.	.	.	656
0.25-0.49	54	532	145	105	12	.	.	.	.	.	848
0.50-0.74	.	390	470	253	103	.	.	.	.	.	1216
0.75-0.99	.	4	280	62	85	6	.	.	.	.	437
1.00-1.24	.	.	490	49	59	22	.	.	.	.	620
1.25-1.49	.	.	67	223	11	24	.	.	.	.	325
1.50-1.74	.	.	.	228	13	18	.	.	.	.	259
1.75-1.99	.	.	.	86	7	12	2	.	.	.	107
2.00-2.24	.	.	.	41	17	20	6	.	.	.	84
2.25-2.49	.	.	.	.	14	8	7	.	.	.	29
2.50-2.74	.	.	.	.	6	2	5	.	.	.	13
2.75-2.99	.	.	.	.	4	.	6	.	.	.	10
3.00-3.24	.	.	.	.	2	1	2	3	.	.	8
3.25-3.49	.	.	.	.	1	.	1	.	.	.	2
3.50+											0
TOTAL	429	1142	1505	1059	334	113	29	3	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 4.1 NO. OF CASES= 4336.

STATION M17 44.13N 87.43W 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	
0.00-0.24	286	148	28	12	.	.	.	.	.	.	474
0.25-0.49	52	443	108	54	7	.	.	.	.	.	664
0.50-0.74	.	293	391	171	52	1	.	.	.	.	908
0.75-0.99	.	2	227	113	48	5	.	.	.	.	395
1.00-1.24	.	.	186	167	54	8	.	.	.	.	415
1.25-1.49	.	.	13	124	48	12	.	.	.	.	197
1.50-1.74	.	.	.	70	60	5	.	.	.	.	135
1.75-1.99	.	.	.	10	37	13	.	.	.	.	60
2.00-2.24	.	.	.	3	28	14	.	.	.	.	45
2.25-2.49	.	.	.	.	14	8	2	.	.	.	24
2.50-2.74	.	.	.	.	3	14	2	.	.	.	19
2.75-2.99	.	.	.	.	.	2	1	.	.	.	3
3.00-3.24	.	.	.	.	.	6	2	1	.	.	9
3.25-3.49	.	.	.	.	.	1	1	.	.	.	2
3.50+							4	2			6
TOTAL	338	886	953	724	351	89	12	3	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 3159.

STATION M17 44.13N 87.43W 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	
0.00-0.24	576	356	66	19	.	.	.	.	.	.	1017
0.25-0.49	135	1166	235	130	9	.	.	.	.	.	1675
0.50-0.74	.	610	1125	259	45	1	.	.	.	.	2040
0.75-0.99	.	1	500	365	32	3	.	.	.	.	901
1.00-1.24	.	.	270	579	118	1	.	.	.	.	968
1.25-1.49	.	.	7	216	199	3	.	.	.	.	425
1.50-1.74	.	.	.	175	250	21	.	.	.	.	446
1.75-1.99	.	.	.	9	162	37	.	.	.	.	208
2.00-2.24	.	.	.	.	110	60	2	.	.	.	172
2.25-2.49	.	.	.	.	44	44	6	.	.	.	94
2.50-2.74	.	.	.	.	6	56	7	.	.	.	69
2.75-2.99	.	.	.	.	.	21	7	.	.	.	28
3.00-3.24	.	.	.	.	.	18	6	.	.	.	24
3.25-3.49	.	.	.	.	.	3	13	.	.	.	16
3.50+							36	2			38
TOTAL	711	2133	2203	1752	975	268	77	2	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 7615.

STATION M17 44.13N 87.43W 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	
0.00-0.24	386	265	56	10	.	.	.	.	.	.	717
0.25-0.49	89	682	135	62	4	.	.	.	.	.	972
0.50-0.74	.	270	436	120	16	1	.	.	.	.	843
0.75-0.99	.	1	151	89	11	1	.	.	.	.	253
1.00-1.24	.	.	53	149	13	.	.	.	.	.	215
1.25-1.49	.	.	2	60	27	.	.	.	.	.	89
1.50-1.74	.	.	.	65	54	.	.	.	.	.	119
1.75-1.99	.	.	.	2	40	3	.	.	.	.	45
2.00-2.24	.	.	.	.	26	5	.	.	.	.	31
2.25-2.49	.	.	.	.	12	1	.	.	.	.	13
2.50-2.74	.	.	.	.	.	13	.	.	.	.	13
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	3	.	.	.	.	3
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	475	1218	833	557	203	30	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 3117.

STATION M17 44.13N 87.43W 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	
0.00-0.24	453	333	71	23	2	.	.	.	.	.	882
0.25-0.49	55	540	133	91	2	.	.	.	.	.	821
0.50-0.74	.	199	241	63	18	.	.	.	.	.	521
0.75-0.99	.	1	94	59	3	2	.	.	.	.	159
1.00-1.24	.	.	51	103	10	.	.	.	.	.	164
1.25-1.49	.	.	4	50	10	1	.	.	.	.	65
1.50-1.74	.	.	.	74	17	.	.	.	.	.	91
1.75-1.99	.	.	.	2	26	.	.	.	.	.	28
2.00-2.24	.	.	.	.	11	.	.	.	.	.	11
2.25-2.49	.	.	.	.	6	.	.	.	.	.	6
2.50-2.74	.	.	.	.	.	1	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	508	1073	594	465	105	4	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 2584.

STATION M17 44.13N 87.43W 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	
0.00-0.24	305	208	27	9	1	.	.	.	.	.	550
0.25-0.49	74	288	71	41	2	.	.	.	.	.	476
0.50-0.74	.	163	120	24	6	.	.	.	.	.	313
0.75-0.99	.	1	73	36	1	.	.	.	.	.	111
1.00-1.24	.	.	34	64	2	.	.	.	.	.	100
1.25-1.49	.	.	.	37	9	1	.	.	.	.	47
1.50-1.74	.	.	.	23	13	2	.	.	.	.	38
1.75-1.99	.	.	.	1	10	.	.	.	.	.	11
2.00-2.24	.	.	.	.	11	.	.	.	.	.	11
2.25-2.49	.	.	.	.	5	.	.	.	.	.	5
2.50-2.74	.	.	.	.	1	2	.	.	.	.	3
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	379	660	325	235	61	5	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 1571.

STATION M17 44.13N 87.43W 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	
0.00-0.24	359	236	64	13	.	.	.	.	.	.	672
0.25-0.49	69	422	152	60	6	.	.	.	.	.	709
0.50-0.74	.	269	252	91	12	.	.	.	.	.	624
0.75-0.99	.	6	112	69	20	1	.	.	.	.	208
1.00-1.24	.	.	67	83	21	3	.	.	.	.	174
1.25-1.49	.	.	4	44	14	1	.	.	.	.	63
1.50-1.74	.	.	.	27	20	5	2	.	.	.	54
1.75-1.99	.	.	.	1	11	2	1	.	.	.	15
2.00-2.24	.	.	.	.	8	4	1	.	.	.	13
2.25-2.49	.	.	.	.	1	1	1	.	.	.	3
2.50-2.74	.	.	.	.	.	3	.	.	.	.	3
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	428	933	651	388	113	22	5	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 2391.

STATION M17 44.13N 87.43W 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	
0.00-0.24	526	534	213	45	3	.	.	.	.	.	1321
0.25-0.49	154	1021	571	238	13	1	.	.	.	.	2098
0.50-0.74	.	506	828	763	127	9	.	.	.	.	2233
0.75-0.99	.	27	266	462	156	24	1	.	.	.	936
1.00-1.24	.	.	132	235	266	39	7	.	.	.	679
1.25-1.49	.	.	11	80	105	33	6	.	.	.	235
1.50-1.74	.	.	.	63	85	29	9	.	.	.	186
1.75-1.99	.	.	.	4	49	19	5	.	.	.	77
2.00-2.24	.	.	.	1	27	17	2	.	.	.	47
2.25-2.49	.	.	.	.	7	3	4	.	.	.	14
2.50-2.74	.	.	.	.	6	10	.	.	.	.	16
2.75-2.99	.	.	.	.	.	3	1	.	.	.	4
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	680	2088	2121	1891	844	187	36	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.1 NO. OF CASES= 7358.

STATION M17 44.13N 87.43W 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	
0.00-0.24	884	1412	1053	279	6	.	.	.	.	.	3634
0.25-0.49	234	1797	3211	1515	49	.	.	.	.	.	6806
0.50-0.74	.	918	2060	3698	383	8	.	.	.	.	7067
0.75-0.99	.	91	535	1401	746	37	2	.	.	.	2812
1.00-1.24	.	.	460	572	1064	172	21	.	.	.	2389
1.25-1.49	.	.	75	321	358	175	26	.	.	.	955
1.50-1.74	.	.	9	252	272	213	54	1	.	.	801
1.75-1.99	.	.	.	38	165	102	44	2	.	.	351
2.00-2.24	.	.	.	3	167	72	52	.	.	.	294
2.25-2.49	.	.	.	1	54	40	22	2	.	.	119
2.50-2.74	.	.	.	.	16	69	44	2	.	.	131
2.75-2.99	.	.	.	.	1	28	14	3	.	.	46
3.00-3.24	.	.	.	.	.	16	16	3	.	.	35
3.25-3.49	.	.	.	.	.	4	18	3	.	.	25
3.50+	.	.	.	.	.	1	21	9	1	.	32
TOTAL	1118	4218	7403	8180	3281	937	334	25	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.5 NO. OF CASES= 23871.

STATION M17 44.13N 87.43W 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	
0.00-0.24	981	567	198	70	2	.	.	.	.	.	1818
0.25-0.49	255	1256	408	223	28	.	.	.	.	.	2170
0.50-0.74	.	1417	991	242	32	.	.	.	.	.	2682
0.75-0.99	.	299	887	530	97	3	.	.	.	.	1816
1.00-1.24	.	.	1212	334	124	21	.	.	.	.	1691
1.25-1.49	.	.	134	619	88	19	.	.	.	.	860
1.50-1.74	.	.	13	586	83	39	3	.	.	.	724
1.75-1.99	.	.	.	143	82	39	5	.	.	.	269
2.00-2.24	.	.	.	16	163	48	16	.	.	.	243
2.25-2.49	.	.	.	.	56	29	12	.	.	.	97
2.50-2.74	.	.	.	.	21	32	20	2	.	.	75
2.75-2.99	.	.	.	.	6	11	10	2	.	.	29
3.00-3.24	.	.	.	.	2	11	10	.	.	.	23
3.25-3.49	.	.	.	.	.	5	8	3	.	.	16
3.50+	.	.	.	.	.	4	11	5	3	.	23
TOTAL	1236	3539	3843	2763	784	261	95	12	3	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 11748.

STATION M17 44.13N 87.43W 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	
0.00-0.24	998	481	154	70	2	.	.	.	.	.	1705
0.25-0.49	253	962	116	122	28	.	.	.	.	.	1481
0.50-0.74	.	1274	291	36	27	1	.	.	.	.	1629
0.75-0.99	.	486	455	127	20	1	.	.	.	.	1089
1.00-1.24	.	.	619	73	13	1	.	.	.	.	706
1.25-1.49	.	.	86	208	9	1	.	.	.	.	304
1.50-1.74	.	.	14	202	8	2	.	.	.	.	226
1.75-1.99	.	.	4	58	3	3	.	.	.	.	68
2.00-2.24	.	.	.	6	36	.	.	.	.	.	42
2.25-2.49	.	.	.	.	13	.	.	.	.	.	13
2.50-2.74	.	.	.	.	8	1	.	.	.	.	9
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	4	.	.	.	.	4
3.50+	.	.	.	.	.	1	.	.	.	.	1
TOTAL	1251	3203	1739	902	168	15	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 6824.

STATION M17 44.13N 87.43W 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	
0.00-0.24	591	260	68	44	.	.	.	.	.	.	963
0.25-0.49	199	703	64	106	21	1	.	.	.	.	1094
0.50-0.74	.	885	42	29	37	3	.	.	.	.	996
0.75-0.99	.	207	213	12	5	4	.	.	.	.	441
1.00-1.24	.	.	190	4	1	2	.	.	.	.	197
1.25-1.49	.	.	63	7	2	1	.	.	.	.	73
1.50-1.74	.	.	26	6	2	.	.	.	.	.	34
1.75-1.99	.	.	1	7	.	.	.	.	.	.	8
2.00-2.24	.	.	.	2	1	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	790	2055	667	217	69	11	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 3576.

STATION M17 44.13N 87.43W 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	
0.00-0.24	622	275	93	44	3	.	.	.	.	.	1037
0.25-0.49	238	776	95	211	55	1	.	.	.	.	1376
0.50-0.74	.	1006	18	65	95	6	.	.	.	.	1190
0.75-0.99	.	161	165	12	19	5	.	.	.	.	362
1.00-1.24	.	.	110	.	9	5	.	.	.	.	124
1.25-1.49	.	.	60	1	1	.	.	.	.	.	62
1.50-1.74	.	.	28	7	.	1	.	.	.	.	36
1.75-1.99	.	.	.	9	.	.	.	.	.	.	9
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	860	2218	569	349	182	18	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.2 NO. OF CASES= 3936.

STATION M17 44.13N 87.43W 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	
0.00-0.24	353	193	48	26	1	.	.	.	.	.	621
0.25-0.49	124	605	89	132	28	1	.	.	.	.	979
0.50-0.74	.	1032	69	82	100	7	.	.	.	.	1290
0.75-0.99	.	109	294	18	62	26	1	.	.	.	510
1.00-1.24	.	.	213	3	8	17	1	.	.	.	242
1.25-1.49	.	.	127	.	.	4	2	.	.	.	133
1.50-1.74	.	.	25	32	.	1	.	.	.	.	58
1.75-1.99	.	.	.	9	.	.	.	.	.	.	9
2.00-2.24	.	.	.	5	.	.	.	.	.	.	5
2.25-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	477	1939	865	308	199	56	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 3610.

STATION M17 44.13N 87.43W 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	
0.00-0.24	351	181	62	37	1	.	.	.	.	.	632
0.25-0.49	55	509	98	132	20	.	.	.	.	.	814
0.50-0.74	.	1068	129	88	114	3	.	.	.	.	1402
0.75-0.99	.	47	372	31	78	21	1	.	.	.	550
1.00-1.24	.	.	317	29	34	45	1	.	.	.	426
1.25-1.49	.	.	140	5	14	7	4	.	.	.	170
1.50-1.74	.	.	18	48	1	8	3	.	.	.	78
1.75-1.99	.	.	.	9	.	2	4	.	.	.	15
2.00-2.24	.	.	.	.	.	.	2	1	.	.	3
2.25-2.49	.	.	.	1	.	.	.	2	.	.	3
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	406	1805	1136	380	262	86	15	3	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 3841.

STATION M17 44.13N 87.43W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

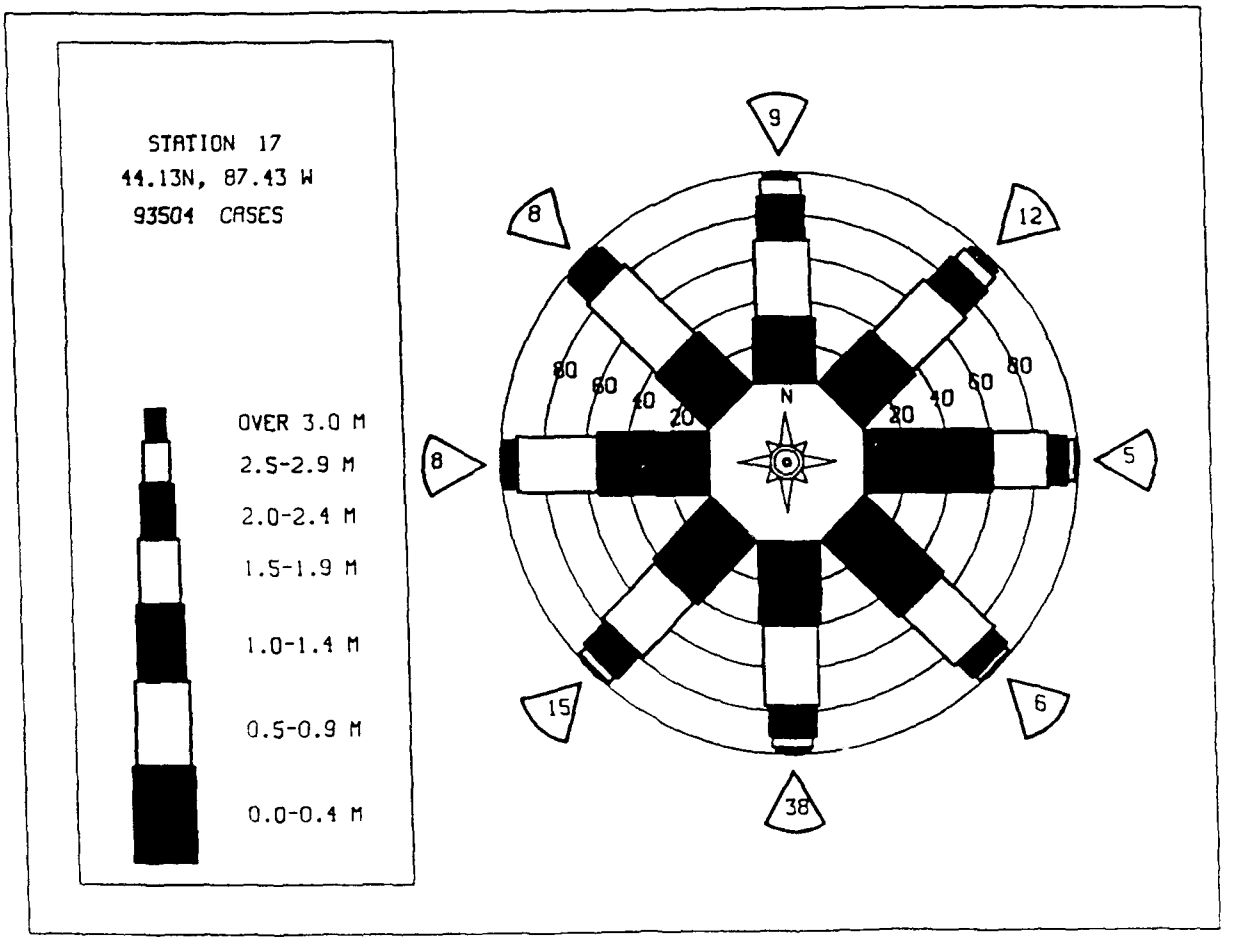
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	320	168	52	14	.	.	.	.	.	.	554
0.25-0.49	47	438	151	142	14	.	.	.	.	.	792
0.50-0.74	.	595	270	165	117	.	.	.	.	.	1147
0.75-0.99	.	20	344	25	98	13	.	.	.	.	500
1.00-1.24	.	.	377	54	50	23	2	.	.	.	506
1.25-1.49	.	.	98	193	6	20	3	.	.	.	320
1.50-1.74	.	.	10	201	5	22	4	.	.	.	242
1.75-1.99	.	.	.	43	7	12	3	.	.	.	65
2.00-2.24	.	.	.	9	40	9	3	.	.	.	61
2.25-2.49	.	.	.	.	11	.	4	.	.	.	15
2.50-2.74	.	.	.	.	3	.	3	.	.	.	6
2.75-2.99	.	.	.	.	1	.	1	.	.	.	2
3.00-3.24	.	.	.	.	2	.	1	.	.	.	3
3.25-3.49	.	.	.	.	.	4	.	.	.	.	4
3.50+	.	.	.	.	.	2	.	.	.	.	2
TOTAL	367	1221	1302	846	354	105	24	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 3967.

STATION M17 44.13N 87.43W 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	
0.00-0.24	837	584	231	73	2	.	.	.	.	.	1727
0.25-0.49	209	1214	589	337	30	.	.	.	.	.	2379
0.50-0.74	.	1090	774	615	129	4	.	.	.	.	2612
0.75-0.99	.	146	497	341	148	15	.	.	.	.	1147
1.00-1.24	.	.	478	260	185	36	3	.	.	.	962
1.25-1.49	.	.	89	219	91	30	4	.	.	.	433
1.50-1.74	.	.	14	206	88	37	7	.	.	.	352
1.75-1.99	.	.	.	43	60	24	6	.	.	.	133
2.00-2.24	.	.	.	8	65	25	8	.	.	.	106
2.25-2.49	.	.	.	.	24	13	6	.	.	.	43
2.50-2.74	.	.	.	.	7	20	8	.	.	.	35
2.75-2.99	.	.	.	.	1	7	4	.	.	.	12
3.00-3.24	.	.	.	.	.	5	3	.	.	.	8
3.25-3.49	.	.	.	.	.	2	4	.	.	.	6
3.50+	.	.	.	.	.	.	7	1	.	.	8
TOTAL	1046	3034	2672	2102	830	218	60	1	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M17 (44.13N 87.43W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													MEAN
1956	0.6	0.6	0.7	0.6	0.5	0.3	0.3	0.3	0.5	0.8	0.9	0.8	0.6
1957	0.9	0.7	0.6	0.5	0.6	0.4	0.3	0.3	0.5	0.5	0.8	0.9	0.6
1958	0.7	0.9	0.5	0.6	0.5	0.4	0.3	0.4	0.7	0.7	1.0	0.8	0.6
1959	0.8	1.0	0.8	0.6	0.6	0.4	0.4	0.5	0.7	0.7	0.8	0.9	0.7
1960	0.9	1.0	0.7	0.8	0.5	0.4	0.3	0.6	0.5	0.6	1.1	1.1	0.7
1961	0.8	0.8	0.9	0.6	0.5	0.4	0.4	0.4	0.8	0.9	0.8	0.8	0.7
1962	1.0	0.8	0.5	0.7	0.6	0.3	0.3	0.4	0.5	0.6	0.6	0.7	0.6
1963	0.8	0.8	0.6	0.6	0.5	0.3	0.3	0.4	0.5	0.7	0.8	0.7	0.6
1964	1.1	1.1	1.0	0.9	0.6	0.4	0.4	0.5	0.6	0.8	0.8	1.0	0.8
1965	1.0	1.1	0.8	0.5	0.5	0.4	0.4	0.4	0.6	0.8	0.8	0.9	0.7
1966	0.8	0.7	0.8	0.5	0.5	0.4	0.4	0.5	0.5	1.0	1.1	0.8	0.7
1967	1.1	1.0	0.7	0.6	0.5	0.4	0.3	0.5	0.5	0.8	0.7	0.8	0.7
1968	1.0	0.9	0.9	0.8	0.5	0.5	0.5	0.5	0.7	0.9	0.8	1.1	0.8
1969	0.8	0.7	0.7	0.6	0.5	0.5	0.4	0.5	0.6	0.9	0.8	1.0	0.7
1970	0.9	1.1	0.6	0.8	0.6	0.5	0.4	0.4	0.7	0.8	1.0	0.9	0.7
1971	1.0	1.1	0.7	0.6	0.5	0.4	0.5	0.5	0.7	0.8	0.9	0.8	0.7
1972	1.2	0.9	0.9	0.6	0.4	0.5	0.4	0.6	0.7	0.9	0.8	0.9	0.7
1973	1.0	1.0	0.8	0.9	0.5	0.4	0.5	0.6	0.7	0.7	0.8	1.0	0.7
1974	0.8	1.0	0.8	0.8	0.5	0.5	0.5	0.6	0.7	0.8	0.8	1.0	0.7
1975	1.0	0.9	0.8	0.6	0.4	0.4	0.4	0.5	0.6	0.9	1.0	0.9	0.7
1976	1.0	1.1	1.1	0.8	0.5	0.5	0.5	0.6	0.7	0.8	0.8	0.9	0.8
1977	0.8	1.0	0.8	0.6	0.5	0.5	0.6	0.6	0.7	0.9	1.0	0.9	0
1978	1.0	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.7	0.8	0.9	1.0	0
1979	0.9	0.9	0.8	0.6	0.6	0.6	0.4	0.5	0.6	0.8	0.9	0.9	0
1980	0.8	0.7	0.7	0.5	0.3	0.4	0.3	0.4	0.6	0.7	0.8	0.8	0.6
1981	0.6	1.0	0.6	0.7	0.5	0.4	0.3	0.4	0.6	0.7	0.6	0.7	0.6
1982	0.9	0.8	0.8	0.7	0.5	0.3	0.4	0.4	0.7	0.8	0.8	0.8	0.7
1983	0.8	0.8	0.7	0.6	0.4	0.4	0.4	0.4	0.6	0.7	1.0	0.8	0.6
1984	0.7	0.8	0.7	0.7	0.4	0.4	0.3	0.4	0.7	0.7	1.0	0.9	0.6
1985	0.8	0.9	0.9	0.6	0.5	0.4	0.4	0.4	0.7	0.6	0.7	0.7	0.6
1986	0.9	0.6	0.8	0.5	0.4	0.4	0.4	0.4	0.5	0.6	0.9	0.8	0.6
1987	0.7	0.8	0.7	0.5	0.4	0.3	0.3	0.4	0.4	0.6	0.7	0.8	0.6
MEAN	0.9	0.9	0.8	0.7	0.5	0.4	0.4	0.5	0.6	0.7	0.9	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M17 (44.13N 87.43W)

	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR												
1956	2.0	2.4	2.7	1.5	1.2	1.3	1.3	1.5	1.8	2.7	2.6	2.9
1957	2.6	2.5	2.5	1.9	1.8	1.3	1.3	1.5	1.8	1.8	2.4	2.5
1958	2.5	2.5	1.7	2.3	1.7	1.4	1.6	1.5	2.4	2.0	3.4	2.1
1959	2.2	4.1	2.8	1.9	2.0	1.7	1.8	1.7	3.1	1.9	2.7	4.3
1960	2.5	4.3	2.4	2.3	1.7	1.1	1.3	1.9	1.6	2.0	3.8	3.9
1961	2.2	2.9	2.8	2.3	1.5	1.6	1.3	1.6	2.2	3.6	3.6	2.8
1962	4.1	2.8	1.8	2.1	1.8	1.4	1.1	1.3	1.4	1.7	3.4	2.5
1963	3.7	2.9	2.2	3.1	1.8	1.3	1.3	1.8	1.6	2.6	2.6	2.2
1964	3.7	3.4	3.2	5.7	2.5	1.9	1.7	1.6	3.8	2.3	3.8	2.8
1965	4.1	3.3	2.4	1.7	1.9	1.4	1.5	1.6	1.7	2.1	3.4	4.0
1966	2.6	2.1	2.4	2.0	1.7	1.4	1.1	1.5	1.8	3.6	3.4	2.3
1967	4.4	4.7	1.9	2.4	2.2	1.2	1.1	1.8	2.1	2.4	2.3	1.7
1968	2.4	2.4	3.0	2.0	2.5	2.4	2.1	2.0	2.1	2.4	2.0	4.5
1969	3.2	2.9	2.4	2.3	1.3	1.6	1.7	2.3	2.2	3.3	3.8	2.6
1970	2.3	3.4	1.8	2.6	2.1	1.4	1.3	1.4	3.0	3.5	3.2	4.1
1971	2.6	3.9	3.0	2.7	1.8	1.3	2.1	1.8	3.3	3.4	3.5	2.7
1972	4.8	2.5	3.2	2.9	1.7	1.5	1.6	1.5	3.0	3.1	3.9	3.1
1973	3.2	3.3	2.4	3.3	1.6	1.4	1.5	1.6	2.0	3.1	3.3	3.4
1974	3.0	3.6	2.7	2.9	1.8	1.6	1.5	2.8	2.8	3.1	2.2	2.9
1975	4.9	4.6	2.7	1.7	1.7	1.5	1.9	2.8	1.6	3.2	3.3	4.0
1976	4.4	3.3	2.9	3.1	1.8	2.5	2.0	2.1	2.2	2.3	2.1	2.8
1977	3.0	2.6	3.2	1.8	2.0	1.5	1.7	4.2	3.1	2.5	3.4	2.6
1978	3.9	2.3	2.4	1.8	2.6	2.1	1.6	1.5	2.7	2.8	3.6	2.5
1979	3.2	2.6	2.3	2.0	2.1	1.9	1.2	1.5	1.9	2.6	3.1	3.7
1980	3.4	2.9	2.1	1.8	1.4	1.2	0.9	1.3	1.7	3.4	2.1	3.1
1981	1.8	2.6	1.9	1.9	2.1	1.6	1.2	1.4	1.5	1.7	2.6	3.2
1982	3.4	3.5	2.4	2.0	1.4	1.2	1.7	1.5	2.2	2.8	2.6	2.0
1983	2.3	3.8	2.2	2.3	1.8	1.2	2.0	1.3	1.7	1.7	3.5	2.8
1984	2.1	4.1	2.4	2.0	1.3	2.6	1.1	1.4	2.5	3.6	2.5	3.5
1985	2.7	2.3	2.5	1.6	1.6	1.7	1.7	1.8	2.4	2.4	2.6	2.5
1986	2.5	1.9	2.5	1.6	1.6	1.3	1.9	1.1	1.3	2.3	3.8	2.3
1987	1.7	3.3	3.8	1.8	1.5	0.9	1.4	1.3	1.4	2.2	1.9	2.5

32 YR. STATISTICS FOR WIS STATION M17

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	5.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	194.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		64041321

STATION M18 44.27N 87.43W 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	
0.00-0.24	430	186	56	13	.	.	.	.	.	.	685
0.25-0.49	75	421	155	118	23	.	.	.	.	.	792
0.50-0.74	.	730	293	218	101	.	.	.	.	.	1342
0.75-0.99	.	3	281	103	109	14	.	.	.	.	510
1.00-1.24	.	.	359	28	83	32	.	.	.	.	502
1.25-1.49	.	.	151	32	36	18	.	.	.	.	237
1.50-1.74	.	.	22	102	47	36	2	.	.	.	209
1.75-1.99	.	.	.	27	10	23	4	.	.	.	64
2.00-2.24	.	.	.	10	1	17	8	.	.	.	36
2.25-2.49	.	.	.	4	1	.	5	.	.	.	10
2.50-2.74	.	.	.	.	1	1	8	1	.	.	11
2.75-2.99	.	.	.	.	1	1	1	1	.	.	4
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	505	1340	1317	655	413	142	28	2	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 4134.

STATION M18 44.27N 87.43W 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	
0.00-0.24	285	125	23	10	.	.	.	.	.	.	443
0.25-0.49	57	416	115	77	8	.	.	.	.	.	673
0.50-0.74	.	447	314	147	59	2	.	.	.	.	969
0.75-0.99	.	2	198	118	45	1	.	.	.	.	364
1.00-1.24	.	.	145	114	52	12	.	.	.	.	323
1.25-1.49	.	.	33	64	42	5	.	.	.	.	144
1.50-1.74	.	.	4	56	50	5	.	.	.	.	115
1.75-1.99	.	.	.	12	25	12	.	.	.	.	49
2.00-2.24	.	.	.	2	22	14	2	.	.	.	40
2.25-2.49	.	.	.	.	9	8	.	.	.	.	17
2.50-2.74	.	.	.	.	4	11	2	.	.	.	17
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	5	2	.	.	.	7
3.25-3.49	.	.	.	.	.	2	1	.	.	.	3
3.50+	.	.	.	.	.	.	4	2	.	.	6
TOTAL	342	990	832	600	316	78	11	2	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 2985.

STATION M18 44.27N 87.43W 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	
0.00-0.24	638	332	71	20	.	.	.	.	.	.	1061
0.25-0.49	145	1114	210	113	11	.	.	.	.	.	1593
0.50-0.74	.	714	1117	240	56	2	.	.	.	.	2129
0.75-0.99	.	.	517	327	40	1	.	.	.	.	885
1.00-1.24	.	.	371	585	75	2	.	.	.	.	1033
1.25-1.49	.	.	29	282	174	3	.	.	.	.	488
1.50-1.74	.	.	.	219	233	16	.	.	.	.	468
1.75-1.99	.	.	.	11	178	35	1	.	.	.	225
2.00-2.24	.	.	.	1	150	44	1	.	.	.	196
2.25-2.49	.	.	.	.	47	48	3	.	.	.	98
2.50-2.74	.	.	.	.	6	56	6	.	.	.	68
2.75-2.99	.	.	.	.	.	25	4	.	.	.	29
3.00-3.24	.	.	.	.	.	22	6	.	.	.	28
3.25-3.49	.	.	.	.	.	1	16	.	.	.	17
3.50+	.	.	.	.	.	.	41	1	.	.	42
TOTAL	783	2160	2315	1798	970	255	78	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.1 NO. OF CASES= 7836.

STATION M18 44.27N 87.43W 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	
0.00-0.24	445	225	48	16	.	.	.	.	.	.	734
0.25-0.49	90	678	113	55	6	.	.	.	.	.	942
0.50-0.74	.	304	403	101	17	1	.	.	.	.	826
0.75-0.99	.	.	152	81	6	.	.	.	.	.	239
1.00-1.24	.	.	75	154	8	.	.	.	.	.	237
1.25-1.49	.	.	.	71	18	2	.	.	.	.	91
1.50-1.74	.	.	.	54	54	.	.	.	.	.	108
1.75-1.99	.	.	.	1	43	1	.	.	.	.	45
2.00-2.24	.	.	.	.	38	6	.	.	.	.	44
2.25-2.49	.	.	.	.	12	6	.	.	.	.	18
2.50-2.74	.	.	.	.	6	11	.	.	.	.	17
2.75-2.99	.	.	.	.	.	6	.	.	.	.	6
3.00-3.24	.	.	.	.	.	3	1	.	.	.	4
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	535	1207	791	533	208	36	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 3111.

STATION M18 44.27N 87.43W 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	
0.00-0.24	500	285	79	25	.	.	.	.	.	.	889
0.25-0.49	58	575	116	88	2	.	.	.	.	.	839
0.50-0.74	.	214	25	42	13	.	.	.	.	.	520
0.75-0.99	.	1	118	45	7	.	.	.	.	.	171
1.00-1.24	.	.	62	124	6	.	.	.	.	.	192
1.25-1.49	.	.	.	52	13	.	.	.	.	.	65
1.50-1.74	.	.	.	48	36	1	.	.	.	.	85
1.75-1.99	.	.	.	1	32	.	.	.	.	.	33
2.00-2.24	.	.	.	.	24	.	.	.	.	.	24
2.25-2.49	.	.	.	.	5	.	.	.	.	.	5
2.50-2.74	.	.	.	.	2	1	.	.	.	.	3
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	558	1075	626	425	140	3	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 2656.

STATION M18 44.27N 87.43W 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	
0.00-0.24	333	152	28	7	.	.	.	.	.	.	520
0.25-0.49	66	302	53	48	4	.	.	.	.	.	473
0.50-0.74	.	170	121	28	3	.	.	.	.	.	322
0.75-0.99	.	1	69	35	2	.	.	.	.	.	107
1.00-1.24	.	.	35	63	2	.	.	.	.	.	100
1.25-1.49	.	.	1	34	10	.	.	.	.	.	45
1.50-1.74	.	.	.	17	16	.	.	.	.	.	33
1.75-1.99	.	.	.	.	7	.	.	.	.	.	7
2.00-2.24	.	.	.	.	12	.	.	.	.	.	12
2.25-2.49	.	.	.	.	3	1	.	.	.	.	4
2.50-2.74	.	.	.	.	1	5	.	.	.	.	6
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	399	625	307	232	60	7	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 1535.

STATION M18 44.27N 87.43W 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	
0.00-0.24	381	186	64	17	.	.	.	.	.	.	648
0.25-0.49	78	442	127	63	6	.	.	.	.	.	716
0.50-0.74	.	286	226	66	12	.	.	.	.	.	590
0.75-0.99	.	4	101	49	14	2	.	.	.	.	170
1.00-1.24	.	.	83	58	13	1	.	.	.	.	155
1.25-1.49	.	.	5	40	21	1	.	.	.	.	67
1.50-1.74	.	.	.	25	27	.	4	.	.	.	56
1.75-1.99	.	.	.	1	8	1	1	.	.	.	11
2.00-2.24	.	.	.	.	12	3	1	.	.	.	16
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	2	.	.	.	.	2
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	459	918	606	319	113	11	6	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 2288.

STATION M18 44.27N 87.43W 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	
0.00-0.24	529	458	247	56	4	1	.	.	.	.	1295
0.25-0.49	158	983	672	298	19	1	.	.	.	.	2131
0.50-0.74	.	586	840	734	156	8	.	.	.	.	2324
0.75-0.99	.	25	259	437	166	24	1	.	.	.	912
1.00-1.24	.	.	157	203	237	47	12	.	.	.	656
1.25-1.49	.	.	12	80	99	38	8	.	.	.	237
1.50-1.74	.	.	1	64	74	28	7	.	.	.	174
1.75-1.99	.	.	.	9	44	10	6	.	.	.	69
2.00-2.24	.	.	.	.	42	8	3	1	.	.	54
2.25-2.49	.	.	.	.	13	1	2	.	.	.	16
2.50-2.74	.	.	.	.	4	8	2	.	.	.	14
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	687	2052	2188	1881	858	178	42	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 7397.

STATION M18 44.27N 87.43W 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	
0.00-0.24	940	1201	1055	295	3	.	.	.	.	.	3494
0.25-0.49	265	1789	3331	1765	68	.	.	.	.	.	7218
0.50-0.74	.	1132	1992	3931	473	11	.	.	.	.	7539
0.75-0.99	.	144	729	1487	920	48	.	.	.	.	3328
1.00-1.24	.	.	574	1009	1240	250	22	.	.	.	3095
1.25-1.49	.	.	72	436	411	217	34	.	.	.	1170
1.50-1.74	.	.	9	337	291	251	70	.	1	.	959
1.75-1.99	.	.	.	32	192	116	53	2	.	.	395
2.00-2.24	.	.	.	5	207	87	69	2	.	.	370
2.25-2.49	.	.	.	.	72	60	38	3	.	.	173
2.50-2.74	.	.	.	.	18	89	32	4	.	.	143
2.75-2.99	.	.	.	.	3	39	18	7	.	.	67
3.00-3.24	.	.	.	.	1	21	24	6	.	.	52
3.25-3.49	.	.	.	.	.	8	8	3	.	.	19
3.50+	.	.	.	.	.	1	25	11	3	.	40
TOTAL	1205	4266	7762	9297	3899	1198	393	38	4	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.6 NO. OF CASES= 26267.

STATION M18 44.27N 87.43W 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	
0.00-0.24	1050	466	193	69	3	.	.	.	.	.	1781
0.25-0.49	266	1326	421	205	22	.	.	.	.	.	2240
0.50-0.74	.	2063	479	205	26	.	.	.	.	.	2773
0.75-0.99	.	389	1140	564	98	6	.	.	.	.	2197
1.00-1.24	.	.	451	695	106	18	.	.	.	.	1270
1.25-1.49	.	.	133	303	49	19	.	.	.	.	504
1.50-1.74	.	.	37	294	91	35	7	.	.	.	464
1.75-1.99	.	.	.	39	95	16	5	.	.	.	155
2.00-2.24	.	.	.	6	81	32	5	.	.	.	124
2.25-2.49	.	.	.	1	16	14	8	.	.	.	39
2.50-2.74	.	.	.	.	8	18	8	.	.	.	34
2.75-2.99	.	.	.	.	1	4	4	.	.	.	9
3.00-3.24	.	.	.	.	.	7	10	.	.	.	17
3.25-3.49	.	.	.	.	.	2	1	.	.	.	3
3.50+	.	.	.	.	.	.	11	2	2	0	15
TOTAL	1316	4244	2854	2381	596	171	59	2	2	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 10889.

STATION M18 44.27N 87.43W 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	
0.00-0.24	1014	351	128	54	.	.	.	.	.	.	1547
0.25-0.49	244	938	56	127	20	1	.	.	.	.	1386
0.50-0.74	.	1531	71	28	19	.	.	.	.	.	1649
0.75-0.99	.	319	417	59	14	.	.	.	.	.	809
1.00-1.24	.	.	234	24	12	3	.	.	.	.	273
1.25-1.49	.	.	87	4	5	2	.	.	.	.	98
1.50-1.74	.	.	23	16	16	4	1	.	.	.	60
1.75-1.99	.	.	2	13	7	1	1	.	.	.	24
2.00-2.24	.	.	.	7	3	1	1	.	.	.	12
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1258	3139	1018	332	98	13	3	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.1 NO. OF CASES= 5497.

STATION M18 44.27N 87.43W 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	
0.00-0.24	637	202	68	43	3	.	.	.	.	.	953
0.25-0.49	209	599	52	98	23	1	.	.	.	.	982
0.50-0.74	.	950	12	19	28	5	.	.	.	.	1014
0.75-0.99	.	136	223	5	4	1	.	.	.	.	369
1.00-1.24	.	.	165	2	1	1	.	.	.	.	169
1.25-1.49	.	.	51	.	1	.	.	.	.	.	52
1.50-1.74	.	.	27	.	2	.	.	.	.	.	29
1.75-1.99	.	.	1	7	.	.	.	.	.	.	8
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	846	1887	599	175	62	8	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 3357.

STATION M18 44.27N 87.43W 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	
0.00-0.24	644	222	98	41	2	.	.	.	.	.	1007
0.25-0.49	278	797	69	168	60	2	.	.	.	.	1374
0.50-0.74	.	1208	11	56	78	1	.	.	.	.	1354
0.75-0.99	.	156	220	4	14	6	.	.	.	.	400
1.00-1.24	.	.	160	1	6	1	.	.	.	.	168
1.25-1.49	.	.	71	.	.	.	.	.	.	.	71
1.50-1.74	.	.	27	8	.	2	.	.	.	.	37
1.75-1.99	.	.	.	5	.	.	.	.	.	.	5
2.00-2.24	.	.	.	3	.	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	922	2383	656	286	160	12	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.2 NO. OF CASES= 4145.

STATION M18 44.27N 87.43W 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	
0.00-0.24	366	155	49	28	2	.	.	.	.	.	600
0.25-0.49	125	614	67	113	25	1	.	.	.	.	945
0.50-0.74	.	1155	45	52	77	11	.	.	.	.	1340
0.75-0.99	.	98	336	12	38	21	1	.	.	.	506
1.00-1.24	.	.	255	.	7	13	1	.	.	.	276
1.25-1.49	.	.	129	.	2	1	.	.	.	.	132
1.50-1.74	.	.	13	34	.	1	.	.	.	.	48
1.75-1.99	.	.	.	12	.	.	.	.	.	.	12
2.00-2.24	.	.	.	5	.	.	.	.	.	.	5
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	491	2022	894	256	151	48	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 3627.

STATION M18 44.27N 87.43W 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	
0.00-0.24	376	147	59	38	1	.	.	.	.	.	621
0.25-0.49	65	481	97	144	25	.	.	.	.	.	812
0.50-0.74	.	1134	122	70	94	3	.	.	.	.	1423
0.75-0.99	.	52	356	20	60	31	.	.	.	.	519
1.00-1.24	.	.	341	6	36	27	3	.	.	.	413
1.25-1.49	.	.	156	.	3	10	2	.	.	.	171
1.50-1.74	.	.	11	52	.	5	2	.	.	.	70
1.75-1.99	.	.	.	8	.	.	2	.	.	.	10
2.00-2.24	.	.	.	2	.	.	1	1	.	.	4
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	441	1814	1142	340	219	76	10	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 3794.

STATION M18 44.27N 87.43W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

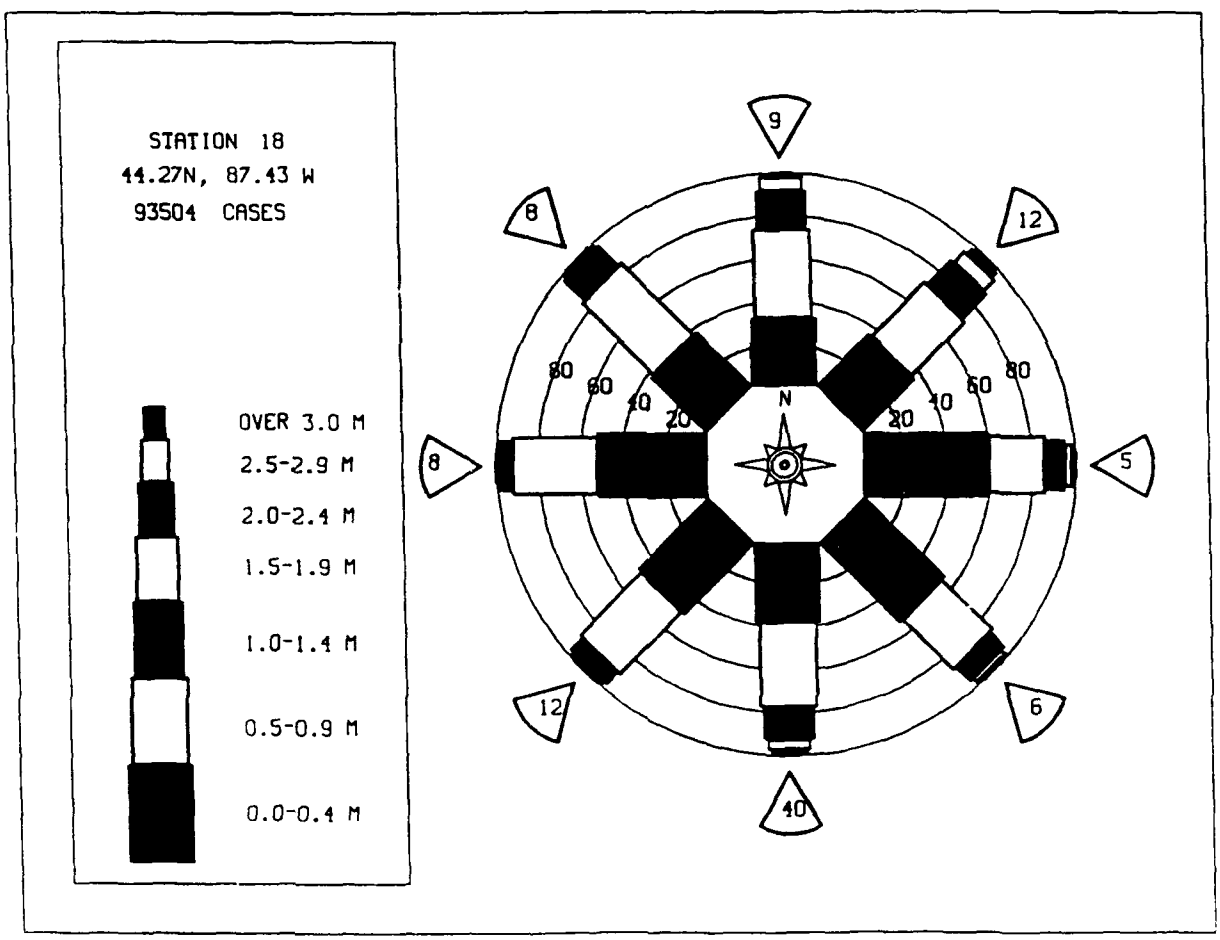
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	361	157	55	13	.	.	.	.	.	.	586
0.25-0.49	53	382	163	137	22	.	.	.	.	.	757
0.50-0.74	.	802	176	144	126	2	.	.	.	.	1250
0.75-0.99	.	25	337	39	117	10	.	.	.	.	528
1.00-1.24	.	.	429	6	48	38	1	.	.	.	522
1.25-1.49	.	.	178	80	13	9	3	.	.	.	283
1.50-1.74	.	.	24	147	2	29	7	.	.	.	209
1.75-1.99	.	.	1	44	1	10	2	.	.	.	58
2.00-2.24	.	.	.	22	.	2	8	.	.	.	32
2.25-2.49	.	.	.	1	1	.	1	.	.	.	3
2.50-2.74	.	.	.	1	3	.	3	.	.	.	7
2.75-2.99	.	.	.	.	2	.	.	.	.	.	2
3.00-3.24	.	.	.	.	2	.	.	.	.	.	2
3.25-3.49	.	.	.	.	2	.	.	.	.	.	2
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	414	1366	1363	634	339	100	25	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 3986.

STATION M18 44.27N 87.43W 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	
0.00-0.24	893	485	232	75	1	.	.	.	.	.	1686
0.25-0.49	223	1186	582	362	35	.	.	.	.	.	2388
0.50-0.74	.	1343	648	608	134	4	.	.	.	.	2737
0.75-0.99	.	136	546	339	166	16	.	.	.	.	1203
1.00-1.24	.	.	390	307	194	44	4	.	.	.	939
1.25-1.49	.	.	111	148	90	32	4	.	.	.	385
1.50-1.74	.	.	20	147	94	41	10	.	.	.	312
1.75-1.99	.	.	.	22	64	22	7	.	.	.	115
2.00-2.24	.	.	.	6	59	21	10	.	.	.	96
2.25-2.49	.	.	.	.	18	14	5	.	.	.	37
2.50-2.74	.	.	.	.	5	20	6	.	.	.	31
2.75-2.99	.	.	.	.	.	8	2	.	.	.	10
3.00-3.24	.	.	.	.	.	6	4	.	.	.	10
3.25-3.49	.	.	.	.	.	1	2	.	.	.	3
3.50+	.	.	.	.	.	.	8	1	.	.	9
TOTAL	1116	3150	2529	2014	860	229	62	1	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M18 (44.27N 87.43W)

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M18 (44.27N 87.43W)

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

32 YR. STATISTICS FOR WIS STATION M18

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	5.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	8.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	191.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011115

STATION M19 44.41N 87.42W 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	
0.00-0.24	504	192	83	32	.	.	.	.	.	.	811
0.25-0.49	183	543	206	218	54	.	.	.	.	.	1204
0.50-0.74	.	522	65	171	148	9	.	.	.	.	915
0.75-0.99	.	232	72	196	100	18	.	.	.	.	618
1.00-1.24	.	.	67	49	115	66	3	.	.	.	300
1.25-1.49	.	.	23	5	14	17	8	.	.	.	67
1.50-1.74	.	.	14	1	7	7	7	1	.	.	37
1.75-1.99	.	.	4	2	.	3	6	.	.	.	15
2.00-2.24	.	.	.	1	.	2	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	687	1489	534	675	438	122	24	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 3728.

STATION M19 44.41N 87.42W 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	
0.00-0.24	341	114	27	18	2	.	.	.	.	.	502
0.25-0.49	137	417	118	116	27	1	.	.	.	.	816
0.50-0.74	.	442	124	105	57	5	.	.	.	.	733
0.75-0.99	.	71	121	103	36	6	.	.	.	.	337
1.00-1.24	.	.	73	91	27	9	.	.	.	.	200
1.25-1.49	.	.	6	52	26	8	1	.	.	.	93
1.50-1.74	.	.	3	41	31	2	2	.	.	.	79
1.75-1.99	.	.	.	2	18	4	.	.	.	.	24
2.00-2.24	.	.	.	1	13	10	.	.	.	.	24
2.25-2.49	.	.	.	.	7	4	1	.	.	.	12
2.50-2.74	.	.	.	.	2	6	2	.	.	.	10
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	1	2	1	.	.	4
3.25-3.49	.	.	.	.	.	.	4	.	.	.	4
3.50+	.	.	.	.	.	.	3	2	.	.	5
TOTAL	478	1044	472	529	246	59	15	3	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 2682.

STATION M19 44.41N 87.42W 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	
0.00-0.24	752	359	100	37	.	.	.	.	.	.	1248
0.25-0.49	173	1101	238	137	29	.	.	.	.	.	1678
0.50-0.74	.	824	917	212	43	1	.	.	.	.	1997
0.75-0.99	.	7	595	170	22	.	.	.	.	.	794
1.00-1.24	.	.	395	476	42	3	.	.	.	.	916
1.25-1.49	.	.	34	252	170	6	.	.	.	.	462
1.50-1.74	.	.	2	197	183	5	1	.	.	.	388
1.75-1.99	.	.	.	11	168	32	.	.	.	.	211
2.00-2.24	.	.	.	2	120	45	3	.	.	.	170
2.25-2.49	.	.	.	.	26	48	4	.	.	.	78
2.50-2.74	.	.	.	.	5	56	7	.	.	.	68
2.75-2.99	.	.	.	.	.	19	7	.	.	.	26
3.00-3.24	.	.	.	.	.	13	12	.	.	.	25
3.25-3.49	.	.	.	.	.	.	13	.	.	.	13
3.50+	.	.	.	.	.	.	40	3	.	.	43
TOTAL	925	2291	2281	1494	808	228	87	3	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 7615.

STATION M19 44.41N 87.42W 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	
0.00-0.24	539	216	56	23	.	.	.	.	.	.	834
0.25-0.49	100	659	96	74	7	.	.	.	.	.	936
0.50-0.74	.	355	370	57	18	1	.	.	.	.	801
0.75-0.99	.	.	191	63	3	.	.	.	.	.	257
1.00-1.24	.	.	106	185	4	1	.	.	.	.	296
1.25-1.49	.	.	4	82	26	.	.	.	.	.	112
1.50-1.74	.	.	.	71	59	1	.	.	.	.	131
1.75-1.99	.	.	.	2	56	1	.	.	.	.	59
2.00-2.24	.	.	.	.	52	7	.	.	.	.	59
2.25-2.49	.	.	.	.	13	10	.	.	.	.	23
2.50-2.74	.	.	.	.	3	13	.	.	.	.	16
2.75-2.99	.	.	.	.	.	7	.	.	.	.	7
3.00-3.24	.	.	.	.	.	3	3	.	.	.	6
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	639	1230	823	557	241	44	3	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 3322.

STATION M19 44.41N 87.42W 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	
0.00-0.24	591	252	83	41		.	.	.	.	.	967
0.25-0.49	73	577	85	62	8	.	.	.	.	.	805
0.50-0.74	.	213	254	20	6	.	.	.	.	.	493
0.75-0.99	.	.	133	40	4	.	.	.	.	.	177
1.00-1.24	.	.	68	132	4	.	.	.	.	.	204
1.25-1.49	.	.	.	59	12	.	.	.	.	.	71
1.50-1.74	.	.	.	59	34	.	.	.	.	.	93
1.75-1.99	.	.	.	.	38	.	.	.	.	.	38
2.00-2.24	.	.	.	.	17	.	.	.	.	.	17
2.25-2.49	.	.	.	.	4	.	.	.	.	.	4
2.50-2.74	.	.	.	.	5	2	.	.	.	.	7
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	664	1042	623	413	132	3	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 2703.

STATION M19 44.41N 87.42W 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	
0.00-0.24	356	148	39	13	1	.	.	.	.	.	557
0.25-0.49	75	303	22	37	5	.	.	.	.	.	442
0.50-0.74	.	174	126	16	2	.	.	.	.	.	318
0.75-0.99	.	1	73	31	1	.	.	.	.	.	106
1.00-1.24	.	.	35	66		.	.	.	.	.	101
1.25-1.49	.	.	2	32	8	.	.	.	.	.	42
1.50-1.74	.	.	.	19	16	.	.	.	.	.	35
1.75-1.99	.	.	.	.	11	.	.	.	.	.	11
2.00-2.24	.	.	.	.	13	.	.	.	.	.	13
2.25-2.49	.	.	.	.	3	.	.	.	.	.	3
2.50-2.74	.	.	.	.	1	4	.	.	.	.	5
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	431	626	297	214	61	5	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.3 NO. OF CASES= 1538.

STATION M19 44.41N 87.42W 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	
0.00-0.24	401	168		29	2	.	.	.	.	.	664
0.25-0.49	74	438		80	5	.	.	.	.	.	672
0.50-0.74	.	274		45	12	.	.	.	.	.	543
0.75-0.99	.	6		91	9	.	.	.	.	.	165
1.00-1.24	.	.		89	7	1	.	.	.	.	156
1.25-1.49	.	.		39	17	1	.	.	.	.	62
1.50-1.74	.	.		31	25	2	5	.	.	.	63
1.75-1.99	.	.		.	8	1	1	.	.	.	10
2.00-2.24	.	.		.	14	1	.	.	.	.	15
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	1	.	.	.	.	1
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	475	886	544	334	99	9	6	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 2216.

STATION M19 44.41N 87.42W 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	
0.00-0.24	591	425	315	67	4	1	.	.	.	.	1403
0.25-0.49	165	984	666	342	33	.	.	.	.	.	2190
0.50-0.74	.	590	795	705	163	12	.	.	.	.	2265
0.75-0.99	.	49	256	374	175	28	2	.	.	.	884
1.00-1.24	.	.	156	207	197	55	12	.	.	.	627
1.25-1.49	.	.	12	82	74	33	10	.	.	.	211
1.50-1.74	.	.	.	72	73	24	7	.	.	.	176
1.75-1.99	.	.	.	4	42	8	2	.	.	.	56
2.00-2.24	.	.	.	1	52	5	4	1	.	.	63
2.25-2.49	.	.	.	.	13	2	.	.	.	.	15
2.50-2.74	.	.	.	.	2	9	2	.	.	.	13
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	756	2048	2200	1854	828	180	39	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 7415.

STATION M19 44.41N 87.42W 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	
0.00-0.24	1023	1045	1244	391	8	.	.	.	.	.	3711
0.25-0.49	270	1784	3465	2091	93	3	.	.	.	.	7706
0.50-0.74	.	1306	1993	4318	598	6	.	.	.	.	8221
0.75-0.99	.	205	820	1768	1094	59	.	.	.	.	3946
1.00-1.24	.	.	563	1030	1361	271	31	.	.	.	3256
1.25-1.49	.	.	96	429	425	244	37	1	.	.	1232
1.50-1.74	.	.	7	345	308	268	70	.	1	.	999
1.75-1.99	.	.	1	39	206	109	57	2	.	.	414
2.00-2.24	.	.	.	4	201	94	79	4	.	.	382
2.25-2.49	.	.	.	.	80	52	34	3	.	.	169
2.50-2.74	.	.	.	.	23	101	41	5	.	.	170
2.75-2.99	.	.	.	.	2	38	17	7	.	.	64
3.00-3.24	.	.	.	.	.	31	25	5	.	.	61
3.25-3.49	.	.	.	.	.	6	11	3	.	.	20
3.50+	.	.	.	.	.	3	24	13	5	.	45
TOTAL	1293	4340	8189	10415	4399	1285	426	43	6	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.6 NO. OF CASES= 28451.

STATION M19 44.41N 87.42W 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	
0.00-0.24	1136	403	194	85	9	.	.	.	.	.	1827
0.25-0.49	283	1356	361	176	16	.	.	.	.	.	2192
0.50-0.74	.	2337	373	186	17	1	.	.	.	.	2914
0.75-0.99	.	411	755	524	135	6	.	.	.	.	1831
1.00-1.24	.	.	539	290	98	19	.	.	.	.	946
1.25-1.49	.	.	224	120	45	14	1	.	.	.	404
1.50-1.74	.	.	84	154	91	28	2	.	.	.	359
1.75-1.99	.	.	.	53	53	14	5	.	.	.	125
2.00-2.24	.	.	.	7	42	20	10	.	.	.	79
2.25-2.49	.	.	.	4	12	8	8	.	.	.	32
2.50-2.74	.	.	.	1	6	14	5	.	.	.	26
2.75-2.99	.	.	.	.	1	9	6	.	.	.	16
3.00-3.24	.	.	.	.	.	4	3	.	.	.	7
3.25-3.49	.	.	.	.	.	2	2	.	.	.	4
3.50+	.	.	.	.	.	3	9	2	.	.	14
TOTAL	1419	4507	2530	1600	525	142	51	2	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.6 NO. OF CASES= 10101.

STATION M19 44.41N 87.42W 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	
0.00-0.24	1122	273	101	60	6	.	.	.	.	.	1562
0.25-0.49	249	952	33	69	16	.	.	.	.	.	1319
0.50-0.74	.	1620	86	7	6	.	.	.	.	.	1719
0.75-0.99	.	304	436	36	11	2	.	.	.	.	789
1.00-1.24	.	.	237	7	11	3	.	.	.	.	258
1.25-1.49	.	.	105	.	4	2	.	.	.	.	111
1.50-1.74	.	.	26	28	4	6	.	.	.	.	64
1.75-1.99	.	.	3	11	1	1	.	.	.	.	16
2.00-2.24	.	.	.	8	.	1	.	.	.	.	9
2.25-2.49	.	.	.	.	.	1	.	.	.	.	1
2.50-2.74	.	.	.	.	2	.	.	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1371	3149	1027	226	61	16	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 5486.

STATION M19 44.41N 87.42W 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	
0.00-0.24	687	164	72	33	2	.	.	.	.	.	958
0.25-0.49	238	647	27	59	31	.	.	.	.	.	1002
0.50-0.74	.	1036	12	5	9	3	.	.	.	.	1065
0.75-0.99	.	115	244	.	3	.	.	.	.	.	362
1.00-1.24	.	.	178	.	.	.	.	.	.	.	178
1.25-1.49	.	.	60	.	3	.	.	.	.	.	63
1.50-1.74	.	.	23	2	.	.	.	.	.	.	25
1.75-1.99	.	.	.	4	.	.	.	.	.	.	4
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	925	1962	616	103	48	3	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 3430.

STATION M19 44.41N 87.42W 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	
0.00-0.24	706	178	98	48	3	.	.	.	.	.	1033
0.25-0.49	280	777	35	116	52	2	.	.	.	.	1262
0.50-0.74	.	1330	10	10	25	1	.	.	.	.	1376
0.75-0.99	.	124	286	1	4	1	.	.	.	.	416
1.00-1.24	.	.	208	.	.	.	.	.	.	.	208
1.25-1.49	.	.	74	.	.	.	.	.	.	.	74
1.50-1.74	.	.	28	13	.	1	.	.	.	.	42
1.75-1.99	.	.	.	8	.	.	.	.	.	.	8
2.00-2.24	.	.	.	4	.	.	.	.	.	.	4
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	986	2409	739	200	84	5	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 4147.

STATION M19 44.41N 87.42W 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	
0.00-0.24	407	140	56	42	2	.	.	.	.	.	647
0.25-0.49	140	621	37	102	42	1	.	.	.	.	943
0.50-0.74	.	1195	59	19	33	12	1	.	.	.	1319
0.75-0.99	.	95	343	2	11	10	.	.	.	.	461
1.00-1.24	.	.	300	.	.	.	.	.	.	.	300
1.25-1.49	.	.	139	.	.	.	.	.	.	.	139
1.50-1.74	.	.	12	34	.	.	.	.	.	.	46
1.75-1.99	.	.	.	9	.	.	.	.	.	.	9
2.00-2.24	.	.	.	5	.	.	.	.	.	.	5
2.25-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	547	2051	946	214	88	23	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 3630.

STATION M19 44.41N 87.42W 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	
0.00-0.24	433	128	79	63	2	.	.	.	.	.	705
0.25-0.49	57	430	64	102	43	.	.	.	.	.	696
0.50-0.74	.	1118	109	32	48	6	1	.	.	.	1314
0.75-0.99	.	17	314	6	28	21	.	.	.	.	386
1.00-1.24	.	.	296	1	4	5	.	.	.	.	306
1.25-1.49	.	.	159	.	.	.	.	.	.	.	159
1.50-1.74	.	.	13	66	.	.	.	.	.	.	79
1.75-1.99	.	.	.	11	.	.	.	.	.	.	11
2.00-2.24	.	.	.	2	.	.	.	.	.	.	2
2.25-2.49	.	.	.	2	.	.	.	.	.	.	2
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	490	1693	1034	285	125	32	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 3433.

STATION M19 44.41N 87.42W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

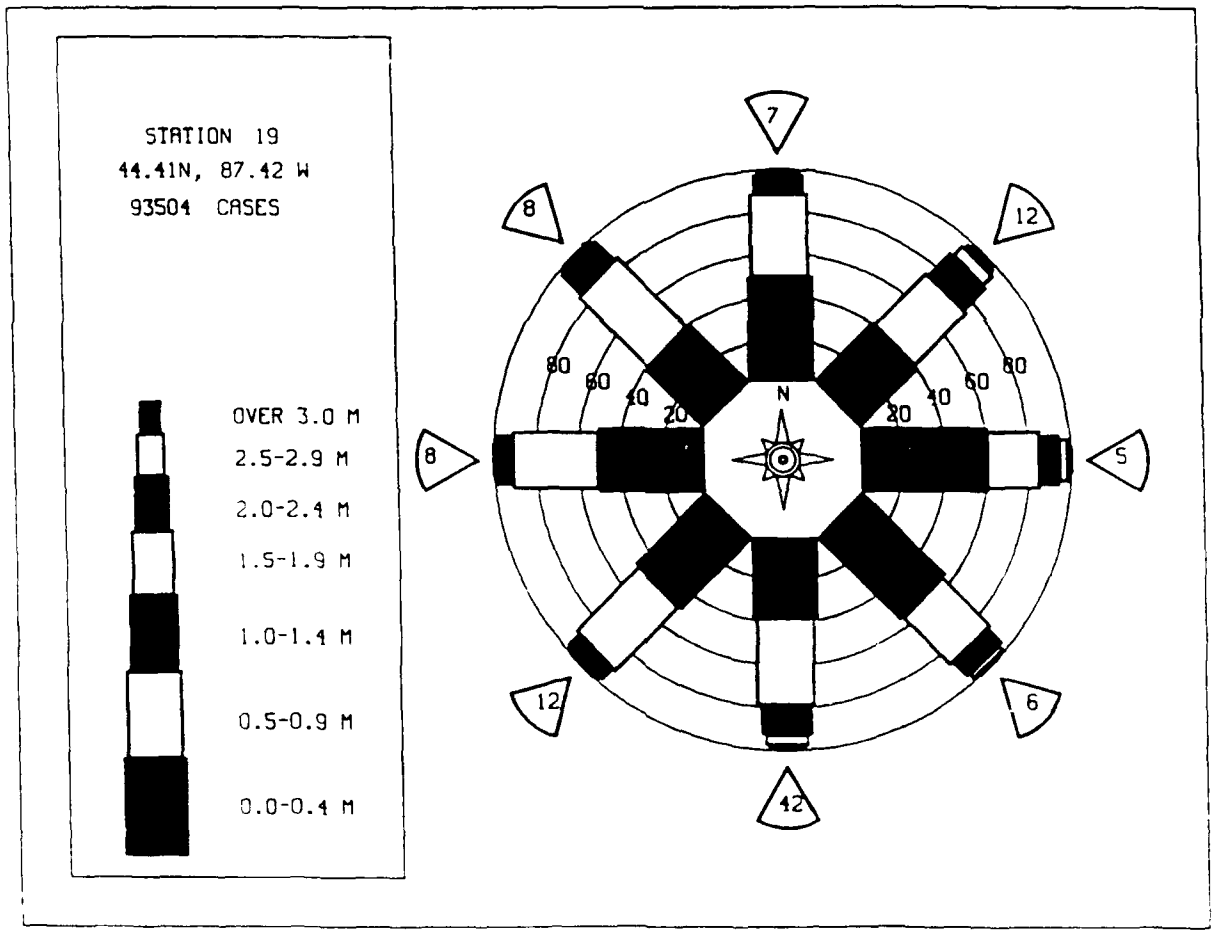
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	444	151	91	34	1	.	.	.	.	.	721
0.25-0.49	114	421	142	167	58	.	.	.	.	.	902
0.50-0.74	.	889	55	71	121	8	.	.	.	.	1144
0.75-0.99	.	140	235	65	97	41	.	.	.	.	578
1.00-1.24	.	.	210	5	28	29	5	.	.	.	277
1.25-1.49	.	.	124	.	2	2	4	.	.	.	132
1.50-1.74	.	.	37	31	.	1	3	.	.	.	72
1.75-1.99	.	.	.	8	.	.	.	.	.	.	8
2.00-2.24	.	.	.	5	.	.	.	.	.	.	5
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	2	.	.	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	558	1601	894	386	309	81	12	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.6 NO. OF CASES= 3607.

STATION M19 44.41N 87.42W 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	
0.00-0.24	1004	436	271	102	4	.	.	.	.	.	1817
0.25-0.49	262	1201	567	395	52	.	.	.	.	.	2477
0.50-0.74	.	1423	556	598	131	6	.	.	.	.	2714
0.75-0.99	.	178	498	343	174	19	.	.	.	.	1212
1.00-1.24	.	.	352	260	190	46	5	.	.	.	853
1.25-1.49	.	.	107	115	83	33	6	.	.	.	344
1.50-1.74	.	.	25	117	83	34	9	.	.	.	268
1.75-1.99	.	.	.	17	60	17	7	.	.	.	101
2.00-2.24	.	.	.	4	52	18	9	.	.	.	83
2.25-2.49	.	.	.	.	16	12	4	.	.	.	32
2.50-2.74	.	.	.	.	5	21	5	.	.	.	31
2.75-2.99	.	.	.	.	.	8	3	.	.	.	11
3.00-3.24	.	.	.	.	.	5	4	.	.	.	9
3.25-3.49	.	.	.	.	.	.	3	.	.	.	3
3.50+	.	.	.	.	.	.	7	2	.	.	9
TOTAL	1266	3238	2376	1951	850	219	62	2	0	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M19 (44.41N 87.42W)

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M19 (44.41N 87.42W)

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

32 YR. STATISTICS FOR WIS STATION M19

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	6.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	190.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011115

STATION M20 44.55N 87.22W 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	
0.00-0.24	418	269	56	7	.	.	.	.	.	.	750
0.25-0.49	69	494	168	88	5	.	.	.	.	.	824
0.50-0.74	.	383	419	255	69	.	.	.	.	.	1126
0.75-0.99	.	3	259	84	102	1	.	.	.	.	449
1.00-1.24	.	.	490	43	101	4	.	.	.	.	638
1.25-1.49	.	.	65	222	23	17	1	.	.	.	328
1.50-1.74	.	.	.	236	29	23	1	.	.	.	289
1.75-1.99	.	.	.	77	4	16	.	.	.	.	97
2.00-2.24	.	.	.	26	25	20	6	.	.	.	77
2.25-2.49	.	.	.	.	11	8	3	.	.	.	22
2.50-2.74	.	.	.	.	4	3	7	.	.	.	14
2.75-2.99	.	.	.	.	5	.	3	.	.	.	8
3.00-3.24	.	.	.	.	2	.	2	.	.	.	4
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	1	.	.	1
TOTAL	487	1149	1457	1038	380	92	23	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 4346.

STATION M20 44.55N 87.22W 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	
0.00-0.24	366	151	31	10	1	.	.	.	.	.	559
0.25-0.49	69	521	140	64	6	.	.	.	.	.	800
0.50-0.74	.	275	454	211	42	.	.	.	.	.	982
0.75-0.99	.	1	242	148	45	.	1	.	.	.	437
1.00-1.24	.	.	199	209	69	2	.	.	.	.	479
1.25-1.49	.	.	21	96	65	1	.	.	.	.	183
1.50-1.74	.	.	1	63	60	10	.	.	.	.	134
1.75-1.99	.	.	.	9	37	12	.	.	.	.	58
2.00-2.24	.	.	.	3	28	17	.	.	.	.	48
2.25-2.49	.	.	.	.	8	9	2	.	.	.	19
2.50-2.74	.	.	.	.	2	10	1	.	.	.	13
2.75-2.99	.	.	.	.	.	4	1	.	.	.	5
3.00-3.24	.	.	.	.	.	2	3	.	.	.	5
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	6	.	.	.	6
TOTAL	435	948	1088	813	363	67	14	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 3506.

STATION M20 44.55N 87.22W 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	
0.00-0.24	751	439	68	14	.	.	.	.	.	.	1272
0.25-0.49	148	1137	229	77	3	.	.	.	.	.	1594
0.50-0.74	.	626	944	212	27	1	.	.	.	.	1810
0.75-0.99	.	4	479	272	31	.	.	.	.	.	786
1.00-1.24	.	.	279	479	65	.	.	.	.	.	823
1.25-1.49	.	.	12	256	126	.	.	.	.	.	394
1.50-1.74	.	.	.	207	194	12	.	.	.	.	413
1.75-1.99	.	.	.	14	134	26	.	.	.	.	174
2.00-2.24	.	.	.	.	102	44	.	.	.	.	146
2.25-2.49	.	.	.	.	34	32	.	.	.	.	66
2.50-2.74	.	.	.	.	8	47	1	.	.	.	56
2.75-2.99	.	.	.	.	1	16	1	.	.	.	18
3.00-3.24	.	.	.	.	.	25	5	.	.	.	30
3.25-3.49	.	.	.	.	.	3	4	.	.	.	7
3.50+	.	.	.	.	.	1	20	.	.	.	21
TOTAL	899	2206	2011	1531	725	207	31	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 7135

STATION M20 44.55N 87.22W 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	
0.00-0.24	563	321	41	13	.	.	.	.	.	.	938
0.25-0.49	72	557	132	40	1	.	.	.	.	.	802
0.50-0.74	.	237	337	100	7	.	.	.	.	.	741
0.75-0.99	.	1	142	69	7	.	.	.	.	.	219
1.00-1.24	.	.	65	119	9	.	.	.	.	.	193
1.25-1.49	.	.	1	47	14	.	.	.	.	.	102
1.50-1.74	.	.	.	72	21	.	.	.	.	.	93
1.75-1.99	.	.	.	3	36	.	.	.	.	.	39
2.00-2.24	.	.	.	.	31	4	.	.	.	.	35
2.25-2.49	.	.	.	.	6	1	.	.	.	.	7
2.50-2.74	.	.	.	.	1	2	.	.	.	.	6
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	635	1216	718	463	133	13	3	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 80

STATION M20 44.55N 87.22W 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	
0.00-0.24	590	332	52	17	.	.	.	.	.	.	991
0.25-0.49	59	522	120	68	3	.	.	.	.	.	772
0.50-0.74	.	188	216	49	7	.	.	.	.	.	460
0.75-0.99	.	1	114	44	4	.	.	.	.	.	163
1.00-1.24	.	.	56	83	1	.	.	.	.	.	140
1.25-1.49	.	.	1	63	1	.	.	.	.	.	65
1.50-1.74	.	.	.	74	6	.	.	.	.	.	80
1.75-1.99	.	.	.	2	13	.	.	.	.	.	15
2.00-2.24	.	.	.	.	6	.	.	.	.	.	6
2.25-2.49	.	.	.	.	4	.	.	.	.	.	4
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	649	1043	559	400	45	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 2532.

STATION M20 44.55N 87.22W 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	
0.00-0.24	361	232	25	8	.	.	.	.	.	.	626
0.25-0.49	53	289	62	24	.	.	.	.	.	.	428
0.50-0.74	.	140	121	27	4	.	.	.	.	.	292
0.75-0.99	.	1	80	29	4	.	.	.	.	.	114
1.00-1.24	.	.	38	63	1	.	.	.	.	.	102
1.25-1.49	.	.	1	36	3	.	.	.	.	.	40
1.50-1.74	.	.	.	22	7	.	.	.	.	.	29
1.75-1.99	.	.	.	2	11	.	.	.	.	.	13
2.00-2.24	.	.	.	.	6	.	.	.	.	.	6
2.25-2.49	.	.	.	.	3	.	.	.	.	.	3
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	414	662	327	211	39	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 1556.

STATION M20 44.55N 87.22W 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	
0.00-0.24	428	237	55	12	1	.	.	.	.	.	733
0.25-0.49	82	399	63	39	3	.	.	.	.	.	586
0.50-0.74	.	205	194	32	21	.	.	.	.	.	452
0.75-0.99	.	4	105	36	11	1	.	.	.	.	157
1.00-1.24	.	.	49	51	5	1	.	.	.	.	106
1.25-1.49	.	.	1	35	4	1	.	.	.	.	41
1.50-1.74	.	.	.	34	9	.	.	.	.	.	43
1.75-1.99	.	.	.	.	9	.	.	.	.	.	9
2.00-2.24	.	.	.	.	10	.	.	.	.	.	10
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	510	845	467	239	75	3	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 2012.

STATION M20 44.55N 87.22W 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	
0.00-0.24	565	488	237	65	2	.	.	.	.	.	1357
0.25-0.49	152	945	382	296	32	.	.	.	.	.	1807
0.50-0.74	.	505	613	409	137	9	.	.	.	.	1673
0.75-0.99	.	5	190	189	98	8	2	.	.	.	492
1.00-1.24	.	.	124	165	90	24	.	.	.	.	403
1.25-1.49	.	.	8	99	36	7	1	.	.	.	151
1.50-1.74	.	.	.	59	65	8	1	.	.	.	133
1.75-1.99	.	.	.	3	44	2	.	.	.	.	50
2.00-2.24	.	.	.	.	36	2	.	.	.	.	38
2.25-2.49	.	.	.	.	7	2	.	.	.	.	9
2.50-2.74	.	.	.	.	.	2	.	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	717	1943	1554	1285	547	63	5	0	0	0	

MEAN HS(M) = 1.5 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 5736.

STATION M20 44.55N 87.22W 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	
0.00-0.24	1028	1340	871	709	53	1	.	.	.	.	4002
0.25-0.49	245	1894	2136	2473	406	9	.	.	.	.	7163
0.50-0.74	.	848	1387	3926	1556	42	.	.	.	.	7759
0.75-0.99	.	66	443	1103	1581	117	.	.	.	.	3310
1.00-1.24	.	.	347	540	1270	410	11	.	.	.	2578
1.25-1.49	.	.	39	248	325	242	39	.	.	.	893
1.50-1.74	.	.	3	233	228	194	93	.	.	.	751
1.75-1.99	.	.	.	10	120	58	40	.	.	.	228
2.00-2.24	.	.	.	2	120	67	55	7	.	.	251
2.25-2.49	.	.	.	.	38	27	19	1	.	.	85
2.50-2.74	.	.	.	.	6	62	26	8	.	.	102
2.75-2.99	.	.	.	.	.	24	10	5	.	.	39
3.00-3.24	.	.	.	.	.	10	16	4	.	.	30
3.25-3.49	.	.	.	.	.	7	12	3	.	.	22
3.50+	.	.	.	.	.	.	14	6	2	.	22
TOTAL	1273	4148	5226	9244	5703	1270	335	34	2	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 25495.

STATION M20 44.55N 87.22W 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	
0.00-0.24	1190	736	178	82	11	.	.	.	.	.	2197
0.25-0.49	258	1575	434	241	48	1	.	.	.	.	2557
0.50-0.74	.	1406	1040	387	111	2	.	.	.	.	2946
0.75-0.99	.	363	798	623	393	33	.	.	.	.	2210
1.00-1.24	.	.	1116	438	368	81	8	.	.	.	2011
1.25-1.49	.	.	202	562	245	40	5	.	.	.	1054
1.50-1.74	.	.	4	594	264	89	8	1	.	.	960
1.75-1.99	.	.	.	143	155	58	12	.	.	.	368
2.00-2.24	.	.	.	48	182	96	36	3	.	.	365
2.25-2.49	.	.	.	1	68	43	21	2	.	.	135
2.50-2.74	.	.	.	.	23	60	27	1	.	.	111
2.75-2.99	.	.	.	.	2	19	11	4	.	.	36
3.00-3.24	.	.	.	.	3	20	17	1	1	.	42
3.25-3.49	.	.	.	.	.	5	3	1	.	.	9
3.50+	.	.	.	.	.	4	17	5	5	.	31
TOTAL	1448	4080	3772	3119	1873	551	165	18	6	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 14083.

STATION M20 44.55N 87.22W 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	
0.00-0.24	1250	501	125	33	2	.	.	.	.	.	1911
0.25-0.49	235	1124	111	86	13	.	.	.	.	.	1569
0.50-0.74	.	1219	318	40	13	.	.	.	.	.	1590
0.75-0.99	.	347	397	43	24	6	.	.	.	.	817
1.00-1.24	.	.	560	69	25	2	1	.	.	.	657
1.25-1.49	.	.	88	162	12	7	.	.	.	.	269
1.50-1.74	.	.	26	162	8	17	3	.	.	.	216
1.75-1.99	.	.	2	55	5	3	.	.	.	.	65
2.00-2.24	.	.	.	9	29	3	.	.	.	.	41
2.25-2.49	.	.	.	.	14	2	.	.	.	.	16
2.50-2.74	.	.	.	.	3	.	.	.	.	.	3
2.75-2.99	.	.	.	.	2	.	1	.	.	.	3
3.00-3.24	.	.	.	.	1	.	1	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	3	.	.	.	.	3
TOTAL	1485	3191	1627	659	151	43	5	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 6716.

STATION M20 44.55N 87.22W 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	
0.00-0.24	678	260	69	18	1	.	.	.	.	.	1026
0.25-0.49	203	764	68	20	11	1	.	.	.	.	1117
0.50-0.74	.	841	23	24	16	.	.	.	.	.	904
0.75-0.99	.	187	175	5	11	.	.	.	.	.	378
1.00-1.24	.	.	134	2	2	1	.	.	.	.	139
1.25-1.49	.	.	45	2	.	.	.	.	.	.	47
1.50-1.74	.	.	24	5	6	4	.	.	.	.	39
1.75-1.99	.	.	2	3	.	.	.	.	.	.	5
2.00-2.24	.	.	.	3	.	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	881	2052	540	132	47	6	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 4432

STATION M20 44.55N 87.22W 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	
0.00-0.24	629	278	86	35	1	.	.	.	.	.	1029
0.25-0.49	254	687	70	131	24	.	.	.	.	.	1165
0.50-0.74	.	836	20	72	48	2	.	.	.	.	978
0.75-0.99	.	103	134	3	13	2	.	.	.	.	255
1.00-1.24	.	.	101	2	4	.	.	.	.	.	107
1.25-1.49	.	.	66	.	3	1	.	.	.	.	70
1.50-1.74	.	.	35	8	1	.	.	.	.	.	44
1.75-1.99	.	.	.	3	2	.	.	.	.	.	5
2.00-2.24	.	.	.	2	.	1	.	.	.	.	3
2.25-2.49	.	.	.	.	.	1	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	883	1904	512	256	96	7	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 3432.

STATION M20 44.55N 87.22W 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	
0.00-0.24	407	192	51	22	.	.	.	.	.	.	672
0.25-0.49	127	586	88	106	10	.	.	.	.	.	917
0.50-0.74	.	905	63	88	68	1	.	.	.	.	1125
0.75-0.99	.	97	213	12	52	5	.	.	.	.	379
1.00-1.24	.	.	168	1	26	6	.	.	.	.	201
1.25-1.49	.	.	75	1	1	5	.	.	.	.	82
1.50-1.74	.	.	20	25	1	.	.	.	.	.	46
1.75-1.99	.	.	.	6	1	.	.	.	.	.	7
2.00-2.24	.	.	.	3	.	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	1	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	534	1780	678	264	159	17	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 3224.

STATION M20 44.55N 87.22W 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	
0.00-0.24	414	191	53	23	2	.	.	.	.	.	683
0.25-0.49	44	465	112	111	14	1	.	.	.	.	747
0.50-0.74	.	975	106	95	59	1	.	.	.	.	1236
0.75-0.99	.	42	297	36	77	9	1	.	.	.	462
1.00-1.24	.	.	239	16	65	19	1	.	.	.	340
1.25-1.49	.	.	114	2	7	12	1	.	.	.	136
1.50-1.74	.	.	17	32	2	3	1	.	.	.	55
1.75-1.99	.	.	.	6	1	.	.	.	.	.	7
2.00-2.24	.	.	.	.	.	.	3	.	.	.	3
2.25-2.49	.	.	.	.	.	.	2	.	.	.	2
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	458	1673	938	321	227	45	9	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.6 NO. OF CASES= 3446.

STATION M20 44.55N 87.22W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

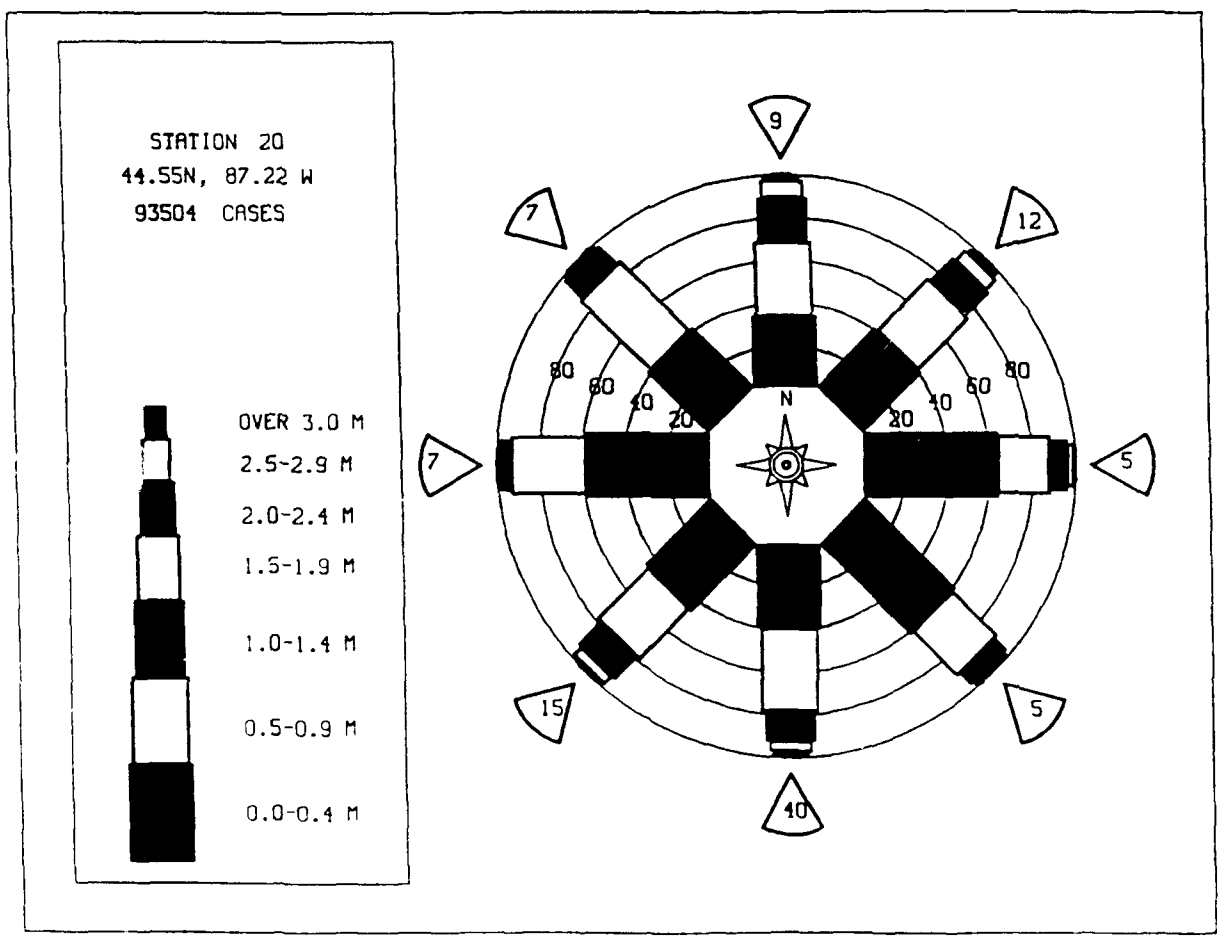
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	396	199	51	7	.	.	.	.	.	.	653
0.25-0.49	48	416	176	90	7	.	.	.	.	.	737
0.50-0.74	.	549	242	195	73	.	.	.	.	.	1059
0.75-0.99	.	13	312	41	98	1	.	.	.	.	465
1.00-1.24	.	.	330	35	83	9	.	.	.	.	457
1.25-1.49	.	.	80	158	18	13	2	.	.	.	271
1.50-1.74	.	.	9	207	12	20	.	.	.	.	248
1.75-1.99	.	.	.	48	7	7	.	.	.	.	62
2.00-2.24	.	.	.	12	19	5	1	.	.	.	37
2.25-2.49	.	.	.	1	11	.	1	.	.	.	13
2.50-2.74	.	.	.	1	2	.	1	.	.	.	4
2.75-2.99	.	.	.	.	2	.	.	.	.	.	2
3.00-3.24	.	.	.	.	3	2	.	.	.	.	5
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	2	.	.	.	.	2
TOTAL	444	1177	1200	795	335	59	5	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 3773.

STATION M20 44.55N 87.22W 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	
0.00-0.24	1004	617	205	108	7	.	.	.	.	.	1941
0.25-0.49	212	1248	449	401	59	1	.	.	.	.	2370
0.50-0.74	.	1014	656	613	226	5	.	.	.	.	2514
0.75-0.99	.	124	438	274	255	18	.	.	.	.	1109
1.00-1.24	.	.	430	232	219	56	2	.	.	.	939
1.25-1.49	.	.	82	203	88	35	5	.	.	.	413
1.50-1.74	.	.	14	204	92	38	10	.	.	.	358
1.75-1.99	.	.	.	38	58	18	5	.	.	.	119
2.00-2.24	.	.	.	11	60	26	10	1	.	.	108
2.25-2.49	.	.	.	.	21	12	5	.	.	.	38
2.50-2.74	.	.	.	.	5	19	6	.	.	.	30
2.75-2.99	.	.	.	.	1	6	2	.	.	.	9
3.00-3.24	.	.	.	.	.	6	4	.	.	.	10
3.25-3.49	.	.	.	.	.	1	2	.	.	.	3
3.50+	.	.	.	.	.	1	5	1	.	.	7
TOTAL	1216	3003	2274	2084	1091	242	56	2	0	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M20 (44.55N 87.22W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.6	0.7	0.5	0.4	0.3	0.3	0.3	0.5	0.8	0.8	0.8	0.5
1957	0.8	0.7	0.6	0.5	0.5	0.3	0.3	0.3	0.4	0.5	0.8	0.9	0.6
1958	0.7	0.9	0.4	0.6	0.4	0.4	0.3	0.4	0.7	0.7	0.9	0.8	0.6
1959	0.8	1.0	0.7	0.6	0.6	0.4	0.4	0.5	0.7	0.7	0.8	0.9	0.7
1960	0.9	1.0	0.7	0.7	0.5	0.4	0.3	0.6	0.5	0.6	1.1	1.1	0.7
1961	0.8	0.8	0.9	0.5	0.5	0.4	0.3	0.4	0.8	0.9	0.8	0.8	0.7
1962	1.0	0.8	0.5	0.7	0.6	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.6
1963	0.7	0.8	0.6	0.6	0.5	0.3	0.3	0.4	0.5	0.7	0.8	0.7	0.6
1964	1.1	1.1	0.9	0.9	0.6	0.4	0.4	0.5	0.6	0.8	0.8	1.0	0.8
1965	1.0	1.1	0.7	0.5	0.5	0.4	0.4	0.4	0.6	0.8	0.8	0.9	0.7
1966	0.7	0.7	0.8	0.5	0.5	0.4	0.4	0.5	0.5	1.0	1.0	0.8	0.6
1967	1.1	1.0	0.7	0.6	0.5	0.3	0.3	0.5	0.5	0.7	0.7	0.8	0.7
1968	1.0	0.9	0.9	0.8	0.5	0.5	0.5	0.5	0.6	0.9	0.7	1.0	0.7
1969	0.8	0.6	0.7	0.6	0.5	0.5	0.4	0.5	0.6	0.9	0.8	0.9	0.6
1970	0.8	1.1	0.6	0.8	0.6	0.5	0.4	0.4	0.6	0.8	0.9	0.9	0.7
1971	1.0	1.1	0.7	0.6	0.5	0.4	0.5	0.5	0.6	0.8	0.9	0.8	0.7
1972	1.2	0.8	0.8	0.5	0.4	0.5	0.4	0.5	0.7	0.9	0.8	0.8	0.7
1973	1.0	1.0	0.8	0.8	0.5	0.4	0.5	0.6	0.6	0.7	0.8	1.0	0.7
1974	0.8	1.0	0.8	0.8	0.5	0.5	0.5	0.6	0.7	0.8	0.8	1.0	0.7
1975	1.0	0.8	0.7	0.6	0.4	0.4	0.4	0.5	0.6	0.9	1.0	0.9	0.7
1976	1.0	1.1	1.0	0.7	0.5	0.5	0.5	0.6	0.7	0.7	0.8	0.9	0.7
1977	0.8	1.0	0.8	0.6	0.4	0.4	0.6	0.7	0.6	0.8	0.9	0.9	0.7
1978	1.0	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.7	0.8	0.9	0.9	0.7
1979	0.8	0.8	0.7	0.6	0.5	0.6	0.3	0.5	0.6	0.8	0.9	0.9	0.7
1980	0.8	0.7	0.7	0.5	0.3	0.4	0.3	0.4	0.6	0.8	0.9	0.8	0.6
1981	0.5	0.9	0.6	0.7	0.4	0.4	0.3	0.4	0.6	0.7	0.7	0.7	0.6
1982	0.9	0.8	0.8	0.7	0.4	0.3	0.4	0.4	0.7	0.8	0.8	0.8	0.7
1983	0.8	0.8	0.7	0.5	0.4	0.4	0.4	0.4	0.6	0.7	1.0	0.8	0.6
1984	0.7	0.8	0.7	0.6	0.4	0.4	0.3	0.4	0.7	0.7	1.0	0.9	0.6
1985	0.8	0.9	0.9	0.6	0.4	0.3	0.3	0.4	0.7	0.6	0.7	0.7	0.6
1986	0.9	0.6	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.9	0.8	0.6
1987	0.7	0.7	0.6	0.5	0.3	0.2	0.3	0.4	0.4	0.6	0.7	0.8	0.5
MEAN	0.9	0.9	0.7	0.6	0.5	0.4	0.4	0.5	0.6	0.7	0.8	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M20 (44.55N 87.22W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.0	2.3	2.5	1.5	1.2	1.3	1.3	1.2	1.8	2.8	2.6	2.7
1957	2.1	2.3	2.4	1.9	1.9	1.4	1.3	1.5	1.8	2.0	2.2	2.7
1958	2.2	2.4	1.5	2.4	2.0	1.5	1.7	1.4	2.4	2.1	3.6	2.2
1959	2.3	3.7	2.6	2.0	2.0	1.7	1.9	1.8	3.1	1.9	2.6	3.7
1960	2.3	3.7	1.9	2.0	1.7	1.1	1.3	1.9	1.7	2.0	3.1	4.2
1961	2.2	2.6	3.1	2.3	1.5	1.5	1.3	1.6	2.0	3.4	3.1	2.9
1962	4.2	2.3	1.7	2.1	1.7	1.4	1.2	1.2	1.4	1.6	3.3	2.2
1963	3.2	2.9	2.1	2.8	1.9	1.2	1.3	1.5	1.6	2.4	2.3	2.3
1964	3.6	3.5	2.9	4.7	2.4	1.8	1.6	1.5	3.8	2.5	3.9	2.7
1965	3.5	3.0	2.3	1.4	1.9	1.4	1.5	1.7	1.7	2.0	2.9	3.8
1966	2.5	1.9	2.4	1.9	1.6	1.4	1.1	1.4	1.7	3.5	3.2	2.1
1967	4.2	4.0	1.8	2.3	2.1	1.2	1.2	1.9	2.1	2.2	2.3	1.7
1968	2.4	2.3	2.8	2.2	2.6	2.3	2.2	2.0	1.9	2.3	2.0	4.1
1969	2.8	2.6	2.3	2.2	1.3	1.7	1.6	2.3	2.2	3.4	3.6	3.0
1970	2.4	3.3	1.7	2.5	2.0	1.4	1.3	1.3	2.8	3.5	2.8	3.6
1971	2.5	5.1	2.7	2.6	1.8	1.3	1.8	2.1	3.3	3.3	3.1	2.5
1972	4.7	2.2	2.8	2.5	1.5	1.5	1.4	1.4	3.0	2.9	3.3	3.1
1973	2.8	3.2	2.3	3.1	1.4	1.5	1.6	1.5	1.9	3.0	2.5	3.0
1974	2.7	3.3	2.5	2.8	1.8	1.5	1.6	2.9	2.6	3.2	2.5	3.1
1975	6.8	3.6	2.5	1.8	1.8	1.6	1.9	3.0	1.5	3.1	3.2	3.4
1976	4.4	3.1	2.7	2.7	2.0	2.6	2.0	2.0	2.7	2.4	2.3	3.8
1977	2.7	3.3	4.1	1.9	1.9	1.5	1.8	4.4	3.2	2.4	3.3	2.5
1978	3.5	2.3	2.3	1.8	2.5	2.5	1.4	1.5	2.8	3.0	3.5	2.7
1979	2.9	2.1	2.1	1.9	2.1	1.9	1.3	1.5	2.0	2.7	3.4	3.2
1980	4.3	3.2	2.4	1.7	1.1	1.1	1.1	1.3	2.0	3.6	2.8	3.8
1981	1.9	2.7	1.8	2.0	1.8	1.6	1.2	1.3	1.6	2.0	2.4	3.1
1982	3.2	2.9	2.4	2.1	1.4	1.2	1.6	1.5	2.4	2.7	2.5	2.6
1983	2.3	3.5	2.2	2.5	1.6	1.2	1.9	1.5	1.6	1.9	3.1	3.3
1984	2.3	3.6	2.2	1.9	1.2	2.2	1.1	1.5	2.4	3.7	2.7	3.5
1985	2.5	2.3	2.4	1.6	1.5	1.6	1.7	1.8	2.2	2.2	2.6	2.5
1986	2.4	1.8	2.3	1.6	1.6	1.3	1.9	1.1	1.2	2.3	3.3	2.6
1987	1.7	3.1	3.5	1.6	1.3	0.9	1.3	1.2	1.4	2.5	2.1	2.6

32 YR. STATISTICS FOR WIS STATION M20

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
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)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	203.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011118

STATION M21 44.70N 87.20W 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	
0.00-0.24	474	293	60	10	.	.	.	.	.	.	837
0.25-0.49	64	409	196	109	13	1	.	.	.	.	792
0.50-0.74	.	688	252	242	55	.	.	.	.	.	1237
0.75-0.99	.	1	259	146	103	.	.	.	.	.	509
1.00-1.24	.	.	346	34	124	2	.	.	.	.	506
1.25-1.49	.	.	140	29	52	14	.	.	.	.	235
1.50-1.74	.	.	35	94	38	45	1	.	.	.	213
1.75-1.99	.	.	.	19	5	25	1	.	.	.	50
2.00-2.24	.	.	.	11	2	13	3	.	.	.	29
2.25-2.49	.	.	.	5	2	3	5	.	.	.	15
2.50-2.74	.	.	.	.	2	1	4	.	.	.	7
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	1	.	.	1
TOTAL	538	1391	1288	699	396	104	14	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.9 NO. OF CASES= 4162.

STATION M21 44.70N 87.20W 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	
0.00-0.24	433	198	39	11	2	.	.	.	.	.	683
0.25-0.49	69	515	156	100	4	.	.	.	.	.	844
0.50-0.74	.	452	394	217	38	.	1	.	.	.	1102
0.75-0.99	.	1	197	165	45	.	1	.	.	.	409
1.00-1.24	.	.	149	175	70	3	.	.	.	.	397
1.25-1.49	.	.	24	55	57	2	.	.	.	.	138
1.50-1.74	.	.	3	42	49	11	.	.	.	.	105
1.75-1.99	.	.	.	9	27	12	.	.	.	.	48
2.00-2.24	.	.	.	.	21	14	.	.	.	.	35
2.25-2.49	.	.	.	.	6	9	1	.	.	.	16
2.50-2.74	.	.	.	.	1	7	1	.	.	.	9
2.75-2.99	.	.	.	.	.	2	1	.	.	.	3
3.00-3.24	.	.	.	.	.	3	2	.	.	.	5
3.25-3.49	.	.	.	.	.	1	2	.	.	.	3
3.50+	.	.	.	.	.	.	3	.	.	.	3
TOTAL	502	1166	962	774	320	64	12	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 3573.

STATION M21 44.70N 87.20W 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	
0.00-0.24	827	466	97	21	3	.	.	.	.	.	1414
0.25-0.49	154	1050	216	72	2	.	.	.	.	.	1494
0.50-0.74	.	587	860	221	20	.	.	.	.	.	1688
0.75-0.99	.	4	482	222	27	.	.	.	.	.	735
1.00-1.24	.	.	273	432	62	1	.	.	.	.	768
1.25-1.49	.	.	14	244	113	.	.	.	.	.	371
1.50-1.74	.	.	1	177	179	9	.	.	.	.	366
1.75-1.99	.	.	.	12	118	22	.	.	.	.	152
2.00-2.24	.	.	.	.	97	41	.	.	.	.	138
2.25-2.49	.	.	.	.	25	32	.	.	.	.	57
2.50-2.74	.	.	.	.	8	36	1	.	.	.	45
2.75-2.99	.	.	.	.	.	23	1	.	.	.	24
3.00-3.24	.	.	.	.	.	22	4	.	.	.	26
3.25-3.49	.	.	.	.	.	.	4	.	.	.	4
3.50+	.	.	.	.	.	1	17	.	.	.	18
TOTAL	981	2107	1943	1401	654	187	27	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 6843.

STATION M21 44.70N 87.20W 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	
0.00-0.24	623	358	55	10	.	.	.	.	.	.	1046
0.25-0.49	83	648	148	51	3	.	.	.	.	.	933
0.50-0.74	.	245	360	65	4	.	.	.	.	.	674
0.75-0.99	.	.	146	70	6	.	.	.	.	.	222
1.00-1.24	.	.	69	117	7	.	.	.	.	.	193
1.25-1.49	.	.	4	93	13	.	.	.	.	.	110
1.50-1.74	.	.	.	71	23	.	.	.	.	.	94
1.75-1.99	.	.	.	3	34	.	.	.	.	.	37
2.00-2.24	.	.	.	.	32	5	.	.	.	.	37
2.25-2.49	.	.	.	.	9	1	.	.	.	.	10
2.50-2.74	.	.	.	.	1	7	.	.	.	.	8
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	706	1251	782	480	132	16	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 3161.

STATION M21 44.70N 87.20W 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	
0.00-0.24	618	360	67	8	1	.	.	.	.	.	1054
0.25-0.49	49	476	112	42	5	.	.	.	.	.	684
0.50-0.74	.	166	218	34	2	.	.	.	.	.	420
0.75-0.99	.	.	95	45	2	.	.	.	.	.	142
1.00-1.24	.	.	51	85	3	.	.	.	.	.	139
1.25-1.49	.	.	1	59	3	.	.	.	.	.	63
1.50-1.74	.	.	.	69	6	.	.	.	.	.	75
1.75-1.99	.	.	.	3	9	.	.	.	.	.	12
2.00-2.24	.	.	.	.	6	.	.	.	.	.	6
2.25-2.49	.	.	.	.	4	.	.	.	.	.	4
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	667	1002	544	345	41	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 2441.

STATION M21 44.70N 87.20W 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	
0.00-0.24	409	231	28	13	2	.	.	.	.	.	683
0.25-0.49	55	269	53	23	.	.	.	.	.	.	400
0.50-0.74	.	141	136	13	1	.	.	.	.	.	291
0.75-0.99	.	.	86	26	2	.	.	.	.	.	114
1.00-1.24	.	.	43	68	2	.	.	.	.	.	113
1.25-1.49	.	.	1	31	6	.	.	.	.	.	38
1.50-1.74	.	.	.	20	12	.	.	.	.	.	32
1.75-1.99	.	.	.	1	8	.	.	.	.	.	9
2.00-2.24	.	.	.	.	9	.	.	.	.	.	9
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	464	641	347	195	43	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 1592.

STATION M21 44.70N 87.20W 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	
0.00-0.24	427	262	48	8	4	.	.	.	.	.	749
0.25-0.49	67	393	58	47	2	.	.	.	.	.	567
0.50-0.74	.	198	196	27	22	2	.	.	.	.	445
0.75-0.99	.	3	99	43	9	1	.	.	.	.	155
1.00-1.24	.	.	36	54	6	1	1	.	.	.	98
1.25-1.49	.	.	4	32	5	.	.	.	.	.	41
1.50-1.74	.	.	.	31	7	.	.	.	.	.	38
1.75-1.99	.	.	.	.	13	.	.	.	.	.	13
2.00-2.24	.	.	.	.	8	.	.	.	.	.	8
2.25-2.49	.	.	.	.	2	.	.	.	.	.	2
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	494	856	441	242	78	4	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 1991.

STATION M21 44.70N 87.20W 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	
0.00-0.24	641	489	275	109	7	.	.	.	.	.	1521
0.25-0.49	164	955	343	290	52	1	.	.	.	.	1805
0.50-0.74	.	489	626	333	145	11	1	.	.	.	1605
0.75-0.99	.	4	197	190	73	11	.	.	.	.	475
1.00-1.24	.	.	135	170	87	17	1	.	.	.	410
1.25-1.49	.	.	7	93	38	7	2	.	.	.	147
1.50-1.74	.	.	1	72	56	4	3	.	.	.	136
1.75-1.99	.	.	.	2	48	2	.	.	.	.	52
2.00-2.24	.	.	.	.	37	5	.	.	.	.	42
2.25-2.49	.	.	.	.	8	.	.	.	.	.	8
2.50-2.74	.	.	.	.	.	3	.	.	.	.	3
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	805	1937	1584	1259	551	61	7	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 5819.

STATION M21 44.70N 87.20W 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	
0.00-0.24	1160	1436	1162	885	73	1	.	.	.	.	4717
0.25-0.49	283	1974	2241	2849	535	11	.	.	.	.	7893
0.50-0.74	.	1082	1469	4096	1824	60	.	.	.	.	8531
0.75-0.99	.	86	610	1260	1771	146	1	.	.	.	3874
1.00-1.24	.	.	497	781	1555	517	21	.	.	.	3371
1.25-1.49	.	.	42	341	464	288	48	.	.	.	1183
1.50-1.74	.	.	2	267	306	226	108	.	.	.	909
1.75-1.99	.	.	.	26	168	80	63	1	.	.	338
2.00-2.24	.	.	.	.	156	96	77	9	.	.	338
2.25-2.49	.	.	.	.	48	52	32	6	.	.	138
2.50-2.74	.	.	.	.	13	70	35	10	.	.	128
2.75-2.99	.	.	.	.	1	25	11	2	2	.	41
3.00-3.24	.	.	.	.	.	18	19	5	.	.	42
3.25-3.49	.	.	.	.	.	3	9	3	.	.	15
3.50+	.	.	.	.	.	.	14	7	5	.	26
TOTAL	1443	4578	6023	10505	6914	1593	438	43	7	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.8 NO. OF CASES= 29522.

STATION M21 44.70N 87.20W 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	
0.00-0.24	1235	671	207	74	16	.	.	.	.	.	2203
0.25-0.49	282	1438	375	197	37	1	.	.	.	.	2330
0.50-0.74	.	1994	460	222	82	1	.	.	.	.	2759
0.75-0.99	.	408	1103	529	370	33	1	.	.	.	2444
1.00-1.24	.	.	386	742	367	69	9	.	.	.	1573
1.25-1.49	.	.	78	266	162	44	4	.	.	.	554
1.50-1.74	.	.	19	221	193	78	9	1	.	.	521
1.75-1.99	.	.	.	26	126	47	11	.	.	.	210
2.00-2.24	.	.	.	3	67	59	21	2	.	.	152
2.25-2.49	.	.	.	.	22	22	8	.	.	.	52
2.50-2.74	.	.	.	.	4	27	17	1	.	.	49
2.75-2.99	.	.	.	.	.	14	3	4	.	.	21
3.00-3.24	.	.	.	.	.	11	9	.	.	.	20
3.25-3.49	.	.	.	.	.	1	3	.	.	.	4
3.50+	.	.	.	.	.	.	11	4	2	.	17
TOTAL	1517	4511	2628	2280	1446	407	106	12	2	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 12095.

STATION M21 44.70N 87.20W 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	
0.00-0.24	1291	463	128	45	3	1	.	.	.	.	1931
0.25-0.49	239	928	69	71	11	1	.	.	.	.	1319
0.50-0.74	.	1309	63	19	8	2	.	.	.	.	1401
0.75-0.99	.	217	259	36	25	4	.	.	.	.	541
1.00-1.24	.	.	219	16	21	6	.	.	.	.	262
1.25-1.49	.	.	75	2	12	5	.	.	.	.	94
1.50-1.74	.	.	20	4	13	22	2	.	.	.	61
1.75-1.99	.	.	.	6	2	1	1	.	.	.	10
2.00-2.24	.	.	.	3	.	1	.	.	.	.	4
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1530	2917	833	202	95	43	3	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 5272.

STATION M21 44.70N 87.20W 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	
0.00-0.24	778	251	77	25	2	.	.	.	.	.	1133
0.25-0.49	222	617	50	63	16	.	.	.	.	.	968
0.50-0.74	.	801	10	13	7	.	.	.	.	.	831
0.75-0.99	.	113	150	3	6	.	.	.	.	.	272
1.00-1.24	.	.	116	2	.	1	.	.	.	.	119
1.25-1.49	.	.	35	.	2	1	.	.	.	.	38
1.50-1.74	.	.	23	2	3	4	.	.	.	.	32
1.75-1.99	.	.	1	5	.	1	.	.	.	.	7
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1000	1782	462	114	36	7	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 3189.

STATION M21 44.70N 87.20W 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	
0.00-0.24	695	273	100	41	4	.	.	.	.	.	1113
0.25-0.49	234	695	59	108	18	.	.	.	.	.	1114
0.50-0.74	.	926	11	38	28	1	.	.	.	.	1004
0.75-0.99	.	78	140	4	5	.	.	.	.	.	227
1.00-1.24	.	.	113	.	.	1	.	.	.	.	114
1.25-1.49	.	.	65	.	2	1	.	.	.	.	68
1.50-1.74	.	.	27	4	4	.	.	.	.	.	35
1.75-1.99	.	.	.	3	1	.	.	.	.	.	4
2.00-2.24	.	.	.	3	.	1	.	.	.	.	4
2.25-2.49	.	.	.	.	.	.	1	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	929	1972	515	201	62	4	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 3454.

STATION M21 44.70N 87.20W 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	
0.00-0.24	424	192	72	32	1	.	.	.	.	.	721
0.25-0.49	132	579	53	112	11	.	.	.	.	.	887
0.50-0.74	.	997	59	60	44	3	.	.	.	.	1163
0.75-0.99	.	72	226	10	26	2	.	.	.	.	336
1.00-1.24	.	.	186	.	9	4	.	.	.	.	199
1.25-1.49	.	.	82	.	.	1	.	.	.	.	83
1.50-1.74	.	.	16	25	2	1	.	.	.	.	44
1.75-1.99	.	.	.	4	1	.	.	.	.	.	5
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	556	1840	694	244	94	11	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.3 NO. OF CASES= 3229.

STATION M21 44.70N 87.20W 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	
0.00-0.24	462	210	84	18	3	.	.	.	.	.	777
0.25-0.49	53	429	99	96	11	.	.	.	.	.	688
0.50-0.74	.	1053	88	87	57	1	.	.	.	.	1286
0.75-0.99	.	37	294	31	69	7	.	.	.	.	438
1.00-1.24	.	.	235	3	38	12	.	.	.	.	288
1.25-1.49	.	.	111	.	4	6	1	.	.	.	122
1.50-1.74	.	.	11	22	.	1	.	.	.	.	34
1.75-1.99	.	.	.	4	.	1	1	.	.	.	6
2.00-2.24	.	.	.	3	.	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	515	1729	922	264	182	28	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 3418.

STATION M21 44.70N 87.20W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

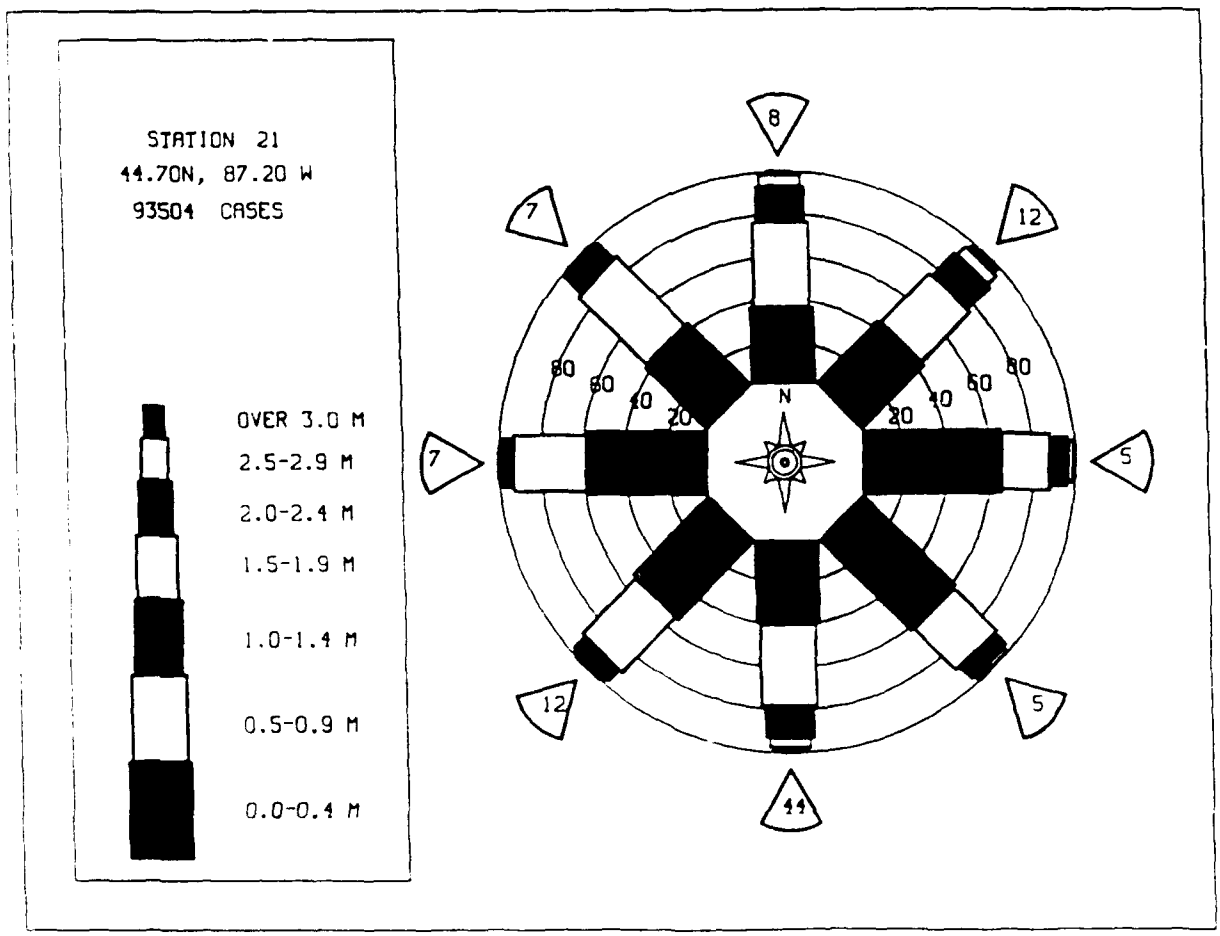
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	440	234	73	13	2	.	.	.	.	.	762
0.25-0.49	53	351	164	100	8	.	.	.	.	.	676
0.50-0.74	.	751	174	164	75	.	.	.	.	.	1164
0.75-0.99	.	26	288	64	105	.	.	.	.	.	483
1.00-1.24	.	.	331	14	98	10	1	.	.	.	454
1.25-1.49	.	.	155	36	24	11	.	.	.	.	226
1.50-1.74	.	.	25	108	3	25	.	.	.	.	161
1.75-1.99	.	.	1	24	1	4	.	.	.	.	30
2.00-2.24	.	.	.	12	.	2	.	.	.	.	14
2.25-2.49	.	.	.	3	2	.	.	.	.	.	5
2.50-2.74	.	.	.	1	5	.	.	.	.	.	6
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	1	.	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	493	1362	1211	539	325	52	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 3743.

STATION M21 44.70N 87.20W 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	
0.00-0.24	1094	639	258	133	12	.	.	.	.	.	2136
0.25-0.49	220	1173	439	433	73	1	.	.	.	.	2339
0.50-0.74	.	1188	538	585	242	8	.	.	.	.	2561
0.75-0.99	.	105	464	285	265	20	.	.	.	.	1139
1.00-1.24	.	.	319	269	245	64	3	.	.	.	900
1.25-1.49	.	.	84	128	96	38	5	.	.	.	351
1.50-1.74	.	.	18	123	90	43	12	.	.	.	286
1.75-1.99	.	.	.	15	56	19	7	.	.	.	97
2.00-2.24	.	.	.	3	43	24	10	1	.	.	81
2.25-2.49	.	.	.	.	13	12	4	.	.	.	29
2.50-2.74	.	.	.	.	3	15	5	1	.	.	24
2.75-2.99	.	.	.	.	.	6	1	.	.	.	7
3.00-3.24	.	.	.	.	.	5	3	.	.	.	8
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	4	1	.	.	5
TOTAL	1314	3105	2120	1974	1138	255	55	3	0	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M21 (44.70N 87.20W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.6	0.6	0.5	0.4	0.3	0.3	0.3	0.5	0.7	0.8	0.7	0.5
1957	0.8	0.7	0.6	0.5	0.5	0.3	0.3	0.3	0.4	0.5	0.8	0.8	0.5
1958	0.7	0.8	0.4	0.5	0.4	0.4	0.3	0.4	0.6	0.7	0.9	0.7	0.6
1959	0.7	0.9	0.7	0.6	0.6	0.3	0.4	0.5	0.7	0.7	0.8	0.8	0.6
1960	0.8	0.9	0.6	0.7	0.4	0.4	0.3	0.5	0.5	0.6	1.0	1.0	0.6
1961	0.8	0.8	0.8	0.5	0.5	0.4	0.3	0.4	0.7	0.8	0.8	0.7	0.6
1962	0.9	0.8	0.4	0.7	0.5	0.3	0.3	0.3	0.5	0.5	0.6	0.7	0.5
1963	0.7	0.8	0.6	0.6	0.5	0.3	0.3	0.4	0.5	0.6	0.8	0.7	0.5
1964	1.0	1.0	0.9	0.8	0.6	0.4	0.3	0.5	0.6	0.7	0.8	0.9	0.7
1965	0.9	1.1	0.7	0.5	0.5	0.4	0.3	0.4	0.5	0.7	0.8	0.9	0.6
1966	0.7	0.6	0.7	0.5	0.5	0.4	0.4	0.4	0.5	0.9	0.9	0.8	0.6
1967	1.0	0.9	0.7	0.6	0.5	0.3	0.3	0.5	0.5	0.7	0.7	0.7	0.6
1968	0.9	0.8	0.8	0.7	0.5	0.4	0.5	0.5	0.6	0.8	0.7	1.0	0.7
1969	0.8	0.6	0.6	0.6	0.4	0.4	0.3	0.5	0.6	0.8	0.8	0.9	0.6
1970	0.8	1.1	0.6	0.8	0.6	0.5	0.4	0.3	0.6	0.8	0.9	0.9	0.7
1971	0.9	1.0	0.7	0.6	0.5	0.4	0.5	0.5	0.6	0.7	0.9	0.8	0.7
1972	1.1	0.8	0.8	0.5	0.3	0.4	0.4	0.5	0.7	0.8	0.7	0.8	0.7
1973	1.0	0.9	0.7	0.8	0.5	0.4	0.4	0.6	0.6	0.7	0.8	0.9	0.7
1974	0.8	0.9	0.7	0.7	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.9	0.7
1975	1.0	0.8	0.7	0.6	0.4	0.4	0.4	0.5	0.5	0.9	0.9	0.8	0.7
1976	1.0	1.0	1.0	0.7	0.4	0.5	0.4	0.5	0.7	0.7	0.8	0.8	0.7
1977	0.8	1.0	0.8	0.6	0.4	0.4	0.5	0.6	0.6	0.8	0.9	0.8	0.7
1978	0.9	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.9	0.7
1979	0.8	0.8	0.7	0.6	0.5	0.5	0.3	0.4	0.6	0.8	0.8	0.8	0.6
1980	0.7	0.7	0.7	0.5	0.2	0.4	0.3	0.4	0.6	0.8	0.9	0.8	0.6
1981	0.5	0.9	0.6	0.7	0.4	0.4	0.3	0.4	0.6	0.7	0.6	0.7	0.6
1982	0.9	0.7	0.8	0.7	0.4	0.3	0.4	0.4	0.7	0.8	0.8	0.8	0.6
1983	0.7	0.8	0.6	0.5	0.4	0.3	0.3	0.4	0.6	0.7	1.0	0.7	0.6
1984	0.7	0.7	0.6	0.6	0.4	0.4	0.3	0.4	0.7	0.7	1.0	0.8	0.6
1985	0.7	0.8	0.8	0.5	0.4	0.3	0.3	0.4	0.6	0.6	0.6	0.7	0.6
1986	0.8	0.5	0.7	0.5	0.4	0.3	0.3	0.3	0.4	0.5	0.8	0.7	0.5
1987	0.7	0.7	0.6	0.4	0.3	0.2	0.3	0.4	0.3	0.6	0.6	0.8	0.5
MEAN	0.8	0.8	0.7	0.6	0.4	0.4	0.4	0.4	0.6	0.7	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M21 (44.70N 87.20W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.8	2.3	2.5	1.4	1.3	1.0	1.1	0.9	1.6	2.8	2.1	2.5
1957	2.1	2.3	2.2	1.7	1.8	1.2	1.1	1.5	1.4	1.9	2.1	2.5
1958	2.1	2.4	1.5	2.1	1.8	1.3	1.6	1.4	2.0	2.0	3.2	2.2
1959	2.2	3.6	2.6	1.8	1.7	1.6	1.7	1.8	3.1	1.8	2.3	3.7
1960	1.9	3.6	1.9	1.8	1.5	0.9	1.0	1.7	1.5	1.9	2.7	4.2
1961	1.9	2.5	2.6	2.3	1.5	1.4	1.1	1.3	1.9	3.3	2.9	2.8
1962	4.2	2.3	1.7	2.1	1.7	1.1	1.2	1.1	1.2	1.5	3.0	2.0
1963	3.2	2.9	2.0	2.4	1.8	1.2	1.1	1.4	1.6	2.3	2.2	2.2
1964	3.6	3.4	2.7	4.6	2.2	1.5	1.5	1.4	3.7	2.5	3.9	2.5
1965	3.4	3.0	2.3	1.3	1.9	1.4	1.2	1.4	1.6	2.0	2.7	3.7
1966	2.5	1.9	2.1	1.9	1.6	1.2	1.1	1.2	1.5	3.3	2.7	2.0
1967	3.5	3.9	1.8	2.2	1.7	0.9	0.9	1.6	2.0	2.2	2.3	1.6
1968	2.4	2.1	2.8	2.0	2.2	2.1	2.2	1.7	1.9	2.3	2.0	3.9
1969	2.8	2.6	2.2	2.1	1.1	1.5	1.4	2.3	2.2	3.1	3.6	2.8
1970	2.3	2.9	1.7	2.4	1.8	1.3	1.1	1.1	2.8	3.4	2.7	3.4
1971	2.3	4.3	2.6	2.6	1.5	1.3	1.7	1.9	3.2	3.2	3.1	2.5
1972	4.5	2.2	2.8	2.5	1.3	1.4	1.4	1.4	3.0	2.8	3.2	2.9
1973	2.8	3.0	2.3	3.1	1.4	1.3	1.4	1.5	1.9	2.8	2.4	3.0
1974	2.6	3.1	2.5	2.5	1.6	1.5	1.5	2.9	2.6	3.2	2.5	3.1
1975	7.1	3.5	2.4	1.7	1.8	1.3	1.9	3.2	1.5	3.1	3.0	3.3
1976	4.4	3.1	2.6	2.6	2.0	2.4	2.0	1.9	2.7	2.3	2.2	3.9
1977	2.4	3.3	4.2	1.7	1.9	1.3	1.6	4.3	3.1	2.1	3.1	2.5
1978	3.0	2.2	2.3	1.7	2.5	2.5	1.4	1.5	2.7	3.0	3.5	2.4
1979	2.9	2.1	2.0	1.8	2.1	1.8	1.2	1.4	2.0	2.7	3.5	3.2
1980	3.6	3.0	2.4	1.6	1.0	1.1	1.0	1.4	2.2	3.7	2.6	3.9
1981	1.8	2.7	1.8	1.9	1.7	1.9	1.1	1.3	1.5	2.2	2.4	2.9
1982	3.2	2.8	2.2	2.0	1.4	1.0	1.6	1.2	2.4	2.4	2.5	2.7
1983	2.2	3.5	2.2	2.5	1.6	1.2	1.9	1.5	1.7	1.7	2.9	3.0
1984	2.1	3.3	2.1	1.6	1.3	2.1	1.1	1.7	2.6	3.6	2.6	2.9
1985	2.4	2.3	2.4	1.5	1.3	1.4	1.8	1.7	2.0	2.2	2.5	2.3
1986	2.2	1.6	2.3	1.6	1.4	1.1	1.8	1.1	1.2	2.3	3.2	2.5
1987	1.6	2.7	3.3	1.5	1.2	0.8	1.1	1.3	1.3	2.3	1.9	2.3

32 YR. STATISTICS FOR WIS STATION M21

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	7.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	199.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011118

STATION M22 44.83N 87.18W 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	
0.00-0.24	562	314	109	31	3	.	.	.	.	.	1019
0.25-0.49	181	516	244	206	20	.	.	.	.	.	1167
0.50-0.74	.	457	95	218	94	3	.	.	.	.	867
0.75-0.99	.	227	49	135	151	3	.	.	.	.	565
1.00-1.24	.	.	59	43	144	56	.	.	.	.	302
1.25-1.49	.	.	16	2	13	23	1	.	.	.	55
1.50-1.74	.	.	14	1	4	14	5	.	.	.	38
1.75-1.99	.	.	3	1	.	2	1	.	.	.	7
2.00-2.24	.	.	.	.	.	.	2	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	1	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	743	1514	589	637	429	101	9	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 3777.

STATION M22 44.83N 87.18W 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	
0.00-0.24	548	286	72	26	3	.	.	.	.	.	935
0.25-0.49	150	459	175	149	10	.	1	.	.	.	944
0.50-0.74	.	363	225	182	41	1	.	.	.	.	812
0.75-0.99	.	52	105	88	34	.	.	.	.	.	279
1.00-1.24	.	.	75	84	65	8	.	.	.	.	232
1.25-1.49	.	.	5	24	25	6	.	.	.	.	60
1.50-1.74	.	.	.	18	23	8	.	.	.	.	49
1.75-1.99	.	.	.	1	9	3	1	.	.	.	14
2.00-2.24	.	.	.	.	9	7	.	.	.	.	16
2.25-2.49	.	.	.	.	3	5	.	.	.	.	8
2.50-2.74	.	.	.	.	.	5	.	.	.	.	5
2.75-2.99	.	.	.	.	.	5	.	.	.	.	5
3.00-3.24	.	.	.	.	.	.	4	.	.	.	4
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+							3				3
TOTAL	698	1160	657	572	222	48	9	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 3167.

STATION M22 44.83N 87.18W 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	
0.00-0.24	970	530	127	38	1	.	.	.	.	.	1666
0.25-0.49	161	914	223	97	9	.	.	.	.	.	1404
0.50-0.74	.	626	699	186	19	.	.	.	.	.	1530
0.75-0.99	.	6	469	124	23	.	.	.	.	.	622
1.00-1.24	.	.	251	370	42	2	.	.	.	.	665
1.25-1.49	.	.	13	220	104	.	.	.	.	.	337
1.50-1.74	.	.	.	111	132	9	.	.	.	.	252
1.75-1.99	.	.	.	7	86	17	.	.	.	.	110
2.00-2.24	.	.	.	.	72	32	.	.	.	.	104
2.25-2.49	.	.	.	.	14	27	1	.	.	.	42
2.50-2.74	.	.	.	.	7	31	1	.	.	.	39
2.75-2.99	.	.	.	.	.	16	.	.	.	.	16
3.00-3.24	.	.	.	.	.	14	4	.	.	.	18
3.25-3.49	.	.	.	.	.	1	7	.	.	.	8
3.50+							8				8
TOTAL	1131	2076	1782	1153	509	149	21	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 6395.

STATION M22 44.83N 87.18W 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	
0.00-0.24	684	403	101	33	4	.	.	.	.	.	1225
0.25-0.49	87	591	108	38	6	.	.	.	.	.	830
0.50-0.74	.	269	344	44	6	.	.	.	.	.	663
0.75-0.99	.	.	180	58	7	.	.	.	.	.	245
1.00-1.24	.	.	75	152	6	1	.	.	.	.	234
1.25-1.49	.	.	2	84	34	.	.	.	.	.	120
1.50-1.74	.	.	.	80	53	.	.	.	.	.	133
1.75-1.99	.	.	.	3	54	1	.	.	.	.	58
2.00-2.24	.	.	.	.	40	9	.	.	.	.	49
2.25-2.49	.	.	.	.	12	5	.	.	.	.	17
2.50-2.74	.	.	.	.	3	11	.	.	.	.	14
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	771	1263	810	492	225	30	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 3373

STATION M22 44.83N 87.18W 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	
0.00-0.24	668	393	75	21	2	.	.	.	.	.	1159
0.25-0.49	58	398	57	37	2	.	.	.	.	.	552
0.50-0.74	.	157	207	18	2	.	.	.	.	.	384
0.75-0.99	.	.	109	55	1	.	.	.	.	.	165
1.00-1.24	.	.	40	101	5	.	.	.	.	.	146
1.25-1.49	.	.	.	59	8	.	.	.	.	.	67
1.50-1.74	.	.	.	49	19	.	.	.	.	.	68
1.75-1.99	.	.	.	.	11	.	.	.	.	.	11
2.00-2.24	.	.	.	.	13	.	.	.	.	.	13
2.25-2.49	.	.	.	.	3	.	.	.	.	.	3
2.50-2.74	.	.	.	.	.	1	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	726	948	488	340	66	1	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 2414.

STATION M22 44.83N 87.18W 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	
0.00-0.24	434	242	53	11	2	.	.	.	.	.	742
0.25-0.49	53	275	27	9	.	.	.	.	.	.	364
0.50-0.74	.	115	142	11	1	.	.	.	.	.	269
0.75-0.99	.	.	88	38	.	.	.	.	.	.	126
1.00-1.24	.	.	42	60	2	.	.	.	.	.	104
1.25-1.49	.	.	.	29	8	.	.	.	.	.	37
1.50-1.74	.	.	.	22	13	.	.	.	.	.	35
1.75-1.99	.	.	.	2	7	.	.	.	.	.	9
2.00-2.24	.	.	.	.	7	.	.	.	.	.	7
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	1	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	487	632	352	182	41	1	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 1598.

STATION M22 44.83N 87.18W 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	
0.00-0.24	448	242	49	25	1	.	.	.	.	.	765
0.25-0.49	72	387	51	36	5	.	.	.	.	.	551
0.50-0.74	.	183	223	24	12	1	2	.	.	.	445
0.75-0.99	.	5	83	48	4	1	.	.	.	.	141
1.00-1.24	.	.	39	69	10	2	1	.	.	.	121
1.25-1.49	.	.	3	27	14	4	.	.	.	.	48
1.50-1.74	.	.	.	17	11	1	1	.	.	.	30
1.75-1.99	.	.	.	.	13	.	1	.	.	.	14
2.00-2.24	.	.	.	.	9	.	.	.	.	.	9
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	1	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	520	817	448	246	80	10	5	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 2002.

STATION M22 44.83N 87.18W 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	
0.00-0.24	657	572	336	137	12	.	.	.	.	.	1714
0.25-0.49	161	997	311	279	71	3	.	.	.	.	1822
0.50-0.74	.	473	617	288	129	11	1	.	.	.	1519
0.75-0.99	.	23	195	192	70	13	1	.	.	.	494
1.00-1.24	.	.	141	180	89	18	1	.	.	.	429
1.25-1.49	.	.	6	85	53	5	2	.	.	.	151
1.50-1.74	.	.	.	59	58	3	1	.	.	.	121
1.75-1.99	.	.	.	.	41	4	.	.	.	.	45
2.00-2.24	.	.	.	.	36	5	1	.	.	.	42
2.25-2.49	.	.	.	.	8	4	.	.	.	.	12
2.50-2.74	.	.	.	.	.	6	.	.	.	.	6
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	818	2065	1606	1220	567	72	7	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 5962.

STATION M22 44.83N 87.18W 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	
0.00-0.24	1285	1565	1516	1175	142	1	.	.	.	.	5684
0.25-0.49	266	1934	2400	3290	673	9	.	.	.	.	8572
0.50-0.74	.	1196	1537	4278	2143	85	1	.	.	.	9240
0.75-0.99	.	148	762	1467	2005	185	3	.	.	.	4570
1.00-1.24	.	1	521	872	1704	585	36	.	.	.	3719
1.25-1.49	.	.	57	362	486	310	64	.	.	.	1279
1.50-1.74	.	.	7	258	350	233	115	2	.	.	965
1.75-1.99	.	.	.	36	201	108	57	1	.	.	403
2.00-2.24	.	.	.	2	143	100	85	13	.	.	343
2.25-2.49	.	.	.	.	60	53	37	7	.	.	157
2.50-2.74	.	.	.	.	19	67	33	12	.	.	131
2.75-2.99	.	.	.	.	.	25	10	2	1	.	38
3.00-3.24	.	.	.	.	.	23	21	3	2	.	49
3.25-3.49	.	.	.	.	.	2	7	4	1	.	14
3.50+	.	.	.	.	.	.	17	4	6	.	27
TOTAL	1551	4844	6800	11740	7926	1786	486	48	10	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.8 NO. OF CASES= 32935.

STATION M22 44.83N 87.18W 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	
0.00-0.24	1369	592	218	88	9	1	.	.	.	.	2277
0.25-0.49	291	1355	258	146	36	.	.	.	.	.	2086
0.50-0.74	.	2272	286	150	77	8	1	.	.	.	2794
0.75-0.99	.	393	623	548	372	36	2	.	.	.	1974
1.00-1.24	.	.	403	253	225	53	10	.	.	.	944
1.25-1.49	.	.	150	96	85	35	4	.	.	.	370
1.50-1.74	.	.	56	103	111	58	12	.	.	.	340
1.75-1.99	.	.	.	16	51	31	12	1	.	.	111
2.00-2.24	.	.	.	8	27	33	12	.	.	.	80
2.25-2.49	.	.	.	1	7	8	8	.	.	.	24
2.50-2.74	.	.	.	1	2	10	7	.	.	.	20
2.75-2.99	.	.	.	.	.	11	4	2	.	.	17
3.00-3.24	.	.	.	.	.	3	4	.	.	.	7
3.25-3.49	.	.	.	.	.	2	2	.	.	.	4
3.50+	.	.	.	.	.	.	11	3	1	.	15
TOTAL	1660	4612	1994	1410	1002	289	89	6	1	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 10371.

STATION M22 44.83N 87.18W 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	
0.00-0.24	1378	424	116	55	6	.	.	.	.	.	1979
0.25-0.49	255	827	27	31	4	.	.	.	.	.	1144
0.50-0.74	.	1359	59	4	2	2	.	.	.	.	1426
0.75-0.99	.	208	253	17	32	7	.	.	.	.	517
1.00-1.24	.	.	221	1	20	5	1	.	.	.	248
1.25-1.49	.	.	68	.	4	5	.	.	.	.	77
1.50-1.74	.	.	18	7	7	17	3	.	.	.	52
1.75-1.99	.	.	2	5	.	1	.	.	.	.	8
2.00-2.24	.	.	.	1	.	1	1	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1633	2818	764	121	75	38	5	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.0 NO. OF CASES= 5112.

STATION M22 44.83N 87.18W 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	
0.00-0.24	875	235	100	42	4	.	.	.	.	.	1256
0.25-0.49	224	587	21	26	8	.	.	.	.	.	866
0.50-0.74	.	828	14	7	2	.	.	.	.	.	851
0.75-0.99	.	110	158	.	4	1	.	.	.	.	273
1.00-1.24	.	.	114	.	1	.	.	.	.	.	115
1.25-1.49	.	.	41	.	2	4	1	.	.	.	48
1.50-1.74	.	.	22	3	3	1	.	.	.	.	29
1.75-1.99	.	.	.	5	.	.	1	.	.	.	6
2.00-2.24	.	.	.	.	.	1	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1099	1760	470	83	24	7	2	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 2.9 NO. OF CASES= 2222.

STATION M22 44.83N 87.18W 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	
0.00-0.24	728	258	105	60	2	.	.	.	.	.	1153
0.25-0.49	235	656	31	58	19	.	.	.	.	.	999
0.50-0.74	.	1005	18	6	7	2	.	.	.	.	1038
0.75-0.99	.	56	162	.	.	.	.	.	.	.	218
1.00-1.24	.	.	112	.	.	.	.	.	.	.	112
1.25-1.49	.	.	64	.	.	.	.	.	.	.	64
1.50-1.74	.	.	19	5	2	.	1	.	.	.	27
1.75-1.99	.	.	.	4	.	.	.	.	.	.	4
2.00-2.24	.	.	.	2	.	.	1	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	963	1975	511	135	30	2	2	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.0 NO. OF CASES= 3392.

STATION M22 44.83N 87.18W 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	
0.00-0.24	479	213	96	43	.	.	.	.	.	.	831
0.25-0.49	117	278	43	71	13	1	.	.	.	.	823
0.50-0.74	.	968	51	21	10	2	.	.	.	.	1052
0.75-0.99	.	48	228	1	3	1	.	.	.	.	281
1.00-1.24	.	.	176	.	1	.	.	.	.	.	177
1.25-1.49	.	.	85	.	.	.	.	.	.	.	85
1.50-1.74	.	.	10	24	.	.	.	.	.	.	34
1.75-1.99	.	.	.	4	.	.	.	.	.	.	4
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	596	1807	689	164	27	4	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.2 NO. OF CASES= 3085.

STATION M22 44.83N 87.18W 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	
0.00-0.24	558	223	115	42	4	.	.	.	.	.	942
0.25-0.49	56	396	52	80	26	.	.	.	.	.	610
0.50-0.74	.	981	95	36	28	.	.	.	.	.	1140
0.75-0.99	.	21	278	7	38	4	.	.	.	.	348
1.00-1.24	.	.	196	.	3	1	.	.	.	.	200
1.25-1.49	.	.	88	.	.	.	.	.	.	.	88
1.50-1.74	.	.	4	22	.	.	.	.	.	.	26
1.75-1.99	.	.	.	3	.	.	.	.	.	.	3
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	614	1621	828	191	99	5	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.3 NO. OF CASES= 3151.

STATION M22 44.83N 87.18W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

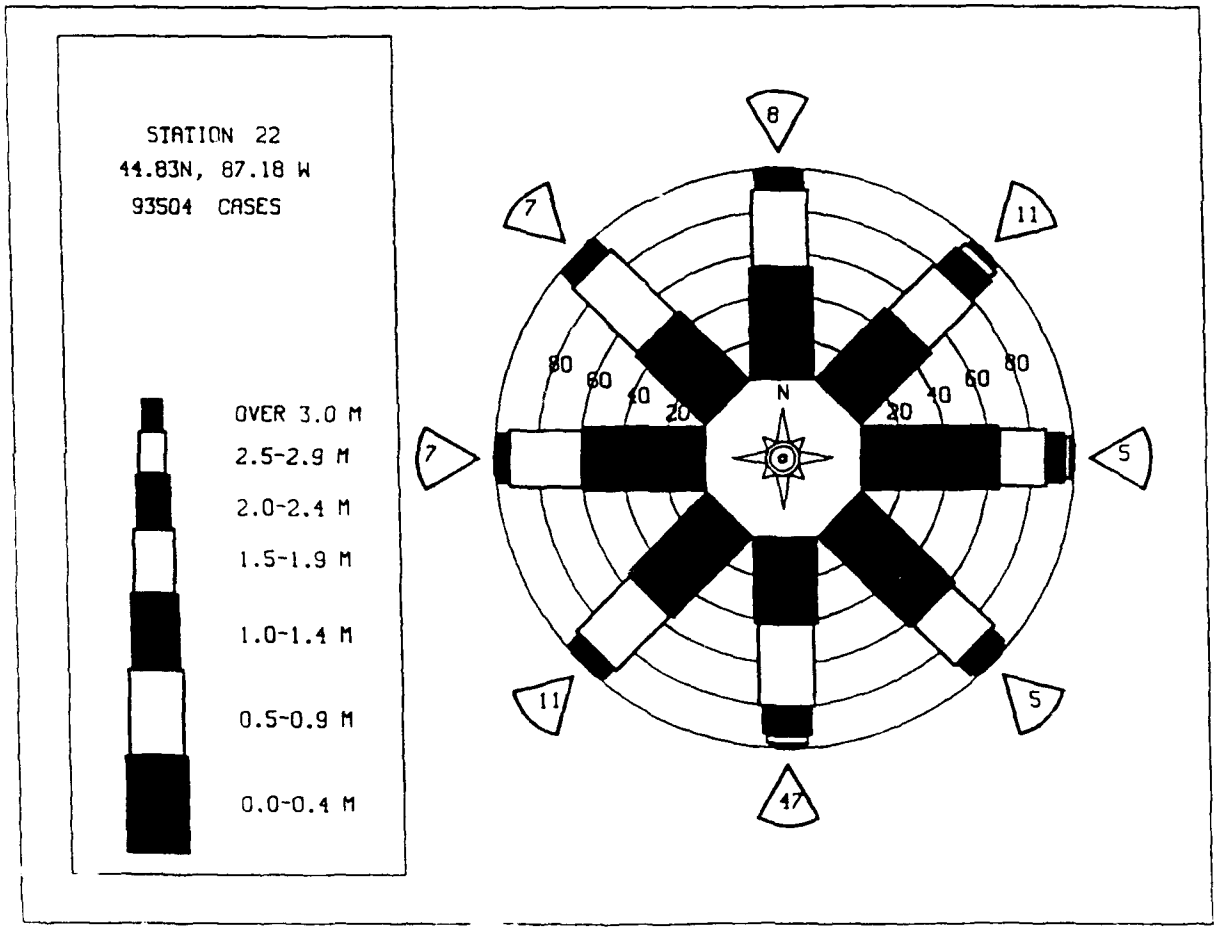
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	516	257	104	32	1	.	.	.	.	.	910
0.25-0.49	111	388	125	150	19	.	.	.	.	.	793
0.50-0.74	.	873	70	100	78	1	.	.	.	.	1122
0.75-0.99	.	172	199	49	171	8	.	.	.	.	599
1.00-1.24	.	.	122	6	52	29	.	.	.	.	209
1.25-1.49	.	.	84	.	5	5	.	.	.	.	94
1.50-1.74	.	.	16	7	2	3	2	.	.	.	30
1.75-1.99	.	.	.	6	.	.	.	.	.	.	6
2.00-2.24	.	.	.	7	.	.	.	.	.	.	7
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	627	1690	720	357	328	46	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.5 NO. OF CASES= 3538.

STATION M22 44.83N 87.18W 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	
0.00-0.24	1216	675	330	186	19	.	.	.	.	.	2426
0.25-0.49	248	1126	416	471	92	1	.	.	.	.	2354
0.50-0.74	.	1213	468	558	265	11	.	.	.	.	2515
0.75-0.99	.	147	394	283	291	26	.	.	.	.	1141
1.00-1.24	.	.	259	219	237	76	5	.	.	.	796
1.25-1.49	.	.	68	99	84	39	7	.	.	.	297
1.50-1.74	.	.	17	79	79	35	14	.	.	.	224
1.75-1.99	.	.	.	9	47	16	7	.	.	.	79
2.00-2.24	.	.	.	2	36	19	10	1	.	.	68
2.25-2.49	.	.	.	.	11	10	4	.	.	.	25
2.50-2.74	.	.	.	.	3	13	4	1	.	.	21
2.75-2.99	.	.	.	.	.	6	1	.	.	.	7
3.00-3.24	.	.	.	.	.	4	3	.	.	.	7
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+							4				4
TOTAL	1464	3161	1952	1906	1164	256	60	2	0	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M22 (44.83N 87.18W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
						MONTH							
1956	0.5	0.5	0.6	0.4	0.4	0.3	0.3	0.3	0.5	0.7	0.7	0.7	0.5
1957	0.7	0.6	0.6	0.5	0.5	0.3	0.3	0.3	0.4	0.4	0.7	0.8	0.5
1958	0.6	0.7	0.4	0.5	0.4	0.3	0.3	0.4	0.6	0.6	0.9	0.7	0.5
1959	0.7	0.8	0.6	0.5	0.5	0.3	0.4	0.4	0.7	0.6	0.7	0.8	0.6
1960	0.8	0.8	0.6	0.6	0.4	0.3	0.3	0.5	0.4	0.5	1.0	0.9	0.6
1961	0.7	0.7	0.8	0.5	0.5	0.4	0.3	0.4	0.7	0.8	0.7	0.7	0.6
1962	0.9	0.7	0.4	0.6	0.5	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.5
1963	0.7	0.7	0.6	0.5	0.5	0.3	0.3	0.3	0.4	0.6	0.7	0.6	0.5
1964	1.0	0.9	0.8	0.8	0.6	0.4	0.3	0.5	0.5	0.7	0.7	0.9	0.7
1965	0.9	1.0	0.6	0.4	0.4	0.4	0.3	0.4	0.5	0.7	0.7	0.8	0.6
1966	0.6	0.6	0.7	0.5	0.4	0.4	0.3	0.4	0.5	0.9	0.8	0.7	0.6
1967	1.0	0.9	0.6	0.6	0.5	0.3	0.3	0.4	0.5	0.7	0.6	0.7	0.6
1968	0.8	0.7	0.8	0.7	0.5	0.4	0.5	0.5	0.6	0.8	0.6	0.9	0.7
1969	0.7	0.5	0.6	0.5	0.4	0.4	0.3	0.5	0.5	0.8	0.7	0.8	0.6
1970	0.7	1.0	0.5	0.7	0.5	0.4	0.4	0.3	0.6	0.8	0.8	0.8	0.6
1971	0.9	1.0	0.6	0.6	0.4	0.4	0.4	0.5	0.6	0.7	0.8	0.7	0.6
1972	1.1	0.8	0.7	0.5	0.3	0.4	0.4	0.5	0.6	0.8	0.7	0.7	0.6
1973	0.9	0.8	0.6	0.7	0.4	0.4	0.4	0.5	0.6	0.6	0.8	0.9	0.6
1974	0.7	0.9	0.7	0.7	0.4	0.4	0.4	0.5	0.6	0.8	0.7	0.8	0.7
1975	1.0	0.7	0.6	0.5	0.4	0.4	0.4	0.5	0.5	0.8	0.9	0.8	0.6
1976	0.9	1.0	0.9	0.6	0.4	0.4	0.4	0.5	0.6	0.6	0.7	0.8	0.7
1977	0.7	0.9	0.7	0.5	0.4	0.4	0.5	0.6	0.6	0.7	0.9	0.8	0.6
1978	0.9	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.6	0.7	0.8	0.9	0.6
1979	0.7	0.7	0.7	0.5	0.5	0.5	0.3	0.4	0.5	0.8	0.8	0.8	0.6
1980	0.7	0.6	0.6	0.4	0.2	0.3	0.3	0.5	0.6	0.8	0.9	0.7	0.6
1981	0.5	0.?	0.5	0.6	0.4	0.4	0.3	0.4	0.5	0.7	0.6	0.6	0.5
1982	0.8	0.7	0.7	0.6	0.4	0.3	0.4	0.4	0.7	0.8	0.8	0.8	0.6
1983	0.7	0.7	0.6	0.5	0.3	0.3	0.3	0.4	0.7	0.7	0.9	0.7	0.6
1984	0.7	0.6	0.6	0.5	0.3	0.4	0.3	0.4	0.8	0.7	1.0	0.8	0.6
1985	0.7	0.7	0.8	0.5	0.3	0.3	0.3	0.4	0.6	0.6	0.6	0.7	0.5
1986	0.8	0.5	0.7	0.4	0.4	0.3	0.3	0.3	0.4	0.5	0.8	0.7	0.5
1987	0.6	0.6	0.5	0.4	0.3	0.2	0.3	0.3	0.3	0.5	0.6	0.7	0.4
MEAN	0.8	0.8	0.6	0.6	0.4	0.4	0.3	0.4	0.6	0.7	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M22 (44.83N 87.18W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
						MONTH						
1956	1.8	2.3	2.4	1.3	1.3	1.0	1.1	0.9	1.4	2.9	2.0	2.3
1957	2.1	2.2	2.2	1.8	2.0	1.2	1.0	1.4	1.4	1.8	2.1	2.4
1958	2.0	2.4	1.4	2.0	1.7	1.1	1.5	1.4	1.9	1.9	3.0	2.0
1959	2.1	3.5	2.5	1.7	1.5	1.4	1.5	1.8	3.0	1.7	2.4	3.5
1960	1.9	3.4	1.8	1.7	1.3	0.8	0.9	1.6	1.5	1.9	2.6	4.1
1961	1.8	2.4	2.7	2.2	1.5	1.4	1.0	1.2	1.9	3.2	2.9	2.8
1962	4.1	2.4	1.7	2.1	1.7	1.0	0.9	1.0	1.2	1.5	2.8	1.9
1963	3.0	2.7	1.9	2.2	1.8	1.1	1.0	1.3	1.5	2.3	2.2	2.2
1964	3.6	3.3	2.6	5.1	2.2	1.5	1.4	1.4	3.6	2.3	3.8	2.4
1965	3.2	2.8	2.5	1.4	1.9	1.4	1.1	1.3	1.5	1.8	2.6	3.6
1966	2.3	1.9	2.1	2.1	1.7	1.2	0.9	1.2	1.3	3.3	2.1	2.0
1967	3.4	3.6	1.8	2.2	1.7	0.9	0.9	1.5	1.9	2.2	2.3	1.5
1968	2.3	2.0	2.6	1.9	2.0	2.0	2.0	1.6	1.9	2.2	1.8	3.8
1969	2.6	2.4	2.1	2.1	1.2	1.4	1.2	2.1	2.1	3.1	3.5	2.6
1970	2.2	2.9	1.7	2.3	1.7	1.3	1.0	1.0	2.6	3.4	2.7	3.4
1971	2.2	4.3	2.6	2.4	1.4	1.3	1.7	1.9	3.2	3.2	3.0	2.4
1972	4.2	2.2	2.6	2.4	1.2	1.3	1.3	1.3	2.8	2.7	3.0	2.7
1973	2.7	2.9	2.2	3.0	1.4	1.3	1.3	1.4	1.8	2.8	2.3	2.8
1974	2.5	2.9	2.5	2.5	1.6	1.4	1.5	2.6	2.6	3.1	2.4	3.1
1975	7.4	3.3	2.4	1.6	1.7	1.3	1.8	3.1	1.5	3.1	3.0	3.3
1976	4.1	3.0	2.5	2.6	1.9	2.4	1.9	1.9	2.6	2.1	2.1	3.8
1977	2.3	3.1	4.0	1.7	1.8	1.1	1.6	4.1	3.0	2.0	3.1	2.4
1978	2.5	2.1	2.2	1.7	2.4	2.3	1.3	1.4	2.7	2.9	3.4	2.2
1979	2.8	1.9	1.7	1.8	1.9	1.8	1.2	1.4	2.0	2.7	3.6	3.5
1980	4.0	2.8	2.4	1.6	0.9	1.1	0.9	1.3	2.4	3.8	2.8	3.9
1981	1.6	2.7	1.8	1.9	1.9	1.9	1.3	1.4	1.5	2.2	2.4	2.7
1982	3.4	2.6	2.2	1.9	1.2	0.9	1.6	1.2	2.4	2.3	2.6	2.6
1983	2.1	3.4	2.0	2.3	1.5	1.1	1.7	1.5	1.8	1.7	2.9	2.8
1984	2.0	3.1	2.0	1.6	1.3	2.1	1.2	1.9	2.9	3.7	3.1	2.9
1985	2.3	2.3	2.3	1.4	1.2	1.2	1.8	1.7	1.9	2.2	2.5	2.1
1986	2.3	1.6	2.3	1.6	1.4	1.1	1.8	1.1	1.2	2.3	3.3	2.5
1987	1.6	2.1	3.1	1.3	1.2	0.7	1.1	1.2	0.9	1.7	1.8	2.3

32 YR. STATISTICS FOR WIS STATION M22

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.4
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)	196.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011118

STATION M23 44.98N 86.98W 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	
0.00-0.24	685	365	74	9	2	.	.	.	.	.	1135
0.25-0.49	93	503	208	83	3	2	1	.	.	.	893
0.50-0.74	.	759	322	265	27	1	1	.	.	.	1375
0.75-0.99	.	.	300	251	35	2	.	.	.	.	588
1.00-1.24	.	.	388	71	57	3	.	.	.	.	519
1.25-1.49	.	.	185	33	53	4	.	.	.	.	275
1.50-1.74	.	.	36	127	27	7	.	.	.	.	197
1.75-1.99	.	.	.	52	10	8	1	.	.	.	71
2.00-2.24	.	.	.	24	2	7	.	.	.	.	33
2.25-2.49	.	.	.	2	6	1	.	.	.	.	9
2.50-2.74	.	.	.	.	4	2	.	.	.	.	6
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	778	1627	1513	917	226	38	3	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 4787.

STATION M23 44.98N 86.98W 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	
0.00-0.24	711	410	64	11	1	2	.	.	.	.	1199
0.25-0.49	95	718	249	58	4	.	.	.	.	.	1124
0.50-0.74	.	559	599	210	13	.	.	.	.	.	1381
0.75-0.99	.	1	245	234	24	.	.	.	.	.	504
1.00-1.24	.	.	161	211	52	4	.	.	.	.	428
1.25-1.49	.	.	18	66	57	.	.	.	.	.	141
1.50-1.74	.	.	2	39	71	2	.	.	.	.	114
1.75-1.99	.	.	.	7	43	8	.	.	.	.	58
2.00-2.24	.	.	.	2	21	16	.	.	.	.	39
2.25-2.49	.	.	.	.	2	8	.	.	.	.	10
2.50-2.74	.	.	.	.	.	14	.	.	.	.	14
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	1	2	.	.	.	3
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	.	2	.	.	2
TOTAL	806	1688	1338	838	288	56	3	2	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 3.7 NO. OF CASES= 4710.

STATION M23 44.98N 86.98W 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	
0.00-0.24	915	468	71	11	1	.	.	.	.	.	1466
0.25-0.49	119	841	164	48	2	2	.	.	.	.	1176
0.50-0.74	.	366	623	99	7	.	.	.	.	.	1095
0.75-0.99	.	3	279	182	5	.	.	.	.	.	469
1.00-1.24	.	.	163	316	47	1	.	.	.	.	527
1.25-1.49	.	.	8	112	100	.	.	.	.	.	220
1.50-1.74	.	.	.	79	131	3	.	.	.	.	213
1.75-1.99	.	.	.	.	64	8	.	.	.	.	72
2.00-2.24	.	.	.	.	55	21	.	.	.	.	76
2.25-2.49	.	.	.	.	14	10	1	.	.	.	25
2.50-2.74	.	.	.	.	3	26	.	.	.	.	29
2.75-2.99	.	.	.	.	.	4	.	.	.	.	4
3.00-3.24	.	.	.	.	.	11	.	.	.	.	11
3.25-3.49	.	.	.	.	.	1	2	.	.	.	3
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	1034	1678	1308	847	429	87	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.7 NO. OF CASES= 5054.

STATION M23 44.98N 86.98W 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	
0.00-0.24	680	370	39	6	2	.	.	.	.	.	1097
0.25-0.49	62	572	87	13	1	.	.	.	.	.	735
0.50-0.74	.	173	357	26	3	.	.	.	.	.	559
0.75-0.99	.	2	126	51	3	.	.	.	.	.	182
1.00-1.24	.	.	59	154	8	1	.	.	.	.	222
1.25-1.49	.	.	1	66	33	.	.	.	.	.	100
1.50-1.74	.	.	.	64	29	.	.	.	.	.	93
1.75-1.99	.	.	.	.	36	2	.	.	.	.	38
2.00-2.24	.	.	.	.	20	4	.	.	.	.	24
2.25-2.49	.	.	.	.	7	4	.	.	.	.	11
2.50-2.74	.	.	.	.	.	6	.	.	.	.	6
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	742	1117	669	380	142	17	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 2878.

STATION M23 44.98N 86.98W 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	
0.00-0.24	671	405	40	2	4	.	.	.	.	.	1122
0.25-0.49	40	442	53	11	2	.	.	.	.	.	548
0.50-0.74	.	134	250	21	.	1	.	.	.	.	406
0.75-0.99	.	.	85	72	.	.	.	.	.	.	157
1.00-1.24	.	.	43	108	4	.	.	.	.	.	155
1.25-1.49	.	.	1	54	5	.	.	.	.	.	60
1.50-1.74	.	.	.	27	7	.	.	.	.	.	34
1.75-1.99	.	.	.	2	8	.	.	.	.	.	10
2.00-2.24	.	.	.	.	6	.	.	.	.	.	6
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	711	981	472	297	37	1	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 2348.

STATION M23 44.98N 86.98W 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	
0.00-0.24	521	251	26	5	1	.	.	.	.	.	804
0.25-0.49	47	320	36	.	1	.	.	.	.	.	404
0.50-0.74	.	116	197	9	.	.	.	.	.	.	322
0.75-0.99	.	.	86	41	1	.	.	.	.	.	128
1.00-1.24	.	.	29	60	1	1	.	.	.	.	91
1.25-1.49	.	.	1	41	2	1	.	.	.	.	45
1.50-1.74	.	.	.	27	7	.	.	.	.	.	34
1.75-1.99	.	.	.	.	3	.	.	.	.	.	3
2.00-2.24	.	.	.	.	2	.	.	.	.	.	2
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	568	687	375	183	19	2	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 1726.

STATION M23 44.98N 86.98W 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	
0.00-0.24	560	278	34	7	2	1	.	.	.	.	882
0.25-0.49	60	439	47	9	4	1	.	.	.	.	560
0.50-0.74	.	177	244	12	6	2	.	.	.	.	441
0.75-0.99	.	4	100	34	12	.	.	.	.	.	150
1.00-1.24	.	.	41	64	9	.	.	.	.	.	114
1.25-1.49	.	.	1	26	6	3	.	.	.	.	36
1.50-1.74	.	.	.	24	9	2	.	.	.	.	35
1.75-1.99	.	.	.	.	10	1	.	.	.	.	11
2.00-2.24	.	.	.	.	4	.	.	.	.	.	4
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	620	898	467	176	62	10	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 2101.

STATION M23 44.98N 86.98W 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	
0.00-0.24	674	488	155	63	10	.	.	.	.	.	1390
0.25-0.49	159	549	167	137	53	1	.	.	.	.	1466
0.50-0.74	.	451	622	128	67	19	1	.	.	.	1288
0.75-0.99	.	6	209	130	33	14	.	.	.	.	392
1.00-1.24	.	.	110	86	39	24	4	.	.	.	363
1.25-1.49	.	.	8	20	35	7	1	.	.	.	141
1.50-1.74	.	.	.	58	35	7	2	.	.	.	102
1.75-1.99	.	.	.	3	40	3	.	.	.	.	46
2.00-2.24	.	.	.	.	25	1	.	.	.	.	26
2.25-2.49	.	.	.	.	1	1	.	.	.	.	2
2.50-2.74	.	.	.	.	.	4	.	.	.	.	4
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	833	1894	1271	795	338	81	8	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.7 NO. OF CASES= 4898.

STATION M23 44.98N 86.98W 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	
0.00-0.24	1267	1589	1290	959	249	11	.	.	.	.	5365
0.25-0.49	248	1704	2103	2409	960	70	1	.	.	.	7495
0.50-0.74	.	852	1392	2895	2425	196	3	.	.	.	7763
0.75-0.99	.	34	497	689	1701	321	6	.	.	.	3248
1.00-1.24	.	.	375	491	1025	746	56	.	.	.	2693
1.25-1.49	.	.	26	262	266	297	101	1	.	.	953
1.50-1.74	.	.	.	194	213	211	115	.	.	.	733
1.75-1.99	.	.	.	17	126	53	70	5	.	.	271
2.00-2.24	.	.	.	2	102	51	57	13	.	.	225
2.25-2.49	.	.	.	.	45	28	29	10	.	.	112
2.50-2.74	.	.	.	.	4	49	23	2	.	.	78
2.75-2.99	.	.	.	.	.	20	6	5	.	.	31
3.00-3.24	.	.	.	.	.	17	5	2	2	.	26
3.25-3.49	.	.	.	.	.	1	6	.	1	.	8
3.50+	.	.	.	.	.	.	13	4	.	.	17
TOTAL	1515	4179	5683	7918	7116	2071	491	42	3	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.8 NO. OF CASES= 27163.

STATION M23 44.98N 86.98W 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	
0.00-0.24	1534	996	333	124	34	1	.	.	.	.	3022
0.25-0.49	333	1603	581	243	82	11	.	.	.	.	2853
0.50-0.74	.	1483	1167	429	204	29	.	.	.	.	3312
0.75-0.99	.	301	834	396	456	106	11	.	.	.	2104
1.00-1.24	.	.	1226	379	371	121	14	.	.	.	2111
1.25-1.49	.	.	222	496	239	90	18	.	.	.	1065
1.50-1.74	.	.	6	511	237	163	39	.	.	.	956
1.75-1.99	.	.	.	131	128	93	25	2	.	.	379
2.00-2.24	.	.	.	41	132	116	45	.	.	.	334
2.25-2.49	.	.	.	1	35	50	24	6	.	.	116
2.50-2.74	.	.	.	.	11	35	28	7	1	.	82
2.75-2.99	.	.	.	.	5	9	10	1	2	.	27
3.00-3.24	.	.	.	.	.	6	10	6	2	.	24
3.25-3.49	.	.	.	.	.	3	4	3	1	.	11
3.50+	.	.	.	.	.	1	16	7	2	.	26
TOTAL	1867	4383	4369	2751	1934	834	244	32	8	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.1 NO. OF CASES= 15388.

STATION M23 44.98N 86.98W 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	
0.00-0.24	1412	583	109	24	7	2	.	.	.	.	2137
0.25-0.49	241	1027	70	26	1	.	.	.	.	.	1365
0.50-0.74	.	1311	327	4	1	.	.	.	.	.	1643
0.75-0.99	.	319	363	29	17	10	1	.	.	.	739
1.00-1.24	.	.	468	22	11	6	3	.	.	.	510
1.25-1.49	.	.	83	114	1	3	.	.	.	.	201
1.50-1.74	.	.	14	126	7	20	5	1	.	.	173
1.75-1.99	.	.	2	33	.	3	1	.	.	.	39
2.00-2.24	.	.	.	8	14	1	3	.	.	.	26
2.25-2.49	.	.	.	.	7	.	.	.	.	.	7
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1653	3240	1436	386	67	45	13	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 6414.

STATION M23 44.98N 86.98W 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	
0.00-0.24	933	329	96	25	1	.	.	.	.	.	1384
0.25-0.49	234	761	27	28	2	1	.	.	.	.	1053
0.50-0.74	.	821	29	9	.	1	.	.	.	.	860
0.75-0.99	.	147	135	1	.	1	.	.	.	.	284
1.00-1.24	.	.	81	2	.	1	.	.	.	.	84
1.25-1.49	.	.	49	1	4	1	.	.	.	.	55
1.50-1.74	.	.	19	5	5	.	2	.	.	.	31
1.75-1.99	.	.	.	.	1	1	.	.	.	.	2
2.00-2.24	.	.	.	.	1	1	.	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1167	2058	436	71	14	7	2	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 2.9 NO. OF CASES= 3521.

STATION M23 44.98N 86.98W 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	
0.00-0.24	750	316	108	37	1	.	.	.	.	.	1212
0.25-0.49	186	489	41	44	5	1	.	.	.	.	766
0.50-0.74	.	726	16	21	2	2	.	.	.	.	767
0.75-0.99	.	59	113	1	3	.	.	.	.	.	176
1.00-1.24	.	.	69	.	.	.	.	.	.	.	69
1.25-1.49	.	.	31	.	.	1	.	.	.	.	32
1.50-1.74	.	.	17	4	1	.	.	.	.	.	22
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	936	1590	395	108	12	4	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 2.9 NO. OF CASES= 2855.

STATION M23 44.98N 86.98W 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	
0.00-0.24	463	265	79	12	.	1	.	.	.	.	820
0.25-0.49	106	445	56	58	4	2	.	.	.	.	671
0.50-0.74	.	760	37	21	7	.	.	.	.	.	825
0.75-0.99	.	32	146	1	7	.	.	.	.	.	186
1.00-1.24	.	.	111	.	.	1	.	.	.	.	112
1.25-1.49	.	.	33	.	.	.	.	.	.	.	33
1.50-1.74	.	.	6	8	.	.	.	.	.	.	14
1.75-1.99	.	.	.	4	.	.	.	.	.	.	4
2.00-2.24	.	.	.	.	.	.	1	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	569	1502	468	104	18	4	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 2502.

STATION M23 44.98N 86.98W 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	
0.00-0.24	588	320	72	8	3	.	.	.	.	.	991
0.25-0.49	63	436	110	72	1	.	.	.	.	.	682
0.50-0.74	.	1001	108	58	10	.	.	.	.	.	1177
0.75-0.99	.	40	294	24	25	.	.	.	.	.	383
1.00-1.24	.	.	177	4	13	2	.	.	.	.	196
1.25-1.49	.	.	68	.	1	1	.	.	.	.	70
1.50-1.74	.	.	8	13	.	1	1	.	.	.	23
1.75-1.99	.	.	.	3	.	.	.	.	.	.	3
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	651	1797	837	182	53	4	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.2 NO. OF CASES= 3307.

STATION M23 44.98N 86.98W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

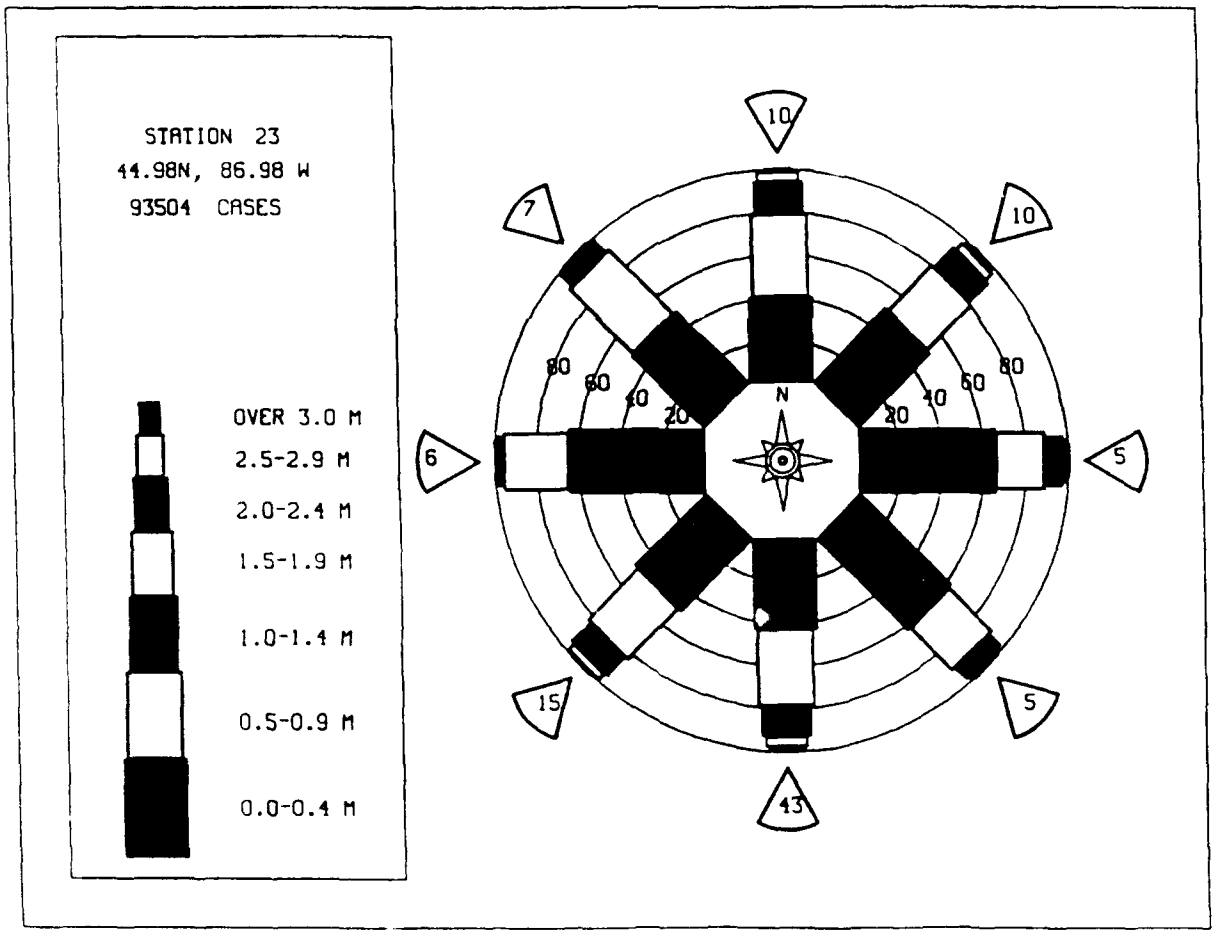
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	541	283	71	8	1	.	.	.	.	.	904
0.25-0.49	58	410	142	72	1	1	.	.	.	.	684
0.50-0.74	.	837	196	157	27	2	.	.	.	.	1219
0.75-0.99	.	21	349	80	47	3	.	.	.	.	500
1.00-1.24	.	.	379	17	33	4	.	.	.	.	433
1.25-1.49	.	.	156	33	11	2	.	.	.	.	202
1.50-1.74	.	.	21	94	6	2	.	.	.	.	123
1.75-1.99	.	.	1	21	.	2	.	.	.	.	24
2.00-2.24	.	.	.	8	.	1	.	.	.	.	9
2.25-2.49	.	.	.	2	.	.	1	.	.	.	3
2.50-2.74	.	.	.	.	4	.	.	.	.	.	4
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	599	1551	1315	492	131	17	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 3852.

STATION M23 44.98N 86.98W 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	
0.00-0.24	1291	772	266	131	32	1	.	.	.	.	2493
0.25-0.49	215	1166	414	332	112	9	.	.	.	.	2248
0.50-0.74	.	1053	649	437	280	25	.	.	.	.	2444
0.75-0.99	.	97	416	222	237	46	1	.	.	.	1019
1.00-1.24	.	.	388	209	167	91	7	.	.	.	862
1.25-1.49	.	.	89	139	81	41	12	.	.	.	362
1.50-1.74	.	.	13	140	79	42	16	.	.	.	290
1.75-1.99	.	.	.	27	47	18	9	.	.	.	101
2.00-2.24	.	.	.	8	38	22	10	1	.	.	79
2.25-2.49	.	.	.	.	12	10	5	1	.	.	28
2.50-2.74	.	.	.	.	2	13	5	.	.	.	20
2.75-2.99	.	.	.	.	.	3	1	.	.	.	4
3.00-3.24	.	.	.	.	.	3	1	.	.	.	4
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	3	1	.	.	4
TOTAL	1506	3088	2235	1645	1087	324	71	3	0	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M23 (44.98N 86.98W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.5	0.5	0.6	0.4	0.4	0.3	0.2	0.3	0.5	0.7	0.7	0.7	0.5
1957	0.8	0.6	0.5	0.5	0.5	0.3	0.3	0.3	0.4	0.5	0.8	0.8	0.5
1958	0.6	0.7	0.3	0.5	0.4	0.3	0.3	0.4	0.6	0.6	0.8	0.7	0.5
1959	0.7	0.8	0.6	0.5	0.5	0.3	0.3	0.4	0.7	0.6	0.7	0.8	0.6
1960	0.7	0.8	0.5	0.6	0.4	0.3	0.3	0.5	0.4	0.5	1.0	1.0	0.6
1961	0.7	0.7	0.7	0.4	0.4	0.4	0.3	0.4	0.7	0.8	0.8	0.7	0.6
1962	0.9	0.7	0.4	0.6	0.5	0.3	0.3	0.3	0.5	0.5	0.6	0.7	0.5
1963	0.7	0.8	0.6	0.6	0.4	0.3	0.3	0.3	0.4	0.6	0.8	0.7	0.5
1964	1.0	1.0	0.9	0.8	0.6	0.4	0.3	0.5	0.6	0.7	0.7	0.9	0.7
1965	0.9	1.1	0.6	0.4	0.4	0.4	0.3	0.4	0.6	0.7	0.8	0.9	0.6
1966	0.7	0.6	0.7	0.5	0.4	0.4	0.3	0.4	0.5	0.9	0.9	0.7	0.6
1967	1.0	0.9	0.7	0.6	0.4	0.3	0.3	0.5	0.5	0.7	0.7	0.7	0.6
1968	0.9	0.7	0.8	0.7	0.4	0.4	0.5	0.5	0.6	0.8	0.6	1.0	0.6
1969	0.7	0.5	0.6	0.5	0.4	0.4	0.3	0.5	0.6	0.8	0.7	0.8	0.6
1970	0.7	1.0	0.5	0.7	0.5	0.4	0.4	0.3	0.6	0.8	0.8	0.8	0.6
1971	0.9	1.0	0.6	0.5	0.4	0.3	0.4	0.5	0.6	0.7	0.8	0.7	0.6
1972	1.1	0.7	0.7	0.4	0.3	0.4	0.4	0.4	0.6	0.8	0.7	0.7	0.6
1973	1.0	0.8	0.7	0.7	0.4	0.4	0.4	0.5	0.6	0.6	0.8	0.9	0.6
1974	0.7	0.9	0.7	0.6	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.6
1975	1.0	0.7	0.6	0.5	0.3	0.4	0.4	0.4	0.5	0.8	0.9	0.8	0.6
1976	0.9	1.0	1.0	0.6	0.4	0.4	0.4	0.5	0.6	0.6	0.7	0.8	0.7
1977	0.7	0.9	0.7	0.5	0.3	0.3	0.5	0.6	0.6	0.7	0.8	0.8	0.6
1978	0.9	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.6	0.7	0.8	0.9	0.6
1979	0.7	0.7	0.6	0.5	0.4	0.4	0.3	0.4	0.6	1.0	1.1	1.0	0.6
1980	0.7	0.6	0.6	0.4	0.3	0.4	0.4	0.6	0.9	1.1	1.2	0.8	0.7
1981	0.5	0.9	0.6	0.6	0.4	0.4	0.4	0.5	0.7	0.9	0.8	0.6	0.6
1982	0.8	0.7	0.7	0.6	0.4	0.3	0.4	0.5	0.9	0.9	1.0	0.8	0.7
1983	0.7	0.7	0.6	0.5	0.3	0.3	0.3	0.5	0.9	0.8	1.1	0.7	0.6
1984	0.7	0.7	0.6	0.5	0.4	0.4	0.4	0.6	1.0	0.9	1.3	0.8	0.7
1985	0.7	0.8	0.8	0.6	0.4	0.3	0.4	0.4	0.6	0.6	0.6	0.7	0.6
1986	0.8	0.5	0.7	0.5	0.3	0.3	0.3	0.3	0.4	0.5	0.8	0.7	0.5
1987	0.6	0.6	0.5	0.4	0.3	0.2	0.3	0.4	0.3	0.6	0.6	0.7	0.5
MEAN	0.8	0.8	0.6	0.5	0.4	0.4	0.3	0.4	0.6	0.7	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M23 (44.98N 86.98W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.7	2.0	2.2	1.4	1.3	1.2	1.0	1.1	1.6	2.7	2.2	2.2
1957	2.1	1.9	2.3	2.0	1.7	1.4	1.2	1.4	1.5	2.1	2.3	2.7
1958	2.7	2.4	1.2	2.4	2.0	1.4	1.5	1.4	2.3	1.9	3.4	2.1
1959	2.2	3.0	2.0	1.9	1.8	1.4	1.7	1.6	2.6	1.7	2.3	3.0
1960	1.9	3.1	1.8	1.7	1.5	0.9	1.1	1.8	1.3	1.7	2.8	3.8
1961	2.1	2.0	2.4	2.0	1.3	1.2	1.1	1.4	1.8	2.7	2.8	2.9
1962	3.8	2.0	1.4	1.9	1.7	1.3	0.9	1.0	1.5	1.6	2.9	2.1
1963	2.8	2.4	1.9	2.7	1.7	1.2	1.2	1.4	1.6	2.0	2.4	2.3
1964	3.6	3.1	2.5	4.5	2.0	1.7	1.2	1.5	3.2	2.1	3.6	2.5
1965	2.7	2.5	2.3	1.4	1.7	1.3	1.3	1.5	1.6	1.8	2.5	3.3
1966	2.2	1.8	2.4	1.8	1.5	1.1	1.0	1.4	1.3	3.0	2.6	2.0
1967	3.5	3.2	2.0	1.9	1.7	1.2	1.0	1.8	1.9	2.1	2.1	1.5
1968	1.9	2.2	2.0	2.2	2.0	1.8	1.7	1.9	1.9	2.0	1.7	3.4
1969	2.3	2.2	1.9	1.9	1.2	1.7	1.1	2.0	1.9	2.6	2.9	2.5
1970	1.9	2.8	1.5	2.2	1.7	1.2	1.3	1.2	2.2	3.0	2.5	3.1
1971	2.3	4.5	1.9	2.0	1.5	1.1	1.5	1.9	3.1	3.1	2.8	2.7
1972	4.1	1.9	2.2	1.9	1.1	1.1	1.2	1.4	2.8	2.3	2.5	2.9
1973	2.7	2.5	2.1	2.6	1.2	1.4	1.5	1.5	1.8	2.4	2.3	2.4
1974	2.7	2.7	2.2	2.1	1.4	1.2	1.3	2.2	2.2	2.7	2.2	2.7
1975	6.9	2.7	2.2	1.7	1.5	1.5	1.6	2.4	1.3	3.0	3.3	3.2
1976	3.6	2.7	2.5	2.2	1.9	1.9	1.6	1.7	2.7	2.2	4.0	3.7
1977	2.2	2.9	3.5	1.8	1.5	1.0	1.4	3.3	2.7	2.3	3.3	2.3
1978	2.9	1.9	2.1	1.5	2.4	2.0	1.2	1.5	2.4	2.7	3.2	2.4
1979	2.6	1.7	1.6	1.5	1.7	1.6	1.1	1.3	1.8	3.0	4.5	3.5
1980	3.6	2.7	2.2	1.4	1.1	1.2	1.2	1.6	2.8	4.2	3.5	4.7
1981	1.8	2.5	1.7	1.7	2.0	2.5	1.5	1.4	2.1	3.2	2.6	2.4
1982	2.9	2.2	2.3	2.0	1.1	1.0	1.8	1.6	2.4	2.5	3.2	2.5
1983	2.1	2.8	1.8	2.1	1.2	1.0	1.4	1.9	2.5	2.2	2.4	2.8
1984	2.3	2.9	1.7	1.8	1.6	2.0	1.6	2.5	3.5	4.0	3.8	3.3
1985	2.1	2.2	2.3	1.7	1.5	1.4	2.5	1.5	1.9	2.0	2.3	2.1
1986	2.5	1.5	2.4	1.6	1.6	1.3	1.6	1.1	1.2	2.5	2.7	2.7
1987	2.0	2.6	2.7	1.5	1.2	1.0	1.2	1.2	1.3	2.6	1.6	2.6

32 YR STATISTICS FOR WIS STATION M23

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	6.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	203.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011118

STATION M24 45.13N 86.97W AZIMUTH(DEGREES) = 0.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECOND. .										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	860	398	111	35	2	1	.	.	.	.	1407
0.25-0.49	249	277	32.	172	8	.	.	.	.	.	1328
0.50-0.74	.	543	160	198	39	.	.	.	.	.	940
0.75-0.99	.	322	59	275	40	5	.	.	.	.	701
1.00-1.24	.	.	65	90	98	10	1	.	.	.	264
1.25-1.49	.	.	32	1	20	7	.	.	.	.	60
1.50-1.74	.	.	32	.	12	8	.	.	.	.	52
1.75-1.99	.	.	3	5	.	3	.	.	.	.	11
2.00-2.24	.	.	.	.	.	2	1	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1109	1540	784	776	219	36	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 4472.

STATION M24 45.13N 86.97W 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	
0.00-0.24	848	463	126	23	5	1	.	.	.	.	1466
0.25-0.49	17	659	332	118	7	.	.	.	.	.	1293
0.50-0.74	.	423	388	189	21	2	.	.	.	.	1023
0.75-0.99	.	73	199	154	27	2	.	.	.	.	455
1.00-1.24	.	.	85	104	59	.	.	.	.	.	248
1.25-1.49	.	.	5	31	42	2	.	.	.	.	80
1.50-1.74	.	.	.	18	33	4	.	.	.	.	55
1.75-1.99	.	.	.	2	19	2	.	.	.	.	23
2.00-2.24	.	.	.	2	9	5	.	.	.	.	16
2.25-2.49	.	.	.	.	2	4	.	.	.	.	6
2.50-2.74	.	.	.	.	.	11	.	1	.	.	12
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	1	2	.	.	.	3
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	1	.	.	1
TOTAL	1027	1616	1135	641	224	34	2	2	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 4392.

STATION M24 45.13N 86.97W 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	
0.00-0.24	989	515	96	20	8	.	.	.	.	.	1628
0.25-0.49	118	711	171	25	3	1	.	.	.	.	1029
0.50-0.74	.	362	501	91	7	.	.	.	.	.	961
0.75-0.99	.	4	279	113	13	1	.	.	.	.	410
1.00-1.24	.	.	139	236	36	.	.	.	.	.	411
1.25-1.49	.	.	12	84	87	1	.	.	.	.	184
1.50-1.74	.	.	.	67	99	3	.	.	.	.	169
1.75-1.99	.	.	.	2	56	2	.	.	.	.	60
2.00-2.24	.	.	.	.	35	12	.	.	.	.	47
2.25-2.49	.	.	.	.	10	16	.	.	.	.	26
2.50-2.74	.	.	.	.	1	21	.	.	.	.	22
2.75-2.99	.	.	.	.	.	5	.	.	.	.	5
3.00-3.24	.	.	.	.	.	3	1	.	.	.	4
3.25-3.49	.	.	.	.	.	.	2	.	.	.	2
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	1107	1592	1198	638	355	65	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.6 NO. OF CASES= 4652.

STATION M24 45.13N 86.97W 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	
0.00-0.24	712	350	63	10	3	1	.	.	.	.	1139
0.25-0.49	68	514	89	4	2	.	.	.	.	.	677
0.50-0.74	.	163	319	28	3	.	.	.	.	.	513
0.75-0.99	.	1	140	66	2	1	.	.	.	.	210
1.00-1.24	.	.	54	172	14	.	.	.	.	.	240
1.25-1.49	.	.	1	72	44	.	.	.	.	.	117
1.50-1.74	.	.	.	39	48	.	.	.	.	.	87
1.75-1.99	.	.	.	1	48	1	.	.	.	.	50
2.00-2.24	.	.	.	.	23	4	.	.	.	.	27
2.25-2.49	.	.	.	.	7	6	.	.	.	.	13
2.50-2.74	.	.	.	.	2	8	.	.	.	.	10
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	3	.	.	.	.	3
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	780	1028	666	392	196	27	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 2902.

STATION M24 45.13N 86.97W 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	
0.00-0.24	700	370	31	5	3	.	.	.	.	.	1109
0.25-0.49	36	430	43	5	1	.	.	.	.	.	515
0.50-0.74	.	154	273	12	.	.	.	.	.	.	439
0.75-0.99	.	1	90	53	.	1	.	.	.	.	145
1.00-1.24	.	.	45	142	5	.	.	.	.	.	192
1.25-1.49	.	.	.	45	14	.	.	.	.	.	59
1.50-1.74	.	.	.	21	21	.	.	.	.	.	42
1.75-1.99	.	.	.	.	16	.	.	.	.	.	16
2.00-2.24	.	.	.	.	6	.	.	.	.	.	6
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	736	955	482	283	68	1	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 2372.

STATION M24 45.13N 86.97W 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	
0.00-0.24	536	281	23	5	3	.	.	.	.	.	848
0.25-0.49	44	305	28	1	.	.	.	.	.	.	378
0.50-0.74	.	125	179	9	.	.	.	.	.	.	313
0.75-0.99	.	.	94	48	.	.	.	.	.	.	142
1.00-1.24	.	.	27	80	2	.	.	.	.	.	109
1.25-1.49	.	.	2	47	1	.	.	.	.	.	50
1.50-1.74	.	.	.	22	17	.	.	.	.	.	39
1.75-1.99	.	.	.	1	6	.	.	.	.	.	7
2.00-2.24	.	.	.	.	4	.	.	.	.	.	4
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	1	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	580	711	353	213	33	1	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.2 NO. OF CASES= 1777.

STATION M24 45.13N 86.97W 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	
0.00-0.24	618	290	39	10	1	.	.	.	.	.	958
0.25-0.49	73	440	49	12	3	1	.	.	.	.	578
0.50-0.74	.	186	275	13	11	1	1	.	.	.	487
0.75-0.99	.	5	106	41	7	2	.	.	.	.	161
1.00-1.24	.	.	42	82	2	5	.	.	.	.	131
1.25-1.49	.	.	1	28	6	1	.	.	.	.	36
1.50-1.74	.	.	.	21	14	1	.	.	.	.	36
1.75-1.99	.	.	.	.	12	.	.	.	.	.	12
2.00-2.24	.	.	.	.	5	.	.	.	.	.	5
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	691	921	512	207	62	11	1	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 2264.

STATION M24 45.13N 86.97W 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	
0.00-0.24	711	519	167	85	23	1	.	.	.	.	1506
0.25-0.49	148	1021	201	114	50	7	1	.	.	.	1542
0.50-0.74	.	455	694	148	78	10	1	.	.	.	1386
0.75-0.99	.	24	205	174	52	9	.	.	.	.	464
1.00-1.24	.	.	134	213	50	18	3	.	.	.	418
1.25-1.49	.	.	4	90	52	7	.	.	.	.	153
1.50-1.74	.	.	.	55	40	2	1	.	.	.	98
1.75-1.99	.	.	.	1	39	3	.	.	.	.	43
2.00-2.24	.	.	.	.	31	3	.	.	.	.	34
2.25-2.49	.	.	.	.	4	3	.	.	.	.	7
2.50-2.74	.	.	.	.	1	5	.	.	.	.	6
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	859	2019	1405	880	420	71	6	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 5309.

STATION M24 45.13N 86.97W 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	
0.00-0.24	1445	1707	1651	1239	356	28	.	.	.	.	6426
0.25-0.49	271	1685	2275	2858	1137	86	3	.	.	.	8315
0.50-0.74	.	1045	1445	3039	2763	264	4	.	.	.	8560
0.75-0.99	.	98	762	814	1901	419	16	.	.	.	4010
1.00-1.24	.	.	553	805	1374	906	81	.	.	.	3719
1.25-1.49	.	.	34	348	409	386	122	1	.	.	1300
1.50-1.74	.	.	2	262	309	295	151	1	.	.	1020
1.75-1.99	.	.	.	21	155	88	87	4	.	.	355
2.00-2.24	.	.	.	3	135	101	79	23	.	.	341
2.25-2.49	.	.	.	.	37	43	27	10	1	.	118
2.50-2.74	.	.	.	.	13	44	26	5	2	.	90
2.75-2.99	.	.	.	.	.	20	10	5	1	.	36
3.00-3.24	.	.	.	.	.	19	12	2	3	.	36
3.25-3.49	.	.	.	.	.	.	8	.	1	.	9
3.50+	.	.	.	.	.	.	21	4	.	.	25
TOTAL	1716	4535	6722	9389	8589	2699	647	55	8	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.9 NO. OF CASES= 32161.

STATION M24 45.13N 86.97W 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	
0.00-0.24	1583	788	288	105	31	3	.	.	.	.	2798
0.25-0.49	347	1466	430	178	75	12	.	.	.	.	2508
0.50-0.74	.	2191	433	182	122	32	.	.	.	.	2960
0.75-0.99	.	395	1069	326	417	98	9	.	.	.	2314
1.00-1.24	.	.	335	543	294	109	13	.	.	.	1294
1.25-1.49	.	.	84	187	121	49	18	.	.	.	459
1.50-1.74	.	.	29	166	119	90	26	1	.	.	431
1.75-1.99	.	.	1	20	80	40	14	1	.	.	156
2.00-2.24	.	.	.	5	42	56	25	5	.	.	133
2.25-2.49	.	.	.	.	16	20	6	1	.	.	43
2.50-2.74	.	.	.	.	5	18	8	6	.	.	37
2.75-2.99	.	.	.	.	.	6	4	1	.	.	11
3.00-3.24	.	.	.	.	.	5	5	4	1	.	15
3.25-3.49	.	.	.	.	.	.	2	.	1	.	3
3.50+	.	.	.	.	.	1	9	4	2	.	16
TOTAL	1930	4840	2669	1712	1322	539	139	23	4	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 12351.

STATION M24 45.13N 86.97W 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	
0.00-0.24	1511	462	124	28	4	1	.	.	.	.	2130
0.25-0.49	265	880	35	10	2	1	.	.	.	.	1193
0.50-0.74	.	1446	44	2	2	1	.	.	.	.	1495
0.75-0.99	.	204	220	22	12	7	3	.	.	.	468
1.00-1.24	.	.	141	6	5	9	2	.	.	.	163
1.25-1.49	.	.	56	2	2	6	.	.	.	.	66
1.50-1.74	.	.	21	8	8	13	4	.	.	.	54
1.75-1.99	.	.	.	7	.	1	2	.	.	.	10
2.00-2.24	.	.	.	1	.	.	2	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1776	2992	641	86	35	39	13	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 2.9 NO. OF CASES= 5233.

STATION M24 45.13N 86.97W 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	
0.00-0.24	975	291	89	27	3	1	.	.	.	.	1386
0.25-0.49	214	619	5	6	.	.	.	.	.	.	844
0.50-0.74	.	861	12	2	.	.	.	.	.	.	875
0.75-0.99	.	81	141	.	1	1	1	.	.	.	225
1.00-1.24	.	.	75	.	1	.	.	.	.	.	76
1.25-1.49	.	.	33	.	.	5	.	.	.	.	38
1.50-1.74	.	.	16	1	4	1	.	.	.	.	22
1.75-1.99	.	.	.	2	1	1	.	.	.	.	4
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1189	1852	371	38	10	9	1	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 2.8 NO. OF CASES= 3254.

STATION M24 45.13N 86.97W 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	
0.00-0.24	871	284	119	41	3	.	.	.	.	.	1318
0.25-0.49	205	512	18	25	2	.	.	.	.	.	762
0.50-0.74	.	812	13	4	1	.	.	.	.	.	830
0.75-0.99	.	53	122	.	1	.	.	.	.	.	176
1.00-1.24	.	.	78	.	.	.	.	.	.	.	78
1.25-1.49	.	.	34	.	.	.	.	.	.	.	34
1.50-1.74	.	.	12	7	.	.	.	.	.	.	19
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1076	1661	396	77	7	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.8 NO. OF CASES= 3017.

STATION M24 45.13N 86.97W 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	
0.00-0.24	519	256	94	24	2	1	1	.	.	.	897
0.25-0.49	129	419	23	22	1	.	.	.	.	.	594
0.50-0.74	.	807	41	7	2	.	.	.	.	.	857
0.75-0.99	.	29	173	.	.	.	.	.	.	.	202
1.00-1.24	.	.	122	.	.	.	.	.	.	.	122
1.25-1.49	.	.	45	.	.	.	.	.	.	.	45
1.50-1.74	.	.	4	11	.	.	1	.	.	.	16
1.75-1.99	.	.	.	3	.	1	.	.	.	.	4
2.00-2.24	.	.	.	.	.	1	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	648	1511	502	67	5	3	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 2570.

STATION M24 45.13N 86.97W 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	
0.00-0.24	685	331	98	24	5	2	.	.	.	.	1145
0.25-0.49	71	417	55	64	5	1	.	.	.	.	613
0.50-0.74	.	955	119	25	3	2	.	.	.	.	1104
0.75-0.99	.	11	260	4	2	1	.	.	.	.	278
1.00-1.24	.	.	170	.	.	1	1	.	.	.	172
1.25-1.49	.	.	51	.	.	.	.	.	.	.	51
1.50-1.74	.	.	3	17	.	.	.	.	.	.	20
1.75-1.99	.	.	.	6	.	.	.	.	.	.	6
2.00-2.24	.	.	.	2	.	.	.	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	756	1714	756	142	15	7	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 3180.

STATION M24 45.13N 86.97W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

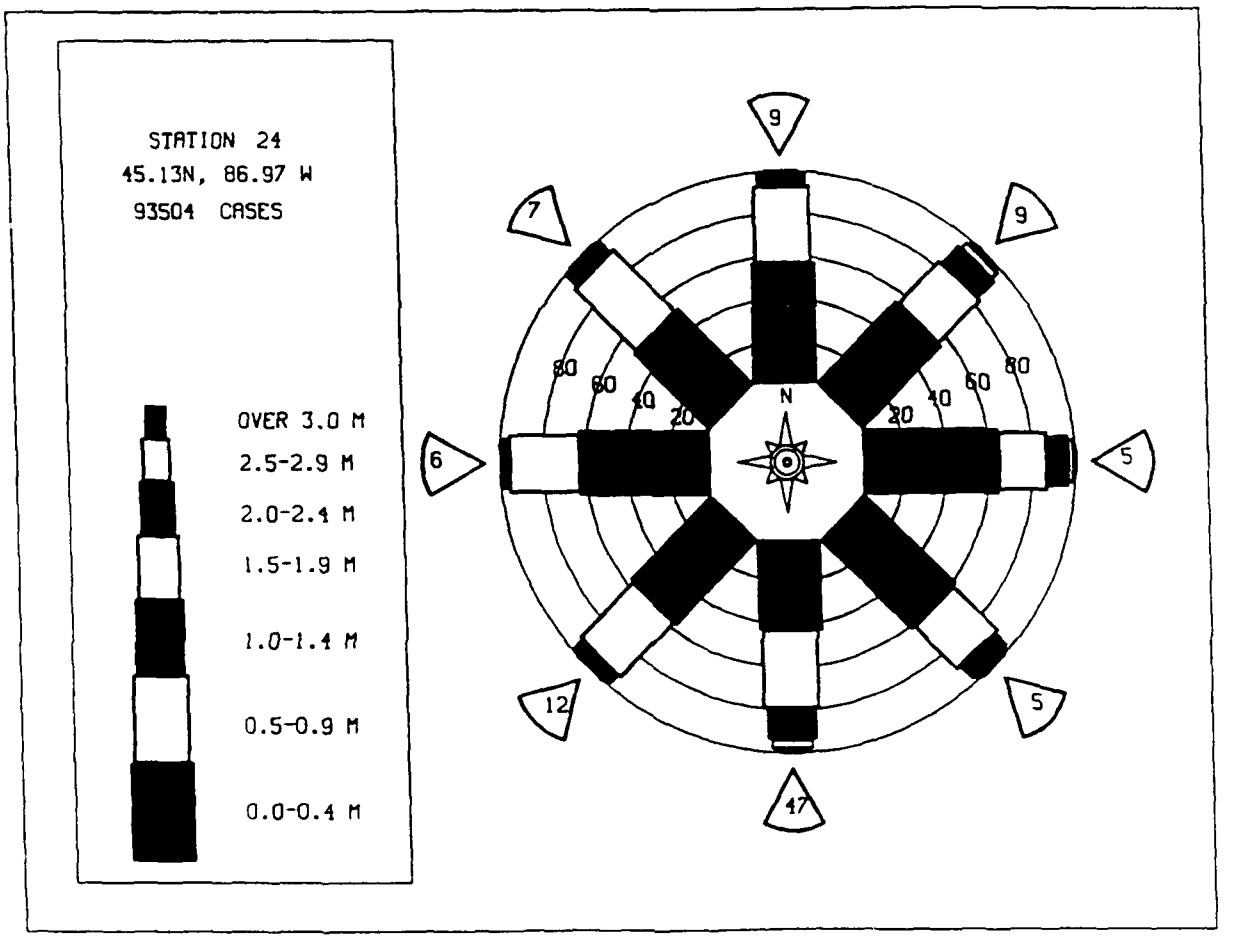
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	606	276	96	19	1	.	.	.	.	.	998
0.25-0.49	122	447	104	99	4	1	.	.	.	.	777
0.50-0.74	.	987	74	81	35	1	.	.	.	.	1178
0.75-0.99	.	216	214	96	37	2	.	.	.	.	565
1.00-1.24	.	.	157	8	21	8	1	.	.	.	195
1.25-1.49	.	.	69	.	.	1	.	.	.	.	70
1.50-1.74	.	.	20	19	.	1	.	.	.	.	40
1.75-1.99	.	.	1	8	.	.	.	.	.	.	9
2.00-2.24	.	.	.	4	.	.	.	.	.	.	4
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	728	1926	735	334	98	14	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 3598.

STATION M24 45.13N 86.97W 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	
0.00-0.24	1417	759	322	170	45	4	.	.	.	.	2717
0.25-0.49	254	1110	418	372	130	11	.	.	.	.	2295
0.50-0.74	.	1152	498	403	309	31	.	.	.	.	2393
0.75-0.99	.	152	414	219	251	55	2	.	.	.	1093
1.00-1.24	.	.	223	248	196	106	10	.	.	.	783
1.25-1.49	.	.	46	94	80	46	14	.	.	.	280
1.50-1.74	.	.	14	74	72	42	18	.	.	.	220
1.75-1.99	.	.	.	8	43	14	10	.	.	.	75
2.00-2.24	.	.	.	1	29	18	10	2	.	.	60
2.25-2.49	.	.	.	.	8	9	3	1	.	.	21
2.50-2.74	.	.	.	.	2	11	3	1	.	.	17
2.75-2.99	.	.	.	.	.	3	1	.	.	.	4
3.00-3.24	.	.	.	.	.	3	2	.	.	.	5
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	3	.	.	.	3
TOTAL	1671	3173	1935	1589	1165	353	77	4	0	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M24 (45.13N 86.97W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.5	0.5	0.5	0.4	0.4	0.2	0.2	0.2	0.4	0.7	0.7	0.6	0.4
1957	0.7	0.6	0.5	0.5	0.4	0.3	0.2	0.3	0.4	0.4	0.7	0.8	0.5
1958	0.6	0.7	0.3	0.4	0.3	0.3	0.3	0.3	0.6	0.6	0.8	0.6	0.5
1959	0.6	0.7	0.5	0.4	0.5	0.3	0.3	0.4	0.6	0.6	0.6	0.7	0.5
1960	0.7	0.7	0.5	0.5	0.3	0.3	0.3	0.5	0.4	0.5	0.9	0.9	0.5
1961	0.7	0.6	0.7	0.4	0.4	0.4	0.2	0.3	0.6	0.7	0.7	0.7	0.5
1962	0.9	0.7	0.4	0.6	0.5	0.3	0.2	0.3	0.4	0.5	0.5	0.7	0.5
1963	0.7	0.7	0.6	0.5	0.4	0.3	0.3	0.3	0.4	0.6	0.7	0.6	0.5
1964	1.0	0.9	0.8	0.7	0.5	0.4	0.3	0.5	0.5	0.7	0.7	0.9	0.7
1965	0.9	1.0	0.6	0.4	0.4	0.4	0.3	0.3	0.5	0.7	0.7	0.8	0.6
1966	0.6	0.6	0.6	0.4	0.4	0.4	0.3	0.4	0.4	0.9	0.8	0.7	0.5
1967	1.0	0.9	0.6	0.5	0.4	0.3	0.3	0.4	0.4	0.7	0.6	0.7	0.6
1968	0.8	0.6	0.7	0.6	0.4	0.4	0.5	0.5	0.5	0.8	0.6	0.9	0.6
1969	0.7	0.5	0.5	0.5	0.4	0.4	0.3	0.4	0.5	0.7	0.7	0.7	0.5
1970	0.7	0.9	0.4	0.7	0.5	0.4	0.3	0.3	0.6	0.7	0.8	0.8	0.6
1971	0.8	0.9	0.6	0.5	0.4	0.3	0.4	0.4	0.5	0.7	0.8	0.7	0.6
1972	1.1	0.7	0.6	0.4	0.2	0.3	0.4	0.4	0.6	0.8	0.6	0.7	0.6
1973	0.9	0.7	0.6	0.6	0.4	0.3	0.4	0.5	0.5	0.6	0.7	0.8	0.6
1974	0.7	0.8	0.7	0.6	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.6
1975	0.9	0.7	0.6	0.4	0.3	0.4	0.3	0.4	0.5	0.8	0.8	0.7	0.6
1976	0.9	0.9	0.9	0.6	0.4	0.4	0.4	0.4	0.6	0.6	0.7	0.7	0.6
1977	0.7	0.9	0.6	0.4	0.3	0.3	0.5	0.6	0.5	0.7	0.8	0.7	0.6
1978	0.8	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.6	0.7	0.7	0.8	0.6
1979	0.7	0.6	0.6	0.4	0.4	0.4	0.3	0.4	0.6	1.0	1.1	1.0	0.6
1980	0.7	0.6	0.6	0.4	0.3	0.4	0.4	0.6	0.9	1.1	1.1	0.7	0.6
1981	0.4	0.8	0.5	0.6	0.4	0.4	0.4	0.5	0.7	0.9	0.8	0.6	0.6
1982	0.8	0.6	0.7	0.6	0.4	0.3	0.4	0.5	0.9	0.9	0.9	0.7	0.6
1983	0.6	0.6	0.5	0.4	0.3	0.3	0.3	0.5	0.8	0.8	1.0	0.6	0.6
1984	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.6	1.0	0.9	1.3	0.8	0.7
1985	0.6	0.7	0.7	0.5	0.4	0.3	0.4	0.4	0.6	0.5	0.5	0.6	0.5
1986	0.8	0.5	0.7	0.4	0.3	0.3	0.3	0.3	0.4	0.5	0.8	0.7	0.5
1987	0.6	0.6	0.5	0.3	0.3	0.2	0.2	0.3	0.3	0.6	0.5	0.6	0.4
MEAN	0.7	0.7	0.6	0.5	0.4	0.3	0.3	0.4	0.6	0.7	0.8	0.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M24 (45.13N 86.97W)

YEAR	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.5	2.0	2.2	1.2	1.2	1.0	1.0	0.8	1.5	2.7	1.9	2.0
1957	2.0	1.8	2.2	1.7	1.7	1.6	1.1	1.3	1.2	1.8	2.0	2.5
1958	2.0	2.4	1.2	2.1	1.8	1.2	1.3	1.4	2.0	1.9	3.1	1.9
1959	1.9	2.9	1.9	1.7	1.9	1.2	1.5	1.5	2.5	1.5	2.1	3.0
1960	1.8	3.1	1.5	1.8	1.5	0.8	0.9	1.6	1.2	1.7	2.6	3.5
1961	1.9	1.9	2.4	2.0	1.3	1.1	0.9	1.1	1.7	2.4	2.8	2.9
1962	3.8	2.2	1.4	1.9	1.7	1.1	0.9	0.9	1.2	1.5	3.0	2.2
1963	2.7	2.4	1.7	2.4	1.7	1.1	1.0	1.3	1.6	1.9	2.5	2.1
1964	3.6	3.1	2.4	4.0	2.0	1.4	1.2	1.4	3.2	1.9	3.6	2.3
1965	2.6	2.4	2.3	1.1	1.7	1.3	1.0	1.2	1.4	1.8	2.4	3.2
1966	2.1	1.8	2.1	1.9	1.5	1.0	0.9	1.3	1.3	2.8	2.3	2.0
1967	3.4	3.1	1.9	1.8	1.5	0.9	0.9	1.6	1.6	2.0	2.1	1.4
1968	1.9	2.1	1.8	2.0	1.8	1.7	1.5	1.6	1.9	2.1	1.6	3.3
1969	2.4	2.2	1.9	1.7	1.2	1.5	0.9	1.7	1.9	2.4	2.8	2.4
1970	1.7	2.6	1.4	1.9	1.5	1.1	1.1	1.1	2.1	2.9	2.5	3.0
1971	2.2	4.4	1.9	1.9	1.2	0.9	1.4	1.7	3.0	3.1	2.6	2.6
1972	4.1	1.9	2.1	1.9	0.9	1.0	1.0	1.2	2.8	2.3	2.4	2.6
1973	2.6	2.4	2.0	2.5	1.2	1.3	1.3	1.5	1.7	2.2	2.3	2.3
1974	2.6	2.5	2.1	2.0	1.2	1.2	1.3	2.1	2.2	2.5	1.9	2.3
1975	5.4	2.6	2.2	1.5	1.5	1.3	1.5	2.3	1.2	2.8	3.0	3.2
1976	3.4	2.7	2.6	2.2	1.7	1.8	1.5	1.6	2.7	2.0	1.9	3.2
1977	2.1	2.8	2.9	1.6	1.5	0.8	1.4	3.1	2.5	2.0	3.3	2.3
1978	2.7	1.8	2.1	1.4	2.2	1.9	1.2	1.4	2.4	2.6	3.1	2.2
1979	2.5	1.5	1.5	1.5	1.7	1.4	1.1	1.2	1.8	3.5	4.7	3.8
1980	3.6	2.7	2.1	1.2	1.1	1.2	1.1	1.3	3.5	4.4	3.9	4.8
1981	1.6	2.5	1.6	1.6	2.2	2.7	1.4	1.3	2.0	3.0	2.7	2.2
1982	2.6	2.2	2.3	2.0	1.1	0.9	1.9	1.6	2.4	2.5	3.4	2.5
1983	2.1	2.8	1.8	2.1	1.2	0.9	1.4	1.9	2.5	2.3	2.3	2.6
1984	2.2	2.6	1.7	1.7	1.6	2.0	1.7	2.7	4.0	4.2	4.1	2.7
1985	2.1	2.0	2.2	1.5	1.2	1.3	1.9	1.5	1.8	2.0	2.3	1.9
1986	2.3	1.4	2.4	1.6	1.5	1.3	1.6	1.1	1.2	2.6	2.6	2.6
1987	2.0	2.0	2.5	1.4	1.2	0.8	1.0	1.0	1.3	2.3	1.5	2.1

32 YR. STATISTICS FOR WIS STATION M24

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.4
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	5.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	193.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011118

STATION M25 45.27N 86.75W 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	
0.00-0.24	1035	395	37	6	1	1	.	.	.	.	1475
0.25-0.49	122	779	146	24	6	.	.	.	.	.	1077
0.50-0.74	.	1164	472	132	8	1	.	.	.	.	1777
0.75-0.99	.	1	546	90	9	3	.	.	.	.	649
1.00-1.24	.	.	552	25	14	1	.	.	.	.	592
1.25-1.49	.	.	216	65	9	5	2	.	.	.	297
1.50-1.74	.	.	16	129	11	4	1	.	.	.	161
1.75-1.99	.	.	.	57	6	2	.	.	.	.	65
2.00-2.24	.	.	.	23	5	4	1	.	.	.	33
2.25-2.49	.	.	.	.	11	.	.	.	.	.	11
2.50-2.74	.	.	.	.	4	.	.	.	.	.	4
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1157	2339	1985	551	84	21	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 5760.

STATION M25 45.27N 86.75W 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	
0.00-0.24	834	343	36	4	1	.	.	.	.	.	1218
0.25-0.49	83	693	96	12	1	1	.	.	.	.	886
0.50-0.74	.	593	505	71	4	.	.	.	.	.	1173
0.75-0.99	.	1	285	140	3	4	.	.	.	.	433
1.00-1.24	.	.	188	112	13	2	.	.	.	.	315
1.25-1.49	.	.	28	53	27	1	.	.	.	.	109
1.50-1.74	.	.	6	54	52	1	.	.	.	.	113
1.75-1.99	.	.	.	13	18	1	.	.	.	.	32
2.00-2.24	.	.	.	3	22	1	.	.	.	.	26
2.25-2.49	.	.	.	.	12	4	.	.	.	.	16
2.50-2.74	.	.	.	.	.	8	.	.	.	.	8
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	.	1	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	917	1630	1144	462	153	26	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 3.4 NO. OF CASES= 4067.

STATION M25 45.27N 86.75W 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	
0.00-0.24	1052	371	32	4	5	.	.	.	.	.	1464
0.25-0.49	91	737	63	3	.	.	.	.	.	.	894
0.50-0.74	.	282	570	44	2	1	.	.	.	.	899
0.75-0.99	.	.	220	154	2	.	1	.	.	.	377
1.00-1.24	.	.	111	265	13	.	1	.	.	.	390
1.25-1.49	.	.	10	91	80	.	.	.	.	.	181
1.50-1.74	.	.	.	63	101	.	.	.	.	.	164
1.75-1.99	.	.	.	2	49	.	.	.	.	.	51
2.00-2.24	.	.	.	.	49	1	.	.	.	.	50
2.25-2.49	.	.	.	.	22	3	.	.	.	.	25
2.50-2.74	.	.	.	.	1	12	.	.	.	.	13
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	2	.	.	.	2
TOTAL	1143	1390	1006	626	324	20	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 4231.

STATION M25 45.27N 86.75W 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	
0.00-0.24	682	232	23	2	.	.	.	.	.	.	939
0.25-0.49	48	514	25	4	.	1	.	.	.	.	592
0.50-0.74	.	156	341	14	1	.	.	.	.	.	512
0.75-0.99	.	.	112	95	1	2	.	.	.	.	210
1.00-1.24	.	.	48	159	5	.	.	.	.	.	212
1.25-1.49	.	.	2	38	40	.	.	.	.	.	80
1.50-1.74	.	.	.	23	40	.	.	.	.	.	63
1.75-1.99	.	.	.	1	17	.	.	.	.	.	18
2.00-2.24	.	.	.	.	24	2	.	.	.	.	26
2.25-2.49	.	.	.	.	4	.	.	.	.	.	4
2.50-2.74	.	.	.	.	1	2	.	.	.	.	3
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	730	902	551	336	133	10	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 2498.

STATION M25 45.27N 86.75W 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	
0.00-0.24	633	243	6	2	1	.	.	.	.	.	885
0.25-0.49	44	460	23	.	1	.	.	.	.	.	528
0.50-0.74	.	131	294	3	1	1	.	.	.	.	430
0.75-0.99	.	.	84	55	.	.	.	.	.	.	139
1.00-1.24	.	.	33	159	3	.	.	.	.	.	195
1.25-1.49	.	.	1	40	12	.	.	.	.	.	53
1.50-1.74	.	.	.	11	26	.	.	.	.	.	37
1.75-1.99	.	.	.	3	13	.	.	.	.	.	16
2.00-2.24	.	.	.	.	5	.	.	.	.	.	5
2.25-2.49	.	.	.	.	.	1	.	.	.	.	1
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	677	834	441	273	63	2	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 2152.

STATION M25 45.27N 86.75W 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	
0.00-0.24	472	154	7	3	.	1	.	.	.	.	637
0.25-0.49	42	352	17	3	.	.	.	.	.	.	414
0.50-0.74	.	126	212	3	.	.	.	.	.	.	341
0.75-0.99	.	.	80	50	.	.	.	.	.	.	130
1.00-1.24	.	.	25	99	1	.	.	.	.	.	125
1.25-1.49	.	.	1	32	10	.	.	.	.	.	43
1.50-1.74	.	.	.	28	8	.	.	.	.	.	36
1.75-1.99	.	.	.	.	6	.	.	.	.	.	6
2.00-2.24	.	.	.	.	2	.	.	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	514	632	342	218	27	2	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 1631.

STATION M25 45.27N 86.75W 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	
0.00-0.24	585	228	19	4	.	2	.	.	.	.	838
0.25-0.49	52	504	27	5	2	1	.	.	.	.	591
0.50-0.74	.	225	321	11	13	3	.	.	.	.	573
0.75-0.99	.	1	106	55	3	2	.	.	.	.	167
1.00-1.24	.	.	53	68	1	2	.	.	.	.	124
1.25-1.49	.	.	2	33	8	2	.	.	.	.	45
1.50-1.74	.	.	.	22	8	2	.	.	.	.	32
1.75-1.99	.	.	.	.	9	.	.	.	.	.	9
2.00-2.24	.	.	.	.	7	.	.	.	.	.	7
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	637	958	528	198	52	14	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 2245.

STATION M25 45.27N 86.75W 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	
0.00-0.24	817	494	115	42	22	1	.	.	.	.	1491
0.25-0.49	155	1086	122	53	39	6	.	.	.	.	1461
0.50-0.74	.	520	705	101	73	16	.	.	.	.	1415
0.75-0.99	.	2	220	160	25	11	2	.	.	.	420
1.00-1.24	.	.	122	220	32	17	3	.	.	.	394
1.25-1.49	.	.	5	87	31	6	3	.	.	.	132
1.50-1.74	.	.	.	55	41	5	.	.	.	.	101
1.75-1.99	.	.	.	2	33	1	1	.	.	.	37
2.00-2.24	.	.	.	.	24	1	.	.	.	.	25
2.25-2.49	.	.	.	.	4	2	.	.	.	.	6
2.50-2.74	.	.	.	.	1	4	1	.	.	.	6
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	972	2102	1289	720	325	71	10	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.6 NO. OF CASES= 5149.

STATION M25 45.27N 86.75W 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	
0.00-0.24	1562	1527	1500	1033	356	55	2	.	.	.	6035
0.25-0.49	242	1748	1992	2431	1074	157	6	.	.	.	7650
0.50-0.74	.	906	1463	2683	2487	419	33	.	.	.	7991
0.75-0.99	.	39	506	697	1500	548	32	.	.	.	3322
1.00-1.24	.	.	411	537	918	1107	160	.	.	.	3133
1.25-1.49	.	.	26	271	244	363	156	1	.	.	1061
1.50-1.74	.	.	2	183	167	238	264	6	.	.	860
1.75-1.99	.	.	.	3	132	55	86	7	.	.	293
2.00-2.24	.	.	.	.	110	49	99	18	1	.	277
2.25-2.49	.	.	.	.	39	21	36	10	3	.	109
2.50-2.74	.	.	.	.	4	42	19	14	2	.	81
2.75-2.99	.	.	.	.	.	20	3	8	2	.	33
3.00-3.24	.	.	.	.	.	16	12	2	3	.	33
3.25-3.49	.	.	.	.	.	3	11	2	.	.	16
3.50+	.	.	.	.	.	.	23	4	1	.	28
TOTAL	1804	4220	5900	7838	7031	3093	952	72	12	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.9 NO. OF CASES= 28945.

STATION M25 45.27N 86.75W 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	
0.00-0.24	1648	934	331	135	50	9	.	.	.	.	3107
0.25-0.49	343	1518	750	309	103	26	3	.	.	.	3052
0.50-0.74	.	1470	1195	619	207	59	4	.	.	.	3554
0.75-0.99	.	213	853	407	406	166	34	1	.	.	2080
1.00-1.24	.	.	1186	395	303	171	29	1	.	.	2085
1.25-1.49	.	.	262	452	221	126	14	2	.	.	1077
1.50-1.74	.	.	12	451	328	161	66	4	.	.	1022
1.75-1.99	.	.	.	85	154	126	47	1	.	.	413
2.00-2.24	.	.	.	37	133	103	59	2	1	.	335
2.25-2.49	.	.	.	6	50	43	32	5	.	.	136
2.50-2.74	.	.	.	.	18	38	25	4	5	.	90
2.75-2.99	.	.	.	.	8	17	22	4	1	.	52
3.00-3.24	.	.	.	.	4	7	11	6	2	.	30
3.25-3.49	.	.	.	.	.	2	2	.	.	.	4
3.50+	.	.	.	.	.	1	17	5	5	1	29
TOTAL	1991	4135	4589	2896	1985	1055	365	35	14	1	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.2 NO. OF CASES= 15988.

STATION M25 45.27N 86.75W 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	
0.00-0.24	1444	539	98	12	3	2	.	.	.	.	2098
0.25-0.49	268	1072	63	9	2	1	.	.	.	.	1415
0.50-0.74	.	1294	352	5	5	1	.	.	.	.	1657
0.75-0.99	.	312	370	20	19	5	2	.	.	.	728
1.00-1.24	.	.	449	26	9	8	4	.	.	.	496
1.25-1.49	.	.	88	128	7	5	3	.	.	.	231
1.50-1.74	.	.	9	120	5	10	2	.	.	.	146
1.75-1.99	.	.	3	38	1	3	3	.	.	.	48
2.00-2.24	.	.	.	11	10	1	1	.	.	.	23
2.25-2.49	.	.	.	.	9	1	2	.	.	.	12
2.50-2.74	.	.	.	.	7	.	.	.	.	.	7
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1712	3217	1432	369	77	37	17	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 6433.

STATION M25 45.27N 86.75W 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	
0.00-0.24	828	309	44	3	1	.	.	.	.	.	1185
0.25-0.49	192	676	22	8	.	.	.	.	.	.	898
0.50-0.74	.	844	14	4	.	.	.	.	.	.	862
0.75-0.99	.	157	113	1	1	.	.	.	.	.	272
1.00-1.24	.	.	63	.	.	.	.	.	.	.	63
1.25-1.49	.	.	25	.	.	1	1	.	.	.	27
1.50-1.74	.	.	23	2	1	1	.	.	.	.	27
1.75-1.99	.	.	.	2	.	1	.	.	.	.	3
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1020	1986	304	20	3	3	1	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 2.8 NO. OF CASES= 3129.

STATION M25 45.27N 86.75W 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	
0.00-0.24	697	288	39	4	3	.	.	.	.	.	1031
0.25-0.49	172	447	28	5	.	2	.	.	.	.	654
0.50-0.74	.	608	13	2	.	.	.	.	.	.	623
0.75-0.99	.	39	105	.	.	.	.	.	.	.	144
1.00-1.24	.	.	66	.	.	.	.	.	.	.	66
1.25-1.49	.	.	21	.	.	.	.	.	.	.	21
1.50-1.74	.	.	12	6	.	.	.	.	.	.	18
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	869	1382	284	18	3	2	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 2.8 NO. OF CASES= 2400.

STATION M25 45.27N 86.75W 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	
0.00-0.24	392	209	28	2	2	.	.	.	.	.	633
0.25-0.49	105	444	35	10	1	.	.	.	.	.	595
0.50-0.74	.	635	43	16	.	1	.	.	.	.	695
0.75-0.99	.	19	144	2	.	.	.	.	.	.	165
1.00-1.24	.	.	78	.	.	.	.	.	.	.	78
1.25-1.49	.	.	42	1	.	.	.	.	.	.	43
1.50-1.74	.	.	5	12	.	.	.	1	.	.	18
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	497	1307	375	45	3	1	0	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 2093.

STATION M25 45.27N 86.75W 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	
0.00-0.24	507	235	35	7	2	.	.	.	.	.	786
0.25-0.49	57	426	34	6	.	2	.	.	.	.	525
0.50-0.74	.	1009	105	9	.	.	.	.	.	.	1123
0.75-0.99	.	20	308	3	1	1	.	.	.	.	333
1.00-1.24	.	.	174	.	.	.	.	.	.	.	174
1.25-1.49	.	.	64	.	.	.	.	.	.	.	64
1.50-1.74	.	.	5	18	.	.	1	.	.	.	24
1.75-1.99	.	.	.	4	.	.	.	.	.	.	4
2.00-2.24	.	.	.	7	.	.	.	.	.	.	7
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	564	1690	725	54	3	3	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 2851.

STATION M25 45.27N 86.75W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

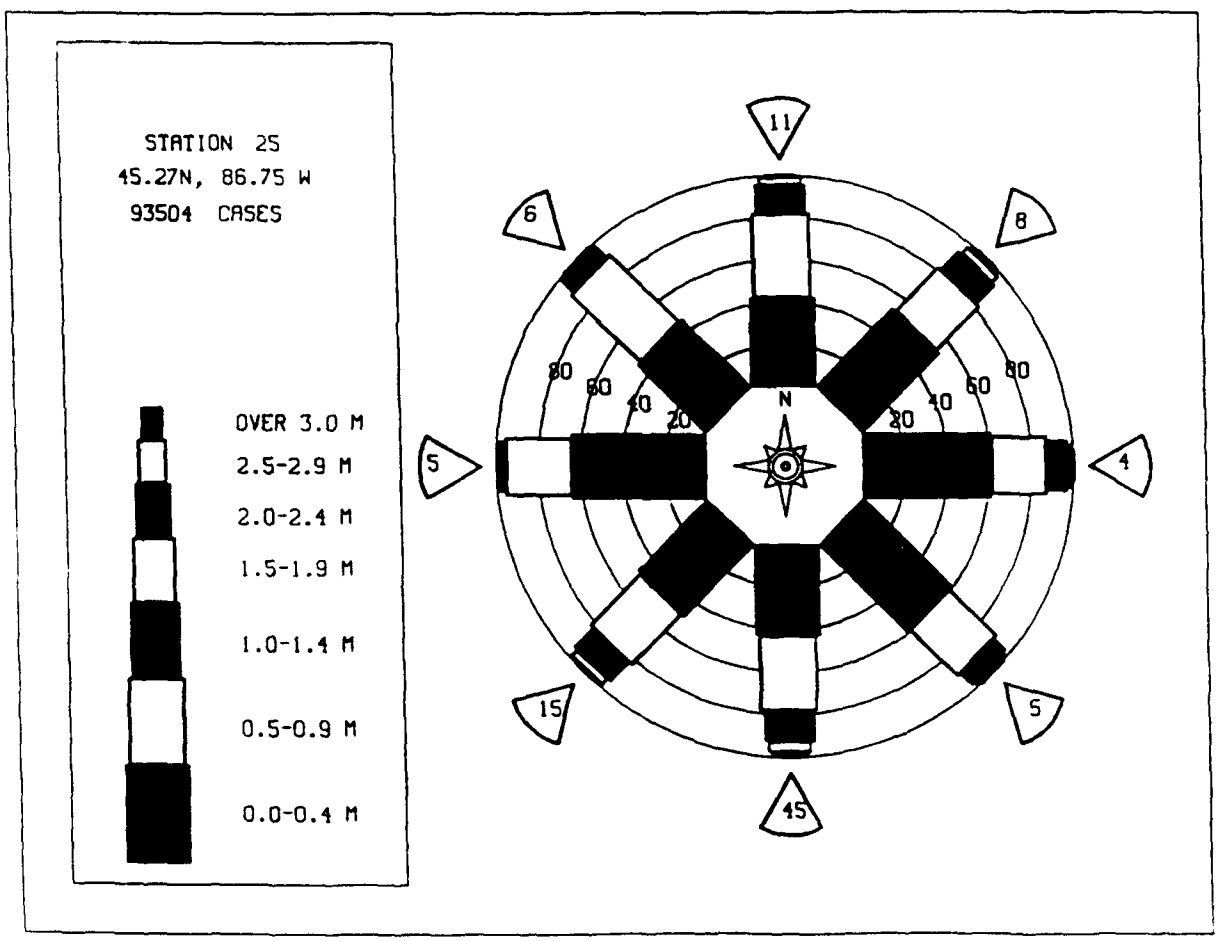
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	668	271	32	2	2	.	.	.	.	.	975
0.25-0.49	86	539	68	7	1	.	1	.	.	.	702
0.50-0.74	.	965	220	52	2	1	.	.	.	.	1240
0.75-0.99	.	22	469	13	5	2	2	.	.	.	513
1.00-1.24	.	.	428	.	2	.	1	.	.	.	431
1.25-1.49	.	.	129	52	1	.	.	.	.	.	182
1.50-1.74	.	.	9	97	.	.	1	.	.	.	107
1.75-1.99	.	.	.	27	1	.	1	.	.	.	29
2.00-2.24	.	.	.	8	.	.	.	.	.	.	8
2.25-2.49	.	.	.	1	1	.	.	.	.	.	2
2.50-2.74	.	.	.	.	4	.	.	.	.	.	4
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	754	1797	1355	259	19	3	6	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 3932.

STATION M25 45.27N 86.75W 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	
0.00-0.24	1386	677	238	127	45	7	.	.	.	.	2480
0.25-0.49	211	1200	351	289	123	19	1	.	.	.	2194
0.50-0.74	.	1093	683	377	280	50	3	.	.	.	2486
0.75-0.99	.	82	452	194	197	74	7	.	.	.	1006
1.00-1.24	.	.	399	207	131	131	19	.	.	.	887
1.25-1.49	.	.	92	134	69	51	18	.	.	.	364
1.50-1.74	.	.	10	128	79	42	33	1	.	.	293
1.75-1.99	.	.	.	24	44	19	14	.	.	.	101
2.00-2.24	.	.	.	9	39	16	16	2	.	.	82
2.25-2.49	.	.	.	.	15	7	7	1	.	.	30
2.50-2.74	.	.	.	.	4	10	4	1	.	.	19
2.75-2.99	.	.	.	.	.	4	2	1	.	.	7
3.00-3.24	.	.	.	.	.	2	2	.	.	.	4
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	4	.	.	.	4
TOTAL	1597	3052	2225	1489	1026	432	131	6	0	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M25 (45.27N 86.75W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.3	0.5	0.7	0.7	0.7	0.5
1957	0.8	0.6	0.5	0.5	0.5	0.3	0.3	0.3	0.4	0.5	0.9	0.9	0.5
1958	0.6	0.7	0.3	0.5	0.4	0.3	0.3	0.4	0.6	0.6	0.8	0.7	0.5
1959	0.7	0.8	0.5	0.4	0.5	0.3	0.3	0.4	0.7	0.6	0.7	0.8	0.6
1960	0.7	0.8	0.5	0.5	0.4	0.3	0.3	0.5	0.4	0.5	1.0	1.0	0.6
1961	0.7	0.6	0.7	0.4	0.4	0.4	0.3	0.4	0.6	0.8	0.8	0.7	0.6
1962	0.9	0.7	0.4	0.6	0.5	0.3	0.3	0.4	0.5	0.5	0.6	0.8	0.5
1963	0.7	0.8	0.6	0.6	0.4	0.3	0.3	0.4	0.4	0.6	0.8	0.7	0.6
1964	1.0	1.0	0.8	0.8	0.6	0.4	0.3	0.5	0.6	0.7	0.8	0.9	0.7
1965	0.9	1.1	0.6	0.4	0.5	0.4	0.3	0.4	0.6	0.8	0.8	0.9	0.6
1966	0.7	0.6	0.7	0.5	0.4	0.4	0.4	0.4	0.5	0.9	0.9	0.7	0.6
1967	1.0	1.0	0.7	0.6	0.4	0.3	0.3	0.5	0.5	0.7	0.7	0.7	0.6
1968	0.8	0.7	0.7	0.6	0.4	0.4	0.5	0.5	0.6	0.8	0.6	1.0	0.6
1969	0.8	0.5	0.6	0.5	0.4	0.4	0.3	0.5	0.6	0.7	0.7	0.8	0.6
1970	0.7	1.0	0.4	0.7	0.5	0.4	0.4	0.4	0.6	0.8	0.8	0.8	0.6
1971	0.9	1.0	0.6	0.5	0.4	0.3	0.4	0.5	0.6	0.7	0.8	0.7	0.6
1972	1.1	0.7	0.6	0.4	0.2	0.4	0.4	0.4	0.7	0.8	0.7	0.7	0.6
1973	1.0	0.7	0.6	0.6	0.4	0.4	0.4	0.5	0.6	0.6	0.7	0.9	0.6
1974	0.7	0.8	0.7	0.6	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.6
1975	0.9	0.7	0.6	0.5	0.3	0.4	0.4	0.4	0.5	0.8	0.9	0.8	0.6
1976	0.9	1.0	1.0	0.6	0.4	0.4	0.4	0.5	0.6	0.6	0.7	0.8	0.6
1977	0.7	0.9	0.6	0.5	0.3	0.3	0.5	0.6	0.6	0.7	0.8	0.8	0.6
1978	0.9	0.6	0.5	0.5	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.9	0.6
1979	0.7	0.6	0.6	0.4	0.4	0.4	0.3	0.4	0.6	1.2	1.3	1.3	0.7
1980	0.7	0.6	0.6	0.4	0.3	0.5	0.4	0.7	1.1	1.3	1.4	0.8	0.7
1981	0.5	0.8	0.5	0.6	0.5	0.5	0.4	0.6	0.8	1.0	0.9	0.6	0.6
1982	0.8	0.6	0.7	0.6	0.4	0.3	0.5	0.6	1.0	1.1	1.1	0.8	0.7
1983	0.7	0.6	0.5	0.4	0.3	0.3	0.4	0.6	1.0	1.0	1.1	0.6	0.6
1984	0.7	0.7	0.5	0.5	0.4	0.5	0.5	0.7	1.2	1.1	1.5	0.8	0.8
1985	0.7	0.7	0.8	0.6	0.4	0.3	0.4	0.4	0.6	0.5	0.6	0.7	0.6
1986	0.9	0.5	0.7	0.5	0.3	0.3	0.3	0.3	0.4	0.5	0.8	0.7	0.5
1987	0.6	0.6	0.5	0.4	0.3	0.2	0.3	0.4	0.4	0.7	0.6	0.7	0.5
MEAN	0.8	0.7	0.6	0.5	0.4	0.4	0.4	0.5	0.6	0.8	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M25 (45.27N 86.75W)

MONTH

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

32 YR. STATISTICS FOR WIS STATION M25

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	5.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	203.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011118

STATION M26 45.40N 86.75W 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	
0.00-0.24	1242	376	87	8	8	.	.	.	.	.	1721
0.25-0.49	331	990	240	56	2	1	.	.	.	.	1620
0.50-0.74	.	982	74	109	7	.	1	.	.	.	1173
0.75-0.99	.	488	127	108	22	4	2	.	.	.	751
1.00-1.24	.	.	111	42	31	4	.	.	.	.	188
1.25-1.49	.	.	50	4	7	2	.	.	.	.	63
1.50-1.74	.	.	39	4	2	.	.	.	.	.	45
1.75-1.99	.	.	2	6	1	.	1	.	.	.	10
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1573	2836	730	338	80	11	4	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 5223.

STATION M26 45.40N 86.75W 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	
0.00-0.24	988	337	57	2	2	.	.	.	.	.	1386
0.25-0.49	140	721	158	13	3	.	1	.	.	.	1036
0.50-0.74	.	488	221	115	4	3	1	.	.	.	832
0.75-0.99	.	126	124	73	2	2	.	.	.	.	327
1.00-1.24	.	.	64	80	20	1	.	.	.	.	165
1.25-1.49	.	.	14	38	5	.	.	.	.	.	57
1.50-1.74	.	.	3	25	17	2	.	.	.	.	47
1.75-1.99	.	.	.	1	20	.	.	.	.	.	21
2.00-2.24	.	.	.	1	17	.	.	.	.	.	18
2.25-2.49	.	.	.	1	5	.	.	.	.	.	6
2.50-2.74	.	.	.	.	1	3	.	.	.	.	4
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1128	1672	641	349	96	11	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 3658.

STATION M26 45.40N 86.75W 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	
0.00-0.24	1130	362	53	7	3	.	.	.	.	.	1555
0.25-0.49	98	608	82	2	2	.	.	.	.	.	792
0.50-0.74	.	336	444	39	3	.	.	.	.	.	822
0.75-0.99	.	3	202	99	.	1	.	.	.	.	305
1.00-1.24	.	.	104	221	2	1	.	.	.	.	328
1.25-1.49	.	.	5	116	5	.	.	.	.	.	126
1.50-1.74	.	.	.	84	45	1	.	.	.	.	130
1.75-1.99	.	.	.	4	41	.	.	.	.	.	45
2.00-2.24	.	.	.	.	41	.	.	.	.	.	41
2.25-2.49	.	.	.	.	16	.	.	.	.	.	16
2.50-2.74	.	.	.	.	.	2	.	.	.	.	2
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	1	1	.	.	.	2
TOTAL	1228	1309	890	572	158	8	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 3908.

STATION M26 45.40N 86.75W 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	
0.00-0.24	731	231	21	4	2	.	.	.	.	.	989
0.25-0.49	43	460	52	1	.	1	.	.	.	.	557
0.50-0.74	.	152	315	29	1	.	.	.	.	.	497
0.75-0.99	.	.	139	69	2	.	.	.	.	.	210
1.00-1.24	.	.	49	157	4	.	.	.	.	.	210
1.25-1.49	.	.	1	53	26	.	.	.	.	.	80
1.50-1.74	.	.	.	37	40	1	.	.	.	.	78
1.75-1.99	.	.	.	1	21	.	.	.	.	.	22
2.00-2.24	.	.	.	.	23	.	.	.	.	.	23
2.25-2.49	.	.	.	.	6	1	.	.	.	.	7
2.50-2.74	.	.	.	.	1	1	.	.	.	.	2
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	774	843	577	351	126	5	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 2513.

STATION M26 45.40N 86.75W 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	
0.00-0.24	688	236	17	4	1	.	.	.	.	.	946
0.25-0.49	45	427	26	1	.	.	.	.	.	.	499
0.50-0.74	.	127	273	10	.	.	.	.	.	.	410
0.75-0.99	.	.	85	70	.	.	.	.	.	.	155
1.00-1.24	.	.	36	148	3	.	.	.	.	.	188
1.25-1.49	.	.	1	34	32	.	.	.	.	.	67
1.50-1.74	.	.	.	10	31	.	.	.	.	.	41
1.75-1.99	.	.	.	1	14	.	.	.	.	.	15
2.00-2.24	.	.	.	.	9	.	.	.	.	.	9
2.25-2.49	.	.	.	.	2	.	.	.	.	.	2
2.50-2.74	.	.	.	.	.	2	.	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	733	790	438	279	92	2	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.2 NO. OF CASES= 2193.

STATION M26 45.40N 86.75W 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	
0.00-0.24	501	157	18	6	2	.	.	.	.	.	684
0.25-0.49	40	320	9	.	.	.	.	.	.	.	369
0.50-0.74	.	125	206	10	.	.	.	.	.	.	341
0.75-0.99	.	.	90	56	.	.	.	.	.	.	146
1.00-1.24	.	.	31	109	6	.	.	.	.	.	146
1.25-1.49	.	.	1	27	17	.	.	.	.	.	45
1.50-1.74	.	.	.	18	24	.	.	.	.	.	42
1.75-1.99	.	.	.	.	8	.	.	.	.	.	8
2.00-2.24	.	.	.	.	3	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	541	602	355	226	60	1	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.3 NO. OF CASES= 1678.

STATION M26 45.40N 86.75W 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	
0.00-0.24	625	240	25	8	5	.	.	.	.	.	903
0.25-0.49	68	498	41	5	7	1	.	.	.	.	620
0.50-0.74	.	233	352	26	11	3	.	.	.	.	625
0.75-0.99	.	8	105	56	7	3	.	.	.	.	179
1.00-1.24	.	.	47	87	4	2	1	.	.	.	141
1.25-1.49	.	.	3	35	6	1	.	.	.	.	45
1.50-1.74	.	.	.	20	16	1	.	.	.	.	37
1.75-1.99	.	.	.	.	11	.	.	.	.	.	11
2.00-2.24	.	.	.	.	6	.	.	.	.	.	6
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	1	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	693	979	573	237	74	12	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 2416.

STATION M26 45.40N 86.75W 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	
0.00-0.24	879	531	101	33	25	2	.	.	.	.	1571
0.25-0.49	147	1105	147	78	47	4	.	.	.	.	1528
0.50-0.74	.	507	823	116	68	13	1	.	.	.	1528
0.75-0.99	.	24	232	199	38	12	.	.	.	.	505
1.00-1.24	.	.	129	142	58	24	5	.	.	.	458
1.25-1.49	.	.	2	89	50	1	.	.	.	.	142
1.50-1.74	.	.	.	50	55	5	.	.	.	.	110
1.75-1.99	.	.	.	2	31	4	1	.	.	.	38
2.00-2.24	.	.	.	.	31	2	.	.	.	.	33
2.25-2.49	.	.	.	.	7	2	.	.	.	.	9
2.50-2.74	.	.	.	.	1	8	.	.	.	.	9
2.75-2.99	.	.	.	.	.	1	1	.	.	.	2
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1026	2167	1434	809	411	79	8	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 5566.

STATION M26 45.40N 86.75W 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	
0.00-0.24	1747	1660	1956	1382	510	86	3	.	.	.	7344
0.25-0.49	273	1755	2231	2874	1296	207	17	.	.	.	8653
0.50-0.74	.	1113	1552	2913	2788	552	39	.	.	.	8957
0.75-0.99	.	105	687	834	1646	700	50	.	.	.	4022
1.00-1.24	.	.	546	839	1142	1316	206	2	.	.	4051
1.25-1.49	.	.	39	375	361	465	214	.	.	.	1454
1.50-1.74	.	.	2	197	304	278	325	10	.	.	1116
1.75-1.99	.	.	.	20	159	96	133	9	.	.	417
2.00-2.24	.	.	.	3	114	99	115	24	1	.	356
2.25-2.49	.	.	.	.	34	35	29	17	2	.	117
2.50-2.74	.	.	.	.	8	50	23	19	6	.	106
2.75-2.99	.	.	.	.	2	11	10	5	1	.	29
3.00-3.24	.	.	.	.	.	17	14	4	3	.	38
3.25-3.49	.	.	.	.	.	2	7	.	1	.	10
3.50+	.	.	.	.	.	2	28	9	2	.	41
TOTAL	2020	4633	7013	9437	8364	3916	1213	99	16	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.9 NO. OF CASES= 34359.

STATION M26 45.40N 86.75W 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	
0.00-0.24	1753	732	319	150	44	10	.	.	.	.	3008
0.25-0.49	347	1427	504	255	100	33	4	.	.	.	2670
0.50-0.74	.	2106	390	286	152	56	6	.	.	.	2996
0.75-0.99	.	350	1047	393	315	154	32	1	.	.	2292
1.00-1.24	.	.	274	601	337	112	31	1	.	.	1356
1.25-1.49	.	.	66	142	164	57	22	2	1	.	454
1.50-1.74	.	.	16	106	178	78	40	1	1	.	420
1.75-1.99	.	.	.	9	86	41	13	.	.	.	149
2.00-2.24	.	.	.	4	53	51	17	5	2	.	132
2.25-2.49	.	.	.	.	12	28	13	1	1	.	55
2.50-2.74	.	.	.	.	7	27	11	2	1	.	48
2.75-2.99	.	.	.	.	.	8	5	5	1	.	19
3.00-3.24	.	.	.	.	.	4	6	.	1	.	11
3.25-3.49	.	.	.	.	.	1	5	1	.	.	7
3.50+	.	.	.	.	.	1	6	4	1	1	13
TOTAL	2100	4615	2616	1946	1448	661	211	23	9	1	

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 12777.

STATION M26 45.40N 86.75W 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	
0.00-0.24	1574	382	77	13	2	2	.	.	.	.	2050
0.25-0.49	263	904	16	3	2	1	.	.	.	.	1189
0.50-0.74	.	1378	44	1	2	2	.	.	.	.	1427
0.75-0.99	.	167	194	11	11	2	2	.	.	.	387
1.00-1.24	.	.	134	8	4	7	4	.	.	.	157
1.25-1.49	.	.	41	.	5	4	2	.	.	.	52
1.50-1.74	.	.	18	10	5	8	1	.	.	.	42
1.75-1.99	.	.	3	2	.	.	1	.	.	.	6
2.00-2.24	.	.	.	1	1	.	2	.	.	.	4
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1837	2831	527	49	32	26	12	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 2.8 NO. OF CASES= 4983.

STATION M26 45.40N 86.75W 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	
0.00-0.24	921	242	58	13	4	.	.	.	.	.	1238
0.25-0.49	225	572	14	2	.	.	.	.	.	.	813
0.50-0.74	.	827	9	.	.	.	.	.	.	.	836
0.75-0.99	.	77	117	.	1	2	1	.	.	.	198
1.00-1.24	.	.	56	.	.	1	.	.	.	.	57
1.25-1.49	.	.	29	.	.	.	1	.	.	.	30
1.50-1.74	.	.	24	4	1	.	.	.	.	.	29
1.75-1.99	.	.	.	1	.	1	.	.	.	.	2
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	1	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1146	1718	307	20	6	4	3	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 2.8 NO. OF CASES= 3206

STATION M26 45.40N 86.75W 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	
0.00-0.24	803	220	49	9	5	.	.	.	.	.	1086
0.25-0.49	168	465	10	.	1	.	.	.	.	.	644
0.50-0.74	.	737	11	1	.	.	.	.	.	.	749
0.75-0.99	.	48	116	.	.	.	.	.	.	.	164
1.00-1.24	.	.	63	.	.	.	.	.	.	.	63
1.25-1.49	.	.	24	.	.	.	1	.	.	.	25
1.50-1.74	.	.	12	7	.	.	.	.	.	.	19
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	971	1470	285	18	6	0	1	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 2.8 NO. OF CASES= 2580.

STATION M26 45.40N 86.75W 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	
0.00-0.24	490	209	38	6	1	.	.	.	.	.	744
0.25-0.49	104	387	13	5	.	.	.	.	.	.	509
0.50-0.74	.	730	48	4	.	.	.	.	.	.	782
0.75-0.99	.	22	186	.	.	.	.	.	.	.	208
1.00-1.24	.	.	86	.	.	.	.	.	.	.	86
1.25-1.49	.	.	45	.	.	.	1	.	.	.	46
1.50-1.74	.	.	10	8	.	.	.	.	.	.	18
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	2	.	.	1	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	594	1348	426	25	1	0	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 2249.

STATION M26 45.40N 86.75W 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	
0.00-0.24	633	204	58	7	.	.	1	.	.	.	903
0.25-0.49	52	385	23	6	1	.	.	.	.	.	467
0.50-0.74	.	900	140	4	.	.	.	.	.	.	1044
0.75-0.99	.	4	251	.	.	.	.	.	.	.	255
1.00-1.24	.	.	151	.	.	.	.	.	.	.	151
1.25-1.49	.	.	54	.	.	.	.	.	.	.	54
1.50-1.74	.	.	2	20	.	.	.	.	.	.	22
1.75-1.99	.	.	.	6	.	.	.	.	.	.	6
2.00-2.24	.	.	.	3	.	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	685	1493	679	46	1	0	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 2723.

STATION M26 45.40N 86.75W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

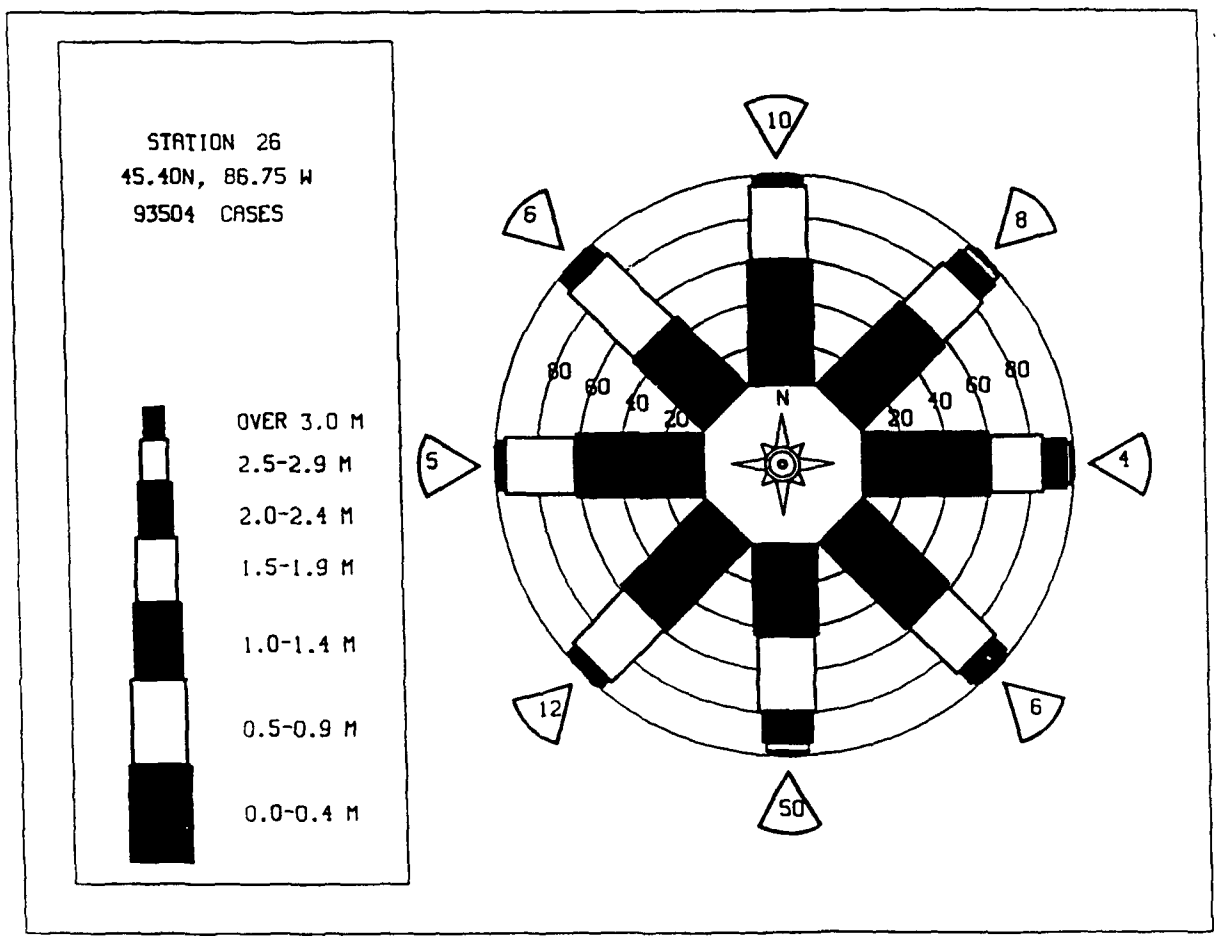
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	793	263	56	7	2	1	.	.	.	.	1122
0.25-0.49	165	586	50	31	3	.	.	.	.	.	835
0.50-0.74	.	1104	55	17	2	.	.	.	.	.	1178
0.75-0.99	.	211	271	12	4	3	.	.	.	.	501
1.00-1.24	.	.	161	.	4	1	.	.	.	.	166
1.25-1.49	.	.	66	.	.	.	.	.	.	.	66
1.50-1.74	.	.	14	22	1	.	.	.	.	.	37
1.75-1.99	.	.	.	7	.	.	.	.	.	.	7
2.00-2.24	.	.	.	4	.	.	.	.	.	.	4
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	958	2164	673	100	16	5	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 3672.

STATION M26 45.40N 86.75W 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	
0.00-0.24	1550	639	299	166	62	10	.	.	.	.	2726
0.25-0.49	251	1161	362	333	146	24	2	.	.	.	2279
0.50-0.74	.	1185	496	368	304	63	4	.	.	.	2420
0.75-0.99	.	163	397	198	205	88	8	.	.	.	1059
1.00-1.24	.	.	204	253	161	147	24	.	.	.	789
1.25-1.49	.	.	44	91	68	53	24	.	.	.	280
1.50-1.74	.	.	14	62	72	37	36	1	.	.	222
1.75-1.99	.	.	.	6	39	14	15	.	.	.	74
2.00-2.24	.	.	.	2	30	15	13	2	.	.	62
2.25-2.49	.	.	.	.	8	6	4	1	.	.	19
2.50-2.74	.	.	.	.	1	9	3	2	.	.	15
2.75-2.99	.	.	.	.	.	2	1	1	.	.	4
3.00-3.24	.	.	.	.	.	2	2	.	.	.	4
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	3	1	.	.	4
TOTAL	1801	3148	1816	1479	1096	470	140	8	0	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M26 (45.40N 86.75W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.4	0.5	0.5	0.4	0.4	0.2	0.2	0.2	0.4	0.7	0.7	0.6	0.4
1957	0.7	0.6	0.5	0.5	0.4	0.3	0.2	0.3	0.4	0.4	0.8	0.8	0.5
1958	0.6	0.6	0.2	0.4	0.3	0.3	0.3	0.3	0.6	0.6	0.8	0.6	0.5
1959	0.6	0.7	0.5	0.4	0.4	0.3	0.3	0.4	0.6	0.6	0.6	0.7	0.5
1960	0.7	0.7	0.4	0.5	0.3	0.3	0.3	0.5	0.4	0.5	0.9	0.9	0.5
1961	0.6	0.6	0.7	0.4	0.4	0.3	0.2	0.3	0.6	0.7	0.7	0.7	0.5
1962	0.9	0.6	0.4	0.6	0.5	0.3	0.3	0.3	0.5	0.5	0.6	0.7	0.5
1963	0.7	0.7	0.6	0.5	0.4	0.3	0.3	0.3	0.4	0.6	0.8	0.6	0.5
1964	1.0	0.9	0.8	0.7	0.5	0.4	0.3	0.5	0.5	0.6	0.7	0.9	0.7
1965	0.9	1.0	0.5	0.4	0.4	0.4	0.3	0.4	0.6	0.7	0.7	0.8	0.6
1966	0.6	0.6	0.7	0.4	0.4	0.4	0.3	0.4	0.4	0.9	0.9	0.7	0.6
1967	1.0	0.9	0.6	0.5	0.4	0.3	0.3	0.4	0.5	0.7	0.7	0.7	0.6
1968	0.8	0.6	0.7	0.6	0.4	0.3	0.4	0.5	0.5	0.8	0.6	0.9	0.6
1969	0.7	0.5	0.5	0.5	0.3	0.4	0.3	0.4	0.5	0.7	0.6	0.7	0.5
1970	0.6	0.9	0.4	0.6	0.5	0.4	0.3	0.3	0.6	0.7	0.8	0.8	0.6
1971	0.8	0.9	0.5	0.5	0.4	0.3	0.4	0.4	0.5	0.6	0.8	0.7	0.6
1972	1.1	0.7	0.6	0.4	0.2	0.3	0.3	0.4	0.6	0.8	0.6	0.7	0.6
1973	0.9	0.7	0.6	0.6	0.4	0.3	0.4	0.5	0.5	0.6	0.7	0.8	0.6
1974	0.7	0.8	0.7	0.6	0.4	0.4	0.4	0.4	0.6	0.7	0.7	0.7	0.6
1975	0.9	0.6	0.6	0.4	0.3	0.4	0.3	0.4	0.5	0.8	0.8	0.7	0.6
1976	0.9	0.9	0.9	0.5	0.4	0.3	0.3	0.4	0.5	0.5	0.6	0.8	0.6
1977	0.7	0.9	0.6	0.4	0.3	0.3	0.4	0.6	0.5	0.7	0.8	0.7	0.6
1978	0.8	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.6	0.7	0.7	0.8	0.6
1979	0.6	0.6	0.6	0.4	0.4	0.4	0.3	0.4	0.6	1.1	1.3	1.2	0.6
1980	0.7	0.6	0.6	0.3	0.3	0.4	0.4	0.7	1.0	1.2	1.2	0.7	0.7
1981	0.5	0.8	0.5	0.6	0.4	0.5	0.4	0.5	0.7	0.9	0.8	0.6	0.6
1982	0.8	0.6	0.6	0.5	0.4	0.3	0.5	0.5	0.9	1.0	1.0	0.7	0.7
1983	0.6	0.6	0.5	0.4	0.3	0.3	0.3	0.5	0.9	0.9	1.0	0.6	0.6
1984	0.7	0.6	0.5	0.4	0.4	0.5	0.5	0.6	1.1	1.0	1.4	0.8	0.7
1985	0.6	0.7	0.7	0.6	0.4	0.3	0.4	0.3	0.6	0.5	0.5	0.6	0.5
1986	0.8	0.4	0.7	0.4	0.3	0.3	0.3	0.3	0.4	0.5	0.8	0.7	0.5
1987	0.6	0.5	0.4	0.3	0.3	0.2	0.3	0.4	0.4	0.6	0.5	0.6	0.4
MEAN	0.7	0.7	0.6	0.5	0.4	0.3	0.3	0.4	0.6	0.7	0.8	0.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M26 (45.40N 86.75W)

MONTH

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

32 YR. STATISTICS FOR WIS STATION M26

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.4
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	5.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	190.0
DATE OF LARGEST HS OCCURRENCE IS (YR.MO.DA.HR)		79110118

STATION M27 45.53N 86.53W 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	
0.00-0.24	1297	352	54	7	3	1	.	.	.	.	1714
0.25-0.49	356	966	187	4	5	.	1	.	.	.	1519
0.50-0.74	.	1013	206	13	5	4	1	.	.	.	1242
0.75-0.99	.	514	136	231	5	8	2	.	.	.	896
1.00-1.24	.	.	113	47	8	7	.	.	.	.	175
1.25-1.49	.	.	60	7	.	.	.	.	.	.	67
1.50-1.74	.	.	39	3	3	.	.	.	.	.	45
1.75-1.99	.	.	3	6	.	.	.	.	.	.	9
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1653	2845	798	319	29	20	4	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 5313.

STATION M27 45.53N 86.53W 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	
0.00-0.24	1011	253	29	2	2	1	.	.	.	.	1298
0.25-0.49	143	598	108	1	2	.	.	.	.	.	852
0.50-0.74	.	350	279	6	1	1	1	.	.	.	638
0.75-0.99	.	101	172	73	2	3	.	.	.	.	351
1.00-1.24	.	.	59	96	8	1	1	.	.	.	165
1.25-1.49	.	.	17	56	1	.	.	.	.	.	74
1.50-1.74	.	.	2	32	2	.	1	.	.	.	37
1.75-1.99	.	.	.	8	9	1	.	.	.	.	18
2.00-2.24	.	.	.	2	10	.	.	.	.	.	12
2.25-2.49	.	.	.	.	2	.	.	.	.	.	2
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1154	1302	666	276	39	7	3	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 3235.

STATION M27 45.53N 86.53W 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	
0.00-0.24	1194	287	48	7	3	1	.	.	.	.	1540
0.25-0.49	77	591	43	.	.	.	.	.	.	.	711
0.50-0.74	.	293	404	10	.	.	.	.	.	.	707
0.75-0.99	.	1	225	48	1	.	.	.	.	.	275
1.00-1.24	.	.	104	163	.	1	.	.	.	.	268
1.25-1.49	.	.	6	144	.	.	.	.	.	.	150
1.50-1.74	.	.	.	119	.	1	.	.	.	.	120
1.75-1.99	.	.	.	9	19	.	.	.	.	.	28
2.00-2.24	.	.	.	.	13	.	.	.	.	.	13
2.25-2.49	.	.	.	.	2	.	.	.	.	.	2
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	1	.	.	.	.	1
TOTAL	1271	1172	830	500	38	6	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 3579.

STATION M27 45.53N 86.53W 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	
0.00-0.24	715	168	22	.	.	.	.	.	.	.	905
0.25-0.49	43	452	16	.	.	.	.	.	.	.	511
0.50-0.74	.	144	311	9	.	.	.	.	.	.	464
0.75-0.99	.	.	143	55	2	.	.	.	.	.	200
1.00-1.24	.	.	49	127	1	1	.	.	.	.	178
1.25-1.49	.	.	1	62	3	.	.	.	.	.	66
1.50-1.74	.	.	.	37	11	.	.	.	.	.	48
1.75-1.99	.	.	.	2	13	.	.	.	.	.	15
2.00-2.24	.	.	.	.	9	.	.	.	.	.	9
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	758	764	542	292	41	1	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 2251.

STATION M27 45.53N 86.53W 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	
0.00-0.24	611	141	14	5	3	1	.	.	.	.	775
0.25-0.49	36	401	8	.	.	.	.	.	.	.	445
0.50-0.74	.	145	274	8	.	1	.	.	.	.	428
0.75-0.99	.	.	91	54	.	.	.	.	.	.	145
1.00-1.24	.	.	37	147	3	.	.	.	.	.	187
1.25-1.49	.	.	2	40	22	.	.	.	.	.	64
1.50-1.74	.	.	.	14	26	.	.	.	.	.	40
1.75-1.99	.	.	.	.	12	.	.	.	.	.	12
2.00-2.24	.	.	.	.	8	.	.	.	.	.	8
2.25-2.49	.	.	.	.	3	.	.	.	.	.	3
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	647	687	426	268	78	2	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 1983.

STATION M27 45.53N 86.53W 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	
0.00-0.24	484	110	10	1	.	.	.	.	.	.	605
0.25-0.49	37	304	4	.	.	1	.	.	.	.	346
0.50-0.74	.	143	202	5	.	.	.	.	.	.	350
0.75-0.99	.	.	101	62	.	.	.	.	.	.	163
1.00-1.24	.	.	23	103	.	.	.	.	.	.	126
1.25-1.49	.	.	.	33	22	.	.	.	.	.	55
1.50-1.74	.	.	.	17	23	.	.	.	.	.	40
1.75-1.99	.	.	.	1	11	.	.	.	.	.	12
2.00-2.24	.	.	.	.	4	.	.	.	.	.	4
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	521	557	340	222	60	2	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 1599.

STATION M27 45.53N 86.53W 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	
0.00-0.24	586	167	28	2	1	1	.	.	.	.	785
0.25-0.49	63	482	12	2	3	.	.	.	.	.	562
0.50-0.74	.	219	349	4	4	.	.	.	.	.	576
0.75-0.99	.	6	124	78	7	6	.	.	.	.	221
1.00-1.24	.	.	49	111	7	2	1	.	.	.	170
1.25-1.49	.	.	1	47	11	.	.	.	.	.	59
1.50-1.74	.	.	.	22	12	1	1	.	.	.	36
1.75-1.99	.	.	.	.	10	.	.	.	.	.	10
2.00-2.24	.	.	.	.	4	.	.	.	.	.	4
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	1	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	649	874	563	266	60	11	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 2278.

STATION M27 45.53N 86.53W 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	
0.00-0.24	961	392	75	43	18	4	.	.	.	.	1493
0.25-0.49	158	1061	110	60	44	4	2	.	.	.	1439
0.50-0.74	.	542	776	83	49	18	3	.	.	.	1471
0.75-0.99	.	20	213	194	27	13	2	.	.	.	469
1.00-1.24	.	.	117	242	35	16	2	.	.	.	412
1.25-1.49	.	.	2	77	43	1	.	.	.	.	123
1.50-1.74	.	.	.	35	43	2	1	.	.	.	81
1.75-1.99	.	.	.	3	28	2	3	.	.	.	36
2.00-2.24	.	.	.	.	25	3	.	.	.	.	28
2.25-2.49	.	.	.	.	6	1	.	.	.	.	7
2.50-2.74	.	.	.	.	1	3	.	.	.	.	4
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	1	1	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1119	2015	1293	737	319	69	14	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 5223.

STATION M27 45.53N 86.53W 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	
0.00-0.24	1802	1464	2138	1613	567	116	18	.	.	.	7718
0.25-0.49	266	1845	2042	2916	1201	333	31	.	.	.	8634
0.50-0.74	.	951	1660	3035	2338	749	84	1	.	.	8818
0.75-0.99	.	80	518	823	1483	787	103	.	.	.	3794
1.00-1.24	.	.	393	560	836	1196	339	6	.	.	3330
1.25-1.49	.	.	18	247	250	351	259	10	.	.	1135
1.50-1.74	.	.	.	158	186	188	388	17	1	.	938
1.75-1.99	.	.	.	7	108	52	152	24	.	.	343
2.00-2.24	.	.	.	.	81	48	115	19	3	.	266
2.25-2.49	.	.	.	.	24	26	29	18	3	.	100
2.50-2.74	.	.	.	.	7	37	20	20	3	.	87
2.75-2.99	.	.	.	.	.	16	10	14	3	.	43
3.00-3.24	.	.	.	.	.	16	12	3	3	.	34
3.25-3.49	.	.	.	.	.	1	5	2	2	.	10
3.50+	.	.	.	.	.	1	29	6	1	0	37
TOTAL	2068	4340	6769	9359	7081	3917	1594	140	19	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 5.0 NO. OF CASES= 33026.

STATION M27 45.53N 86.53W 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	
0.00-0.24	1699	760	436	195	52	18	1	.	.	.	3161
0.25-0.49	344	1446	823	441	141	51	13	1	.	.	3260
0.50-0.74	.	1486	1142	736	245	89	21	1	.	.	3720
0.75-0.99	.	245	791	452	363	209	57	2	.	.	2119
1.00-1.24	.	.	1049	372	390	174	79	9	1	.	2074
1.25-1.49	.	.	304	373	229	90	35	1	1	.	1033
1.50-1.74	.	.	17	401	308	149	81	4	2	.	962
1.75-1.99	.	.	.	75	130	101	50	2	.	.	358
2.00-2.24	.	.	.	41	113	120	65	3	1	.	343
2.25-2.49	.	.	.	2	25	54	33	3	2	.	119
2.50-2.74	.	.	.	.	23	49	26	6	2	.	106
2.75-2.99	.	.	.	.	3	10	19	3	.	.	35
3.00-3.24	.	.	.	.	6	14	13	5	1	.	39
3.25-3.49	.	.	.	.	.	6	10	.	1	.	17
3.50+	.	.	.	.	1	1	12	9	4	1	28
TOTAL	2043	3937	4562	3088	2029	1135	515	49	15	1	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.3 NO. OF CASES= 16280.

STATION M27 45.53N 86.53W 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	
0.00-0.24	1452	361	65	14	11	3	1	.	.	.	1907
0.25-0.49	259	1038	51	6	2	.	.	.	.	.	1356
0.50-0.74	.	1376	291	5	.	2	.	.	.	.	1674
0.75-0.99	.	318	362	18	9	8	4	.	.	.	719
1.00-1.24	.	.	350	14	8	6	3	1	.	.	382
1.25-1.49	.	.	86	86	9	5	4	.	.	.	190
1.50-1.74	.	.	13	129	8	6	2	.	.	.	158
1.75-1.99	.	.	.	34	5	4	1	.	.	.	44
2.00-2.24	.	.	.	11	7	.	1	.	.	.	19
2.25-2.49	.	.	.	1	5	3	1	.	.	.	10
2.50-2.74	.	.	.	.	5	3	.	.	.	.	8
2.75-2.99	.	.	.	.	4	.	.	.	.	.	4
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1711	3093	1218	318	73	40	17	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.1 NO. OF CASES= 6071.

STATION M27 45.53N 86.53W 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	
0.00-0.24	832	171	23	12	3	.	.	.	.	.	1041
0.25-0.49	176	561	4	.	1	1	.	.	.	.	743
0.50-0.74	.	744	4	.	.	.	.	.	.	.	748
0.75-0.99	.	114	124	.	.	2	.	.	.	.	240
1.00-1.24	.	.	66	.	.	.	.	.	.	.	66
1.25-1.49	.	.	27	1	.	.	.	.	.	.	28
1.50-1.74	.	.	21	2	2	1	1	.	.	.	27
1.75-1.99	.	.	2	3	.	.	.	.	.	.	5
2.00-2.24	.	.	.	.	1	.	1	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1008	1590	271	18	7	4	2	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 2.8 NO. OF CASES= 2718.

STATION M27 45.53N 86.53W 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	
0.00-0.24	690	187	19	10	3	.	.	.	.	.	909
0.25-0.49	142	346	5	.	1	.	.	.	.	.	494
0.50-0.74	.	558	11	1	.	.	.	.	.	.	570
0.75-0.99	.	37	104	.	.	1	.	.	.	.	142
1.00-1.24	.	.	72	.	.	.	.	.	.	.	72
1.25-1.49	.	.	23	.	1	.	2	.	.	.	26
1.50-1.74	.	.	13	4	.	.	1	.	.	.	18
1.75-1.99	.	.	.	3	.	.	.	.	.	.	3
2.00-2.24	.	.	.	1	.	.	1	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	832	1128	247	19	5	1	4	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 2.8 NO. OF CASES= 2099.

STATION M27 45.53N 86.53W 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	
0.00-0.24	436	144	19	5	.	.	.	.	.	.	604
0.25-0.49	97	366	5	.	.	.	.	.	.	.	468
0.50-0.74	.	593	47	.	.	.	.	.	.	.	640
0.75-0.99	.	16	164	.	.	.	.	.	.	.	180
1.00-1.24	.	.	91	.	.	.	.	.	.	.	91
1.25-1.49	.	.	41	.	.	.	.	.	.	.	41
1.50-1.74	.	.	9	13	.	.	.	.	.	.	22
1.75-1.99	.	.	.	2	1	.	1	.	.	.	4
2.00-2.24	.	.	.	4	.	.	.	.	.	.	4
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	533	1119	376	24	1	0	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.0 NO. OF CASES= 1928.

STATION M27 45.53N 86.53W 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	
0.00-0.24	605	152	27	10	2	.	.	.	.	.	796
0.25-0.49	54	322	8	.	.	.	.	.	.	.	384
0.50-0.74	.	748	129	.	.	.	.	.	.	.	877
0.75-0.99	.	4	240	.	.	.	.	.	.	.	244
1.00-1.24	.	.	125	.	.	.	.	.	.	.	125
1.25-1.49	.	.	52	.	.	.	.	.	.	.	52
1.50-1.74	.	.	2	17	.	.	.	.	.	.	19
1.75-1.99	.	.	.	6	.	.	.	.	.	.	6
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	659	1226	583	34	2	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 2349.

STATION M27 45.53N 86.53W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

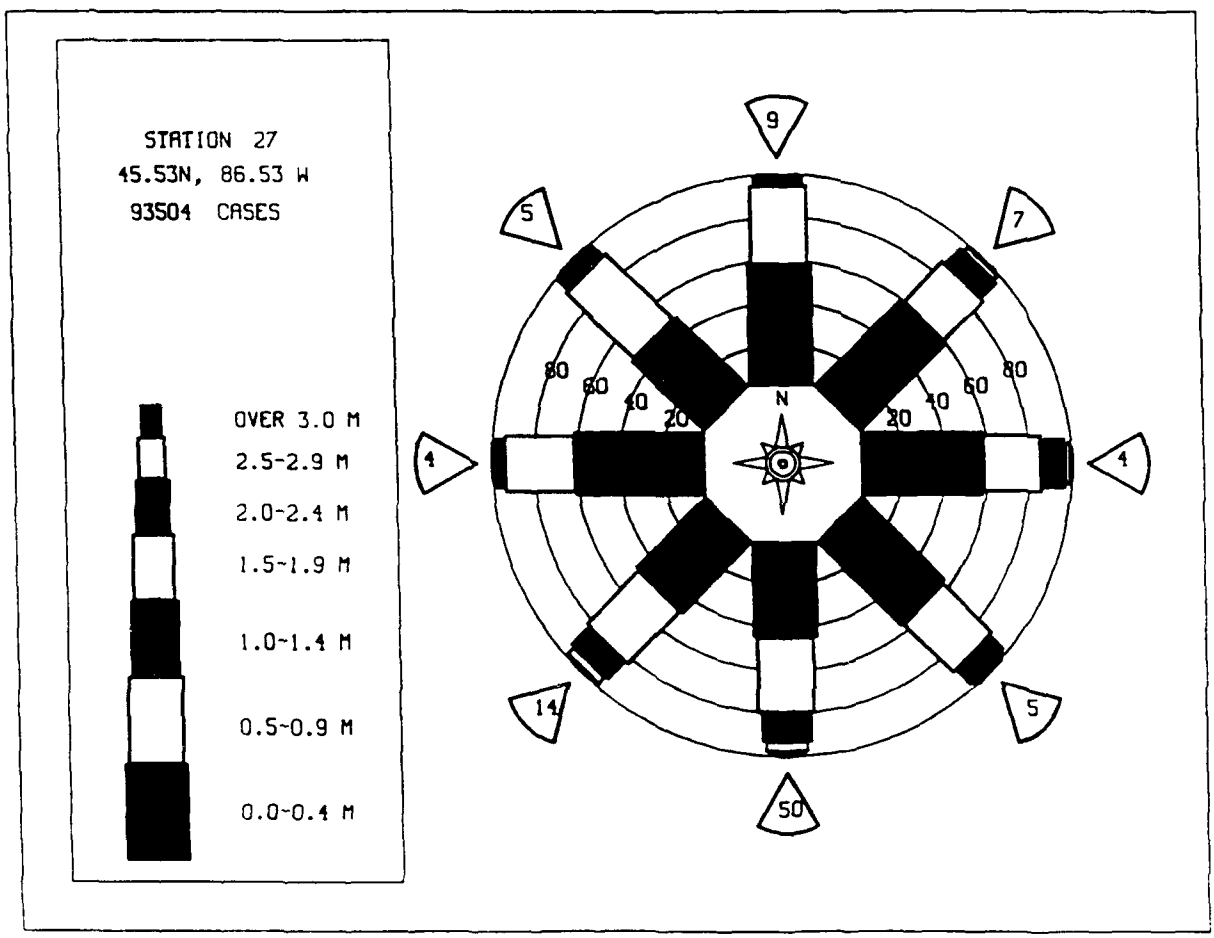
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	816	202	35	8	.	.	.	.	.	.	1061
0.25-0.49	176	622	38	1	.	.	.	.	.	.	837
0.50-0.74	.	1105	54	4	2	.	.	.	.	.	1165
0.75-0.99	.	198	259	14	2	5	3	.	.	.	481
1.00-1.24	.	.	157	.	.	.	1	.	.	.	158
1.25-1.49	.	.	64	.	1	.	.	.	.	.	65
1.50-1.74	.	.	18	18	.	.	.	.	.	.	36
1.75-1.99	.	.	.	8	.	.	.	.	.	.	8
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	992	2127	625	53	5	5	4	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 2.9 NO. OF CASES= 3572.

STATION M27 45.53N 86.53W 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	
0.00-0.24	1519	531	305	194	67	14	2	.	.	.	2632
0.25-0.49	243	1141	347	343	140	39	4	.	.	.	2257
0.50-0.74	.	1041	614	392	264	86	11	.	.	.	2408
0.75-0.99	.	165	377	210	190	104	17	.	.	.	1063
1.00-1.24	.	.	286	198	129	140	42	1	.	.	796
1.25-1.49	.	.	71	117	59	44	30	1	.	.	322
1.50-1.74	.	.	13	102	62	34	47	2	.	.	260
1.75-1.99	.	.	.	17	35	16	20	2	.	.	90
2.00-2.24	.	.	.	6	28	17	18	2	.	.	71
2.25-2.49	.	.	.	.	7	8	6	2	.	.	23
2.50-2.74	.	.	.	.	3	9	4	2	.	.	18
2.75-2.99	.	.	.	.	.	2	2	1	.	.	5
3.00-3.24	.	.	.	.	.	3	2	.	.	.	5
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	4	1	.	.	5
TOTAL	1762	2878	2013	1579	984	516	210	14	0	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M27 (45.53N 86.53W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.4	0.5	0.5	0.4	0.4	0.3	0.2	0.3	0.5	0.7	0.7	0.7	0.5
1957	0.8	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.4	0.5	0.9	0.9	0.5
1958	0.6	0.7	0.2	0.4	0.4	0.3	0.3	0.4	0.6	0.6	0.8	0.6	0.5
1959	0.6	0.7	0.5	0.4	0.5	0.3	0.3	0.4	0.6	0.6	0.7	0.8	0.5
1960	0.7	0.7	0.4	0.5	0.4	0.3	0.3	0.5	0.4	0.5	1.0	0.9	0.6
1961	0.7	0.6	0.6	0.4	0.4	0.4	0.3	0.3	0.6	0.7	0.7	0.7	0.5
1962	0.9	0.6	0.4	0.6	0.5	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.5
1963	0.7	0.7	0.6	0.5	0.4	0.3	0.3	0.4	0.4	0.6	0.8	0.7	0.5
1964	1.0	0.9	0.8	0.8	0.5	0.4	0.3	0.5	0.6	0.7	0.7	0.9	0.7
1965	0.9	1.0	0.5	0.4	0.5	0.4	0.3	0.4	0.6	0.7	0.7	0.9	0.6
1966	0.7	0.6	0.7	0.5	0.4	0.4	0.3	0.4	0.4	0.9	0.9	0.7	0.6
1967	1.0	0.9	0.6	0.6	0.4	0.3	0.3	0.4	0.5	0.7	0.7	0.7	0.6
1968	0.8	0.6	0.7	0.6	0.4	0.3	0.5	0.5	0.6	0.8	0.6	0.9	0.6
1969	0.8	0.5	0.5	0.5	0.4	0.4	0.3	0.5	0.5	0.7	0.6	0.7	0.5
1970	0.7	0.9	0.4	0.6	0.5	0.4	0.4	0.4	0.6	0.7	0.8	0.8	0.6
1971	0.9	0.9	0.5	0.5	0.4	0.3	0.4	0.5	0.6	0.6	0.8	0.7	0.6
1972	1.1	0.7	0.6	0.4	0.2	0.3	0.4	0.4	0.6	0.8	0.6	0.7	0.6
1973	1.0	0.7	0.6	0.6	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.6
1974	0.7	0.8	0.7	0.6	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.6
1975	0.9	0.6	0.5	0.4	0.3	0.4	0.4	0.4	0.5	0.8	0.8	0.7	0.6
1976	0.9	0.9	0.9	0.5	0.4	0.3	0.4	0.4	0.6	0.6	0.7	0.8	0.6
1977	0.7	0.9	0.6	0.4	0.3	0.3	0.5	0.6	0.5	0.7	0.8	0.7	0.6
1978	0.8	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.8	0.6
1979	0.7	0.6	0.6	0.4	0.4	0.4	0.3	0.4	0.6	1.1	1.4	1.3	0.7
1980	0.7	0.6	0.6	0.3	0.3	0.4	0.4	0.7	1.0	1.3	1.3	0.7	0.7
1981	0.5	0.8	0.5	0.6	0.4	0.5	0.4	0.5	0.8	1.0	0.9	0.6	0.6
1982	0.8	0.6	0.6	0.5	0.4	0.3	0.5	0.5	1.0	1.1	1.1	0.8	0.7
1983	0.6	0.6	0.5	0.4	0.3	0.3	0.3	0.6	1.0	1.0	1.0	0.6	0.6
1984	0.7	0.7	0.5	0.4	0.4	0.5	0.5	0.6	1.1	1.1	1.5	0.8	0.7
1985	0.6	0.7	0.7	0.6	0.4	0.3	0.4	0.4	0.6	0.5	0.5	0.7	0.5
1986	0.8	0.4	0.7	0.5	0.3	0.3	0.3	0.3	0.4	0.5	0.8	0.7	0.5
1987	0.6	0.5	0.4	0.3	0.3	0.2	0.3	0.4	0.4	0.7	0.5	0.7	0.4
MEAN	0.8	0.7	0.6	0.5	0.4	0.3	0.3	0.4	0.6	0.7	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M27 (45.53N 86.53W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.6	1.7	1.7	1.8	1.2	1.1	1.2	1.0	1.7	2.7	2.6	3.1
1957	2.7	2.2	2.2	2.6	2.2	1.8	1.3	1.6	1.8	2.0	3.8	3.0
1958	2.9	2.1	0.9	2.5	2.4	1.7	1.6	1.4	2.4	2.1	3.6	2.0
1959	1.9	2.7	1.9	1.9	1.7	1.5	1.6	1.6	2.6	1.8	2.0	2.2
1960	2.0	2.1	1.9	1.3	1.4	1.1	1.3	1.7	1.5	1.8	3.3	3.3
1961	2.2	1.6	2.0	1.7	1.2	1.1	0.9	1.4	1.7	2.6	2.3	2.9
1962	3.2	1.9	1.4	1.8	2.0	1.3	0.9	1.2	1.6	1.8	3.0	2.8
1963	2.2	2.2	1.6	2.9	1.6	1.5	1.1	1.7	1.4	1.6	2.5	2.6
1964	3.3	3.3	2.9	3.1	2.2	1.6	0.9	1.6	2.8	2.0	3.1	1.9
1965	2.3	2.7	2.2	1.4	1.6	1.2	1.2	1.3	1.9	1.9	2.3	2.5
1966	2.1	2.6	2.6	1.9	1.2	1.5	1.1	1.3	1.4	3.2	2.1	2.1
1967	2.8	2.7	2.2	2.0	1.6	1.1	0.9	1.7	2.0	2.1	1.8	2.1
1968	1.6	1.9	1.7	2.3	1.6	1.1	1.5	1.7	1.7	1.9	1.7	3.3
1969	1.9	1.7	1.6	1.3	1.1	1.9	1.2	2.0	1.5	2.0	2.3	2.3
1970	1.8	2.6	1.4	1.9	1.7	1.2	1.3	1.3	1.8	2.1	2.3	2.6
1971	2.3	4.2	1.8	1.8	1.5	0.9	1.4	1.7	2.7	2.8	2.7	1.9
1972	3.8	1.8	1.7	1.4	0.8	1.1	1.1	1.1	2.3	2.0	1.8	2.4
1973	2.9	1.7	2.1	2.0	1.3	1.8	1.4	1.6	1.6	2.6	2.5	2.0
1974	3.6	2.3	2.0	1.7	1.3	1.3	1.2	1.6	2.3	2.3	2.0	2.1
1975	4.7	1.7	1.8	1.5	1.4	1.3	1.2	1.7	1.3	2.5	3.3	3.1
1976	2.9	2.6	3.1	1.8	1.9	1.2	1.4	1.7	2.5	1.9	1.9	3.0
1977	2.0	2.4	2.6	1.5	1.2	0.9	1.2	2.7	2.0	2.0	2.8	2.2
1978	2.7	1.5	1.9	1.4	2.0	1.6	1.1	1.6	2.1	2.2	2.8	2.2
1979	1.5	1.6	1.9	1.4	1.4	1.5	1.1	1.2	2.1	4.1	5.2	4.2
1980	2.7	2.6	2.0	1.2	1.2	1.3	1.6	1.7	4.2	4.9	4.6	3.6
1981	1.3	2.0	1.4	2.6	2.1	3.0	1.8	1.6	2.6	3.6	2.7	2.0
1982	2.5	1.9	2.3	1.7	1.2	1.2	2.0	1.8	2.6	3.1	3.7	2.2
1983	1.9	2.2	1.4	1.9	1.1	0.9	1.3	2.1	2.8	2.8	2.8	2.0
1984	2.4	1.8	1.7	2.2	1.7	2.2	2.1	3.1	4.3	4.5	4.7	2.8
1985	1.9	2.1	2.4	2.1	1.6	1.6	2.1	1.3	1.6	1.8	1.8	2.0
1986	2.8	1.5	2.8	1.4	1.6	1.5	1.6	1.1	1.2	2.7	2.4	2.6
1987	1.7	1.9	1.8	1.3	1.4	1.2	1.3	1.3	1.4	2.4	1.7	2.1

32 YR. STATISTICS FOR WIS STATION M27

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.6
LARGEST WAVE HS	(METERS)	5.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	197.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		79110118

STATION M28 45.68N 86.31W 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	
0.00-0.24	1891	290	26	1	.	.	.	.	.	.	2208
0.25-0.49	171	961	3	.	.	.	.	.	.	.	1135
0.50-0.74	.	1597	565	.	.	.	.	.	.	.	2162
0.75-0.99	.	1	637	.	.	.	.	.	.	.	638
1.00-1.24	.	.	658	1	.	.	.	.	.	.	659
1.25-1.49	.	.	126	83	.	.	.	.	.	.	209
1.50-1.74	.	.	.	122	.	.	.	.	.	.	122
1.75-1.99	.	.	.	25	.	.	.	.	.	.	25
2.00-2.24	.	.	.	9	6	.	.	.	.	.	15
2.25-2.49	.	.	.	.	5	.	.	.	.	.	5
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2062	2849	2015	241	11	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 6721.

STATION M28 45.68N 86.31W 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	
0.00-0.24	1503	204	17	1	.	.	.	.	.	.	1725
0.25-0.49	82	622	3	.	.	.	.	.	.	.	707
0.50-0.74	.	689	318	.	.	.	.	.	.	.	1007
0.75-0.99	.	.	252	1	.	.	.	.	.	.	253
1.00-1.24	.	.	320	1	.	.	.	.	.	.	321
1.25-1.49	.	.	28	55	.	.	.	.	.	.	83
1.50-1.74	.	.	.	54	.	.	.	.	.	.	54
1.75-1.99	.	.	.	6	.	.	.	.	.	.	6
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1585	1515	938	119	2	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 2.9 NO. OF CASES= 3896.

STATION M28 45.68N 86.31W 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	
0.00-0.24	1623	254	27	4	.	.	.	.	.	.	1908
0.25-0.49	90	730	2	.	.	.	.	.	.	.	822
0.50-0.74	.	362	393	.	.	.	.	.	.	.	755
0.75-0.99	.	.	163	.	.	.	.	.	.	.	163
1.00-1.24	.	.	360	1	.	.	.	.	.	.	361
1.25-1.49	.	.	5	106	.	.	.	.	.	.	111
1.50-1.74	.	.	.	28	.	.	.	.	.	.	28
1.75-1.99	.	.	.	7	.	.	.	.	.	.	7
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1713	1346	950	146	2	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 2.9 NO. OF CASES= 3895.

STATION M28 45.68N 86.31W 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	
0.00-0.24	984	149	10	3	.	.	.	.	.	.	1146
0.25-0.49	62	517	.	.	.	.	.	.	.	.	579
0.50-0.74	.	213	267	3	.	.	.	.	.	.	483
0.75-0.99	.	.	126	2	.	.	.	.	.	.	128
1.00-1.24	.	.	129	42	.	.	.	.	.	.	171
1.25-1.49	.	.	3	48	.	.	.	.	.	.	51
1.50-1.74	.	.	.	24	.	.	.	.	.	.	24
1.75-1.99	.	.	.	1	1	.	.	.	.	.	2
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1046	879	535	123	2	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 2.9 NO. OF CASES= 2424.

STATION M28 45.68N 86.31W 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	
0.00-0.24	937	136	6	1	.	.	.	.	.	.	1080
0.25-0.49	43	524	1	.	.	.	.	.	.	.	568
0.50-0.74	.	170	245	2	.	.	.	.	.	.	417
0.75-0.99	.	.	144	29	.	.	.	.	.	.	173
1.00-1.24	.	.	50	80	.	.	.	.	.	.	130
1.25-1.49	.	.	1	55	.	.	.	.	.	.	56
1.50-1.74	.	.	.	27	.	.	.	.	.	.	27
1.75-1.99	.	.	.	.	2	.	.	.	.	.	2
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	980	830	447	194	3	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 2.9 NO. OF CASES= 2302.

STATION M28 45.68N 86.31W 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	
0.00-0.24	690	97	5	.	.	.	.	.	.	.	792
0.25-0.49	56	409	3	.	.	.	.	.	.	.	468
0.50-0.74	.	191	217	1	.	.	.	.	.	.	409
0.75-0.99	.	.	129	53	.	.	.	.	.	.	182
1.00-1.24	.	.	29	101	.	.	.	.	.	.	130
1.25-1.49	.	.	.	50	2	.	.	.	.	.	52
1.50-1.74	.	.	.	36	12	.	.	.	.	.	48
1.75-1.99	.	.	.	.	4	.	.	.	.	.	4
2.00-2.24	.	.	.	.	2	.	.	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	746	697	383	241	20	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 1959.

STATION M28 45.68N 86.31W 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	
0.00-0.24	948	155	14	2	.	.	.	.	.	.	1119
0.25-0.49	83	512	11	.	.	.	.	.	.	.	606
0.50-0.74	.	253	403	4	.	.	.	.	.	.	660
0.75-0.99	.	.	143	56	.	.	.	.	.	.	199
1.00-1.24	.	.	52	118	.	.	.	.	.	.	170
1.25-1.49	.	.	1	55	7	.	.	.	.	.	63
1.50-1.74	.	.	.	23	17	.	.	.	.	.	40
1.75-1.99	.	.	.	1	8	.	.	.	.	.	9
2.00-2.24	.	.	.	.	3	.	.	.	.	.	3
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	1031	920	624	259	36	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 2692.

STATION M28 45.68N 86.31W 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	
0.00-0.24	1239	362	25	2	.	.	.	.	.	.	1628
0.25-0.49	133	1131	35	.	.	.	.	.	.	.	1299
0.50-0.74	.	474	727	21	.	.	.	.	.	.	1222
0.75-0.99	.	.	213	177	.	.	.	.	.	.	390
1.00-1.24	.	.	108	241	9	.	.	.	.	.	358
1.25-1.49	.	.	2	68	33	.	.	.	.	.	103
1.50-1.74	.	.	.	34	51	1	.	.	.	.	86
1.75-1.99	.	.	.	2	31	1	.	.	.	.	34
2.00-2.24	.	.	.	.	16	1	.	.	.	.	17
2.25-2.49	.	.	.	.	5	.	.	.	.	.	5
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	1	1	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	1372	1967	1110	545	146	5	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 4821.

STATION M28 45.68N 86.31W 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	
0.00-0.24	2244	1214	209	54	2	.	.	.	.	.	3723
0.25-0.49	258	2110	983	250	8	.	.	.	.	.	3609
0.50-0.74	.	823	1920	1183	115	1	.	.	.	.	4042
0.75-0.99	.	9	443	792	201	4	.	.	.	.	1449
1.00-1.24	.	.	325	568	361	21	3	.	.	.	1278
1.25-1.49	.	.	3	212	232	25	.	.	.	.	472
1.50-1.74	.	.	.	111	164	39	3	.	.	.	317
1.75-1.99	.	.	.	3	70	27	.	.	.	.	100
2.00-2.24	.	.	.	.	60	38	2	.	.	.	100
2.25-2.49	.	.	.	.	19	20	2	.	.	.	41
2.50-2.74	.	.	.	.	3	20	5	.	.	.	28
2.75-2.99	.	.	.	.	.	18	3	.	.	.	21
3.00-3.24	.	.	.	.	.	8	8	.	.	.	16
3.25-3.49	.	.	.	.	.	1	4	.	.	.	5
3.50+	.	.	.	.	.	1	11	.	.	.	12
TOTAL	2502	4156	3883	3173	1235	223	41	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 14247.

STATION M28 45.68N 86.31W 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	
0.00-0.24	2171	1680	1518	1082	113	1	.	.	.	.	6565
0.25-0.49	435	2019	1730	1555	372	12	.	.	.	.	6123
0.50-0.74	.	1352	1544	1639	680	66	6	.	.	.	5287
0.75-0.99	.	90	702	667	520	100	7	.	.	.	2086
1.00-1.24	.	.	450	729	626	170	43	1	.	.	2019
1.25-1.49	.	.	28	507	245	95	27	1	.	.	903
1.50-1.74	.	.	1	443	227	120	24	4	.	.	819
1.75-1.99	.	.	.	111	148	78	14	2	.	.	353
2.00-2.24	.	.	.	13	170	93	19	1	.	.	296
2.25-2.49	.	.	.	.	63	58	25	2	.	.	148
2.50-2.74	.	.	.	.	43	55	33	2	.	.	133
2.75-2.99	.	.	.	.	9	20	21	.	.	.	50
3.00-3.24	.	.	.	.	4	20	14	.	.	.	38
3.25-3.49	.	.	.	.	.	4	10	2	.	.	16
3.50+	.	.	.	.	.	11	34	6	2	.	53
TOTAL	2606	5141	5973	6746	3220	903	277	21	2	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 23302.

STATION M28 45.68N 86.31W 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	
0.00-0.24	1994	537	95	36	3	.	.	.	.	.	2665
0.25-0.49	401	1490	151	68	27	.	.	.	.	.	2137
0.50-0.74	.	1787	458	84	11	.	.	.	.	.	2340
0.75-0.99	.	668	488	148	49	5	2	.	.	.	1360
1.00-1.24	.	1	340	255	50	11	1	.	.	.	658
1.25-1.49	.	.	32	208	12	1	3	.	.	.	256
1.50-1.74	.	.	8	270	22	10	1	.	.	.	311
1.75-1.99	.	.	3	49	37	4	3	.	.	.	96
2.00-2.24	.	.	.	7	72	3	2	.	.	.	84
2.25-2.49	.	.	.	.	23	1	2	.	.	.	26
2.50-2.74	.	.	.	.	23	.	4	.	.	.	27
2.75-2.99	.	.	.	.	7	1	1	.	.	.	9
3.00-3.24	.	.	.	.	2	8	.	.	.	.	10
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	1	.	1	.	.	2
TOTAL	2395	4483	1575	1125	338	46	19	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.3 NO. OF CASES= 9354.

STATION M28 45.68N 86.31W 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	
0.00-0.24	1155	236	20	4	.	.	.	.	.	.	1415
0.25-0.49	235	764	2	.	.	.	.	.	.	.	1001
0.50-0.74	.	1017	23	.	.	.	.	.	.	.	1040
0.75-0.99	.	222	199	.	3	.	.	.	.	.	424
1.00-1.24	.	.	74	.	.	.	.	.	.	.	74
1.25-1.49	.	.	21	1	.	1	.	.	.	.	23
1.50-1.74	.	.	10	2	.	1	.	.	.	.	13
1.75-1.99	.	.	.	.	1	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1390	2239	349	7	4	2	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 2.7 NO. OF CASES= 3738.

STATION M28 45.68N 86.31W 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	
0.00-0.24	941	229	19	2	.	.	.	.	.	.	1191
0.25-0.49	178	472	.	.	.	.	.	.	.	.	650
0.50-0.74	.	752	10	.	.	.	.	.	.	.	762
0.75-0.99	.	65	197	.	.	.	.	.	.	.	262
1.00-1.24	.	.	99	.	.	.	.	.	.	.	99
1.25-1.49	.	.	19	.	.	.	.	.	.	.	19
1.50-1.74	.	.	7	.	.	.	.	.	.	.	7
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1119	1518	351	2	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.7 NO. OF CASES= 2802.

STATION M28 45.68N 86.31W 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	
0.00-0.24	609	163	7	1	.	.	.	.	.	.	780
0.25-0.49	130	580	.	.	.	.	.	.	.	.	710
0.50-0.74	.	801	75	.	.	.	.	.	.	.	876
0.75-0.99	.	23	252	.	.	.	.	.	.	.	275
1.00-1.24	.	.	142	.	.	.	.	.	.	.	142
1.25-1.49	.	.	47	.	.	.	.	.	.	.	47
1.50-1.74	.	.	5	13	.	.	.	.	.	.	18
1.75-1.99	.	.	.	3	.	.	.	.	.	.	3
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	739	1567	528	17	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 2.9 NO. OF CASES= 2672.

STATION M28 45.68N 86.31W 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	
0.00-0.24	832	181	12	1	.	.	.	.	.	.	1026
0.25-0.49	66	543	.	.	.	.	.	.	.	.	609
0.50-0.74	.	1233	162	.	.	.	.	.	.	.	1395
0.75-0.99	.	2	405	.	.	.	.	.	.	.	407
1.00-1.24	.	.	221	1	.	.	.	.	.	.	222
1.25-1.49	.	.	70	.	.	.	.	.	.	.	70
1.50-1.74	.	.	5	22	.	.	.	.	.	.	27
1.75-1.99	.	.	.	7	.	.	.	.	.	.	7
2.00-2.24	.	.	.	2	.	.	.	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	898	1959	875	33	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 3526.

STATION M28 45.68N 86.31W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

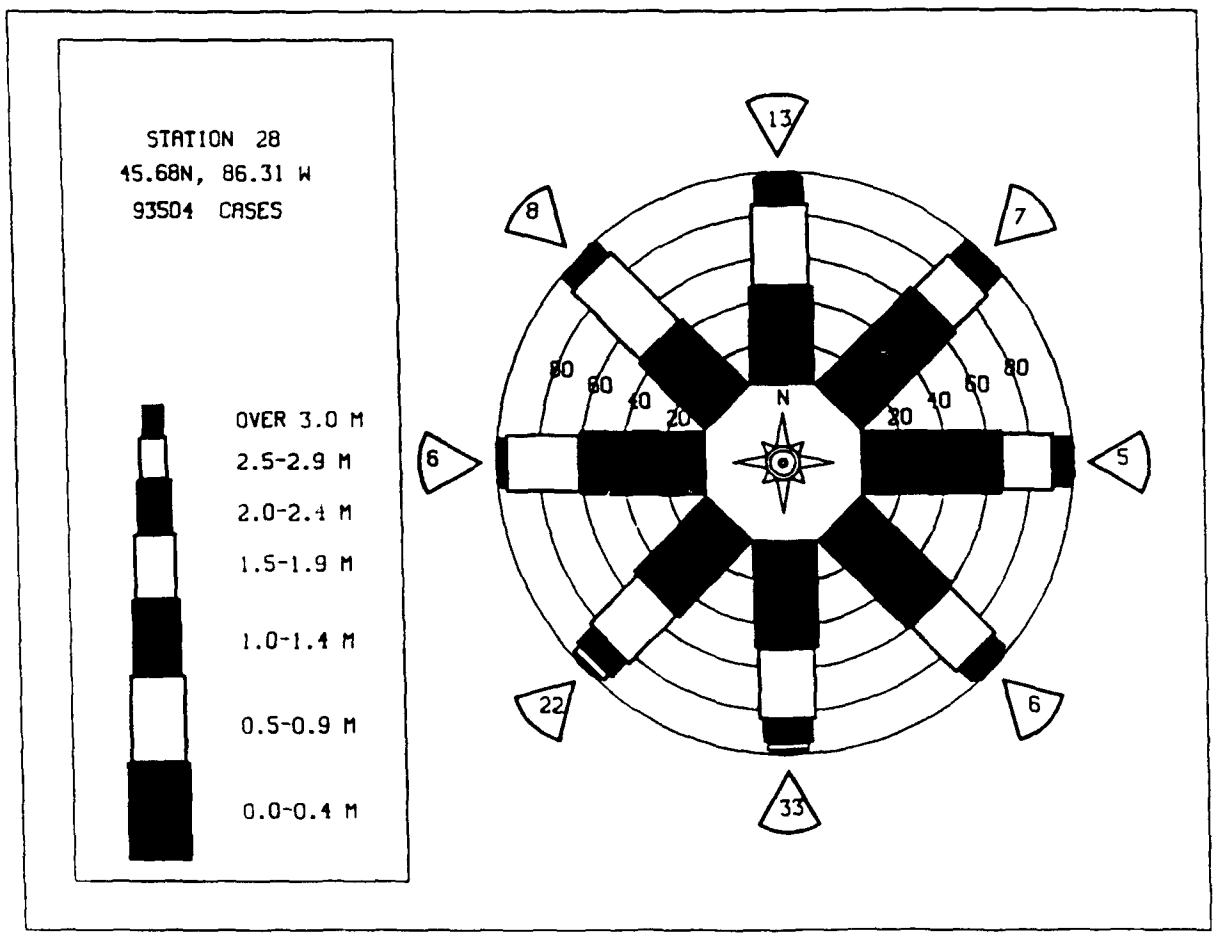
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	1174	193	20	5	.	.	.	.	.	.	1392
0.25-0.49	132	752	.	.	.	.	.	.	.	.	884
0.50-0.74	.	1389	392	.	.	.	.	.	.	.	1781
0.75-0.99	.	5	589	.	.	.	.	.	.	.	594
1.00-1.24	.	.	505	1	.	.	.	.	.	.	506
1.25-1.49	.	.	131	96	.	.	.	.	.	.	227
1.50-1.74	.	.	3	88	.	.	.	.	.	.	91
1.75-1.99	.	.	.	16	.	.	.	.	.	.	16
2.00-2.24	.	.	.	3	6	.	.	.	.	.	9
2.25-2.49	.	.	.	.	3	.	.	.	.	.	3
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1306	2339	1640	209	9	0	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 5153.

STATION M28 45.68N 86.31W 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	
0.00-0.24	2094	608	203	120	11	.	.	.	.	.	3036
0.25-0.49	256	1414	292	187	40	1	.	.	.	.	2190
0.50-0.74	.	1311	772	293	80	6	.	.	.	.	2462
0.75-0.99	.	108	509	192	77	11	.	.	.	.	897
1.00-1.24	.	.	386	214	104	20	4	.	.	.	728
1.25-1.49	.	.	52	155	53	12	3	.	.	.	275
1.50-1.74	.	.	4	130	49	17	2	.	.	.	202
1.75-1.99	.	.	.	23	30	11	1	.	.	.	65
2.00-2.24	.	.	.	3	34	13	2	.	.	.	52
2.25-2.49	.	.	.	.	12	8	2	.	.	.	22
2.50-2.74	.	.	.	.	7	7	4	.	.	.	18
2.75-2.99	.	.	.	.	1	4	2	.	.	.	7
3.00-3.24	.	.	.	.	.	3	2	.	.	.	5
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50	.	.	.	.	.	1	4	.	.	.	5
TOTAL	2350	3441	2218	1317	498	114	27	0	0	0	

MEAN HS(M)= 0.5 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M28 (45.68N 86.31W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.4	0.5	0.5	0.4	0.4	0.2	0.2	0.2	0.4	0.7	0.7	0.7	0.4
1957	0.8	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.4	0.5	0.9	0.9	0.5
1958	0.6	0.7	0.2	0.4	0.4	0.3	0.3	0.4	0.6	0.6	0.8	0.6	0.5
1959	0.7	0.7	0.5	0.4	0.5	0.3	0.3	0.4	0.6	0.6	0.6	0.7	0.5
1960	0.6	0.6	0.4	0.5	0.3	0.3	0.3	0.5	0.4	0.5	0.9	0.9	0.5
1961	0.6	0.5	0.6	0.4	0.4	0.4	0.2	0.3	0.6	0.7	0.7	0.7	0.5
1962	0.9	0.6	0.3	0.5	0.4	0.3	0.2	0.3	0.5	0.5	0.6	0.7	0.5
1963	0.7	0.7	0.5	0.5	0.4	0.3	0.3	0.3	0.4	0.5	0.7	0.6	0.5
1964	0.9	0.9	0.7	0.7	0.5	0.4	0.3	0.5	0.5	0.7	0.7	0.7	0.6
1965	0.8	0.9	0.5	0.4	0.4	0.3	0.3	0.4	0.5	0.7	0.7	0.8	0.6
1966	0.6	0.6	0.7	0.4	0.4	0.3	0.3	0.4	0.5	0.8	0.8	0.6	0.5
1967	0.9	0.8	0.6	0.5	0.4	0.3	0.3	0.4	0.4	0.7	0.6	0.7	0.5
1968	0.7	0.6	0.6	0.5	0.4	0.3	0.4	0.4	0.5	0.7	0.5	0.8	0.5
1969	0.7	0.5	0.5	0.4	0.3	0.4	0.3	0.4	0.5	0.6	0.6	0.7	0.5
1970	0.6	0.8	0.4	0.6	0.4	0.4	0.3	0.3	0.5	0.7	0.7	0.7	0.5
1971	0.8	0.8	0.5	0.4	0.3	0.3	0.4	0.4	0.5	0.6	0.7	0.6	0.5
1972	1.0	0.6	0.5	0.3	0.2	0.3	0.3	0.4	0.5	0.7	0.5	0.6	0.5
1973	0.8	0.6	0.5	0.5	0.3	0.3	0.3	0.5	0.5	0.6	0.6	0.7	0.5
1974	0.6	0.6	0.6	0.5	0.3	0.3	0.3	0.4	0.5	0.6	0.6	0.7	0.5
1975	0.7	0.6	0.5	0.4	0.3	0.3	0.3	0.4	0.5	0.7	0.7	0.6	0.5
1976	0.8	0.8	0.8	0.5	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.5
1977	0.7	0.8	0.5	0.4	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.6	0.5
1978	0.8	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.5	0.6	0.6	0.7	0.5
1979	0.6	0.5	0.5	0.4	0.3	0.3	0.3	0.4	0.6	1.1	1.3	1.2	0.6
1980	0.6	0.5	0.5	0.3	0.3	0.4	0.4	0.7	1.0	1.3	1.3	0.7	0.7
1981	0.4	0.7	0.5	0.5	0.4	0.5	0.4	0.5	0.8	0.9	0.9	0.5	0.6
1982	0.7	0.5	0.6	0.5	0.3	0.3	0.5	0.5	1.0	1.0	1.0	0.7	0.6
1983	0.6	0.5	0.5	0.4	0.3	0.2	0.3	0.5	1.0	0.9	1.0	0.5	0.6
1984	0.6	0.6	0.4	0.4	0.4	0.4	0.5	0.6	1.1	1.1	1.5	0.7	0.7
1985	0.6	0.6	0.6	0.5	0.4	0.3	0.4	0.3	0.5	0.5	0.5	0.6	0.5
1986	0.8	0.4	0.6	0.4	0.3	0.2	0.3	0.3	0.4	0.5	0.7	0.6	0.5
1987	0.6	0.5	0.4	0.3	0.2	0.2	0.2	0.4	0.3	0.6	0.5	0.6	0.4
MEAN	0.7	0.6	0.5	0.4	0.4	0.3	0.3	0.4	0.6	0.7	0.8	0.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M28 (45.68N 86.31W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.6	1.7	1.7	1.8	1.2	1.1	1.1	0.8	1.6	2.7	2.7	3.0
1957	3.5	2.3	2.5	2.9	2.3	1.8	1.4	1.6	2.0	1.9	3.8	3.1
1958	3.2	1.8	0.9	2.7	2.7	2.0	1.7	1.6	2.4	2.0	4.1	2.2
1959	2.1	2.9	2.1	2.0	1.5	1.6	1.5	1.6	2.5	2.2	1.9	2.4
1960	2.0	2.2	1.9	1.4	1.3	1.0	1.5	2.0	1.6	2.1	2.5	3.0
1961	2.3	1.8	2.1	1.5	1.2	1.0	0.9	1.4	1.7	2.4	2.4	2.6
1962	3.0	1.9	1.2	1.8	1.9	1.3	0.8	1.2	1.8	1.6	3.0	2.6
1963	1.9	2.2	1.7	3.1	1.5	1.3	1.2	1.1	1.3	1.7	2.5	2.8
1964	3.2	3.7	2.5	3.0	1.9	1.5	0.9	1.8	2.3	2.2	2.7	1.8
1965	2.3	3.0	1.9	1.7	1.5	1.2	1.1	1.4	2.1	2.0	2.3	2.7
1966	2.0	1.7	2.9	1.6	1.1	1.2	1.2	1.3	1.2	3.1	2.3	2.2
1967	2.7	2.4	1.8	2.1	1.6	0.9	0.8	1.8	1.7	1.9	1.7	1.6
1968	1.5	1.8	1.5	2.5	1.4	1.1	1.5	1.8	1.7	1.7	1.7	2.6
1969	2.0	1.5	1.3	1.2	1.0	2.0	1.2	1.9	1.5	2.1	1.9	2.5
1970	1.9	2.5	1.5	1.9	2.0	1.1	1.4	1.4	2.0	2.1	2.1	2.9
1971	2.2	3.9	1.8	1.4	1.3	0.9	1.2	2.1	2.5	2.7	2.6	1.9
1972	3.1	1.7	1.6	1.2	0.8	1.1	1.1	1.1	2.2	2.1	1.8	2.2
1973	2.4	1.5	2.2	1.6	1.1	1.3	1.4	1.2	1.7	2.5	2.3	1.7
1974	2.7	1.7	2.0	1.2	1.2	0.9	1.1	1.6	2.3	1.8	1.4	2.0
1975	4.7	1.6	1.5	1.6	1.3	1.3	1.2	1.6	1.5	2.3	3.3	2.4
1976	2.5	2.6	2.2	1.3	1.9	1.2	1.3	1.4	2.5	1.9	1.6	2.8
1977	2.0	2.2	2.5	1.5	1.2	0.9	1.4	2.1	1.9	2.0	3.1	2.0
1978	2.7	1.5	1.7	1.2	1.8	1.4	1.0	1.3	2.0	2.1	2.7	2.2
1979	1.5	1.4	1.4	1.4	1.2	1.4	1.0	1.1	1.9	3.8	5.0	4.2
1980	2.6	2.5	1.7	1.2	1.2	1.3	1.6	1.7	3.8	4.4	4.5	2.9
1981	1.4	2.0	1.5	1.5	2.1	2.7	1.7	1.6	2.7	3.8	3.1	1.6
1982	2.6	1.8	2.4	1.3	1.1	1.1	1.9	2.0	2.5	2.9	3.6	2.3
1983	1.7	2.2	1.2	2.0	0.9	0.8	1.3	2.0	2.9	2.8	3.0	1.8
1984	2.4	1.8	1.8	2.2	1.6	2.0	1.9	2.8	3.8	4.0	4.1	3.1
1985	1.6	2.3	2.5	2.4	1.7	1.7	2.2	1.2	1.6	1.9	1.9	2.0
1986	2.8	1.4	2.1	1.5	1.5	1.4	1.6	1.2	1.2	2.6	2.6	2.7
1987	1.4	2.2	1.4	1.2	1.2	1.1	1.4	1.3	1.2	2.0	1.8	2.4

32 YR. STATISTICS FOR WIS STATION M28

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.5
MEAN PEAK WAVE PERIOD	(SECONDS)	3.5
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.4
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.2
LARGEST WAVE HS	(METERS)	5.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	204.0
DATE OF LARGEST HS OCCURRENCE IS (YR.MO.DA.HR)		79110121

STATION M29 45.82N 86.10W 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	
0.00-0.24	2105	229	35	5	.	.	.	.	.	.	2374
0.25-0.49	368	1030	2	.	.	.	.	.	.	.	1400
0.50-0.74	.	1461	1	.	.	.	.	.	.	.	1462
0.75-0.99	.	112	131	.	.	.	.	.	.	.	243
1.00-1.24	.	.	99	.	.	.	.	.	.	.	99
1.25-1.49	.	.	25	.	.	.	.	.	.	.	25
1.50-1.74	.	.	14	4	.	.	.	.	.	.	18
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2473	2832	307	9	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.6 NO. OF CASES= 5264.

STATION M29 45.82N 86.10W 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	
0.00-0.24	1495	186	24	4	.	.	.	.	.	.	1709
0.25-0.49	137	559	.	.	.	.	.	.	.	.	696
0.50-0.74	.	760	29	.	.	.	.	.	.	.	789
0.75-0.99	.	36	71	1	.	.	.	.	.	.	108
1.00-1.24	.	.	38	.	.	.	.	.	.	.	38
1.25-1.49	.	.	6	.	.	.	.	.	.	.	6
1.50-1.74	.	.	.	1	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1632	1541	168	7	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 2.6 NO. OF CASES= 3136.

STATION M29 45.82N 86.10W 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	
0.00-0.24	1456	211	27	5	.	.	.	.	.	.	1699
0.25-0.49	72	499	2	.	.	.	.	.	.	.	573
0.50-0.74	.	803	62	.	.	.	.	.	.	.	865
0.75-0.99	.	.	127	.	.	.	.	.	.	.	127
1.00-1.24	.	.	37	.	.	.	.	.	.	.	37
1.25-1.49	.	.	9	.	.	.	.	.	.	.	9
1.50-1.74	.	.	.	2	.	.	.	.	.	.	2
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1528	1513	264	7	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.6 NO. OF CASES= 3102.

STATION M29 45.82N 86.10W 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	
0.00-0.24	1082	141	23	5	1	.	.	.	.	.	1252
0.25-0.49	59	375	4	1	.	.	.	.	.	.	439
0.50-0.74	.	561	81	.	.	.	.	.	.	.	642
0.75-0.99	.	.	75	.	.	.	.	.	.	.	75
1.00-1.24	.	.	36	.	.	.	.	.	.	.	36
1.25-1.49	.	.	4	1	.	.	.	.	.	.	5
1.50-1.74	.	.	.	1	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1141	1077	223	8	1	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.6 NO. OF CASES= 2296.

STATION M29 45.82N 86.10W 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	
0.00-0.24	1090	157	24	2	.	.	.	.	.	.	1273
0.25-0.49	67	327	3	.	.	.	.	.	.	.	397
0.50-0.74	.	437	118	4	.	.	.	.	.	.	559
0.75-0.99	.	.	113	3	.	.	.	.	.	.	116
1.00-1.24	.	.	57	.	.	.	.	.	.	.	57
1.25-1.49	.	.	2	3	.	.	.	.	.	.	5
1.50-1.74	.	.	.	1	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1157	921	317	13	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.7 NO. OF CASES= 2257.

STATION M29 45.82N 86.10W 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	
0.00-0.24	806	115	20	1	.	.	.	.	.	.	942
0.25-0.49	72	332	3	.	.	.	.	.	.	.	407
0.50-0.74	.	322	186	.	.	.	.	.	.	.	508
0.75-0.99	.	.	115	24	.	.	.	.	.	.	139
1.00-1.24	.	.	66	39	1	.	.	.	.	.	106
1.25-1.49	.	.	2	17	.	.	.	.	.	.	19
1.50-1.74	.	.	.	16	5	.	.	.	.	.	21
1.75-1.99	.	.	.	.	2	.	.	.	.	.	2
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	878	769	392	97	8	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 2.9 NO. OF CASES= 2011.

STATION M29 45.82N 86.10W 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	
0.00-0.24	1093	166	28	1	.	.	.	.	.	.	1288
0.25-0.49	94	438	14	.	.	.	.	.	.	.	546
0.50-0.74	.	264	326	6	.	.	.	.	.	.	596
0.75-0.99	.	.	175	41	.	.	.	.	.	.	216
1.00-1.24	.	.	57	103	.	.	.	.	.	.	160
1.25-1.49	.	.	4	58	3	.	.	.	.	.	65
1.50-1.74	.	.	.	26	17	.	.	.	.	.	43
1.75-1.99	.	.	.	.	6	.	.	.	.	.	6
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1187	868	604	235	27	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 2740.

STATION M29 45.82N 86.10W 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	
0.00-0.24	1155	366	41	3	1	.	.	.	.	.	1566
0.25-0.49	142	974	55	1	.	.	.	.	.	.	1172
0.50-0.74	.	452	644	20	.	.	.	.	.	.	1116
0.75-0.99	.	1	228	151	1	.	.	.	.	.	381
1.00-1.24	.	.	109	224	9	.	.	.	.	.	342
1.25-1.49	.	.	1	71	21	.	.	.	.	.	93
1.50-1.74	.	.	.	38	40	.	.	.	.	.	78
1.75-1.99	.	.	.	.	27	.	.	.	.	.	27
2.00-2.24	.	.	.	.	16	.	.	.	.	.	16
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	1	.	.	.	.	1
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1297	1793	1078	508	116	2	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 4493.

STATION M29 45.82N 86.10W 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	
0.00-0.24	2068	1143	172	26	.	.	.	.	.	.	3409
0.25-0.49	262	2070	592	84	5	.	.	.	.	.	3013
0.50-0.74	.	751	1767	555	20	.	.	.	.	.	3093
0.75-0.99	.	14	386	638	60	3	.	.	.	.	1101
1.00-1.24	.	.	235	488	152	2	.	.	.	.	877
1.25-1.49	.	.	11	166	136	6	1	.	.	.	320
1.50-1.74	.	.	.	71	127	8	1	.	.	.	207
1.75-1.99	.	.	.	3	56	9	1	.	.	.	69
2.00-2.24	.	.	.	.	40	8	.	.	.	.	48
2.25-2.49	.	.	.	.	6	9	1	.	.	.	16
2.50-2.74	.	.	.	.	.	19	.	.	.	.	19
2.75-2.99	.	.	.	.	.	7	1	.	.	.	8
3.00-3.24	.	.	.	.	.	4	.	.	.	.	4
3.25-3.49	.	.	.	.	.	2	1	.	.	.	3
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2330	3978	3163	2031	602	77	6	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.6 NO. OF CASES= 11414.

STATION M29 45.82N 86.10W 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	
0.00-0.24	1994	1966	2054	1543	182	2	.	.	.	.	7741
0.25-0.49	345	2471	1997	2184	514	8	.	.	.	.	7519
0.50-0.74	.	1207	1889	2304	983	72	2	.	.	.	6457
0.75-0.99	.	55	611	947	654	122	11	.	.	.	2400
1.00-1.24	.	.	393	735	706	159	31	1	.	.	2025
1.25-1.49	.	.	26	337	337	106	20	1	.	.	827
1.50-1.74	.	.	.	191	344	130	23	2	.	.	690
1.75-1.99	.	.	.	16	143	66	14	1	.	.	240
2.00-2.24	.	.	.	1	162	87	21	1	1	.	273
2.25-2.49	.	.	.	.	66	34	19	2	.	.	121
2.50-2.74	.	.	.	.	53	65	20	1	.	.	139
2.75-2.99	.	.	.	.	4	26	9	.	.	.	39
3.00-3.24	.	.	.	.	.	28	10	2	.	.	40
3.25-3.49	.	.	.	.	.	8	11	2	.	.	21
3.50+	.	.	.	.	.	5	35	8	1	.	49
TOTAL	2339	5698	6970	8258	4148	918	226	21	2	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.4 NO. OF CASES= 26757.

STATION M29 45.82N 86.10W 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	
0.00-0.24	2039	451	181	49	8	.	.	.	.	.	2728
0.25-0.49	340	1392	119	79	24	1	.	.	.	.	1955
0.50-0.74	.	1810	679	134	63	5	.	.	.	.	2691
0.75-0.99	.	197	712	172	113	22	.	.	.	.	1216
1.00-1.24	.	.	503	298	114	20	2	.	.	.	937
1.25-1.49	.	.	96	233	74	13	3	.	.	.	419
1.50-1.74	.	.	11	165	148	39	9	1	.	.	373
1.75-1.99	.	.	.	25	94	20	6	.	.	.	145
2.00-2.24	.	.	.	4	81	14	6	.	.	.	105
2.25-2.49	.	.	.	1	42	.	5	.	.	.	48
2.50-2.74	.	.	.	1	14	17	2	.	.	.	34
2.75-2.99	.	.	.	.	1	12	1	.	.	.	14
3.00-3.24	.	.	.	.	.	14	1	.	.	.	15
3.25-3.49	.	.	.	.	.	5	.	.	.	.	5
3.50+	.	.	.	.	.	2	.	2	.	.	4
TOTAL	2379	3850	2301	1161	776	184	35	3	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 10018.

STATION M29 45.82N 86.10W 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	
0.00-0.24	1261	219	24	5	.	.	.	.	.	.	1509
0.25-0.49	166	593	1	.	.	.	.	.	.	.	760
0.50-0.74	.	1306	242	.	.	.	.	.	.	.	1548
0.75-0.99	.	84	656	3	.	4	.	.	.	.	747
1.00-1.24	.	.	545	.	.	.	.	.	.	.	545
1.25-1.49	.	.	106	24	.	.	.	.	.	.	130
1.50-1.74	.	.	3	50	1	1	.	.	.	.	55
1.75-1.99	.	.	.	13	.	1	.	.	.	.	14
2.00-2.24	.	.	.	4	1	2	.	.	.	.	7
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1427	2202	1577	99	2	8	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 4980.

STATION M29 45.82N 86.10W 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	
0.00-0.24	1091	195	35	4	.	.	.	.	.	.	1325
0.25-0.49	129	448	.	.	.	.	.	.	.	.	577
0.50-0.74	.	1050	164	.	.	.	.	.	.	.	1214
0.75-0.99	.	38	450	.	.	.	.	.	.	.	488
1.00-1.24	.	.	561	1	.	.	.	.	.	.	562
1.25-1.49	.	.	124	51	.	.	.	.	.	.	175
1.50-1.74	.	.	9	73	.	.	.	.	.	.	82
1.75-1.99	.	.	.	12	.	.	.	.	.	.	12
2.00-2.24	.	.	.	3	.	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1220	1731	1343	144	0	0	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 4157.

STATION M29 45.82N 86.10W 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	
0.00-0.24	686	151	13	1	.	.	.	.	.	.	851
0.25-0.49	99	541	.	.	.	.	.	.	.	.	640
0.50-0.74	.	1038	109	.	.	.	.	.	.	.	1147
0.75-0.99	.	22	264	.	.	.	.	.	.	.	286
1.00-1.24	.	.	210	1	.	.	.	.	.	.	211
1.25-1.49	.	.	91	10	.	.	.	.	.	.	101
1.50-1.74	.	.	9	24	.	.	.	.	.	.	33
1.75-1.99	.	.	.	6	.	.	.	.	.	.	6
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	785	1752	696	43	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 3071.

STATION M29 45.82N 86.10W 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	
0.00-0.24	999	128	17	4	.	.	.	.	.	.	1148
0.25-0.49	86	457	.	.	.	.	.	.	.	.	543
0.50-0.74	.	1075	132	.	.	.	.	.	.	.	1207
0.75-0.99	.	12	272	.	.	.	.	.	.	.	284
1.00-1.24	.	.	144	.	.	.	.	.	.	.	144
1.25-1.49	.	.	55	.	.	.	.	.	.	.	55
1.50-1.74	.	.	2	20	.	.	.	.	.	.	22
1.75-1.99	.	.	.	4	.	.	.	.	.	.	4
2.00-2.2	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1085	1672	622	28	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 2.9 NO. OF CASES= 3193.

STATION M29 45.82N 86.10W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

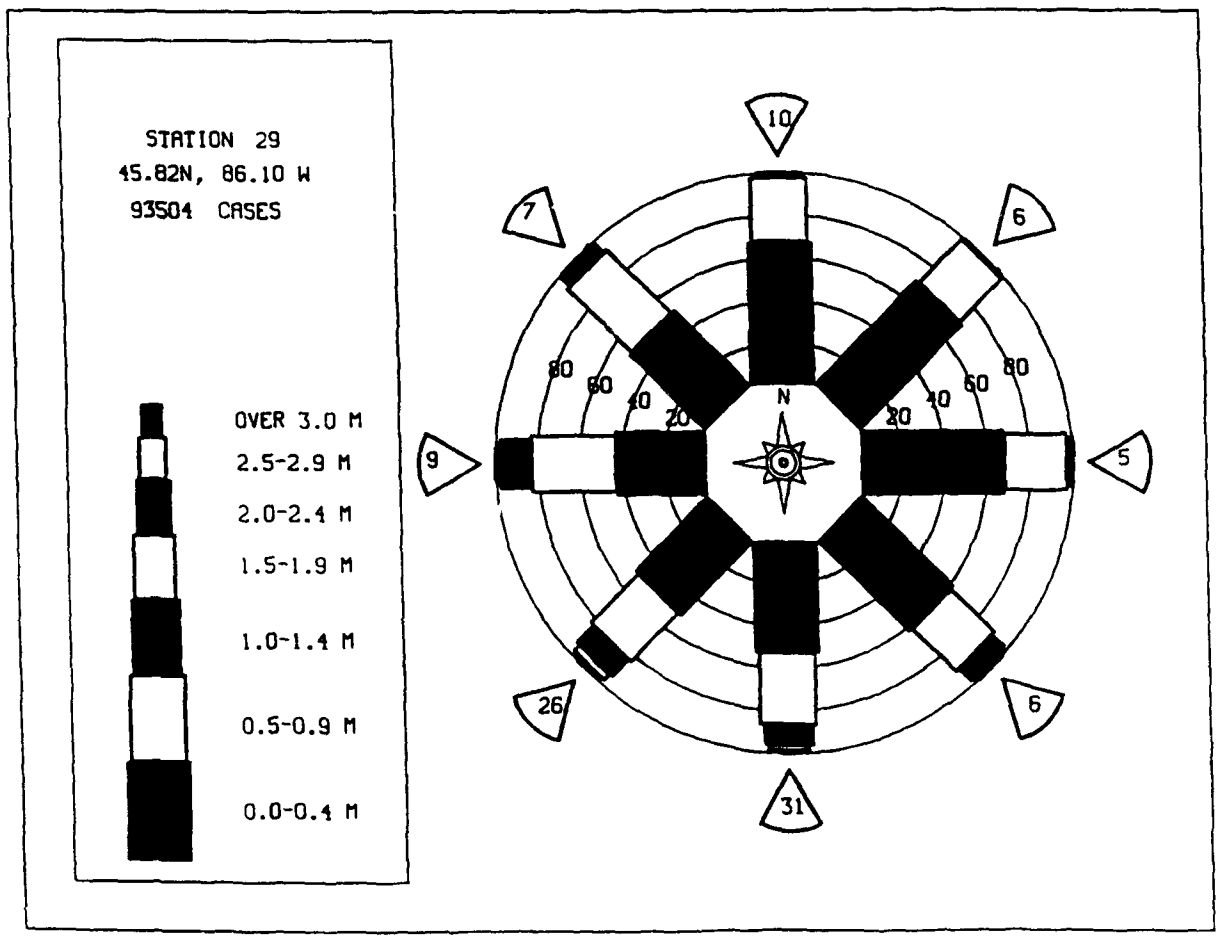
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8 9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	1467	162	25	7	.	.	.	.	.	.	1661
0.25-0.49	244	933	.	.	.	.	.	.	.	.	1177
0.50-0.74	.	1475	58	.	.	.	.	.	.	.	1533
0.75-0.99	.	65	251	.	.	.	.	.	.	.	316
1.00-1.24	.	.	159	.	.	.	.	.	.	.	159
1.25-1.49	.	.	58	.	.	.	.	.	.	.	58
1.50-1.74	.	.	2	22	.	.	.	.	.	.	24
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1711	2635	553	29	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.8 NO. OF CASES= 4615.

STATION M29 45.82N 86.10W 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	
0.00-0.24	2189	599	275	166	19	.	.	.	.	.	3248
0.25-0.49	269	1344	279	235	54	.	.	.	.	.	2181
0.50-0.74	.	1478	649	302	106	7	.	.	.	.	2542
0.75-0.99	.	64	464	198	82	15	1	.	.	.	824
1.00-1.24	.	.	325	189	98	18	3	.	.	.	633
1.25-1.49	.	.	62	97	57	12	2	.	.	.	230
1.50-1.74	.	.	5	71	68	17	3	.	.	.	164
1.75-1.99	.	.	.	8	33	9	2	.	.	.	52
2.00-2.24	.	.	.	1	30	11	2	.	.	.	44
2.25-2.49	.	.	.	.	11	4	2	.	.	.	17
2.50-2.74	.	.	.	.	6	10	2	.	.	.	18
2.75-2.99	.	.	.	.	.	4	1	.	.	.	5
3.00-3.24	.	.	.	.	.	4	1	.	.	.	5
3.25-3.49	.	.	.	.	.	1	1	.	.	.	2
3.50+	.	.	.	.	.	.	3	1	.	.	4
TOTAL	2458	3485	2059	1267	564	112	23	1	0	0	

MEAN HS(M)= 0.5 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.4 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M29 (45.82N 86.10W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.4	0.5	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.7	0.6	0.6	0.4
1957	0.8	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.4	0.5	1.0	0.9	0.5
1958	0.5	0.6	0.2	0.4	0.4	0.3	0.3	0.4	0.6	0.6	0.8	0.6	0.5
1959	0.6	0.7	0.5	0.4	0.5	0.3	0.3	0.4	0.6	0.6	0.6	0.7	0.5
1960	0.6	0.6	0.4	0.5	0.3	0.3	0.3	0.5	0.4	0.5	0.9	0.9	0.5
1961	0.6	0.5	0.6	0.4	0.4	0.3	0.2	0.3	0.6	0.6	0.7	0.7	0.5
1962	0.8	0.5	0.3	0.5	0.4	0.2	0.2	0.3	0.5	0.4	0.5	0.7	0.5
1963	0.6	0.7	0.5	0.5	0.4	0.2	0.3	0.3	0.4	0.5	0.7	0.5	0.5
1964	0.9	0.8	0.6	0.6	0.5	0.3	0.3	0.5	0.5	0.6	0.7	0.7	0.6
1965	0.8	0.9	0.5	0.3	0.4	0.3	0.3	0.4	0.5	0.7	0.7	0.8	0.5
1966	0.6	0.6	0.6	0.4	0.4	0.3	0.3	0.4	0.4	0.9	0.7	0.6	0.5
1967	0.8	0.8	0.6	0.5	0.3	0.2	0.3	0.4	0.4	0.6	0.6	0.7	0.5
1968	0.6	0.6	0.6	0.5	0.3	0.3	0.4	0.4	0.5	0.7	0.5	0.8	0.5
1969	0.7	0.4	0.5	0.4	0.3	0.4	0.2	0.4	0.5	0.6	0.6	0.6	0.5
1970	0.6	0.7	0.4	0.5	0.4	0.3	0.3	0.3	0.5	0.7	0.6	0.7	0.5
1971	0.8	0.8	0.5	0.4	0.3	0.3	0.4	0.4	0.5	0.6	0.7	0.6	0.5
1972	1.0	0.6	0.5	0.3	0.2	0.3	0.3	0.4	0.5	0.7	0.5	0.6	0.5
1973	0.8	0.6	0.5	0.5	0.3	0.3	0.3	0.4	0.5	0.5	0.7	0.6	0.5
1974	0.6	0.6	0.6	0.4	0.3	0.3	0.3	0.4	0.5	0.6	0.6	0.6	0.5
1975	0.7	0.6	0.5	0.3	0.3	0.3	0.3	0.4	0.4	0.7	0.7	0.6	0.5
1976	0.8	0.7	0.7	0.4	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.5
1977	0.7	0.8	0.5	0.4	0.3	0.3	0.4	0.5	0.4	0.6	0.6	0.6	0.5
1978	0.7	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.5	0.6	0.6	0.7	0.5
1979	0.6	0.5	0.5	0.3	0.3	0.3	0.3	0.4	0.5	0.9	1.2	1.1	0.6
1980	0.6	0.4	0.5	0.3	0.2	0.4	0.4	0.6	0.9	1.1	1.1	0.6	0.6
1981	0.4	0.7	0.5	0.5	0.4	0.4	0.4	0.4	0.7	0.8	0.8	0.5	0.5
1982	0.6	0.5	0.6	0.5	0.3	0.3	0.4	0.5	0.9	1.0	0.9	0.7	0.6
1983	0.6	0.5	0.4	0.3	0.2	0.2	0.3	0.5	0.9	0.8	0.9	0.5	0.5
1984	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.5	1.0	1.0	1.4	0.7	0.7
1985	0.5	0.6	0.6	0.5	0.4	0.3	0.4	0.3	0.4	0.5	0.5	0.5	0.4
1986	0.7	0.4	0.5	0.4	0.2	0.2	0.3	0.3	0.3	0.4	0.7	0.6	0.4
1987	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.5	0.5	0.6	0.4
MEAN	0.7	0.6	0.5	0.4	0.3	0.3	0.3	0.4	0.5	0.7	0.7	0.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M29 (45.82N 86.10W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.5	1.7	1.6	1.7	1.1	1.1	1.0	0.8	1.5	2.4	2.7	3.3
1957	3.2	2.1	2.7	2.8	2.2	1.6	1.5	1.5	1.8	1.8	3.7	2.8
1958	3.3	1.9	0.8	2.6	2.8	2.0	1.4	1.5	2.2	2.0	4.4	2.0
1959	2.1	2.9	2.3	1.8	1.4	1.5	1.4	1.5	2.6	2.3	1.8	2.8
1960	1.8	2.2	1.7	1.4	1.3	1.0	1.4	2.0	1.5	2.3	2.6	3.0
1961	2.3	1.8	1.9	1.5	1.1	1.1	0.9	1.4	1.7	2.5	2.3	2.4
1962	3.0	1.9	1.4	1.6	1.8	1.2	0.8	1.2	1.8	1.7	2.8	2.4
1963	1.9	2.0	1.7	3.0	1.4	1.3	1.2	1.0	1.2	1.6	2.4	3.0
1964	2.8	3.4	2.4	3.3	1.8	1.7	0.8	1.8	2.8	2.4	2.6	1.7
1965	2.5	3.1	1.6	1.6	1.3	1.1	1.1	1.2	2.2	2.0	2.7	2.8
1966	2.0	1.6	3.1	1.5	1.2	1.0	1.2	1.2	1.3	3.4	1.7	2.2
1967	2.9	2.3	1.7	2.2	1.7	0.7	0.9	1.6	1.6	1.9	1.7	1.5
1968	1.4	1.9	1.5	2.6	1.3	0.9	1.5	1.8	1.7	1.5	1.5	2.6
1969	2.0	1.4	1.2	0.9	1.0	2.0	0.9	2.0	1.4	2.3	1.6	2.3
1970	1.8	2.6	1.6	1.9	1.9	1.1	1.3	1.3	2.1	2.2	2.7	2.5
1971	2.2	4.2	1.5	1.3	1.4	1.0	1.1	2.1	2.1	2.4	2.6	2.0
1972	2.8	1.7	1.5	1.1	0.8	1.0	1.1	1.1	2.1	2.3	1.7	2.0
1973	2.2	1.7	2.3	1.7	0.9	1.2	1.4	1.2	1.7	2.4	2.0	1.7
1974	2.8	1.4	2.1	1.3	1.0	1.0	1.0	1.3	2.2	1.8	1.4	2.0
1975	4.8	1.7	1.5	1.7	1.3	1.2	1.2	1.4	1.5	2.1	2.9	2.5
1976	2.4	2.5	2.0	1.3	1.9	1.1	1.2	1.6	2.3	1.9	1.5	2.6
1977	1.8	2.0	2.4	1.4	1.3	1.0	1.3	2.2	2.1	1.8	3.1	1.9
1978	2.7	1.6	1.6	1.3	1.7	1.4	1.0	1.2	1.8	2.2	2.6	2.3
1979	1.4	1.4	1.3	1.3	1.2	1.2	0.9	1.1	1.7	3.7	4.7	4.1
1980	2.8	2.3	1.6	0.9	1.1	1.2	1.5	1.5	3.4	4.1	4.3	2.0
1981	1.4	2.1	1.5	1.4	2.1	2.5	1.6	1.5	2.7	3.7	3.2	1.6
1982	2.7	2.0	2.7	1.3	0.9	1.1	1.7	1.9	2.4	2.8	3.1	2.2
1983	1.7	2.1	0.8	2.0	0.7	0.8	1.1	1.8	2.8	2.9	3.2	1.7
1984	2.3	1.5	1.9	2.0	1.6	2.0	1.7	2.7	3.4	4.0	3.7	3.2
1985	1.4	2.4	2.6	2.5	1.7	1.7	2.1	1.1	1.7	1.7	1.7	1.8
1986	2.9	1.4	1.9	1.4	1.4	1.3	1.4	1.2	1.2	2.5	2.7	2.6
1987	1.4	1.7	1.3	1.0	1.0	0.9	1.3	1.2	1.2	1.9	1.9	2.6

32 YR. STATISTICS FOR WIS STATION M29

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.5
MEAN PEAK WAVE PERIOD	(SECONDS)	3.4
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.4
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.2
LARGEST WAVE HS	(METERS)	4.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	213.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011121

STATION M30 45.80N 85.90W 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	
0.00-0.24	1965	201	38	7	1	.	.	.	.	.	2212
0.25-0.49	333	893	.	.	.	.	.	.	.	.	1226
0.50-0.74	.	1297	1	.	.	.	.	.	.	.	1298
0.75-0.99	.	100	119	.	.	.	.	.	.	.	219
1.00-1.24	.	.	91	.	.	.	.	.	.	.	91
1.25-1.49	.	.	13	.	.	.	.	.	.	.	13
1.50-1.74	.	.	12	4	.	.	.	.	.	.	16
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2298	2491	274	11	1	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.6 NO. OF CASES= 4752.

STATION M30 45.80N 85.90W 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	
0.00-0.24	1396	186	32	5	.	.	.	.	.	.	1619
0.25-0.49	125	504	.	.	.	.	.	.	.	.	629
0.50-0.74	.	698	21	.	.	.	.	.	.	.	719
0.75-0.99	.	24	56	.	.	.	.	.	.	.	80
1.00-1.24	.	.	24	.	.	.	.	.	.	.	24
1.25-1.49	.	.	3	.	.	.	.	.	.	.	3
1.50-1.74	.	.	1	.	.	.	.	.	.	.	1
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1521	1412	137	6	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 2.6 NO. OF CASES= 2881.

STATION M30 45.80N 85.90W 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	
0.00-0.24	1348	188	33	7	.	.	.	.	.	.	1576
0.25-0.49	73	426	.	.	.	.	.	.	.	.	499
0.50-0.74	.	712	66	.	.	.	.	.	.	.	778
0.75-0.99	.	.	111	.	.	.	.	.	.	.	111
1.00-1.24	.	.	33	.	.	.	.	.	.	.	33
1.25-1.49	.	.	6	.	.	.	.	.	.	.	6
1.50-1.74	.	.	.	2	.	.	.	.	.	.	2
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1421	1326	249	9	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.6 NO. OF CASES= 2814.

STATION M30 45.80N 85.90W 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	
0.00-0.24	1073	148	25	8	.	.	.	.	.	.	1254
0.25-0.49	120	367	3	.	.	.	.	.	.	.	490
0.50-0.74	.	402	10	.	.	.	.	.	.	.	412
0.75-0.99	.	12	13	.	.	.	.	.	.	.	25
1.00-1.24	.	.	5	.	.	.	.	.	.	.	5
1.25-1.49	.	.	2	.	.	.	.	.	.	.	2
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1193	929	58	8	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.3 MEAN TP(SEC)= 2.5 NO. OF CASES= 2053.

STATION M30 45.80N 85.90W 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	
0.00-0.24	1103	157	28	5	1	.	.	.	.	.	1294
0.25-0.49	216	407	8	.	.	.	.	.	.	.	631
0.50-0.74	.	284	6	.	.	.	.	.	.	.	290
0.75-0.99	.	29	5	.	.	.	.	.	.	.	34
1.00-1.24	.	.	1	.	.	.	.	.	.	.	1
1.25-1.49	.	.	.	.	.	.	.	.	.	.	0
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1319	877	48	5	1	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.0 MEAN TP(SEC)= 2.4 NO. OF CASES= 2109.

STATION M30 45.80N 85.90W 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	
0.00-0.24	848	114	20	.	.	.	.	.	.	.	982
0.25-0.49	139	344	7	.	.	.	.	.	.	.	490
0.50-0.74	.	253	69	.	.	.	.	.	.	.	322
0.75-0.99	.	25	41	6	.	.	.	.	.	.	72
1.00-1.24	.	.	18	12	.	.	.	.	.	.	30
1.25-1.49	.	.	1	11	.	.	.	.	.	.	12
1.50-1.74	.	.	.	6	.	.	.	.	.	.	6
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	987	736	156	35	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.6 NO. OF CASES= 1796.

STATION M30 45.80N 85.90W 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	
0.00-0.24	1130	159	31	5	.	.	.	.	.	.	1325
0.25-0.49	91	326	22	1	.	.	.	.	.	.	440
0.50-0.74	.	283	219	1	.	.	.	.	.	.	503
0.75-0.99	.	11	121	12	.	.	.	.	.	.	144
1.00-1.24	.	.	39	50	.	.	.	.	.	.	89
1.25-1.49	.	.	2	40	.	.	.	.	.	.	42
1.50-1.74	.	.	.	18	.	.	.	.	.	.	18
1.75-1.99	.	.	.	.	1	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1221	779	434	127	1	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 2.8 NO. OF CASES= 2403.

STATION M30 45.80N 85.90W 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	
0.00-0.24	1085	300	37	4	.	1	.	.	.	.	1427
0.25-0.49	158	784	80	2	.	.	.	.	.	.	1024
0.50-0.74	.	469	512	12	.	.	.	.	.	.	993
0.75-0.99	.	16	288	90	.	.	.	.	.	.	394
1.00-1.24	.	.	117	166	2	.	.	.	.	.	285
1.25-1.49	.	.	1	91	4	.	.	.	.	.	96
1.50-1.74	.	.	.	75	3	.	.	.	.	.	78
1.75-1.99	.	.	.	2	6	.	.	.	.	.	8
2.00-2.24	.	.	.	.	3	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1243	1569	1035	442	18	1	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.2 NO. OF CASES= 4039.

STATION M30 45.80N 85.90W 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	
0.00-0.24	1877	773	68	17	2	.	.	.	.	.	2737
0.25-0.49	282	1728	284	23	3	1	1	.	.	.	2322
0.50-0.74	.	696	1188	140	5	1	.	.	.	.	2030
0.75-0.99	.	14	366	325	24	1	.	.	.	.	730
1.00-1.24	.	.	202	399	32	1	.	.	.	.	634
1.25-1.49	.	.	8	154	54	2	.	.	.	.	218
1.50-1.74	.	.	.	69	72	1	.	.	.	.	142
1.75-1.99	.	.	.	1	47	1	.	.	.	.	49
2.00-2.24	.	.	.	1	22	.	1	.	.	.	24
2.25-2.49	.	.	.	.	9	1	.	.	.	.	10
2.50-2.74	.	.	.	.	5	5	.	.	.	.	10
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2159	3211	2116	1129	275	15	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 8341.

STATION M30 45.80N 85.90W 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	
0.00-0.24	1995	2228	2060	1459	181	4	.	.	.	.	7927
0.25-0.49	295	2956	2187	2261	578	16	.	.	.	.	8293
0.50-0.74	.	1133	2483	2701	1161	75	.	.	.	.	7553
0.75-0.99	.	80	622	1241	703	129	10	.	.	.	2785
1.00-1.24	.	.	351	812	788	172	28	1	.	.	2152
1.25-1.49	.	.	32	308	342	100	20	.	.	.	802
1.50-1.74	.	.	.	167	301	185	27	4	.	.	684
1.75-1.99	.	.	.	10	128	77	16	1	.	.	232
2.00-2.24	.	.	.	2	125	84	35	2	1	.	249
2.25-2.49	.	.	.	.	36	38	23	.	.	.	97
2.50-2.74	.	.	.	.	19	63	23	3	.	.	108
2.75-2.99	.	.	.	.	.	26	5	.	.	.	31
3.00-3.24	.	.	.	.	.	20	14	1	.	.	35
3.25-3.49	.	.	.	.	.	6	14	3	.	.	23
3.50+	.	.	.	.	.	.	25	7	1	.	33
TOTAL	2290	6397	7735	8961	4362	995	240	22	2	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 29017.

STATION M30 45.80N 85.90W 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	
0.00-0.24	1911	652	263	85	13	1	.	.	.	.	2925
0.25-0.49	322	1695	260	148	27	3	.	.	.	.	2455
0.50-0.74	.	1498	1074	405	161	6	.	.	.	.	3144
0.75-0.99	.	253	669	408	301	24	1	.	.	.	1656
1.00-1.24	.	.	517	427	318	48	4	.	.	.	1314
1.25-1.49	.	.	65	255	198	38	5	.	.	.	561
1.50-1.74	.	.	.	204	211	71	9	1	.	.	496
1.75-1.99	.	.	.	22	113	48	14	1	.	.	198
2.00-2.24	.	.	.	2	82	66	18	.	.	.	168
2.25-2.49	.	.	.	.	36	25	13	.	.	.	74
2.50-2.74	.	.	.	.	10	54	3	.	.	.	67
2.75-2.99	.	.	.	.	.	28	5	.	.	.	33
3.00-3.24	.	.	.	.	.	12	10	1	.	.	23
3.25-3.49	.	.	.	.	.	3	7	.	.	.	10
3.50+	.	.	.	.	.	.	24	3	.	.	27
TOTAL	2233	4098	2848	1956	1470	427	113	6	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 12324.

STATION M30 45.80N 85.90W 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	
0.00-0.24	1163	302	28	3	.	.	.	.	.	.	1496
0.25-0.49	170	736	3	.	.	.	.	.	.	.	909
0.50-0.74	.	961	450	1	.	.	.	.	.	.	1412
0.75-0.99	.	108	685	21	7	6	.	.	.	.	827
1.00-1.24	.	.	807	59	12	4	.	.	.	.	882
1.25-1.49	.	.	96	311	8	1	.	.	.	.	416
1.50-1.74	.	.	5	193	14	5	.	.	.	.	217
1.75-1.99	.	.	.	43	12	1	.	.	.	.	56
2.00-2.24	.	.	.	8	22	4	.	.	.	.	34
2.25-2.49	.	.	.	.	9	4	1	.	.	.	14
2.50-2.74	.	.	.	.	2	3	.	.	.	.	5
2.75-2.99	.	.	.	.	1	1	.	.	.	.	2
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1333	2107	2074	639	87	30	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.4 NO. OF CASES= 5879.

STATION M30 45.80N 85.90W 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	
0.00-0.24	1040	236	21	1	.	.	.	.	.	.	1298
0.25-0.49	118	627	.	.	.	.	.	.	.	.	745
0.50-0.74	.	863	265	.	.	.	.	.	.	.	1128
0.75-0.99	.	50	453	4	.	.	.	.	.	.	507
1.00-1.24	.	.	519	37	.	.	.	.	.	.	556
1.25-1.49	.	.	106	253	.	.	.	.	.	.	359
1.50-1.74	.	.	25	171	.	.	.	.	.	.	196
1.75-1.99	.	.	.	52	4	.	.	.	.	.	56
2.00-2.24	.	.	.	2	24	.	.	.	.	.	26
2.25-2.49	.	.	.	.	2	.	.	.	.	.	2
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1158	1776	1389	520	31	0	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 4566.

STATION M30 45.80N 85.90W 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	
0.00-0.24	649	166	16	2	1	.	.	.	.	.	834
0.25-0.49	113	563	.	.	.	.	.	.	.	.	676
0.50-0.74	.	1006	110	.	.	.	.	.	.	.	1116
0.75-0.99	.	35	236	1	.	.	.	.	.	.	272
1.00-1.24	.	.	146	4	.	.	.	.	.	.	150
1.25-1.49	.	.	77	13	.	.	.	.	.	.	90
1.50-1.74	.	.	11	36	.	.	.	.	.	.	47
1.75-1.99	.	.	.	2	.	.	.	.	.	.	2
2.00-2.24	.	.	.	2	.	.	.	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	762	1770	596	60	1	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 2988.

STATION M30 45.80N 85.90W 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	
0.00-0.24	945	139	20	4	1	.	.	.	.	.	1109
0.25-0.49	86	489	.	.	.	.	.	.	.	.	575
0.50-0.74	.	948	104	.	.	.	.	.	.	.	1052
0.75-0.99	.	9	245	.	.	.	.	.	.	.	254
1.00-1.24	.	.	116	.	.	.	.	.	.	.	116
1.25-1.49	.	.	41	.	.	.	.	.	.	.	41
1.50-1.74	.	.	1	16	.	.	.	.	.	.	17
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1031	1585	527	21	1	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 2.9 NO. OF CASES= 2966.

STATION M30 45.80N 85.90W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

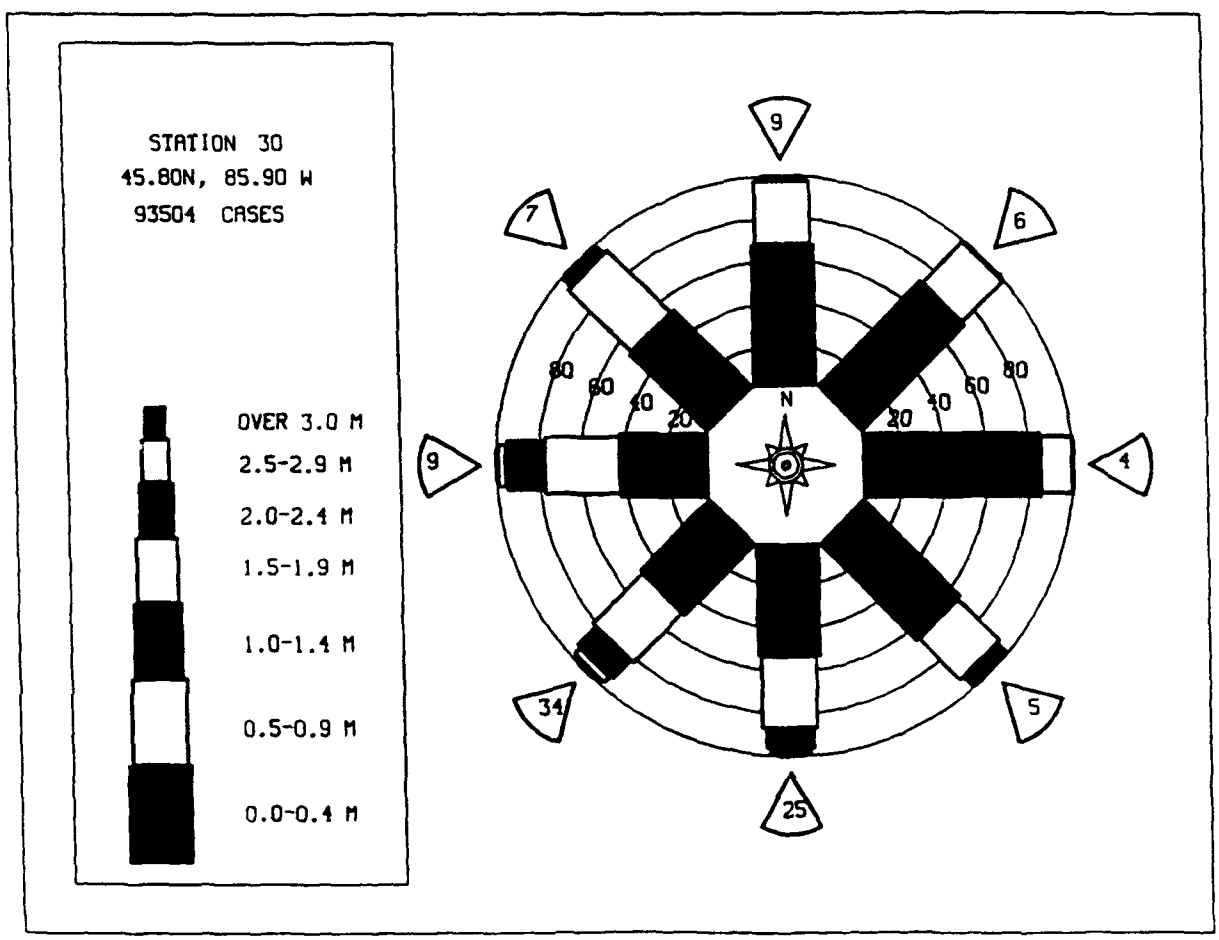
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	1467	152	27	3	.	.	.	.	.	.	1649
0.25-0.49	273	916	.	.	.	.	.	.	.	.	1189
0.50-0.74	.	1503	60	.	.	.	.	.	.	.	1563
0.75-0.99	.	50	219	.	.	.	.	.	.	.	269
1.00-1.24	.	.	143	.	.	.	.	.	.	.	143
1.25-1.49	.	.	52	.	.	.	.	.	.	.	52
1.50-1.74	.	.	6	16	.	.	.	.	.	.	22
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1740	2621	507	19	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.8 NO. OF CASES= 4576.

STATION M30 45.80N 85.90W 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	
0.00-0.24	2100	610	275	162	20	.	.	.	.	.	3167
0.25-0.49	292	1376	285	243	60	2	.	.	.	.	2258
0.50-0.74	.	1301	664	326	132	8	.	.	.	.	2431
0.75-0.99	.	82	425	211	103	16	1	.	.	.	838
1.00-1.24	.	.	313	197	115	22	3	.	.	.	650
1.25-1.49	.	.	51	144	60	14	2	.	.	.	271
1.50-1.74	.	.	6	98	60	26	3	.	.	.	193
1.75-1.99	.	.	.	13	31	12	3	.	.	.	59
2.00-2.24	.	.	.	1	28	15	5	.	.	.	49
2.25-2.49	.	.	.	.	9	6	3	.	.	.	18
2.50-2.74	.	.	.	.	3	12	2	.	.	.	17
2.75-2.99	.	.	.	.	.	5	1	.	.	.	6
3.00-3.24	.	.	.	.	.	3	2	.	.	.	5
3.25-3.49	.	.	.	.	.	.	2	.	.	.	2
3.50+	.	.	.	.	.	.	5	1	.	.	6
TOTAL	2392	3369	2019	1395	621	141	32	1	0	0	

MEAN HS(M)= 0.5 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 3.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M30 (45.80N 85.90W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.4	0.5	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.7	0.7	0.7	0.4
1957	0.8	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.4	0.5	1.0	0.9	0.5
1958	0.6	0.6	0.2	0.4	0.4	0.4	0.3	0.4	0.6	0.6	0.9	0.6	0.5
1959	0.6	0.7	0.5	0.4	0.5	0.3	0.3	0.4	0.6	0.6	0.7	0.7	0.5
1960	0.6	0.6	0.4	0.5	0.3	0.3	0.3	0.5	0.4	0.5	0.9	0.9	0.5
1961	0.6	0.5	0.5	0.3	0.4	0.4	0.2	0.3	0.6	0.7	0.7	0.7	0.5
1962	0.9	0.5	0.3	0.5	0.4	0.2	0.2	0.3	0.5	0.4	0.5	0.7	0.5
1963	0.7	0.7	0.5	0.5	0.4	0.3	0.3	0.3	0.4	0.5	0.7	0.6	0.5
1964	0.9	0.8	0.7	0.6	0.5	0.4	0.3	0.5	0.6	0.7	0.7	0.7	0.6
1965	0.8	0.9	0.4	0.3	0.4	0.3	0.3	0.4	0.5	0.7	0.7	0.8	0.6
1966	0.7	0.6	0.7	0.4	0.4	0.4	0.4	0.4	0.5	0.9	0.7	0.6	0.5
1967	0.9	0.8	0.6	0.5	0.4	0.3	0.3	0.4	0.4	0.7	0.7	0.7	0.5
1968	0.7	0.7	0.6	0.5	0.4	0.3	0.4	0.4	0.5	0.7	0.5	0.8	0.5
1969	0.7	0.4	0.5	0.4	0.3	0.4	0.2	0.5	0.5	0.6	0.6	0.6	0.5
1970	0.6	0.8	0.4	0.5	0.4	0.4	0.3	0.3	0.5	0.7	0.6	0.7	0.5
1971	0.8	0.8	0.5	0.4	0.3	0.3	0.4	0.4	0.5	0.6	0.7	0.7	0.5
1972	1.1	0.6	0.5	0.3	0.2	0.3	0.3	0.4	0.5	0.7	0.5	0.6	0.5
1973	0.9	0.5	0.5	0.5	0.3	0.3	0.3	0.4	0.5	0.5	0.7	0.6	0.5
1974	0.7	0.5	0.6	0.4	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.6	0.5
1975	0.8	0.6	0.5	0.4	0.3	0.3	0.4	0.4	0.5	0.7	0.7	0.6	0.5
1976	0.8	0.8	0.7	0.4	0.3	0.3	0.3	0.4	0.5	0.5	0.7	0.7	0.5
1977	0.7	0.8	0.5	0.4	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.6	0.5
1978	0.7	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.5	0.6	0.6	0.8	0.5
1979	0.6	0.5	0.5	0.3	0.3	0.3	0.3	0.4	0.5	0.8	1.2	1.1	0.6
1980	0.7	0.5	0.5	0.3	0.2	0.4	0.4	0.6	0.9	1.1	1.1	0.6	0.6
1981	0.4	0.7	0.5	0.5	0.3	0.4	0.3	0.4	0.6	0.8	0.7	0.5	0.5
1982	0.7	0.5	0.6	0.5	0.3	0.3	0.4	0.4	0.8	1.0	0.9	0.7	0.6
1983	0.6	0.5	0.4	0.3	0.2	0.2	0.3	0.5	0.9	0.8	0.8	0.5	0.5
1984	0.6	0.5	0.4	0.3	0.4	0.4	0.4	0.5	1.0	1.0	1.4	0.8	0.6
1985	0.5	0.6	0.6	0.5	0.4	0.3	0.4	0.3	0.4	0.5	0.5	0.6	0.5
1986	0.7	0.4	0.6	0.4	0.2	0.2	0.3	0.3	0.3	0.4	0.7	0.6	0.4
1987	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.5	0.5	0.6	0.4
MEAN	0.7	0.6	0.5	0.4	0.3	0.3	0.3	0.4	0.5	0.7	0.7	0.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M30 (45.80N 85.90W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.5	1.8	1.6	1.8	1.2	1.2	1.0	1.0	1.5	2.3	2.9	3.4
1957	3.2	2.1	2.7	2.9	2.3	1.7	1.8	1.5	1.8	1.9	4.0	2.7
1958	3.3	1.9	1.0	2.6	2.9	1.9	1.6	1.5	2.2	2.0	4.8	1.9
1959	2.1	2.9	2.4	2.0	1.9	1.5	1.4	1.5	2.8	2.4	1.9	2.9
1960	2.1	2.3	1.8	1.4	1.3	1.0	1.3	2.0	1.5	2.5	2.7	3.4
1961	2.3	1.9	2.0	1.4	1.2	1.2	1.0	1.5	1.7	2.5	2.3	2.6
1962	3.1	1.7	1.3	1.7	1.8	1.2	1.1	1.2	1.8	1.7	2.8	2.8
1963	2.2	2.2	1.7	3.1	1.3	1.3	1.2	0.9	1.2	1.6	2.4	3.0
1964	2.8	3.4	2.4	3.9	1.8	2.0	0.8	1.8	2.7	2.8	2.8	1.7
1965	2.4	3.1	1.7	1.6	1.4	1.1	1.1	1.2	2.2	2.2	2.9	3.2
1966	2.4	1.8	3.6	1.3	1.3	1.0	1.3	1.3	1.4	3.5	1.7	2.2
1967	3.1	2.3	1.7	2.1	1.7	0.9	1.1	1.6	1.7	1.9	1.6	1.8
1968	1.5	2.6	1.6	2.7	1.4	1.0	1.5	1.9	1.6	1.6	1.7	2.7
1969	2.0	1.5	1.4	1.1	1.0	2.0	1.0	1.9	1.4	2.3	1.6	2.1
1970	1.8	2.6	1.6	2.1	1.9	1.1	1.2	1.3	2.5	2.3	2.5	2.8
1971	2.4	4.8	1.6	1.3	1.3	1.0	1.3	2.0	2.1	2.5	2.3	2.0
1972	3.1	1.7	1.7	1.2	0.8	1.0	1.1	1.1	2.1	2.8	1.8	1.9
1973	2.4	1.5	2.2	1.7	0.9	1.2	1.4	1.1	1.7	2.3	2.0	1.7
1974	3.0	1.6	2.0	1.4	1.0	1.0	0.9	1.3	2.2	1.8	1.4	2.0
1975	5.2	2.0	1.4	1.7	1.2	1.3	1.2	1.5	1.5	2.1	3.2	2.5
1976	2.4	2.6	2.1	1.3	1.9	1.2	1.2	1.5	2.2	2.0	1.7	2.5
1977	1.8	2.1	2.4	1.5	1.3	1.2	1.4	2.3	2.5	1.7	3.3	2.0
1978	2.6	1.6	1.8	1.5	1.7	1.4	1.0	1.2	1.8	2.1	2.8	2.5
1979	1.4	1.5	1.4	1.2	1.2	1.2	0.9	1.1	1.7	3.7	4.5	4.2
1980	3.1	2.3	1.8	1.1	1.1	1.2	1.5	1.5	3.4	3.9	4.1	1.9
1981	1.6	1.9	1.5	1.4	2.0	2.3	1.6	1.5	3.0	3.6	3.3	1.6
1982	2.9	2.0	2.9	1.4	0.9	1.1	1.7	1.9	2.4	3.3	2.8	2.3
1983	1.7	2.1	0.8	2.0	0.7	0.8	1.1	1.7	2.7	2.9	3.7	1.7
1984	2.1	1.5	2.0	2.0	1.9	1.9	1.6	2.6	3.3	4.1	4.0	3.7
1985	1.5	2.4	2.8	2.5	1.6	1.6	2.1	1.1	1.8	1.7	1.8	1.8
1986	3.2	1.4	2.0	1.4	1.5	1.3	1.4	1.2	1.2	2.5	3.0	2.5
1987	1.5	1.7	1.2	1.0	1.0	0.9	1.3	1.1	1.2	1.8	1.9	2.8

32 YR. STATISTICS FOR WIS STATION M30

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.5
MEAN PEAK WAVE PERIOD	(SECONDS)	3.5
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.4
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	5.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	217.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011121

STATION M31 45.65N 85.70W 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	
0.00-0.24	1749	276	20	2	.	.	.	.	.	.	2047
0.25-0.49	333	1148	26	.	.	.	.	.	.	.	1507
0.50-0.74	.	1302	44	.	.	.	.	.	.	.	1346
0.75-0.99	.	402	174	20	.	.	.	.	.	.	596
1.00-1.24	.	.	110	13	.	.	.	.	.	.	123
1.25-1.49	.	.	20	1	.	.	.	.	.	.	21
1.50-1.74	.	.	18	6	.	.	.	.	.	.	24
1.75-1.99	.	.	.	4	.	.	.	.	.	.	4
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2082	3128	412	46	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 2.7 NO. OF CASES= 5308.

STATION M31 45.65N 85.70W 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	
0.00-0.24	1534	193	19	1	.	.	.	.	.	.	1747
0.25-0.49	141	559	6	.	.	.	.	.	.	.	706
0.50-0.74	.	693	25	.	.	.	.	.	.	.	718
0.75-0.99	.	42	79	.	.	.	.	.	.	.	121
1.00-1.24	.	.	26	.	.	.	.	.	.	.	26
1.25-1.49	.	.	5	.	.	.	.	.	.	.	5
1.50-1.74	.	.	1	1	.	.	.	.	.	.	2
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1675	1487	161	2	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.5 NO. OF CASES= 3114.

STATION M31 45.65N 85.70W 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	
0.00-0.24	1441	209	24	3	.	.	.	.	.	.	1677
0.25-0.49	75	490	3	.	.	.	.	.	.	.	568
0.50-0.74	.	781	68	.	.	.	.	.	.	.	849
0.75-0.99	.	.	133	1	.	.	.	.	.	.	134
1.00-1.24	.	.	40	.	.	.	.	.	.	.	40
1.25-1.49	.	.	8	.	.	.	.	.	.	.	8
1.50-1.74	.	.	.	2	.	.	.	.	.	.	2
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1516	1480	276	6	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.6 NO. OF CASES= 3072.

STATION M31 45.65N 85.70W 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	
0.00-0.24	1076	134	11	3	.	.	.	.	.	.	1224
0.25-0.49	125	383	3	.	.	.	.	.	.	.	511
0.50-0.74	.	407	10	.	.	.	.	.	.	.	417
0.75-0.99	.	14	19	.	.	.	.	.	.	.	33
1.00-1.24	.	.	7	.	.	.	.	.	.	.	7
1.25-1.49	.	.	2	.	.	.	.	.	.	.	2
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1201	938	52	3	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.3 MEAN TP(SEC)= 2.5 NO. OF CASES= 2058.

STATION M31 45.65N 85.70W 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	
0.00-0.24	918	159	14	3	.	.	.	.	.	.	1094
0.25-0.49	221	420	11	.	.	.	.	.	.	.	652
0.50-0.74	.	263	5	.	.	.	.	.	.	.	268
0.75-0.99	.	33	6	2	.	.	.	.	.	.	41
1.00-1.24	.	.	1	.	1	.	.	.	.	.	2
1.25-1.49	.	.	.	.	.	.	.	.	.	.	0
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1139	875	37	5	1	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.0 MEAN TP(SEC)= 2.5 NO. OF CASES= 1928.

STATION M31 45.65N 85.70W 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	
0.00-0.24	756	100	10	1	.	.	.	.	.	.	867
0.25-0.49	128	367	2	.	.	.	.	.	.	.	497
0.50-0.74	.	251	62	.	.	.	.	.	.	.	313
0.75-0.99	.	25	44	5	.	.	.	.	.	.	74
1.00-1.24	.	.	28	2	.	.	.	.	.	.	30
1.25-1.49	.	.	2	7	.	.	.	.	.	.	9
1.50-1.74	.	.	.	1	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	884	743	148	16	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.6 NO. OF CASES= 1681.

STATION M31 45.65N 85.70W 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	
0.00-0.24	915	124	19	2	.	.	.	.	.	.	1060
0.25-0.49	85	332	9	.	.	.	.	.	.	.	426
0.50-0.74	.	308	157	.	.	.	.	.	.	.	465
0.75-0.99	.	17	83	3	.	.	.	.	.	.	103
1.00-1.24	.	.	83	2	.	.	.	.	.	.	85
1.25-1.49	.	.	3	16	.	.	.	.	.	.	19
1.50-1.74	.	.	.	2	.	.	.	.	.	.	2
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1000	781	354	25	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.7 NO. OF CASES= 2024.

STATION M31 45.65N 85.70W 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	
0.00-0.24	1060	224	25	1	.	.	.	.	.	.	1310
0.25-0.49	157	765	17	.	.	.	.	.	.	.	939
0.50-0.74	.	517	404	1	.	.	.	.	.	.	922
0.75-0.99	.	18	219	1	1	.	.	.	.	.	239
1.00-1.24	.	.	269	2	.	.	.	.	.	.	271
1.25-1.49	.	.	12	64	.	.	.	.	.	.	76
1.50-1.74	.	.	.	11	.	.	.	.	.	.	11
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1217	1524	946	80	1	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 3.0 NO. OF CASES= 3530.

STATION M31 45.65N 85.70W 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	
0.00-0.24	1809	455	44	4	3	.	.	.	.	.	2315
0.25-0.49	279	1425	69	19	.	1	1	.	.	.	1794
0.50-0.74	.	804	855	27	2	1	.	.	.	.	1689
0.75-0.99	.	13	465	96	9	.	.	.	.	.	583
1.00-1.24	.	.	280	236	1	1	.	.	.	.	518
1.25-1.49	.	.	3	182	.	.	.	.	.	.	185
1.50-1.74	.	.	.	100	1	.	.	.	.	.	101
1.75-1.99	.	.	.	7	8	.	.	.	.	.	15
2.00-2.24	.	.	.	1	9	.	.	.	.	.	10
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2088	2697	1716	672	35	3	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.2 NO. OF CASES= 6755.

STATION M31 45.65N 85.70W 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	
0.00-0.24	2137	1601	1562	1010	126	2	.	.	.	.	6438
0.25-0.49	314	2911	1520	1714	467	12	.	.	.	.	6938
0.50-0.74	.	1311	2455	1943	930	59	.	.	.	.	6698
0.75-0.99	.	39	761	996	455	103	6	.	.	.	2360
1.00-1.24	.	.	465	853	544	121	23	1	.	.	2007
1.25-1.49	.	.	31	441	278	67	23	.	.	.	840
1.50-1.74	.	.	.	346	189	120	18	4	.	.	677
1.75-1.99	.	.	.	52	94	63	7	3	.	.	219
2.00-2.24	.	.	.	8	93	69	31	1	1	.	203
2.25-2.49	.	.	.	.	27	38	23	.	.	.	88
2.50-2.74	.	.	.	.	19	21	14	2	.	.	56
2.75-2.99	.	.	.	.	.	9	21	.	.	.	30
3.00-3.24	.	.	.	.	.	9	7	1	.	.	17
3.25-3.49	.	.	.	.	.	5	5	.	.	.	10
3.50+	.	.	.	.	.	.	16	4	1	.	21
TOTAL	2451	5862	6794	7363	3222	698	194	16	2	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.2 NO. OF CASES= 24899.

STATION M31 45.65N 85.70W 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	
0.00-0.24	1908	922	238	90	12	.	.	.	.	.	3171
0.25-0.49	285	2379	517	272	60	6	.	.	.	.	3519
0.50-0.74	.	1165	2049	819	227	10	.	.	.	.	4270
0.75-0.99	.	117	645	839	207	27	2	.	.	.	1837
1.00-1.24	.	.	385	823	458	51	3	.	.	.	1720
1.25-1.49	.	.	23	276	362	32	5	.	.	.	698
1.50-1.74	.	.	1	202	339	98	9	1	.	.	650
1.75-1.99	.	.	.	21	146	91	6	.	.	.	264
2.00-2.24	.	.	.	1	109	106	31	.	.	.	247
2.25-2.49	.	.	.	.	37	38	29	.	.	.	104
2.50-2.74	.	.	.	.	19	65	37	.	.	.	121
2.75-2.99	.	.	.	.	1	22	16	.	.	.	39
3.00-3.24	.	.	.	.	.	16	19	2	.	.	37
3.25-3.49	.	.	.	.	.	6	12	3	.	.	21
3.50+	.	.	.	.	.	.	38	12	1	.	51
TOTAL	2194	4583	3858	3343	1977	568	207	18	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.1 NO. OF CASES= 15688.

STATION M31 45.65N 85.70W 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	
0.00-0.24	1043	367	24	1	.	.	.	.	.	.	1435
0.25-0.49	147	1023	50	5	.	.	.	.	.	.	1225
0.50-0.74	.	618	838	57	8	.	.	.	.	.	1521
0.75-0.99	.	75	531	166	32	1	.	.	.	.	805
1.00-1.24	.	.	315	443	70	12	.	.	.	.	840
1.25-1.49	.	.	26	388	45	3	.	.	.	.	462
1.50-1.74	.	.	1	330	70	13	1	.	.	.	415
1.75-1.99	.	.	.	53	82	3	1	.	.	.	139
2.00-2.24	.	.	.	4	75	11	2	1	.	.	93
2.25-2.49	.	.	.	.	17	6	5	.	.	.	28
2.50-2.74	.	.	.	.	18	9	1	.	.	.	28
2.75-2.99	.	.	.	.	1	4	1	.	.	.	6
3.00-3.24	.	.	.	.	.	11	.	.	.	.	11
3.25-3.49	.	.	.	.	.	2	1	.	.	.	3
3.50+	.	.	.	.	.	1	2	.	.	.	3
TOTAL	1190	2083	1785	1447	418	76	14	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.7 NO. OF CASES= 6579.

STATION M31 45.65N 85.70W 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	
0.00-0.24	864	283	7	1	.	.	.	.	.	.	1155
0.25-0.49	105	699	31	.	.	.	.	.	.	.	835
0.50-0.74	.	443	604	6	.	.	.	.	.	.	1053
0.75-0.99	.	66	417	75	5	3	.	.	.	.	566
1.00-1.24	.	.	420	278	5	6	.	.	.	.	709
1.25-1.49	.	.	88	339	4	.	.	.	.	.	431
1.50-1.74	.	.	3	360	5	1	.	.	.	.	369
1.75-1.99	.	.	.	35	72	.	.	.	.	.	107
2.00-2.24	.	.	.	5	63	1	.	.	.	.	69
2.25-2.49	.	.	.	1	13	.	.	.	.	.	14
2.50-2.74	.	.	.	.	6	1	.	.	.	.	7
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	969	1491	1570	1100	173	15	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.6 NO. OF CASES= 4984.

STATION M31 45.65N 85.70W 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	
0.00-0.24	515	266	13	.	.	.	.	.	.	.	794
0.25-0.49	93	676	55	.	.	.	.	.	.	.	824
0.50-0.74	.	355	499	.	.	.	.	.	.	.	854
0.75-0.99	.	65	422	13	.	1	.	.	.	.	501
1.00-1.24	.	.	699	40	1	2	.	.	.	.	742
1.25-1.49	.	.	78	309	1	.	.	.	.	.	388
1.50-1.74	.	.	1	242	1	.	.	.	.	.	244
1.75-1.99	.	.	.	39	11	.	.	.	.	.	50
2.00-2.24	.	.	.	7	24	.	.	.	.	.	31
2.25-2.49	.	.	.	.	3	.	.	.	.	.	3
2.50-2.74	.	.	.	.	4	.	.	.	.	.	4
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	608	1362	1767	650	45	3	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 4157.

STATION M31 45.65N 85.70W 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	
0.00-0.24	701	119	11	1	.	.	.	.	.	.	832
0.25-0.49	65	517	32	.	.	.	.	.	.	.	614
0.50-0.74	.	343	372	.	.	.	.	.	.	.	715
0.75-0.99	.	43	276	2	.	.	.	.	.	.	321
1.00-1.24	.	.	521	10	.	.	.	.	.	.	531
1.25-1.49	.	.	27	234	.	.	.	.	.	.	261
1.50-1.74	.	.	.	146	.	.	.	.	.	.	146
1.75-1.99	.	.	.	25	.	.	.	.	.	.	25
2.00-2.24	.	.	.	1	9	.	.	.	.	.	10
2.25-2.49	.	.	.	.	4	.	.	.	.	.	4
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	766	1022	1239	419	14	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 3245.

STATION M31 45.65N 85.70W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

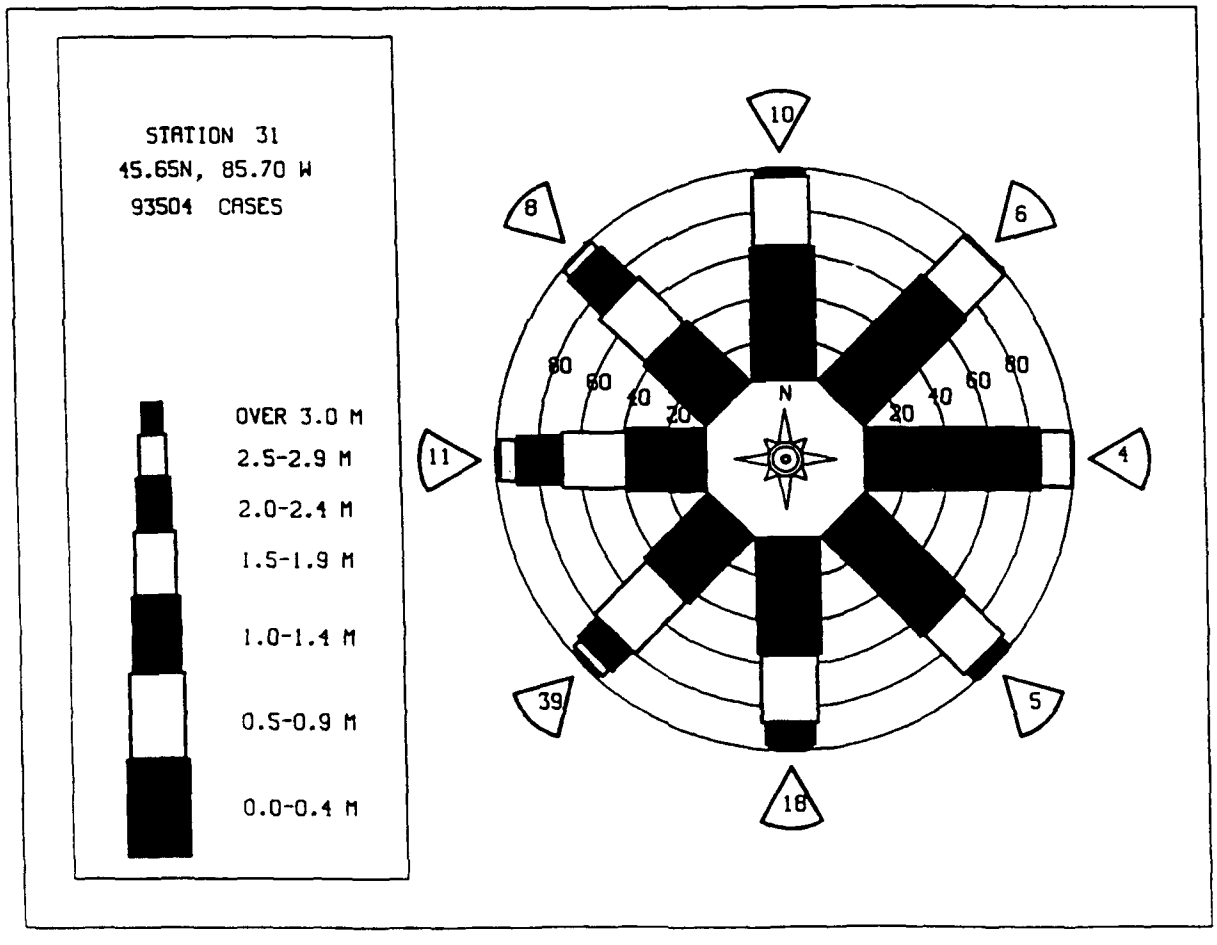
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	1068	196	19	2	1	.	.	.	.	.	1286
0.25-0.49	241	915	22	.	.	.	.	.	.	.	1178
0.50-0.74	.	839	285	.	.	.	.	.	.	.	1124
0.75-0.99	.	167	303	18	.	.	.	.	.	.	488
1.00-1.24	.	.	370	34	.	.	.	.	.	.	404
1.25-1.49	.	.	28	134	.	.	.	.	.	.	162
1.50-1.74	.	.	2	98	.	.	.	.	.	.	100
1.75-1.99	.	.	.	25	1	.	.	.	.	.	26
2.00-2.24	.	.	.	3	7	.	.	.	.	.	10
2.25-2.49	.	.	.	.	5	.	.	.	.	.	5
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1309	2117	1029	314	14	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 4482.

STATION M31 45.65N 85.70W 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	
0.00-0.24	1950	563	206	112	14	.	.	.	.	.	2845
0.25-0.49	280	1501	237	201	52	2	.	.	.	.	2273
0.50-0.74	.	1040	873	285	116	7	.	.	.	.	2321
0.75-0.99	.	114	458	224	71	13	.	.	.	.	880
1.00-1.24	.	.	402	274	108	19	2	.	.	.	805
1.25-1.49	.	.	36	239	69	10	2	.	.	.	356
1.50-1.74	.	.	2	185	60	23	2	.	.	.	272
1.75-1.99	.	.	.	26	41	15	1	.	.	.	83
2.00-2.24	.	.	.	3	39	18	6	.	.	.	66
2.25-2.49	.	.	.	.	11	8	5	.	.	.	24
2.50-2.74	.	.	.	.	6	9	5	.	.	.	20
2.75-2.99	.	.	.	.	.	3	3	.	.	.	6
3.00-3.24	.	.	.	.	.	3	2	.	.	.	5
3.25-3.49	.	.	.	.	.	1	1	.	.	.	2
3.50+	.	.	.	.	.	.	5	1	.	.	6
TOTAL	2230	3218	2214	1549	587	131	34	1	0	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M31 (45.65N 85.70W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.4	0.6	0.5	0.5	0.4	0.3	0.2	0.3	0.5	0.7	0.7	0.7	0.5
1957	0.9	0.6	0.5	0.5	0.5	0.4	0.3	0.4	0.5	0.5	1.1	1.0	0.6
1958	0.6	0.7	0.2	0.5	0.4	0.4	0.4	0.4	0.7	0.6	1.0	0.7	0.6
1959	0.7	0.8	0.5	0.5	0.5	0.3	0.4	0.4	0.7	0.6	0.8	0.8	0.6
1960	0.7	0.7	0.4	0.5	0.3	0.4	0.3	0.5	0.5	0.5	1.0	1.0	0.6
1961	0.7	0.6	0.6	0.4	0.4	0.4	0.3	0.4	0.6	0.7	0.8	0.8	0.6
1962	1.0	0.6	0.3	0.6	0.5	0.3	0.3	0.3	0.6	0.5	0.6	0.8	0.5
1963	0.7	0.8	0.6	0.5	0.4	0.3	0.3	0.4	0.4	0.5	0.8	0.6	0.5
1964	1.0	0.9	0.7	0.7	0.5	0.4	0.3	0.6	0.6	0.8	0.8	0.7	0.7
1965	0.9	1.0	0.5	0.4	0.5	0.4	0.3	0.4	0.6	0.8	0.8	0.8	0.6
1966	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.5	0.5	1.0	0.8	0.7	0.6
1967	0.9	0.9	0.6	0.6	0.4	0.3	0.3	0.4	0.5	0.7	0.8	0.7	0.6
1968	0.7	0.8	0.7	0.6	0.4	0.3	0.5	0.5	0.5	0.8	0.6	0.8	0.6
1969	0.8	0.5	0.6	0.4	0.4	0.4	0.3	0.5	0.5	0.7	0.6	0.7	0.5
1970	0.7	0.8	0.4	0.6	0.5	0.4	0.4	0.4	0.6	0.7	0.7	0.7	0.6
1971	0.9	0.9	0.5	0.5	0.4	0.3	0.4	0.4	0.5	0.6	0.7	0.7	0.6
1972	1.1	0.7	0.5	0.3	0.2	0.3	0.4	0.4	0.6	0.8	0.5	0.7	0.5
1973	0.9	0.6	0.5	0.5	0.4	0.3	0.4	0.5	0.5	0.6	0.8	0.7	0.6
1974	0.7	0.6	0.6	0.5	0.4	0.4	0.4	0.5	0.6	0.7	0.6	0.7	0.6
1975	0.8	0.7	0.5	0.4	0.3	0.4	0.4	0.4	0.5	0.7	0.7	0.7	0.5
1976	0.8	0.9	0.8	0.5	0.4	0.3	0.3	0.4	0.6	0.5	0.7	0.8	0.6
1977	0.8	0.9	0.6	0.4	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.6
1978	0.8	0.5	0.5	0.4	0.3	0.4	0.4	0.4	0.5	0.7	0.7	0.8	0.5
1979	0.7	0.5	0.5	0.4	0.3	0.3	0.3	0.4	0.6	0.9	1.2	1.1	0.6
1980	0.7	0.5	0.6	0.3	0.2	0.4	0.4	0.6	1.0	1.2	1.2	0.7	0.6
1981	0.5	0.8	0.6	0.5	0.4	0.4	0.3	0.4	0.7	0.9	0.8	0.6	0.6
1982	0.7	0.5	0.6	0.5	0.3	0.3	0.4	0.5	0.9	1.0	1.0	0.7	0.6
1983	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.5	1.0	0.8	0.8	0.6	0.5
1984	0.7	0.6	0.5	0.4	0.4	0.4	0.5	0.5	1.0	1.0	1.4	0.8	0.7
1985	0.6	0.7	0.6	0.5	0.4	0.3	0.4	0.3	0.5	0.5	0.5	0.6	0.5
1986	0.8	0.4	0.6	0.5	0.3	0.2	0.3	0.3	0.3	0.4	0.8	0.7	0.5
1987	0.6	0.5	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.5	0.5	0.7	0.4
MEAN	0.8	0.7	0.5	0.5	0.4	0.3	0.3	0.4	0.6	0.7	0.8	0.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M31 (45.65N 85.70W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.4	2.5	1.9	2.0	1.4	1.3	1.2	1.1	1.6	2.2	3.4	3.7
1957	3.3	2.3	3.1	3.3	2.6	1.8	2.1	1.7	2.1	2.1	4.4	3.0
1958	3.7	2.1	1.1	2.7	3.1	2.1	1.8	1.6	2.4	2.3	5.2	2.1
1959	1.8	3.1	2.6	2.2	1.9	1.6	1.5	1.6	2.9	2.7	2.1	3.2
1960	2.3	2.5	1.9	1.6	1.4	1.2	1.5	2.2	1.6	2.7	2.9	3.4
1961	2.5	2.2	2.2	1.5	1.3	1.4	1.2	1.6	1.9	2.5	2.5	2.6
1962	3.3	1.8	1.5	1.9	1.9	1.3	1.3	1.3	1.9	1.9	2.7	2.7
1963	2.6	2.5	1.8	3.4	1.4	1.5	1.3	1.3	1.3	1.7	2.2	3.2
1964	3.1	3.5	2.4	4.0	2.0	1.9	0.9	1.8	2.8	3.2	2.9	1.8
1965	2.5	3.3	2.1	1.8	1.5	1.1	1.2	1.3	2.3	2.2	3.6	3.4
1966	2.7	1.9	4.0	1.3	1.6	1.2	1.4	1.4	1.6	3.7	1.8	2.5
1967	3.1	2.4	1.7	2.2	1.5	1.1	1.2	1.7	1.8	2.0	1.7	1.9
1968	2.0	2.8	1.6	2.9	1.4	1.1	1.5	2.0	1.4	1.8	1.8	2.6
1969	1.8	1.6	1.6	1.2	1.0	2.2	1.1	2.0	1.5	2.2	1.6	2.1
1970	1.9	2.5	1.6	2.3	2.1	1.2	1.3	1.4	2.4	2.3	2.7	3.0
1971	2.6	3.4	1.9	1.4	1.4	1.1	1.5	1.8	2.0	2.7	2.3	2.2
1972	3.2	1.8	2.0	1.3	1.0	1.1	1.2	1.2	2.1	2.8	1.7	2.0
1973	2.4	1.7	2.4	1.6	1.1	1.3	1.4	1.4	1.8	2.4	2.0	1.9
1974	3.0	1.7	2.1	1.5	1.2	1.0	1.0	1.6	2.2	1.9	1.6	2.0
1975	5.2	2.2	1.6	1.6	1.2	1.3	1.2	1.4	1.5	2.1	3.1	2.6
1976	2.4	2.9	2.4	1.3	2.1	1.3	1.2	1.9	2.3	2.0	1.7	2.5
1977	1.9	2.1	2.6	1.5	1.2	1.3	1.5	2.3	2.4	1.9	3.1	2.2
1978	2.9	1.5	1.9	1.7	1.7	1.2	1.0	1.2	1.9	2.1	2.6	2.4
1979	1.5	1.6	1.7	1.5	1.2	1.4	1.1	1.3	1.5	3.2	4.1	4.4
1980	3.3	2.5	2.1	1.2	1.2	1.2	1.4	1.5	3.5	4.0	3.8	2.0
1981	1.9	2.2	1.7	1.5	1.9	2.3	1.5	1.5	3.7	3.8	3.5	1.7
1982	2.9	2.1	3.7	1.6	0.9	1.1	1.6	2.0	2.4	3.1	2.8	2.6
1983	1.6	2.0	1.1	2.0	1.0	0.8	1.1	1.7	2.8	3.0	3.6	1.9
1984	2.1	1.7	2.6	2.0	2.1	1.8	1.6	2.4	3.1	4.1	4.0	4.0
1985	1.6	2.6	2.9	2.6	1.7	1.6	2.2	1.2	1.7	2.0	2.2	1.9
1986	3.6	1.4	2.0	1.5	1.7	1.3	1.4	1.3	1.3	2.5	3.3	2.4
1987	1.8	1.8	1.5	1.1	1.0	0.9	1.3	1.1	1.2	1.8	1.9	2.6

32 YR. STATISTICS FOR WIS STATION M31

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.6
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	5.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	216.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		71022718

STATION M32 45.50N 85.50W 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	
0.00-0.24	1648	284	18	1	.	.	.	.	.	.	1951
0.25-0.49	443	1394	91	1	.	.	.	.	.	.	1929
0.50-0.74	.	1478	91	25	.	.	.	.	.	.	1594
0.75-0.99	.	702	225	77	.	.	.	.	.	.	1004
1.00-1.24	.	.	106	77	3	.	.	.	.	.	186
1.25-1.49	.	.	37	5	5	.	.	.	.	.	47
1.50-1.74	.	.	14	8	4	.	.	.	.	.	26
1.75-1.99	.	.	.	5	.	.	.	.	.	.	5
2.00-2.24	.	.	.	2	.	.	.	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2091	3858	582	201	12	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 2.8 NO. OF CASES= 6316.

STATION M32 45.50N 85.50W 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	
0.00-0.24	1433	217	16	4	.	.	.	.	.	.	1670
0.25-0.49	218	595	34	.	.	.	.	.	.	.	847
0.50-0.74	.	801	38	6	.	.	.	.	.	.	845
0.75-0.99	.	108	87	11	.	.	.	.	.	.	206
1.00-1.24	.	.	26	4	.	.	.	.	.	.	30
1.25-1.49	.	.	6	.	.	.	.	.	.	.	6
1.50-1.74	.	.	.	2	.	.	.	.	.	.	2
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1651	1721	207	28	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 2.6 NO. OF CASES= 3378.

STATION M32 45.50N 85.50W 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	
0.00-0.24	1786	223	17	1	.	.	.	.	.	.	2027
0.25-0.49	103	582	10	.	.	.	.	.	.	.	695
0.50-0.74	.	956	81	1	.	.	.	.	.	.	1038
0.75-0.99	.	2	170	.	.	.	.	.	.	.	172
1.00-1.24	.	.	53	.	.	.	.	.	.	.	53
1.25-1.49	.	.	12	.	.	.	.	.	.	.	12
1.50-1.74	.	.	.	3	.	.	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1889	1763	343	5	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.6 NO. OF CASES= 3745.

STATION M32 45.50N 85.50W 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	
0.00-0.24	996	127	14	.	.	.	.	.	.	.	1137
0.25-0.49	49	423	2	.	.	.	.	.	.	.	474
0.50-0.74	.	632	77	.	.	.	.	.	.	.	709
0.75-0.99	.	.	82	.	.	.	.	.	.	.	82
1.00-1.24	.	.	43	1	.	.	.	.	.	.	44
1.25-1.49	.	.	2	.	.	.	.	.	.	.	2
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1045	1182	220	1	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 2.7 NO. OF CASES= 2293.

STATION M32 45.50N 85.50W 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	
0.00-0.24	967	141	5	2	.	.	.	.	.	.	1115
0.25-0.49	59	362	2	1	.	.	.	.	.	.	424
0.50-0.74	.	488	116	.	.	.	.	.	.	.	604
0.75-0.99	.	.	80	.	.	.	.	.	.	.	80
1.00-1.24	.	.	66	.	.	.	.	.	.	.	66
1.25-1.49	.	.	5	2	.	.	.	.	.	.	7
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1026	991	274	5	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 2.7 NO. OF CASES= 2152.

STATION M32 45.50N 85.50W 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	
0.00-0.24	758	66	12	1	.	.	.	.	.	.	837
0.25-0.49	62	343	3	.	.	.	.	.	.	.	408
0.50-0.74	.	516	77	.	.	.	.	.	.	.	593
0.75-0.99	.	.	69	.	.	.	.	.	.	.	69
1.00-1.24	.	.	37	.	.	.	.	.	.	.	37
1.25-1.49	.	.	1	1	.	.	.	.	.	.	2
1.50-1.74	.	.	.	1	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	820	925	199	3	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.7 NO. OF CASES= 1824.

STATION M32 45.50N 85.50W 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	
0.00-0.24	964	113	6	2	.	.	.	.	.	.	1085
0.25-0.49	66	445	2	.	.	.	.	.	.	.	513
0.50-0.74	.	669	29	.	.	.	.	.	.	.	698
0.75-0.99	.	.	70	.	.	.	.	.	.	.	70
1.00-1.24	.	.	9	.	.	.	.	.	.	.	9
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1030	1227	117	2	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.3 MEAN TP(SEC)= 2.6 NO. OF CASES= 2227.

STATION M32 45.50N 85.50W 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	
0.00-0.24	1075	177	14	.	.	.	.	.	.	.	1266
0.25-0.49	134	643	.	.	.	.	.	.	.	.	777
0.50-0.74	.	1018	52	.	.	.	.	.	.	.	1070
0.75-0.99	.	3	100	.	.	.	.	.	.	.	103
1.00-1.24	.	.	28	.	.	.	.	.	.	.	28
1.25-1.49	.	.	2	1	.	.	.	.	.	.	3
1.50-1.74	.	.	.	1	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1209	1841	196	2	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.7 NO. OF CASES= 3043.

STATION M32 45.50N 85.50W 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	
0.00-0.24	1997	279	28		1	.	.	.	.	.	2305
0.25-0.49	228	1014	6	1	1	.	.	.	.	.	1250
0.50-0.74	.	1497	244	.	.	.	.	.	.	.	1741
0.75-0.99	.	20	303	.	.	.	.	.	.	.	323
1.00-1.24	.	.	193	.	.	.	.	.	.	.	193
1.25-1.49	.	.	26	8	.	.	.	.	.	.	34
1.50-1.74	.	.	3	4	.	.	.	.	.	.	7
1.75-1.99	.	.	.	3	.	.	.	.	.	.	3
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2225	2810	803	16	2	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 2.8 NO. OF CASES= 5484.

STATION M32 45.50N 85.50W 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	
0.00-0.24	1945	865	945	622	93	4	.	.	.	.	4474
0.25-0.49	412	1934	707	961	328	9	.	.	.	.	4351
0.50-0.74	.	1963	1095	429	325	47	6	.	.	.	3865
0.75-0.99	.	24	911	221	146	27	5	1	.	.	1335
1.00-1.24	.	.	775	186	134	29	8	1	.	.	1133
1.25-1.49	.	.	165	126	108	20	7	.	.	.	426
1.50-1.74	.	.	23	118	79	40	3	1	.	.	264
1.75-1.99	.	.	.	12	26	29	6	.	.	.	73
2.00-2.24	.	.	.	6	22	18	12	.	.	.	58
2.25-2.49	.	.	.	.	10	5	3	.	.	.	18
2.50-2.74	.	.	.	.	5	8	7	.	.	.	20
2.75-2.99	.	.	.	.	.	3	4	.	.	.	7
3.00-3.24	.	.	.	.	.	4	4	1	.	.	9
3.25-3.49	.	.	.	.	.	1	2	1	.	.	4
3.50+	.	.	.	.	.	.	4	1	.	.	5
TOTAL	2357	4786	4621	2681	1276	244	71	6	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 15025.

STATION M32 45.50N 85.50W 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	
0.00-0.24	1812	1253	186	72	13	.	.	.	.	.	3336
0.25-0.49	324	3077	979	284	52	.	.	.	.	.	4716
0.50-0.74	.	1360	2851	1490	157	17	.	.	.	.	5875
0.75-0.99	.	38	855	1116	300	19	6	.	.	.	2334
1.00-1.24	.	.	674	966	568	54	8	.	.	.	2270
1.25-1.49	.	.	83	370	390	58	6	1	.	.	908
1.50-1.74	.	.	5	288	284	128	10	.	.	.	715
1.75-1.99	.	.	.	37	125	[illegible]	9	1	.	.	282
2.00-2.24	.	.	.	4	103	39	8	1	.	.	245
2.25-2.49	.	.	.	.	52	34	24	.	.	.	110
2.50-2.74	.	.	.	.	11	47	31	.	.	.	89
2.75-2.99	.	.	.	.	5	21	13	2	.	.	41
3.00-3.24	.	.	.	.	.	14	22	5	.	.	41
3.25-3.49	.	.	.	.	.	4	14	2	.	.	20
3.50+	.	.	.	.	.	1	22	10	4	.	37
TOTAL	2136	5728	5633	4627	2060	606	203	22	4	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 19682.

STATION M32 45.50N 85.50W 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	
0.00-0.24	1088	519	24	2	.	.	.	.	.	.	1633
0.25-0.49	163	1479	148	27	2	1	.	.	.	.	1820
0.50-0.74	.	689	1452	220	11	.	.	.	.	.	2372
0.75-0.99	.	23	465	514	13	2	.	.	.	.	1017
1.00-1.24	.	.	276	663	166	2	.	.	.	.	1107
1.25-1.49	.	.	17	226	222	2	.	.	.	.	467
1.50-1.74	.	.	1	142	299	21	.	.	.	.	463
1.75-1.99	.	.	.	6	129	38	2	.	.	.	175
2.00-2.24	.	.	.	2	132	51	5	.	.	.	190
2.25-2.49	.	.	.	.	33	23	12	.	.	.	68
2.50-2.74	.	.	.	.	8	36	9	.	.	.	53
2.75-2.99	.	.	.	.	.	21	3	.	.	.	24
3.00-3.24	.	.	.	.	.	17	6	.	.	.	23
3.25-3.49	.	.	.	.	.	1	4	.	.	.	5
3.50+	.	.	.	.	.	.	13	4	.	.	17
TOTAL	1251	2710	2383	1802	1015	215	54	4	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 8842.

STATION M32 45.50N 85.50W 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	
0.00-0.24	860	328	9	.	.	.	.	.	.	.	1197
0.25-0.49	109	971	109	.	.	.	.	.	.	.	1189
0.50-0.74	.	426	859	84	1	.	.	.	.	.	1370
0.75-0.99	.	45	315	295	5	.	.	.	.	.	660
1.00-1.24	.	.	227	536	42	1	.	.	.	.	806
1.25-1.49	.	.	13	223	135	.	.	.	.	.	371
1.50-1.74	.	.	.	150	216	1	.	.	.	.	367
1.75-1.99	.	.	.	2	135	1	.	.	.	.	138
2.00-2.24	.	.	.	.	114	4	.	.	.	.	118
2.25-2.49	.	.	.	.	36	8	.	.	.	.	44
2.50-2.74	.	.	.	.	2	32	.	.	.	.	34
2.75-2.99	.	.	.	.	.	7	.	.	.	.	7
3.00-3.24	.	.	.	.	.	4	.	.	.	.	4
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	969	1770	1532	1290	686	59	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 5911.

STATION M32 45.50N 85.50W 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	
0.00-0.24	520	296	6	.	1	.	.	.	.	.	823
0.25-0.49	87	853	131	.	.	.	.	.	.	.	1071
0.50-0.74	.	393	652	114	1	.	.	.	.	.	1160
0.75-0.99	.	62	305	236	4	1	.	.	.	.	608
1.00-1.24	.	.	211	465	8	1	.	.	.	.	685
1.25-1.49	.	.	10	283	25	.	.	.	.	.	318
1.50-1.74	.	.	1	380	53	.	.	.	.	.	434
1.75-1.99	.	.	.	17	105	.	.	.	.	.	122
2.00-2.24	.	.	.	.	89	1	.	.	.	.	90
2.25-2.49	.	.	.	.	18	1	.	.	.	.	19
2.50-2.74	.	.	.	.	6	2	.	.	.	.	8
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	607	1604	1316	1495	310	9	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 5007.

STATION M32 45.50N 85.50W 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	
0.00-0.24	647	124	12	2	.	.	.	.	.	.	785
0.25-0.49	64	510	126	1	.	.	.	.	.	.	701
0.50-0.74	.	356	429	69	.	.	.	.	.	.	854
0.75-0.99	.	68	253	143	.	.	.	.	.	.	464
1.00-1.24	.	.	172	300	2	2	.	.	.	.	476
1.25-1.49	.	.	25	275	.	.	.	.	.	.	300
1.50-1.74	.	.	3	317	10	.	.	.	.	.	330
1.75-1.99	.	.	.	12	83	.	.	.	.	.	95
2.00-2.24	.	.	.	.	57	.	.	.	.	.	57
2.25-2.49	.	.	.	.	11	.	.	.	.	.	11
2.50-2.74	.	.	.	.	5	.	.	.	.	.	5
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	711	1058	1020	1119	168	6	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.8 NO. OF CASES= 3828.

STATION M32 45.50N 85.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

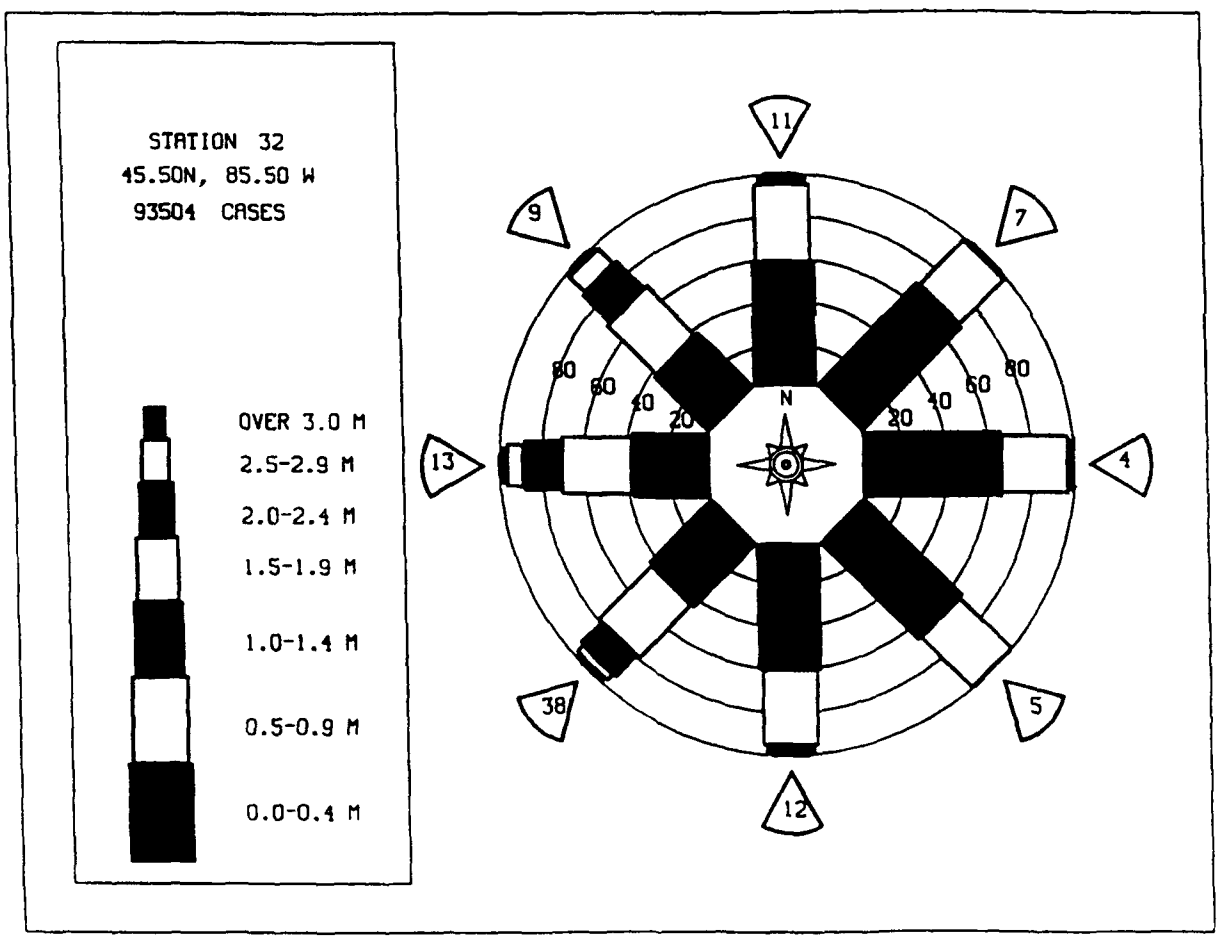
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	991	183	9	.	.	.	.	.	.	.	1183
0.25-0.49	229	827	67	.	.	.	.	.	.	.	1123
0.50-0.74	.	747	387	37	.	.	.	.	.	.	1171
0.75-0.99	.	224	309	110	.	.	.	.	.	.	643
1.00-1.24	.	.	186	211	.	.	.	.	.	.	397
1.25-1.49	.	.	25	164	4	.	.	.	.	.	193
1.50-1.74	.	.	6	185	11	.	.	.	.	.	202
1.75-1.99	.	.	.	20	63	.	.	.	.	.	83
2.00-2.24	.	.	.	2	45	1	.	.	.	.	48
2.25-2.49	.	.	.	.	7	.	.	.	.	.	7
2.50-2.74	.	.	.	.	9	.	.	.	.	.	9
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	3	.	.	.	.	3
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1220	1981	989	729	139	6	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 4747.

STATION M32 45.50N 85.50W 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	
0.00-0.24	1949	520	132	71	10	.	.	.	.	.	2682
0.25-0.49	275	1546	242	127	38	1	.	.	.	.	2229
0.50-0.74	.	1399	853	248	49	6	.	.	.	.	2555
0.75-0.99	.	132	460	272	47	5	1	.	.	.	917
1.00-1.24	.	.	309	341	92	9	1	.	.	.	752
1.25-1.49	.	.	43	168	89	8	1	.	.	.	309
1.50-1.74	.	.	5	160	95	19	1	.	.	.	280
1.75-1.99	.	.	.	11	66	17	1	.	.	.	95
2.00-2.24	.	.	.	1	56	17	5	.	.	.	79
2.25-2.49	.	.	.	.	17	7	4	.	.	.	28
2.50-2.74	.	.	.	.	4	12	4	.	.	.	20
2.75-2.99	.	.	.	.	.	6	2	.	.	.	8
3.00-3.24	.	.	.	.	.	4	3	.	.	.	7
3.25-3.49	.	.	.	.	.	.	2	.	.	.	2
3.50+	.	.	.	.	.	.	4	1	.	.	5
TOTAL	2224	3597	2044	1399	563	111	29	1	0	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 3.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M32 (45.50N 85.50W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													MEAN
1956	0.4	0.6	0.5	0.5	0.5	0.3	0.2	0.3	0.5	0.7	0.8	0.8	0.5
1957	0.9	0.7	0.5	0.6	0.5	0.4	0.4	0.4	0.5	0.6	1.2	1.1	0.6
1958	0.7	0.8	0.2	0.5	0.5	0.4	0.4	0.5	0.7	0.7	1.0	0.8	0.6
1959	0.8	0.8	0.5	0.5	0.5	0.4	0.4	0.4	0.7	0.7	0.8	0.8	0.6
1960	0.7	0.7	0.4	0.5	0.3	0.4	0.3	0.5	0.5	0.6	1.0	1.0	0.6
1961	0.7	0.6	0.6	0.4	0.4	0.4	0.3	0.4	0.6	0.7	0.8	0.9	0.6
1962	1.0	0.6	0.4	0.6	0.5	0.3	0.3	0.4	0.6	0.5	0.6	0.9	0.6
1963	0.8	0.8	0.6	0.6	0.4	0.3	0.3	0.4	0.4	0.5	0.8	0.7	0.6
1964	1.0	0.9	0.8	0.7	0.5	0.4	0.3	0.6	0.6	0.8	0.8	0.7	0.7
1965	0.9	1.1	0.5	0.4	0.5	0.4	0.4	0.4	0.6	0.8	0.8	0.9	0.6
1966	0.8	0.7	0.8	0.5	0.4	0.4	0.4	0.5	0.6	1.0	0.8	0.7	0.6
1967	0.9	0.9	0.6	0.6	0.4	0.3	0.3	0.5	0.5	0.7	0.8	0.8	0.6
1968	0.7	0.8	0.7	0.6	0.4	0.3	0.5	0.5	0.5	0.8	0.6	0.8	0.6
1969	0.8	0.6	0.6	0.4	0.4	0.4	0.3	0.5	0.5	0.7	0.6	0.7	0.5
1970	0.7	0.9	0.4	0.6	0.5	0.4	0.4	0.4	0.6	0.7	0.7	0.7	0.6
1971	1.0	0.9	0.6	0.5	0.4	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.6
1972	1.1	0.7	0.6	0.3	0.2	0.3	0.4	0.4	0.6	0.8	0.5	0.7	0.6
1973	0.9	0.6	0.5	0.5	0.4	0.3	0.4	0.5	0.6	0.6	0.8	0.7	0.6
1974	0.7	0.6	0.7	0.5	0.4	0.4	0.4	0.5	0.6	0.7	0.6	0.7	0.6
1975	0.8	0.7	0.5	0.4	0.3	0.4	0.4	0.4	0.5	0.7	0.7	0.7	0.6
1976	0.8	0.9	0.8	0.5	0.4	0.3	0.4	0.4	0.6	0.6	0.8	0.8	0.6
1977	0.9	0.9	0.6	0.4	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.6
1978	0.9	0.5	0.5	0.5	0.3	0.4	0.4	0.4	0.6	0.6	0.7	0.8	0.6
1979	0.7	0.5	0.5	0.4	0.3	0.3	0.3	0.4	0.6	0.8	1.1	1.0	0.6
1980	0.7	0.5	0.6	0.3	0.2	0.3	0.3	0.6	0.9	1.1	1.1	0.7	0.6
1981	0.6	0.8	0.6	0.5	0.3	0.4	0.3	0.4	0.7	0.8	0.8	0.6	0.6
1982	0.8	0.6	0.6	0.6	0.3	0.3	0.4	0.5	0.8	0.9	0.9	0.7	0.6
1983	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.9	0.8	0.8	0.6	0.5
1984	0.7	0.6	0.5	0.4	0.4	0.4	0.4	0.5	0.9	0.9	1.3	0.8	0.6
1985	0.7	0.7	0.6	0.5	0.4	0.3	0.3	0.4	0.5	0.5	0.5	0.7	0.5
1986	0.8	0.4	0.6	0.5	0.3	0.2	0.2	0.3	0.3	0.4	0.8	0.7	0.5
1987	0.6	0.5	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.5	0.5	0.7	0.4
MEAN	0.8	0.7	0.6	0.5	0.4	0.4	0.4	0.4	0.6	0.7	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M32 (45.50N 85.50W)

	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR												
1956	1.5	2.9	2.4	2.1	1.7	1.4	1.3	1.2	2.0	2.6	4.2	4.7
1957	3.0	2.6	3.3	3.6	2.8	1.9	2.4	1.8	2.3	2.2	4.7	3.2
1958	3.8	4.3	1.1	2.9	3.3	2.4	1.8	1.8	2.5	2.4	5.2	2.4
1959	2.0	3.0	2.8	2.3	1.9	1.4	1.5	1.6	2.8	2.8	2.2	3.3
1960	2.2	2.6	2.1	1.6	1.5	1.4	1.7	2.3	2.0	2.7	2.8	3.7
1961	2.7	2.5	2.2	1.6	1.6	1.4	1.2	1.7	2.2	2.3	2.4	2.5
1962	3.5	2.0	1.9	1.9	1.8	1.3	1.4	1.5	2.0	2.4	2.6	2.6
1963	2.8	2.9	2.2	3.4	1.5	1.6	1.2	1.5	1.4	1.8	2.5	3.3
1964	3.5	3.4	2.2	4.1	2.1	1.8	1.1	1.7	2.4	3.1	3.0	2.0
1965	2.7	3.2	2.5	1.9	1.6	1.2	1.2	1.4	2.3	2.2	3.5	3.5
1966	2.9	2.2	4.0	1.4	1.9	1.3	1.5	1.7	1.9	3.6	2.2	2.7
1967	3.0	2.3	1.7	2.4	1.4	1.1	1.4	1.9	1.9	2.0	2.0	2.1
1968	2.3	3.3	1.8	3.0	1.4	1.2	1.7	2.0	1.5	1.9	2.0	2.8
1969	2.0	1.9	1.9	1.3	1.1	2.4	1.2	2.0	1.7	2.2	1.7	2.2
1970	2.0	2.5	1.7	2.4	2.1	1.3	1.4	1.5	2.5	2.2	2.9	3.1
1971	2.7	5.2	2.2	1.7	1.3	0.8	1.7	1.7	1.7	2.7	2.5	2.3
1972	2.9	2.3	2.3	1.3	1.0	1.2	1.2	1.2	1.8	2.8	1.7	2.3
1973	2.5	2.0	2.5	1.5	1.2	1.5	1.4	1.6	2.0	2.2	2.0	2.0
1974	2.9	2.1	2.0	1.3	1.2	1.1	1.1	1.6	2.1	1.9	1.6	2.1
1975	4.9	2.6	1.9	1.6	1.4	1.4	1.2	1.4	1.5	2.2	2.7	2.4
1976	2.2	3.1	2.7	1.5	2.1	1.1	1.2	2.4	2.1	2.0	2.1	2.4
1977	2.3	2.2	2.5	1.7	1.2	1.2	1.5	2.1	2.3	2.1	2.8	2.4
1978	3.3	1.6	2.1	1.8	1.7	1.2	1.0	1.4	2.0	1.9	2.3	2.4
1979	1.8	1.6	2.0	1.5	1.0	1.4	1.2	1.5	1.6	2.5	3.8	3.8
1980	3.0	2.5	2.3	1.2	1.3	1.2	1.4	1.3	3.2	3.9	3.3	2.2
1981	2.0	2.0	1.8	1.7	1.7	2.1	1.3	1.4	3.8	3.1	3.3	1.8
1982	2.8	2.0	3.5	1.8	1.1	1.1	1.5	1.9	2.3	2.8	2.7	2.6
1983	1.8	1.9	1.3	1.7	1.1	0.8	1.1	1.5	2.6	3.2	3.6	2.3
1984	2.1	1.8	2.5	2.1	2.2	1.6	1.4	2.0	3.1	3.8	3.9	3.9
1985	1.9	2.6	2.9	2.5	1.7	1.6	2.0	1.2	1.8	2.1	2.1	2.0
1986	3.9	1.3	2.2	1.7	1.7	1.2	1.4	1.6	1.3	2.5	3.4	2.6
1987	1.9	1.8	1.7	1.0	1.1	1.0	1.2	1.3	1.2	1.8	1.9	2.4

32 YR. STATISTICS FOR WIS STATION M32

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.5
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)	1.2
LARGEST WAVE HS	(METERS)	5.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	210.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58111821

STATION M33 45.48N 85.30W 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	
0.00-0.24	1992	283	26	3	.	.	.	.	.	.	2304
0.25-0.49	516	1388	66	6	.	.	.	.	.	.	1976
0.50-0.74	.	2002	8	24	.	.	.	.	.	.	2034
0.75-0.99	.	352	212	19	2	.	.	.	.	.	585
1.00-1.24	.	.	87	5	7	.	.	.	.	.	99
1.25-1.49	.	.	27	.	1	.	.	.	.	.	28
1.50-1.74	.	.	13	10	1	.	.	.	.	.	24
1.75-1.99	.	.	.	3	.	.	.	.	.	.	3
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2508	4025	439	70	11	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 2.7 NO. OF CASES= 6605.

STATION M33 45.48N 85.30W 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	
0.00-0.24	1797	255	34	2	.	.	.	.	.	.	2088
0.25-0.49	232	565	19	2	.	.	.	.	.	.	818
0.50-0.74	.	798	24	5	.	.	.	.	.	.	827
0.75-0.99	.	53	73	4	.	.	.	.	.	.	130
1.00-1.24	.	.	22	.	.	.	.	.	.	.	22
1.25-1.49	.	.	6	.	.	.	.	.	.	.	6
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2029	1671	178	13	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 2.5 NO. OF CASES= 3645.

STATION M33 45.48N 85.30W 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	
0.00-0.24	1879	222	38	1	.	.	.	.	.	.	2140
0.25-0.49	90	550	2	.	.	.	.	.	.	.	642
0.50-0.74	.	914	80	1	.	.	.	.	.	.	995
0.75-0.99	.	.	160	.	.	.	.	.	.	.	160
1.00-1.24	.	.	44	.	.	.	.	.	.	.	44
1.25-1.49	.	.	9	.	.	.	.	.	.	.	9
1.50-1.74	.	.	.	3	.	.	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1969	1686	333	5	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.6 NO. OF CASES= 3739.

STATION M33 45.48N 85.30W 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	
0.00-0.24	1210	143	24	4	.	.	.	.	.	.	1381
0.25-0.49	140	439	1	.	.	.	.	.	.	.	580
0.50-0.74	.	484	22	.	.	.	.	.	.	.	506
0.75-0.99	.	8	20	.	1	.	.	.	.	.	29
1.00-1.24	.	.	5	.	.	.	.	.	.	.	5
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1350	1074	73	4	1	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.3 MEAN TP(SEC)= 2.5 NO. OF CASES= 2344.

STATION M33 45.48N 85.30W 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	
0.00-0.24	1112	154	16	4	.	.	.	.	.	.	1286
0.25-0.49	250	479	1	1	.	.	.	.	.	.	731
0.50-0.74	.	316	.	.	.	.	.	.	.	.	316
0.75-0.99	.	6	8	.	.	.	.	.	.	.	14
1.00-1.24	.	.	1	.	.	.	.	.	.	.	1
1.25-1.49	.	.	.	.	.	.	.	.	.	.	0
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1362	955	26	5	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.0 MEAN TP(SEC)= 2.4 NO. OF CASES= 2198.

STATION M33 45.48N 85.30W 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	
0.00-0.24	899	97	9	.	.	.	.	.	.	.	1005
0.25-0.49	165	405	1	.	.	.	.	.	.	.	571
0.50-0.74	.	463	13	.	.	.	.	.	.	.	476
0.75-0.99	.	6	28	.	.	.	.	.	.	.	34
1.00-1.24	.	.	6	.	.	.	.	.	.	.	6
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1064	971	58	0	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.3 MEAN TP(SEC)= 2.5 NO. OF CASES= 1962.

STATION M33 45.48N 85.30W 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	
0.00-0.24	1236	157	21	.	3	.	.	.	.	.	1417
0.25-0.49	78	459	.	.	.	.	.	.	.	.	537
0.50-0.74	.	710	47	.	.	.	.	.	.	.	757
0.75-0.99	.	.	60	.	.	.	.	.	.	.	60
1.00-1.24	.	.	9	.	.	.	.	.	.	.	9
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1314	1326	138	0	3	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.3 MEAN TP(SEC)= 2.6 NO. OF CASES= 2604.

STATION M33 45.48N 85.30W 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	
0.00-0.24	1389	197	28	.	.	.	.	.	.	.	1614
0.25-0.49	213	690	.	.	.	.	.	.	.	.	903
0.50-0.74	.	946	48	.	.	.	.	.	.	.	994
0.75-0.99	.	4	63	.	.	.	.	.	.	.	67
1.00-1.24	.	.	25	.	.	.	.	.	.	.	25
1.25-1.49	.	.	4	.	.	.	.	.	.	.	4
1.50-1.74	.	.	1	.	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1602	1837	169	0	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.6 NO. OF CASES= 3379.

STATION M33 45.48N 85.30W 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	
0.00-0.24	2154	289	24	4	1	.	.	.	.	.	2472
0.25-0.49	507	1067	.	.	.	.	.	.	.	.	1574
0.50-0.74	.	900	5	.	.	.	.	.	.	.	905
0.75-0.99	.	60	45	.	.	.	.	.	.	.	105
1.00-1.24	.	.	9	.	.	.	.	.	.	.	9
1.25-1.49	.	.	2	.	.	.	.	.	.	.	2
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2661	2318	85	4	1	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 2.5 NO. OF CASES= 4745.

STATION M33 45.48N 85.30W 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	
0.00-0.24	1900	659	589	493	97	6	.	.	.	.	3744
0.25-0.49	694	1646	287	283	98	11	1	.	.	.	3020
0.50-0.74	.	1465	58	40	26	1	2	.	.	.	1592
0.75-0.99	.	537	89	19	10	9	1	.	.	.	665
1.00-1.24	.	.	55	36	12	5	.	.	.	.	108
1.25-1.49	.	.	5	10	7	1	.	.	.	.	23
1.50-1.74	.	.	3	14	20	.	.	.	.	.	37
1.75-1.99	.	.	1	1	4	1	.	.	.	.	7
2.00-2.24	.	.	.	1	6	4	.	.	.	.	11
2.25-2.49	.	.	.	.	1	2	.	.	.	.	3
2.50-2.74	.	.	.	.	.	2	3	.	.	.	5
2.75-2.99	.	.	.	.	.	1	1	.	.	.	2
3.00-3.24	.	.	.	.	.	.	2	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	1	1	.	.	2
TOTAL	2594	4307	1087	897	281	43	11	1	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 8640.

STATION M33 45.48N 85.30W 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	
0.00-0.24	1850	1976	407	97	21	.	.	.	.	.	4351
0.25-0.49	385	2532	2129	973	81	3	.	.	.	.	6103
0.50-0.74	.	1646	1594	1602	432	27	2	.	.	.	5303
0.75-0.99	.	339	847	512	439	68	4	.	.	.	2209
1.00-1.24	.	.	557	530	396	151	20	.	.	.	1654
1.25-1.49	.	.	111	243	141	81	13	.	.	.	589
1.50-1.74	.	.	11	201	126	56	19	.	.	.	413
1.75-1.99	.	.	.	29	62	25	16	1	.	.	133
2.00-2.24	.	.	.	9	84	37	9	1	.	.	140
2.25-2.49	.	.	.	1	16	23	2	1	.	.	43
2.50-2.74	.	.	.	.	6	23	11	2	.	.	42
2.75-2.99	.	.	.	.	1	8	5	.	.	.	14
3.00-3.24	.	.	.	.	.	6	6	1	.	.	13
3.25-3.49	.	.	.	.	.	1	2	.	.	.	3
3.50+	.	.	.	.	.	.	7	3	4	1	15
TOTAL	2235	6493	5656	4197	1805	509	116	9	4	1	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 19682.

STATION M33 45.48N 85.30W 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	
0.00-0.24	1351	968	38	2	1	1	.	.	.	.	2361
0.25-0.49	196	1992	595	37	1	.	.	.	.	.	2821
0.50-0.74	.	732	1775	611	6	.	.	.	.	.	3124
0.75-0.99	.	21	515	634	62	.	.	.	.	.	1232
1.00-1.24	.	.	353	476	306	5	.	.	.	.	1142
1.25-1.49	.	.	42	191	218	14	.	.	.	.	465
1.50-1.74	.	.	1	135	205	51	4	.	.	.	396
1.75-1.99	.	.	.	13	108	36	12	.	.	.	169
2.00-2.24	.	.	.	3	69	56	6	.	.	.	134
2.25-2.49	.	.	.	.	26	33	9	.	.	.	68
2.50-2.74	.	.	.	.	2	35	13	1	.	.	51
2.75-2.99	.	.	.	.	.	17	10	.	.	.	27
3.00-3.24	.	.	.	.	.	10	14	.	.	.	24
3.25-3.49	.	.	.	.	.	.	6	.	.	.	6
3.50+	.	.	.	.	.	.	7	2	3	.	12
TOTAL	1547	3713	3321	2102	1004	258	81	3	3	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 11274.

STATION M33 45.48N 85.30W 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	
0.00-0.24	1070	585	22	1	1	.	.	.	.	.	1679
0.25-0.49	129	1181	284	7	.	.	.	.	.	.	1601
0.50-0.74	.	577	1080	250	2	.	.	.	.	.	1909
0.75-0.99	.	12	422	445	1	.	.	.	.	.	880
1.00-1.24	.	.	274	594	111	.	.	.	.	.	979
1.25-1.49	.	.	21	223	272	2	.	.	.	.	518
1.50-1.74	.	.	1	163	219	4	.	.	.	.	387
1.75-1.99	.	.	.	5	135	11	1	.	.	.	152
2.00-2.24	.	.	.	2	117	23	.	.	.	.	142
2.25-2.49	.	.	.	.	35	19	1	.	.	.	55
2.50-2.74	.	.	.	.	6	28	1	.	.	.	35
2.75-2.99	.	.	.	.	.	8	2	.	.	.	10
3.00-3.24	.	.	.	.	.	9	1	.	.	.	10
3.25-3.49	.	.	.	.	.	2	3	.	.	.	5
3.50+	.	.	.	.	.	.	3	.	.	.	3
TOTAL	1199	2355	2104	1690	898	106	12	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 7839.

STATION M33 45.48N 85.30W 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	
0.00-0.24	592	447	29	.	1	.	.	.	.	.	1069
0.25-0.49	134	876	248	14	.	.	.	.	.	.	1272
0.50-0.74	.	693	480	199	1	.	.	.	.	.	1373
0.75-0.99	.	45	503	410	2	.	.	.	.	.	960
1.00-1.24	.	.	113	1115	32	.	.	.	.	.	1260
1.25-1.49	.	.	7	311	125	.	.	.	.	.	443
1.50-1.74	.	.	.	85	240	.	.	.	.	.	325
1.75-1.99	.	.	.	3	103	.	.	.	.	.	106
2.00-2.24	.	.	.	.	55	6	.	.	.	.	61
2.25-2.49	.	.	.	.	8	7	.	.	.	.	15
2.50-2.74	.	.	.	.	2	6	.	.	.	.	8
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	726	2061	1380	2137	569	19	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 6459.

STATION M33 45.48N 85.30W 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	
0.00-0.24	779	157	26	.	.	.	.	.	.	.	962
0.25-0.49	84	551	177	10	.	.	.	.	.	.	822
0.50-0.74	.	728	131	127	.	.	.	.	.	.	986
0.75-0.99	.	85	244	348	1	.	.	.	.	.	678
1.00-1.24	.	.	69	391	37	.	.	.	.	.	497
1.25-1.49	.	.	17	47	65	.	.	.	.	.	129
1.50-1.74	.	.	1	8	73	.	.	.	.	.	82
1.75-1.99	.	.	.	1	11	.	.	.	.	.	12
2.00-2.24	.	.	.	.	2	1	.	.	.	.	3
2.25-2.49	.	.	.	.	.	2	.	.	.	.	2
2.50-2.74	.	.	.	.	.	1	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	863	1521	665	932	189	4	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.5 NO. OF CASES= 3914.

STATION M33 45.48N 85.30W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

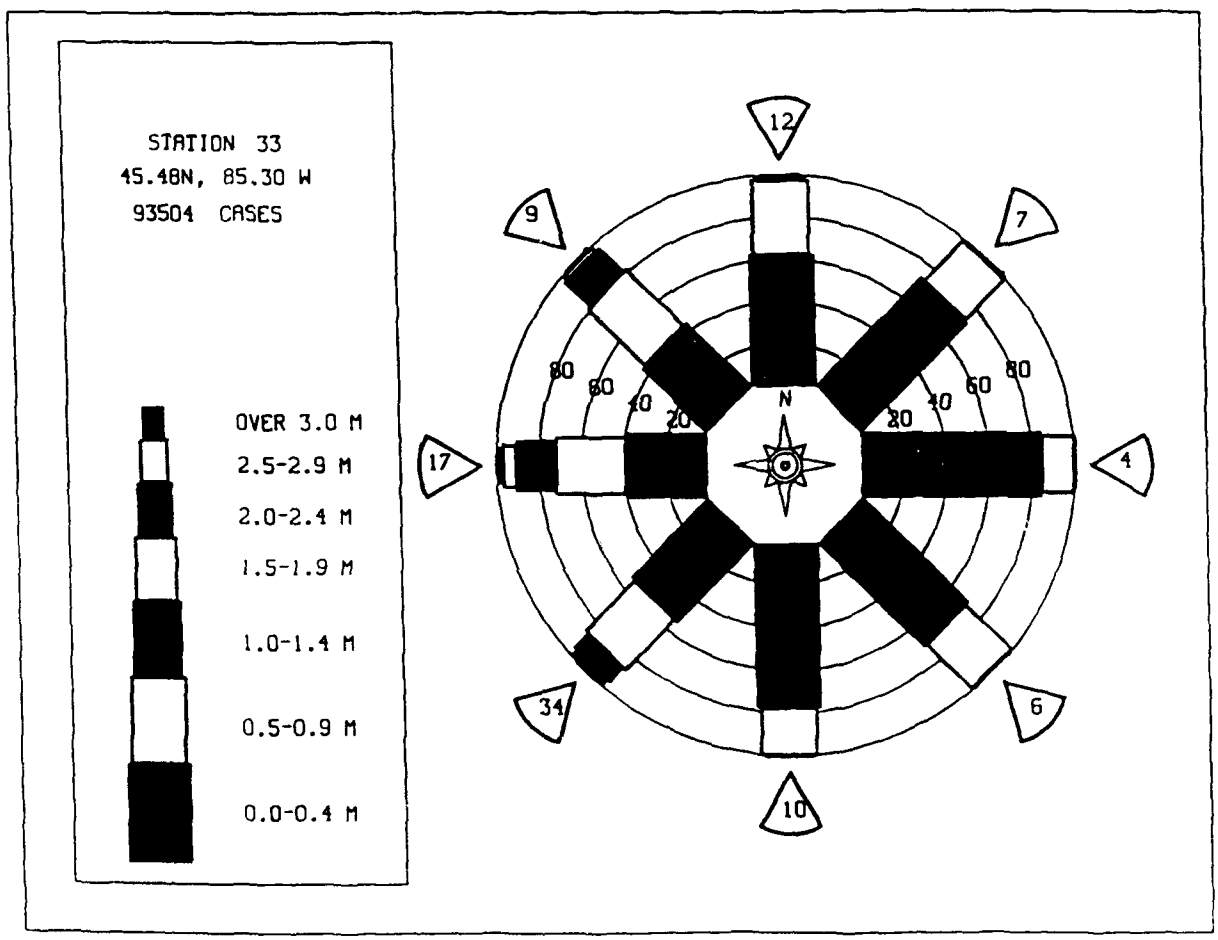
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	1189	207	21	2	.	.	.	.	.	.	1419
0.25-0.49	317	905	47	2	.	.	.	.	.	.	1271
0.50-0.74	.	1297	49	35	.	.	.	.	.	.	1381
0.75-0.99	.	219	166	54	2	.	.	.	.	.	441
1.00-1.24	.	.	100	33	12	.	.	.	.	.	145
1.25-1.49	.	.	24	2	21	.	.	.	.	.	47
1.50-1.74	.	.	9	7	32	.	.	.	.	.	48
1.75-1.99	.	.	.	6	8	.	.	.	.	.	14
2.00-2.24	.	.	.	.	2	6	.	.	.	.	8
2.25-2.49	.	.	.	.	.	1	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1506	2628	416	141	77	7	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 2.9 NO. OF CASES= 4475.

STATION M33 45.48N 85.30W 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	
0.00-0.24	2240	680	136	61	12	.	.	.	.	.	3129
0.25-0.49	413	1573	386	133	18	1	.	.	.	.	2524
0.50-0.74	.	1467	542	289	46	2	.	.	.	.	2346
0.75-0.99	.	175	346	244	52	7	.	.	.	.	824
1.00-1.24	.	.	173	318	91	16	2	.	.	.	600
1.25-1.49	.	.	28	102	85	9	1	.	.	.	225
1.50-1.74	.	.	4	63	91	11	2	.	.	.	171
1.75-1.99	.	.	.	6	43	7	2	.	.	.	58
2.00-2.24	.	.	.	1	33	13	1	.	.	.	48
2.25-2.49	.	.	.	.	8	8	1	.	.	.	17
2.50-2.74	.	.	.	.	1	9	2	.	.	.	12
2.75-2.99	.	.	.	.	.	3	1	.	.	.	4
3.00-3.24	.	.	.	.	.	2	2	.	.	.	4
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	2	.	.	.	2
TOTAL	2653	3895	1615	1217	480	88	17	0	0	0	

MEAN HS(M)= 0.5 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.3 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M33 (45.48N 85.30W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													MEAN
1956	0.4	0.6	0.5	0.5	0.4	0.3	0.2	0.2	0.4	0.6	0.7	0.7	0.4
1957	0.8	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.4	0.5	1.1	0.9	0.6
1958	0.6	0.7	0.2	0.4	0.4	0.4	0.3	0.4	0.6	0.6	0.9	0.7	0.5
1959	0.7	0.7	0.5	0.4	0.4	0.3	0.4	0.4	0.6	0.6	0.7	0.7	0.5
1960	0.7	0.6	0.4	0.5	0.3	0.3	0.3	0.4	0.4	0.5	0.8	0.9	0.5
1961	0.6	0.5	0.6	0.4	0.4	0.4	0.3	0.4	0.5	0.6	0.7	0.8	0.5
1962	0.9	0.5	0.3	0.5	0.4	0.3	0.3	0.3	0.5	0.5	0.5	0.7	0.5
1963	0.7	0.7	0.5	0.5	0.4	0.3	0.3	0.3	0.4	0.4	0.7	0.6	0.5
1964	0.9	0.8	0.7	0.6	0.5	0.4	0.3	0.5	0.6	0.7	0.7	0.6	0.6
1965	0.8	1.0	0.5	0.4	0.4	0.4	0.3	0.4	0.5	0.7	0.7	0.8	0.6
1966	0.7	0.6	0.7	0.4	0.4	0.4	0.4	0.5	0.5	0.9	0.7	0.7	0.6
1967	0.8	0.8	0.5	0.5	0.4	0.3	0.3	0.4	0.4	0.6	0.7	0.7	0.5
1968	0.6	0.8	0.6	0.5	0.3	0.3	0.4	0.5	0.5	0.7	0.6	0.7	0.5
1969	0.7	0.5	0.6	0.4	0.3	0.4	0.3	0.5	0.5	0.6	0.6	0.6	0.5
1970	0.6	0.7	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.5
1971	0.9	0.9	0.5	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.6	0.7	0.5
1972	1.0	0.6	0.5	0.3	0.2	0.3	0.3	0.4	0.5	0.7	0.5	0.6	0.5
1973	0.8	0.6	0.5	0.5	0.3	0.3	0.3	0.4	0.5	0.5	0.7	0.6	0.5
1974	0.6	0.6	0.6	0.4	0.3	0.3	0.3	0.4	0.5	0.6	0.5	0.6	0.5
1975	0.7	0.7	0.5	0.4	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.6	0.5
1976	0.7	0.8	0.7	0.5	0.4	0.3	0.3	0.4	0.5	0.5	0.7	0.7	0.5
1977	0.8	0.8	0.5	0.4	0.3	0.3	0.4	0.4	0.4	0.6	0.6	0.6	0.5
1978	0.8	0.5	0.5	0.4	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.5
1979	0.6	0.5	0.5	0.4	0.3	0.3	0.3	0.4	0.5	0.6	0.9	0.8	0.5
1980	0.7	0.5	0.5	0.3	0.2	0.3	0.3	0.4	0.7	0.9	0.9	0.6	0.5
1981	0.5	0.7	0.5	0.4	0.3	0.3	0.3	0.3	0.6	0.7	0.7	0.5	0.5
1982	0.7	0.5	0.6	0.5	0.2	0.3	0.4	0.4	0.7	0.8	0.8	0.6	0.5
1983	0.5	0.4	0.4	0.3	0.3	0.2	0.3	0.4	0.7	0.6	0.7	0.5	0.5
1984	0.6	0.5	0.5	0.3	0.3	0.3	0.4	0.4	0.7	0.7	1.0	0.7	0.5
1985	0.6	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.4
1986	0.7	0.4	0.5	0.4	0.2	0.2	0.2	0.3	0.3	0.4	0.7	0.6	0.4
1987	0.6	0.5	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.5	0.5	0.6	0.4
MEAN	0.7	0.6	0.5	0.4	0.3	0.3	0.3	0.4	0.5	0.6	0.7	0.7	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M33 (45.48N 85.30W)

	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR												
1956	1.5	2.7	2.0	2.2	1.4	1.4	1.2	1.2	1.6	2.3	3.7	4.2
1957	2.7	1.9	3.0	3.3	2.4	1.7	2.6	1.6	1.9	2.0	4.7	3.1
1958	3.5	2.2	1.0	2.7	3.2	2.4	1.7	1.8	2.4	2.3	4.9	2.1
1959	3.0	2.8	2.6	2.1	2.0	1.4	1.3	1.5	2.4	2.7	2.1	3.2
1960	2.4	2.3	1.4	1.4	1.2	1.4	1.6	2.1	1.7	2.2	2.9	3.6
1961	2.4	2.4	2.5	1.4	1.5	1.4	1.1	1.5	2.1	2.4	2.2	2.7
1962	3.4	1.6	1.8	1.9	1.5	1.3	1.4	1.3	1.9	2.3	2.6	2.1
1963	2.8	3.1	1.5	2.9	1.4	1.4	1.2	1.4	1.3	1.7	2.0	2.6
1964	3.5	3.0	2.1	3.9	2.0	1.8	0.9	1.5	2.4	3.1	2.6	2.1
1965	2.4	3.0	2.3	1.8	1.5	1.2	1.1	1.3	2.2	2.2	3.7	3.2
1966	2.7	2.3	3.9	1.4	1.6	1.2	1.5	1.7	1.8	3.2	2.0	2.7
1967	2.7	2.0	1.5	2.1	1.3	1.0	1.4	1.6	1.7	1.9	1.9	2.1
1968	2.3	3.5	1.6	2.9	1.3	1.1	1.7	1.8	1.5	1.8	1.9	2.5
1969	2.0	1.8	1.9	1.3	1.0	2.1	1.2	1.8	1.6	2.2	1.6	1.7
1970	1.8	2.4	1.6	2.3	1.9	1.2	1.3	1.4	2.7	2.0	3.0	3.1
1971	2.7	4.7	1.9	1.5	1.3	0.7	1.7	1.6	1.3	2.3	2.6	2.3
1972	2.9	2.1	2.3	1.3	1.0	0.9	1.2	1.0	1.5	3.3	1.9	1.9
1973	2.4	1.7	2.0	1.4	1.2	1.2	1.4	1.2	1.9	1.8	2.0	1.9
1974	2.6	1.9	1.7	1.1	1.2	1.0	1.0	1.5	1.9	2.1	1.6	2.1
1975	3.0	2.6	1.7	1.6	1.1	1.4	1.1	1.4	1.5	2.1	2.5	2.0
1976	2.3	2.7	2.5	1.4	2.1	1.1	1.2	2.3	2.0	2.1	2.1	2.1
1977	2.4	2.3	2.2	1.4	1.1	1.3	1.5	1.9	2.2	2.3	2.6	2.2
1978	2.7	1.6	2.1	1.7	1.4	1.2	0.9	1.2	1.7	1.7	2.0	2.2
1979	1.7	1.6	1.6	1.4	0.8	1.3	1.2	1.2	1.4	1.9	3.0	2.8
1980	3.1	2.5	2.2	1.2	1.0	1.1	1.2	1.2	2.5	3.2	2.6	2.2
1981	1.8	1.7	1.6	1.4	1.2	1.4	1.2	1.1	3.7	2.5	2.8	1.8
1982	2.6	1.8	3.3	1.7	1.1	1.0	1.4	1.7	1.8	2.4	2.6	2.3
1983	1.5	1.7	1.0	1.6	0.9	0.7	1.0	1.3	1.9	2.9	3.1	2.2
1984	2.2	1.7	2.2	1.9	2.1	1.5	1.2	1.3	2.5	3.1	3.0	3.5
1985	1.7	2.5	2.9	2.1	1.5	1.6	1.5	1.1	1.6	1.9	2.1	1.9
1986	3.6	1.3	2.2	1.6	1.5	1.1	1.3	1.3	1.3	2.2	3.4	2.4
1987	1.9	1.7	1.6	1.0	1.1	0.8	1.2	1.1	1.2	1.7	1.6	2.3

32 YR. STATISTICS FOR WIS STATION M33

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.5
MEAN PEAK WAVE PERIOD	(SECONDS)	3.3
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	225.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.4
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.2
LARGEST WAVE HS	(METERS)	5.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	249.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011203

STATION M34 45.35N 85.53W 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	
0.00-0.24	1499	222	11	1	.	.	.	.	.	.	1733
0.25-0.49	188	1214	34	1	.	.	.	.	.	.	1437
0.50-0.74	.	1685	874	24	.	.	.	.	.	.	2583
0.75-0.99	.	2	904	74	.	.	.	.	.	.	980
1.00-1.24	.	.	818	64	1	.	.	.	.	.	883
1.25-1.49	.	.	152	98	2	.	.	.	.	.	252
1.50-1.74	.	.	3	118	18	.	.	.	.	.	139
1.75-1.99	.	.	.	19	6	.	.	.	.	.	25
2.00-2.24	.	.	.	10	8	.	.	.	.	.	18
2.25-2.49	.	.	.	1	12	.	.	.	.	.	13
2.50-2.74	.	.	.	.	3	.	.	.	.	.	3
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1687	3123	2796	410	50	0	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 7554.

STATION M34 45.35N 85.53W 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	
0.00-0.24	1255	159	9	1	.	.	.	.	.	.	1424
0.25-0.49	132	866	29	.	.	.	.	.	.	.	1027
0.50-0.74	.	675	376	9	.	.	.	.	.	.	1060
0.75-0.99	.	.	274	14	.	.	.	.	.	.	288
1.00-1.24	.	.	382	10	1	.	.	.	.	.	393
1.25-1.49	.	.	41	58	.	.	.	.	.	.	99
1.50-1.74	.	.	.	26	2	.	.	.	.	.	28
1.75-1.99	.	.	.	3	.	.	.	.	.	.	3
2.00-2.24	.	.	.	1	2	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1387	1700	1111	122	5	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.0 NO. OF CASES= 4055.

STATION M34 45.35N 85.53W 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	
0.00-0.24	1865	234	8	1	.	.	.	.	.	.	2108
0.25-0.49	112	758	27	.	.	.	.	.	.	.	897
0.50-0.74	.	450	371	4	.	.	.	.	.	.	825
0.75-0.99	.	1	233	1	.	.	.	.	.	.	235
1.00-1.24	.	.	359	.	.	.	.	.	.	.	359
1.25-1.49	.	.	20	115	.	.	.	.	.	.	135
1.50-1.74	.	.	.	38	.	.	.	.	.	.	38
1.75-1.99	.	.	.	7	.	.	.	.	.	.	7
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1977	1443	1018	166	1	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 2.9 NO. OF CASES= 4311.

STATION M34 45.35N 85.53W 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	
0.00-0.24	918	125	6	1	.	.	.	.	.	.	1050
0.25-0.49	143	520	16	.	.	.	.	.	.	.	679
0.50-0.74	.	321	114	1	.	.	.	.	.	.	436
0.75-0.99	.	16	70	1	.	.	.	.	.	.	87
1.00-1.24	.	.	91	.	.	.	.	.	.	.	91
1.25-1.49	.	.	2	14	.	.	.	.	.	.	16
1.50-1.74	.	.	.	2	1	.	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1061	982	299	19	1	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.7 NO. OF CASES= 2215.

STATION M34 45.35N 85.53W 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	
0.00-0.24	945	139	5	.	.	.	.	.	.	.	1089
0.25-0.49	216	516	18	.	.	.	.	.	.	.	750
0.50-0.74	.	328	34	3	.	.	.	.	.	.	365
0.75-0.99	.	19	11	1	.	.	.	.	.	.	31
1.00-1.24	.	.	4	.	.	.	.	.	.	.	4
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1161	1002	73	4	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.3 MEAN TP(SEC)= 2.5 NO. OF CASES= 2098.

STATION M34 45.35N 85.53W 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	
0.00-0.24	747	98	5	.	.	.	.	.	.	.	850
0.25-0.49	162	444	8	.	.	.	.	.	.	.	614
0.50-0.74	.	401	13	1	.	.	.	.	.	.	415
0.75-0.99	.	2	21	.	.	.	.	.	.	.	23
1.00-1.24	.	.	4	.	.	.	.	.	.	.	4
1.25-1.49	.	.	.	.	.	.	.	.	.	.	0
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	909	945	51	1	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.1 MEAN TP(SEC)= 2.6 NO. OF CASES= 1787.

STATION M34 45.35N 85.53W 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	
0.00-0.24	1008	126	9	1	.	.	.	.	.	.	1144
0.25-0.49	77	466	8	.	.	.	.	.	.	.	551
0.50-0.74	.	609	38	.	.	.	.	.	.	.	647
0.75-0.99	.	2	49	.	.	.	.	.	.	.	51
1.00-1.24	.	.	16	.	.	.	.	.	.	.	16
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1085	1203	121	1	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 2.6 NO. OF CASES= 2257.

STATION M34 45.35N 85.53W 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	
0.00-0.24	1165	167	10	1	.	.	.	.	.	.	1343
0.25-0.49	166	665	7	.	.	.	.	.	.	.	838
0.50-0.74	.	914	43	.	.	.	.	.	.	.	957
0.75-0.99	.	7	83	.	.	.	.	.	.	.	90
1.00-1.24	.	.	27	.	.	.	.	.	.	.	27
1.25-1.49	.	.	4	.	.	.	.	.	.	.	4
1.50-1.74	.	.	.	4	.	.	.	.	.	.	4
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1331	1753	174	5	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.7 NO. OF CASES= 3058.

STATION M34 45.35N 85.53W 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	
0.00-0.24	2056	300	19	.	.	.	.	.	.	.	2375
0.25-0.49	534	1258	8	.	.	.	.	.	.	.	1800
0.50-0.74	.	1117	6	.	.	.	.	.	.	.	1123
0.75-0.99	.	75	55	.	.	.	.	.	.	.	130
1.00-1.24	.	.	14	.	.	.	.	.	.	.	14
1.25-1.49	.	.	4	.	.	.	.	.	.	.	4
1.50-1.74	.	.	1	.	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2590	2750	107	0	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.5 NO. OF CASES= 5100.

STATION M34 45.35N 85.53W 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	
0.00-0.24	1909	563	399	365	47	3	.	.	.	.	3286
0.25-0.49	757	2058	312	376	157	21	2	.	.	.	3683
0.50-0.74	.	2005	134	48	52	2	2	.	.	.	2243
0.75-0.99	.	725	191	40	24	6	5	.	.	.	991
1.00-1.24	.	.	83	119	21	13	.	.	.	.	236
1.25-1.49	.	.	13	35	47	4	.	.	.	.	99
1.50-1.74	.	.	7	26	35	2	.	.	.	.	70
1.75-1.99	.	.	.	5	12	5	.	.	.	.	22
2.00-2.24	.	.	.	2	8	10	2	.	.	.	22
2.25-2.49	.	.	.	.	3	6	.	.	.	.	9
2.50-2.74	.	.	.	.	2	3	4	.	.	.	9
2.75-2.99	.	.	.	.	.	2	1	.	.	.	3
3.00-3.24	.	.	.	.	.	2	3	.	.	.	5
3.25-3.49	.	.	.	.	.	.	2	1	.	.	3
3.50+	.	.	.	.	.	.	3	1	1	.	5
TOTAL	2666	5351	1139	1016	408	79	24	2	1	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 10011.

STATION M34 45.35N 85.53W 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	
0.00-0.24	581	1204	199	34	3	.	.	.	.	.	3021
0.25-0.49	324	2597	1453	614	33	.	.	.	.	.	5021
0.50-0.74	.	1792	1849	1265	330	20	1	.	.	.	5257
0.75-0.99	.	361	1057	504	350	51	3	.	.	.	2326
1.00-1.24	.	.	722	745	439	125	16	.	.	.	2047
1.25-1.49	.	.	111	290	221	74	17	.	.	.	713
1.50-1.74	.	.	16	258	191	59	16	.	.	.	540
1.75-1.99	.	.	.	43	103	44	7	.	.	.	197
2.00-2.24	.	.	.	10	103	70	12	.	.	.	195
2.25-2.49	.	.	.	.	32	21	8	1	.	.	62
2.50-2.74	.	.	.	.	11	27	13	1	.	.	52
2.75-2.99	.	.	.	.	5	18	8	.	.	.	31
3.00-3.24	.	.	.	.	.	4	10	4	.	.	18
3.25-3.49	.	.	.	.	.	1	5	1	.	.	7
3.50+	.	.	.	.	.	1	8	5	4	.	18
TOTAL	1905	5954	5407	3763	1821	515	124	12	4	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.0 NO. OF CASES= 18266.

STATION M34 45.35N 85.53W 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	
0.00-0.24	945	524	6	2	1	.	.	.	.	.	1478
0.25-0.49	136	1834	363	1	.	.	.	.	.	.	2334
0.50-0.74	.	752	1744	428	.	.	.	.	.	.	2924
0.75-0.99	.	9	555	542	43	.	.	.	.	.	1149
1.00-1.24	.	.	366	574	249	1	.	.	.	.	1190
1.25-1.49	.	.	36	214	258	7	.	.	.	.	515
1.50-1.74	.	.	.	170	251	37	.	.	.	.	458
1.75-1.99	.	.	.	12	100	47	4	.	.	.	163
2.00-2.24	.	.	.	2	93	56	12	.	.	.	163
2.25-2.49	.	.	.	.	27	40	6	1	.	.	74
2.50-2.74	.	.	.	.	7	35	21	1	.	.	64
2.75-2.99	.	.	.	.	1	18	6	.	.	.	25
3.00-3.24	.	.	.	.	.	14	11	.	.	.	25
3.25-3.49	.	.	.	.	.	1	9	.	.	.	10
3.50+	.	.	.	.	.	1	18	2	5	.	26
TOTAL	1081	3119	3070	1945	1030	257	87	4	5	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 9930.

STATION M34 45.35N 85.53W 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	
0.00-0.24	834	319	7	.	2	.	.	.	.	.	1162
0.25-0.49	89	1309	97	2	1	.	.	.	.	.	1498
0.50-0.74	.	483	1165	142	.	.	.	.	.	.	1790
0.75-0.99	.	7	407	447	.	.	.	.	.	.	861
1.00-1.24	.	.	260	597	91	.	.	.	.	.	948
1.25-1.49	.	.	9	166	269	.	.	.	.	.	444
1.50-1.74	.	.	.	131	247	3	.	.	.	.	381
1.75-1.99	.	.	.	4	125	10	.	.	.	.	139
2.00-2.24	.	.	.	1	99	28	.	.	.	.	128
2.25-2.49	.	.	.	.	20	21	.	.	.	.	41
2.50-2.74	.	.	.	.	2	33	.	.	.	.	35
2.75-2.99	.	.	.	.	.	12	.	.	.	.	12
3.00-3.24	.	.	.	.	.	11	4	.	.	.	15
3.25-3.49	.	.	.	.	.	2	3	.	.	.	5
3.50+							2				2
TOTAL	923	2118	1945	1490	856	120	9	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 6982.

STATION M34 45.35N 85.53W 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	
0.00-0.24	540	275	4	1	2	.	.	.	.	.	822
0.25-0.49	85	1042	84	1	.	.	.	.	.	.	1212
0.50-0.74	.	382	928	69	.	.	.	.	.	.	1379
0.75-0.99	.	6	299	345	.	.	.	.	.	.	650
1.00-1.24	.	.	199	520	39	.	.	.	.	.	758
1.25-1.49	.	.	7	223	165	.	.	.	.	.	395
1.50-1.74	.	.	.	148	239	.	.	.	.	.	387
1.75-1.99	.	.	.	4	149	1	.	.	.	.	154
2.00-2.24	.	.	.	.	139	7	.	.	.	.	146
2.25-2.49	.	.	.	.	39	13	.	.	.	.	52
2.50-2.74	.	.	.	.	2	22	.	.	.	.	24
2.75-2.99	.	.	.	.	2	3	.	.	.	.	5
3.00-3.24	.	.	.	.	.	3	.	.	.	.	3
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+											0
TOTAL	625	1705	1521	1311	776	50	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 4.0 NO. OF CASES= 5614.

STATION M34 45.35N 85.53W 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	
0.00-0.24	591	132	7	.	.	.	.	.	.	.	730
0.25-0.49	56	660	56	2	.	.	.	.	.	.	774
0.50-0.74	.	294	696	50	.	.	.	.	.	.	1040
0.75-0.99	.	2	236	258	.	.	.	.	.	.	496
1.00-1.24	.	.	183	497	10	.	.	.	.	.	690
1.25-1.49	.	.	14	257	111	.	.	.	.	.	382
1.50-1.74	.	.	.	195	198	.	.	.	.	.	393
1.75-1.99	.	.	.	8	161	1	.	.	.	.	170
2.00-2.24	.	.	.	.	144	3	.	.	.	.	147
2.25-2.49	.	.	.	.	47	8	.	.	.	.	55
2.50-2.74	.	.	.	.	7	24	.	.	.	.	31
2.75-2.99	.	.	.	.	.	10	.	.	.	.	10
3.00-3.24	.	.	.	.	.	6	.	.	.	.	6
3.25-3.49	.	.	.	.	.	1	1	.	.	.	2
3.50+							1				1
TOTAL	647	1088	1192	1267	678	53	2	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 4622.

STATION M34 45.35N 85.53W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

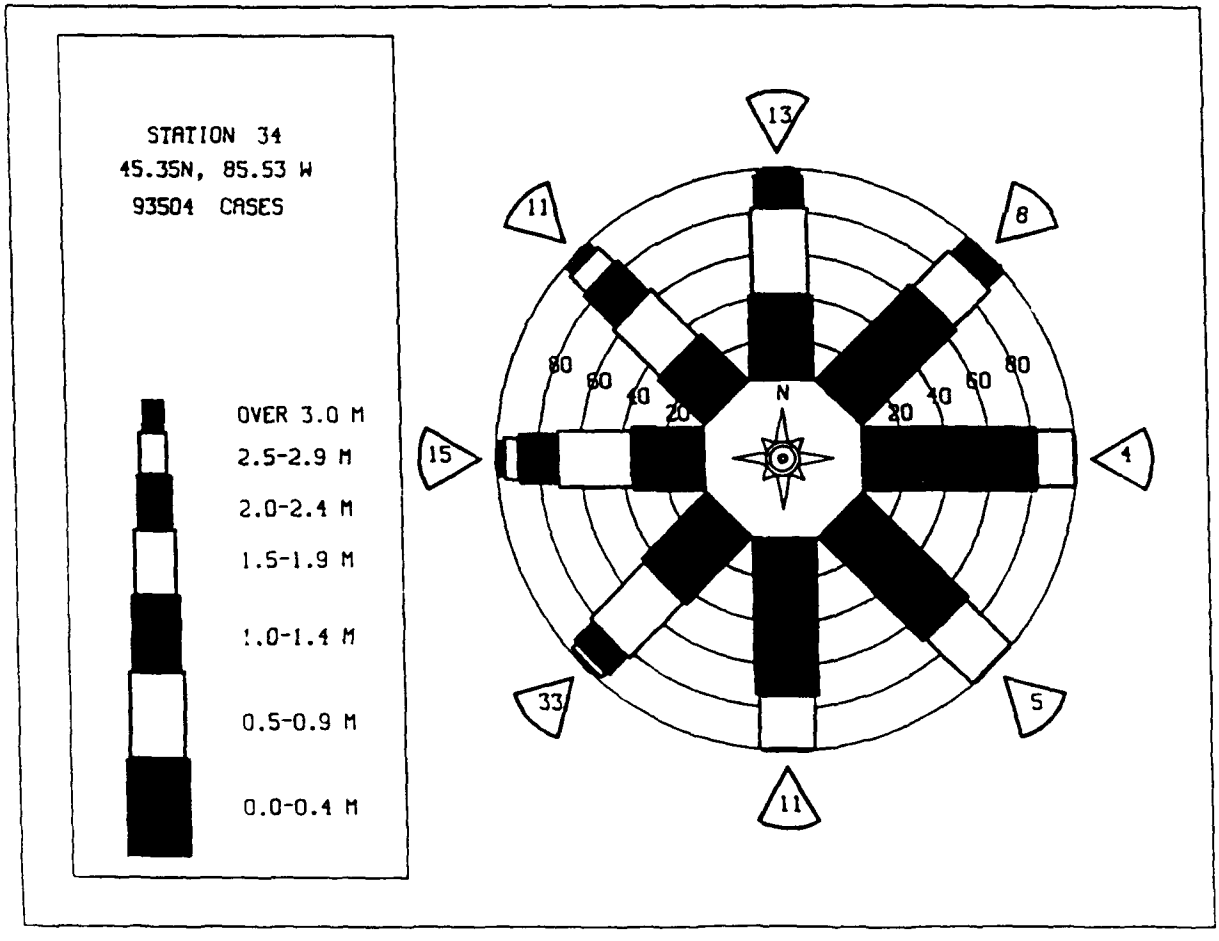
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	843	128	6	.	.	.	.	.	.	.	977
0.25-0.49	117	770	38	.	.	.	.	.	.	.	925
0.50-0.74	.	772	673	34	.	.	.	.	.	.	1479
0.75-0.99	.	2	507	181	.	.	.	.	.	.	690
1.00-1.24	.	.	480	350	10	.	.	.	.	.	840
1.25-1.49	.	.	103	249	34	.	.	.	.	.	386
1.50-1.74	.	.	8	251	120	.	.	.	.	.	379
1.75-1.99	.	.	.	22	111	.	.	.	.	.	133
2.00-2.24	.	.	.	8	106	1	.	.	.	.	115
2.25-2.49	.	.	.	.	39	.	.	.	.	.	39
2.50-2.74	.	.	.	.	17	9	.	.	.	.	26
2.75-2.99	.	.	.	.	3	4	.	.	.	.	7
3.00-3.24	.	.	.	.	.	9	.	.	.	.	9
3.25-3.49	.	.	.	.	.	2	.	.	.	.	2
3.50+						2	1				3
TOTAL	960	1672	1815	1095	440	27	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 5634.

STATION M34 45.35N 85.53W 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	
0.00-0.24	1870	472	71	40	5	.	.	.	.	.	2458
0.25-0.49	330	1698	256	99	19	2	.	.	.	.	2404
0.50-0.74	.	1298	906	208	38	2	.	.	.	.	2452
0.75-0.99	.	124	496	241	41	5	.	.	.	.	907
1.00-1.24	.	.	401	348	86	14	1	.	.	.	850
1.25-1.49	.	.	52	172	111	8	1	.	.	.	344
1.50-1.74	.	.	3	137	130	10	1	.	.	.	281
1.75-1.99	.	.	.	13	77	11	1	.	.	.	102
2.00-2.24	.	.	.	3	70	17	2	.	.	.	92
2.25-2.49	.	.	.	.	22	11	1	.	.	.	34
2.50-2.74	.	.	.	.	5	15	3	.	.	.	23
2.75-2.99	.	.	.	.	1	6	1	.	.	.	8
3.00-3.24	.	.	.	.	.	5	2	.	.	.	7
3.25-3.49	.	.	.	.	.	.	2	.	.	.	2
3.50+	.	.	.	.	.	.	3	.	1	.	4
TOTAL	2200	3592	2185	1261	605	106	18	0	1	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.5 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M34 (45.35N 85.53W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
						MONTH							
1956	0.5	0.6	0.6	0.6	0.5	0.3	0.2	0.3	0.5	0.7	0.8	0.8	0.5
1957	1.0	0.7	0.6	0.6	0.5	0.4	0.4	0.4	0.5	0.6	1.3	1.1	0.7
1958	0.7	0.9	0.3	0.5	0.5	0.5	0.4	0.5	0.7	0.7	1.0	0.8	0.6
1959	0.9	0.8	0.6	0.5	0.5	0.4	0.4	0.3	0.7	0.7	0.8	0.8	0.6
1960	0.8	0.8	0.5	0.5	0.3	0.4	0.4	0.5	0.5	0.6	0.9	1.1	0.6
1961	0.8	0.6	0.7	0.5	0.5	0.5	0.3	0.4	0.6	0.7	0.8	0.9	0.6
1962	1.0	0.7	0.4	0.7	0.5	0.4	0.3	0.4	0.6	0.6	0.6	0.9	0.6
1963	0.8	0.9	0.6	0.6	0.5	0.4	0.4	0.4	0.5	0.5	0.8	0.7	0.6
1964	1.0	1.0	0.8	0.7	0.5	0.5	0.4	0.6	0.6	0.8	0.8	0.7	0.7
1965	0.9	1.1	0.6	0.5	0.5	0.4	0.4	0.5	0.6	0.8	0.9	0.9	0.7
1966	0.8	0.7	0.8	0.5	0.5	0.5	0.5	0.6	0.6	1.0	0.9	0.8	0.7
1967	1.0	1.0	0.6	0.6	0.5	0.3	0.4	0.5	0.5	0.7	0.8	0.7	0.6
1968	0.7	0.9	0.7	0.6	0.4	0.4	0.5	0.6	0.5	0.7	0.7	0.8	0.6
1969	0.8	0.7	0.7	0.5	0.4	0.5	0.3	0.5	0.5	0.7	0.6	0.7	0.6
1970	0.7	0.9	0.5	0.6	0.5	0.4	0.4	0.5	0.6	0.6	0.7	0.7	0.6
1971	1.0	1.0	0.6	0.5	0.4	0.3	0.5	0.5	0.5	0.6	0.7	0.8	0.6
1972	1.0	0.7	0.7	0.4	0.3	0.4	0.4	0.4	0.6	0.8	0.6	0.7	0.6
1973	0.9	0.7	0.6	0.5	0.4	0.3	0.4	0.5	0.6	0.6	0.8	0.7	0.6
1974	0.7	0.7	0.7	0.6	0.4	0.4	0.4	0.5	0.6	0.7	0.6	0.7	0.6
1975	0.8	0.8	0.6	0.5	0.3	0.4	0.4	0.4	0.5	0.7	0.7	0.7	0.6
1976	0.8	0.9	0.9	0.6	0.4	0.3	0.4	0.5	0.6	0.6	0.8	0.8	0.6
1977	0.9	0.9	0.6	0.5	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.6
1978	1.0	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.6	0.6	0.7	0.8	0.6
1979	0.8	0.6	0.5	0.4	0.3	0.3	0.4	0.4	0.6	0.8	1.0	1.0	0.6
1980	0.7	0.6	0.6	0.4	0.2	0.3	0.3	0.5	0.8	1.1	1.1	0.7	0.6
1981	0.6	0.8	0.7	0.5	0.3	0.4	0.3	0.4	0.7	0.8	0.8	0.6	0.6
1982	0.8	0.6	0.6	0.6	0.3	0.3	0.4	0.5	0.8	0.9	0.9	0.7	0.6
1983	0.7	0.5	0.5	0.4	0.3	0.3	0.3	0.4	0.8	0.7	0.8	0.6	0.5
1984	0.7	0.6	0.6	0.4	0.3	0.3	0.4	0.5	0.8	0.8	1.2	0.8	0.6
1985	0.8	0.7	0.6	0.5	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.5
1986	0.9	0.5	0.6	0.5	0.3	0.3	0.2	0.3	0.3	0.4	0.7	0.6	0.5
1987	0.7	0.6	0.5	0.4	0.2	0.2	0.2	0.3	0.3	0.6	0.6	0.8	0.5
MEAN	0.8	0.7	0.6	0.5	0.4	0.4	0.4	0.5	0.6	0.7	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M34 (45.35N 85.53W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
						MONTH						
1956	1.7	3.0	2.9	2.2	2.1	1.5	1.5	1.3	2.3	2.9	4.0	4.9
1957	2.8	2.2	3.5	3.9	3.0	1.8	2.6	1.9	2.1	2.5	5.3	3.8
1958	3.8	2.5	1.1	2.9	3.3	2.6	2.0	1.9	2.4	2.5	5.2	2.2
1959	2.3	2.8	3.0	2.3	1.9	1.5	1.6	1.6	2.6	2.8	2.5	3.5
1960	2.1	2.6	2.4	1.6	1.4	1.5	1.8	2.4	2.0	2.5	3.0	3.9
1961	3.1	2.8	2.3	1.7	1.7	1.3	1.4	1.8	2.4	2.5	2.3	2.5
1962	3.6	2.5	2.0	2.1	1.6	1.4	1.5	1.8	2.2	2.4	2.7	3.1
1963	2.7	3.0	2.5	3.5	1.6	1.7	1.3	1.6	1.7	1.9	2.9	2.6
1964	3.6	2.9	2.2	3.9	2.3	1.8	1.1	1.8	2.2	3.2	2.9	2.1
1965	2.6	3.3	2.5	2.1	1.7	1.2	1.3	1.4	2.2	2.4	3.5	3.7
1966	3.0	2.3	4.2	1.5	1.9	1.4	1.5	1.8	2.1	3.4	2.8	2.9
1967	3.0	2.4	1.8	2.2	1.5	1.1	1.5	1.9	2.0	2.2	2.2	2.0
1968	2.5	3.4	2.1	3.2	1.4	1.2	1.5	2.0	1.8	2.0	2.3	2.8
1969	2.3	2.0	2.1	1.4	1.2	2.4	1.4	2.0	1.9	2.3	1.8	2.5
1970	2.0	2.5	1.7	2.4	2.1	1.4	1.5	1.6	2.7	2.2	3.0	3.3
1971	2.9	5.1	2.1	2.1	1.3	0.9	1.8	1.8	1.3	2.5	2.7	2.5
1972	2.9	2.5	2.4	1.3	1.0	1.2	1.4	1.2	1.8	3.0	1.9	2.7
1973	2.6	2.5	3.0	1.6	1.4	1.5	1.6	1.7	2.0	2.2	2.2	2.0
1974	3.2	2.5	1.9	1.5	1.4	1.1	1.2	1.8	2.1	2.0	1.8	2.1
1975	4.8	2.6	1.9	1.6	1.2	1.4	1.1	1.4	1.5	2.1	2.4	2.3
1976	2.3	3.3	2.9	1.5	2.1	1.1	1.2	2.8	2.0	2.0	2.1	2.1
1977	2.4	2.3	2.4	1.9	1.3	1.2	1.5	2.0	2.3	2.2	2.6	2.4
1978	3.8	1.9	2.2	1.8	1.5	1.3	1.0	1.6	1.7	1.8	2.3	2.5
1979	2.1	1.6	2.2	1.5	1.1	1.3	1.2	1.4	1.9	2.3	3.2	3.1
1980	3.0	2.6	2.2	1.3	1.3	1.2	1.2	1.3	2.6	3.5	3.1	2.3
1981	2.2	2.1	2.0	1.8	1.4	1.5	1.2	1.4	3.6	3.4	3.0	2.1
1982	2.8	1.8	3.4	2.1	1.1	1.0	1.6	1.7	2.1	2.7	2.8	2.5
1983	2.0	1.9	1.4	1.7	1.1	0.9	1.0	1.4	2.1	3.1	3.2	2.8
1984	2.2	2.0	2.3	2.0	2.2	1.4	1.4	1.7	2.8	3.3	3.2	3.8
1985	2.2	2.6	3.0	2.2	1.8	1.8	1.7	1.2	1.8	2.1	2.1	2.0
1986	3.9	1.4	2.4	1.6	1.8	1.2	1.3	1.6	1.4	2.5	3.4	2.6
1987	2.3	2.4	1.8	1.2	1.1	0.9	1.2	1.4	1.2	1.7	2.2	2.5

32 YR. STATISTICS FOR WIS STATION M34

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.5
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)	1.2
LARGEST WAVE HS	(METERS)	5.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	221.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		57112318

STATION M35 45.23N 85.73W 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	
0.00-0.24	1228	194	3	.	.	.	.	.	.	.	1425
0.25-0.49	137	1356	56	.	.	.	.	.	.	.	1549
0.50-0.74	.	664	1219	36	.	.	.	.	.	.	1919
0.75-0.99	.	3	667	209	.	.	.	.	.	.	879
1.00-1.24	.	.	423	632	5	.	.	.	.	.	1060
1.25-1.49	.	.	9	593	3	.	.	.	.	.	605
1.50-1.74	.	.	1	482	12	.	.	.	.	.	495
1.75-1.99	.	.	.	37	114	.	.	.	.	.	151
2.00-2.24	.	.	.	.	109	.	.	.	.	.	109
2.25-2.49	.	.	.	.	35	.	.	.	.	.	35
2.50-2.74	.	.	.	.	14	4	.	.	.	.	18
2.75-2.99	.	.	.	.	1	5	.	.	.	.	6
3.00-3.24	.	.	.	.	.	11	.	.	.	.	11
3.25-3.49	.	.	.	.	.	5	.	.	.	.	5
3.50+	.	.	.	.	.	1	.	.	.	.	1
TOTAL	1365	2217	2378	1989	293	26	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 7743.

STATION M35 45.23N 85.73W 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	
0.00-0.24	996	136	3	.	.	.	.	.	.	.	1135
0.25-0.49	118	1075	32	.	.	.	.	.	.	.	1225
0.50-0.74	.	394	599	23	.	.	.	.	.	.	1016
0.75-0.99	.	1	276	57	.	.	.	.	.	.	334
1.00-1.24	.	.	164	185	.	.	.	.	.	.	349
1.25-1.49	.	.	4	206	1	.	.	.	.	.	211
1.50-1.74	.	.	.	134	2	.	.	.	.	.	136
1.75-1.99	.	.	.	16	11	.	.	.	.	.	27
2.00-2.24	.	.	.	.	12	.	.	.	.	.	12
2.25-2.49	.	.	.	.	3	.	.	.	.	.	3
2.50-2.74	.	.	.	.	4	.	.	.	.	.	4
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1114	1606	1078	621	33	0	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 4174.

STATION M35 45.23N 85.73W 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	
0.00-0.24	1463	228	9	1	.	.	.	.	.	.	1701
0.25-0.49	116	1002	40	.	.	.	.	.	.	.	1158
0.50-0.74	.	368	481	10	.	.	.	.	.	.	859
0.75-0.99	.	.	273	49	.	.	.	.	.	.	322
1.00-1.24	.	.	103	189	.	.	.	.	.	.	292
1.25-1.49	.	.	3	172	.	.	.	.	.	.	175
1.50-1.74	.	.	.	145	.	.	.	.	.	.	145
1.75-1.99	.	.	.	5	23	.	.	.	.	.	28
2.00-2.24	.	.	.	.	16	.	.	.	.	.	16
2.25-2.49	.	.	.	.	5	.	.	.	.	.	5
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1579	1598	909	571	44	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 4404.

STATION M35 45.23N 85.73W 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	
0.00-0.24	755	119	1	1	.	.	.	.	.	.	876
0.25-0.49	139	624	39	1	.	.	.	.	.	.	803
0.50-0.74	.	274	179	3	.	.	.	.	.	.	456
0.75-0.99	.	20	93	9	.	.	.	.	.	.	122
1.00-1.24	.	.	37	19	.	.	.	.	.	.	56
1.25-1.49	.	.	1	24	.	.	.	.	.	.	25
1.50-1.74	.	.	.	7	.	.	.	.	.	.	7
1.75-1.99	.	.	.	.	1	.	.	.	.	.	1
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	894	1037	350	64	2	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 2.8 NO. OF CASES= 2201.

STATION M35 45.23N 85.73W 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	
0.00-0.24	776	150	2	1	.	.	.	.	.	.	929
0.25-0.49	201	585	47	.	.	.	.	.	.	.	833
0.50-0.74	.	321	58	9	.	.	.	.	.	.	388
0.75-0.99	.	25	12	8	.	.	.	.	.	.	45
1.00-1.24	.	.	2	4	.	.	.	.	.	.	6
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	977	1081	122	22	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.3 MEAN TP(SEC)= 2.6 NO. OF CASES= 2065.

STATION M35 45.23N 85.73W 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	
0.00-0.24	645	91	4	1	.	.	.	.	.	.	741
0.25-0.49	162	455	31	1	.	.	.	.	.	.	649
0.50-0.74	.	393	27	5	.	.	.	.	.	.	425
0.75-0.99	.	7	18	.	.	.	.	.	.	.	25
1.00-1.24	.	.	4	1	.	.	.	.	.	.	5
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	807	946	85	8	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.3 MEAN TP(SEC)= 2.6 NO. OF CASES= 1732.

STATION M35 45.23N 85.73W 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	
0.00-0.24	876	137	9	.	.	.	.	.	.	.	1022
0.25-0.49	69	489	21	.	.	.	.	.	.	.	579
0.50-0.74	.	606	36	1	.	.	.	.	.	.	643
0.75-0.99	.	2	48	.	.	.	.	.	.	.	50
1.00-1.24	.	.	19	.	.	.	.	.	.	.	19
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	945	1234	134	1	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 2.7 NO. OF CASES= 2169.

STATION M35 45.23N 85.73W 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	
0.00-0.24	1029	149	5	2	.	.	.	.	.	.	1185
0.25-0.49	162	747	19	.	.	.	.	.	.	.	928
0.50-0.74	.	906	59	.	.	.	.	.	.	.	965
0.75-0.99	.	9	82	.	.	.	.	.	.	.	91
1.00-1.24	.	.	27	.	.	.	.	.	.	.	27
1.25-1.49	.	.	3	.	.	.	.	.	.	.	3
1.50-1.74	.	.	2	4	.	.	.	.	.	.	6
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1191	1811	197	6	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.7 NO. OF CASES= 3004

STATION M35 45.23N 85.73W 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	
0.00-0.24	1864	305	12	.	.	.	.	.	.	.	2181
0.25-0.49	530	1424	20	.	1	.	.	.	.	.	1975
0.50-0.74	.	1135	13	.	.	.	.	.	.	.	1148
0.75-0.99	.	74	62	.	.	.	.	.	.	.	136
1.00-1.24	.	.	25	.	.	.	.	.	.	.	25
1.25-1.49	.	.	4	.	.	.	.	.	.	.	4
1.50-1.74	.	.	2	1	.	.	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2394	2938	138	1	1	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.6 NO. OF CASES= 5123.

STATION M35 45.23N 85.73W 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	
0.00-0.24	1844	537	390	337	41	3	.	.	.	.	3152
0.25-0.49	763	2442	420	580	231	16	.	.	.	.	4452
0.50-0.74	.	2243	240	113	116	20	7	.	.	.	2739
0.75-0.99	.	809	271	78	55	21	2	.	.	.	1236
1.00-1.24	.	.	117	149	48	23	3	.	.	.	340
1.25-1.49	.	.	21	48	67	7	.	.	.	.	143
1.50-1.74	.	.	7	38	57	2	1	.	.	.	105
1.75-1.99	.	.	.	9	24	4	.	.	.	.	37
2.00-2.24	.	.	.	3	16	8	4	.	.	.	31
2.25-2.49	.	.	.	.	5	5	3	.	.	.	13
2.50-2.74	.	.	.	.	1	7	3	.	.	.	11
2.75-2.99	.	.	.	.	.	2	3	.	.	.	5
3.00-3.24	.	.	.	.	.	1	7	.	.	.	8
3.25-3.49	.	.	.	.	.	1	3	.	.	.	4
3.50+	.	.	.	.	.	.	4	1	1	.	6
TOTAL	2607	6031	1466	1355	661	120	40	1	1	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 11506.

STATION M35 45.23N 85.73W 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	
0.00-0.24	1312	920	117	25	1	.	.	.	.	.	2375
0.25-0.49	286	2619	1162	402	12	.	.	.	.	.	4481
0.50-0.74	.	1807	1984	1171	250	20	1	.	.	.	5233
0.75-0.99	.	290	1081	595	319	34	4	.	.	.	2323
1.00-1.24	.	.	737	849	517	115	16	.	.	.	2234
1.25-1.49	.	.	116	346	284	54	9	.	.	.	809
1.50-1.74	.	.	26	304	227	69	17	.	.	.	643
1.75-1.99	.	.	.	45	122	58	2	1	.	.	228
2.00-2.24	.	.	.	12	112	74	10	.	.	.	208
2.25-2.49	.	.	.	1	38	34	5	.	.	.	78
2.50-2.74	.	.	.	.	10	37	26	1	.	.	74
2.75-2.99	.	.	.	.	3	22	16	1	.	.	42
3.00-3.24	.	.	.	.	.	10	6	3	.	.	19
3.25-3.49	.	.	.	.	.	3	7	1	.	.	11
3.50+	.	.	.	.	.	1	9	6	4	1	21
TOTAL	1598	5636	5223	3750	1895	531	128	13	4	1	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 17588.

STATION M35 45.23N 85.73W 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	
0.00-0.24	807	406	4	.	.	.	.	.	.	.	1217
0.25-0.49	119	1691	226	1	.	.	.	.	.	.	2037
0.50-0.74	.	699	1685	296	.	.	.	.	.	.	2680
0.75-0.99	.	9	611	479	21	.	.	.	.	.	1120
1.00-1.24	.	.	396	641	191	.	.	.	.	.	1228
1.25-1.49	.	.	23	267	223	1	.	.	.	.	514
1.50-1.74	.	.	1	181	301	32	.	.	.	.	515
1.75-1.99	.	.	.	9	131	41	.	.	.	.	181
2.00-2.24	.	.	.	2	122	54	6	.	.	.	184
2.25-2.49	.	.	.	.	33	38	4	.	.	.	75
2.50-2.74	.	.	.	.	11	41	12	.	.	.	64
2.75-2.99	.	.	.	.	.	16	5	1	.	.	22
3.00-3.24	.	.	.	.	.	20	10	.	.	.	30
3.25-3.49	.	.	.	.	.	3	14	.	.	.	17
3.50+	.	.	.	.	.	2	19	5	2	.	28
TOTAL	926	2805	2946	1876	1033	248	70	6	2	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 9289.

STATION M35 45.23N 85.73W 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	
0.00-0.24	672	238	3	.	.	.	.	.	.	.	913
0.25-0.49	80	1189	50	2	.	.	.	.	.	.	1321
0.50-0.74	.	495	1113	71	.	.	.	.	.	.	1679
0.75-0.99	.	6	409	401	.	.	.	.	.	.	816
1.00-1.24	.	.	273	643	45	.	.	.	.	.	961
1.25-1.49	.	.	7	233	159	.	.	.	.	.	399
1.50-1.74	.	.	.	147	209	1	.	.	.	.	357
1.75-1.99	.	.	.	11	133	3	.	.	.	.	147
2.00-2.24	.	.	.	1	93	9	.	.	.	.	103
2.25-2.49	.	.	.	.	23	13	.	.	.	.	36
2.50-2.74	.	.	.	.	4	23	.	.	.	.	27
2.75-2.99	.	.	.	.	.	12	.	.	.	.	12
3.00-3.24	.	.	.	.	.	7	.	.	.	.	7
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	3	.	.	.	3
TOTAL	752	1928	1855	1509	666	68	4	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 6356.

STATION M35 45.23N 85.73W 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	
0.00-0.24	463	188	2	1	.	.	.	.	.	.	654
0.25-0.49	67	1025	40	.	.	.	.	.	.	.	1132
0.50-0.74	.	398	945	58	.	.	.	.	.	.	1401
0.75-0.99	.	4	272	347	.	.	.	.	.	.	623
1.00-1.24	.	.	193	571	29	.	.	.	.	.	793
1.25-1.49	.	.	7	216	134	.	.	.	.	.	357
1.50-1.74	.	.	.	156	204	.	.	.	.	.	360
1.75-1.99	.	.	.	2	130	2	.	.	.	.	134
2.00-2.24	.	.	.	.	128	3	.	.	.	.	131
2.25-2.49	.	.	.	.	35	10	.	.	.	.	45
2.50-2.74	.	.	.	.	4	13	.	.	.	.	17
2.75-2.99	.	.	.	.	.	4	.	.	.	.	4
3.00-3.24	.	.	.	.	.	6	.	.	.	.	6
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	530	1615	1459	1351	664	38	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 4.0 NO. OF CASES= 5302.

STATION M35 45.23N 85.73W 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	
0.00-0.24	499	111	5	.	.	.	.	.	.	.	615
0.25-0.49	42	703	19	2	.	.	.	.	.	.	766
0.50-0.74	.	259	770	31	.	.	.	.	.	.	1060
0.75-0.99	.	2	255	315	.	.	.	.	.	.	572
1.00-1.24	.	.	147	576	14	.	.	.	.	.	737
1.25-1.49	.	.	9	288	105	.	.	.	.	.	402
1.50-1.74	.	.	.	210	271	.	.	.	.	.	481
1.75-1.99	.	.	.	4	194	.	.	.	.	.	198
2.00-2.24	.	.	.	.	188	5	.	.	.	.	193
2.25-2.49	.	.	.	.	54	4	.	.	.	.	58
2.50-2.74	.	.	.	.	11	33	.	.	.	.	44
2.75-2.99	.	.	.	.	.	11	.	.	.	.	11
3.00-3.24	.	.	.	.	.	6	.	.	.	.	6
3.25-3.49	.	.	.	.	.	2	2	.	.	.	4
3.50+	.	.	.	.	.	.	2	.	.	.	2
TOTAL	541	1075	1205	1426	837	61	4	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 4829.

STATION M35 45.23N 85.73W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

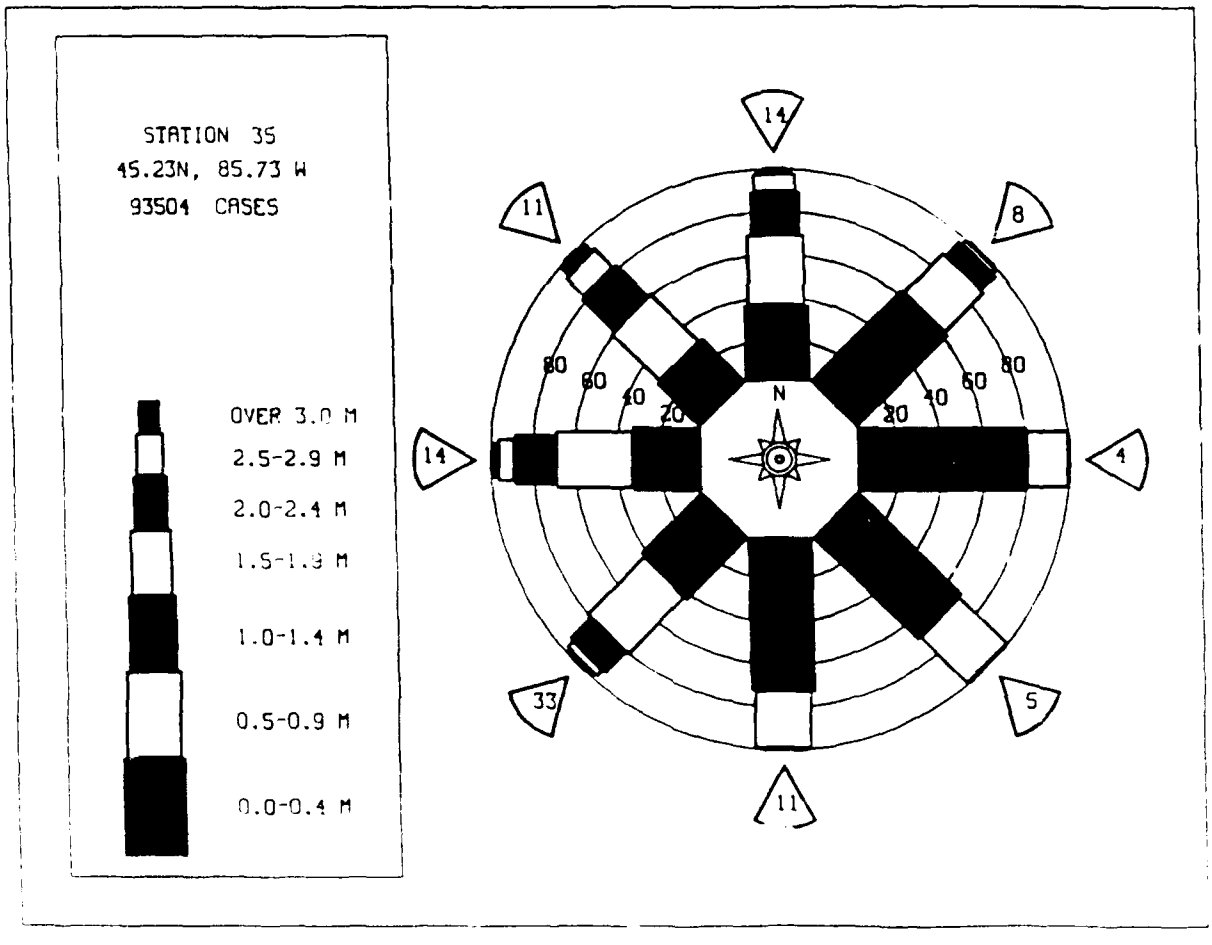
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	675	105	1	2	.	.	.	.	.	.	783
0.25-0.49	114	852	14	.	.	.	.	.	.	.	980
0.50-0.74	.	447	821	22	.	.	.	.	.	.	1290
0.75-0.99	.	2	417	280	.	.	.	.	.	.	699
1.00-1.24	.	.	237	667	13	.	.	.	.	.	917
1.25-1.49	.	.	9	444	73	.	.	.	.	.	526
1.50-1.74	.	.	.	374	201	.	.	.	.	.	575
1.75-1.99	.	.	.	24	233	.	.	.	.	.	257
2.00-2.24	.	.	.	.	202	2	.	.	.	.	204
2.25-2.49	.	.	.	.	77	8	.	.	.	.	85
2.50-2.74	.	.	.	.	19	42	.	.	.	.	61
2.75-2.99	.	.	.	.	.	9	.	.	.	.	9
3.00-3.24	.	.	.	.	.	13	.	.	.	.	13
3.25-3.49	.	.	.	.	.	12	.	.	.	.	12
3.50+	.	.	.	.	.	7	4	.	.	.	11
TOTAL	789	1406	1499	1813	818	93	4	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 6019.

STATION M35 45.23N 85.73W 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	
0.00-0.24	1591	402	57	37	4	.	.	.	.	.	2091
0.25-0.49	311	1828	224	99	24	1	.	.	.	.	2487
0.50-0.74	.	1141	1023	185	36	4	.	.	.	.	2389
0.75-0.99	.	126	485	283	39	5	.	.	.	.	938
1.00-1.24	.	.	291	513	86	13	1	.	.	.	904
1.25-1.49	.	.	22	284	105	6	.	.	.	.	417
1.50-1.74	.	.	4	218	148	10	1	.	.	.	381
1.75-1.99	.	.	.	16	112	11	.	.	.	.	139
2.00-2.24	.	.	.	1	100	15	2	.	.	.	118
2.25-2.49	.	.	.	.	31	11	1	.	.	.	43
2.50-2.74	.	.	.	.	8	20	4	.	.	.	32
2.75-2.99	.	.	.	.	.	8	2	.	.	.	10
3.00-3.24	.	.	.	.	.	7	2	.	.	.	9
3.25-3.49	.	.	.	.	.	2	2	.	.	.	4
3.50+	.	.	.	.	.	1	4	1	.	.	6
TOTAL	1902	3497	2106	1636	693	114	19	1	0	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.6 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M35 (45.23N 85.73W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
						MONTH							
1956	0.6	0.7	0.6	0.6	0.5	0.3	0.3	0.3	0.6	0.7	0.8	0.9	0.6
1957	1.0	0.8	0.7	0.6	0.5	0.5	0.4	0.4	0.6	0.7	1.3	1.1	0.7
1958	0.8	1.0	0.3	0.6	0.5	0.5	0.4	0.5	0.7	0.7	1.0	0.8	0.7
1959	0.9	0.9	0.6	0.5	0.5	0.4	0.4	0.5	0.7	0.7	0.9	0.9	0.7
1960	0.8	0.9	0.5	0.6	0.4	0.5	0.4	0.5	0.6	0.6	1.0	1.2	0.7
1961	0.9	0.7	0.7	0.5	0.5	0.5	0.3	0.5	0.6	0.8	0.8	0.9	0.6
1962	1.1	0.7	0.4	0.7	0.5	0.4	0.4	0.4	0.7	0.6	0.6	1.0	0.6
1963	0.9	1.0	0.7	0.7	0.5	0.4	0.4	0.5	0.5	0.5	0.9	0.8	0.7
1964	1.0	1.1	0.9	0.7	0.6	0.5	0.4	0.6	0.7	0.8	0.8	0.8	0.7
1965	1.0	1.2	0.7	0.5	0.5	0.5	0.4	0.5	0.6	0.9	0.9	0.9	0.7
1966	0.9	0.8	0.8	0.5	0.5	0.5	0.5	0.6	0.7	1.0	1.0	0.8	0.7
1967	1.1	1.0	0.7	0.6	0.5	0.4	0.4	0.6	0.6	0.8	0.9	0.8	0.7
1968	0.8	1.0	0.8	0.6	0.4	0.4	0.5	0.6	0.6	0.8	0.7	0.9	0.7
1969	0.9	0.7	0.8	0.5	0.5	0.5	0.4	0.6	0.6	0.7	0.7	0.8	0.6
1970	0.8	1.0	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.8	0.8	0.6
1971	1.1	1.0	0.7	0.5	0.5	0.4	0.5	0.5	0.5	0.6	0.8	0.8	0.7
1972	1.0	0.8	0.7	0.4	0.3	0.5	0.4	0.5	0.6	0.8	0.6	0.7	0.6
1973	1.0	0.7	0.7	0.6	0.4	0.4	0.4	0.5	0.6	0.7	0.8	0.8	0.6
1974	0.7	0.8	0.7	0.6	0.4	0.5	0.4	0.5	0.6	0.7	0.7	0.8	0.6
1975	0.9	0.8	0.6	0.5	0.4	0.4	0.5	0.5	0.6	0.8	0.8	0.8	0.6
1976	0.9	1.0	0.9	0.6	0.5	0.4	0.4	0.5	0.7	0.6	0.8	0.8	0.7
1977	0.9	0.9	0.6	0.5	0.3	0.4	0.5	0.5	0.5	0.7	0.7	0.7	0.6
1978	1.1	0.6	0.6	0.5	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.9	0.6
1979	0.9	0.6	0.6	0.5	0.4	0.4	0.4	0.5	0.6	0.9	1.1	1.1	0.7
1980	0.8	0.6	0.7	0.4	0.3	0.4	0.3	0.6	0.9	1.3	1.3	0.8	0.7
1981	0.7	0.8	0.7	0.6	0.4	0.4	0.4	0.4	0.8	0.9	0.9	0.6	0.6
1982	0.9	0.7	0.7	0.6	0.3	0.3	0.4	0.5	0.9	0.9	1.0	0.8	0.7
1983	0.7	0.6	0.6	0.5	0.4	0.3	0.4	0.5	0.9	0.8	0.9	0.6	0.6
1984	0.7	0.7	0.6	0.4	0.4	0.3	0.4	0.5	0.9	0.9	1.3	0.9	0.7
1985	0.8	0.8	0.7	0.5	0.4	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.6
1986	0.9	0.5	0.7	0.5	0.4	0.3	0.2	0.3	0.3	0.5	0.8	0.6	0.5
1987	0.8	0.7	0.6	0.4	0.2	0.2	0.2	0.4	0.3	0.6	0.6	0.9	0.5
MEAN	0.9	0.8	0.7	0.6	0.4	0.4	0.4	0.5	0.6	0.7	0.9	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M35 (45.23N 85.73W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
						MONTH						
1956	1.9	3.1	3.0	2.2	2.2	1.6	1.5	1.3	2.4	2.8	3.9	4.3
1957	3.0	2.4	3.6	4.2	3.3	1.8	2.4	2.0	2.2	2.7	5.1	4.2
1958	4.0	2.7	1.2	2.9	3.5	2.8	2.3	2.1	2.4	2.5	5.3	2.3
1959	2.7	2.9	3.3	2.5	1.9	1.5	1.6	1.7	2.8	2.8	2.5	3.5
1960	2.0	2.8	2.8	1.9	1.4	1.5	2.0	2.5	2.0	2.6	3.0	4.0
1961	3.2	2.8	2.3	1.7	1.8	1.7	1.5	1.9	2.4	2.4	2.3	2.5
1962	3.7	2.7	1.9	2.4	1.7	1.6	1.7	1.9	2.3	2.4	2.8	3.4
1963	2.6	3.1	2.7	3.7	1.8	1.8	1.3	1.8	1.9	2.0	2.9	3.5
1964	3.5	2.9	2.3	3.9	2.4	1.8	1.2	1.8	2.3	3.1	3.0	2.0
1965	2.8	3.3	2.7	2.1	1.7	1.2	1.4	1.6	2.2	2.6	3.4	4.0
1966	3.1	2.1	4.3	1.5	1.8	1.4	1.5	1.8	2.1	3.5	3.8	3.1
1967	3.0	2.5	1.9	2.2	1.6	1.2	1.5	1.9	2.2	2.4	2.4	2.0
1968	2.3	3.1	2.0	3.2	1.5	1.4	1.6	2.0	1.8	2.4	2.3	2.8
1969	2.4	2.0	2.1	1.4	1.3	2.5	1.4	2.1	2.1	2.3	1.9	2.5
1970	2.2	2.5	1.8	2.4	2.2	1.5	1.6	1.7	2.3	2.3	2.9	3.4
1971	3.5	5.2	2.3	2.1	1.3	1.1	1.8	1.9	1.4	2.4	2.7	2.4
1972	3.1	2.7	2.4	1.4	1.2	1.5	1.4	1.5	1.9	3.0	1.9	2.8
1973	2.6	2.5	3.5	1.6	1.5	1.6	1.7	1.7	2.2	2.1	2.2	2.0
1974	3.1	2.6	2.0	1.5	1.4	1.2	1.2	1.7	2.2	1.9	1.9	2.2
1975	4.8	2.6	2.0	1.8	1.4	1.6	1.1	1.5	1.7	2.1	2.5	2.4
1976	2.1	3.6	3.3	1.5	2.1	1.1	1.4	2.7	2.1	2.0	2.3	2.7
1977	2.2	2.5	2.6	1.9	1.5	1.2	1.7	2.2	2.2	2.0	2.6	2.5
1978	3.8	1.9	2.1	1.8	1.6	1.3	1.2	1.6	1.7	1.9	2.3	2.4
1979	2.3	1.5	2.2	1.5	1.2	1.3	1.4	1.4	1.9	2.6	3.3	3.3
1980	3.0	2.7	2.2	1.4	1.3	1.3	1.3	1.4	2.9	3.7	3.3	3.0
1981	2.4	2.1	2.0	1.9	1.5	1.9	1.3	1.5	3.7	3.5	3.3	2.1
1982	3.0	1.8	3.6	2.1	1.4	1.1	1.6	2.0	2.2	2.8	2.9	2.7
1983	2.6	1.9	1.7	1.7	1.2	1.1	1.1	1.4	2.2	3.1	3.4	2.8
1984	2.2	2.5	2.2	2.1	2.3	1.4	1.4	1.8	2.8	3.5	3.4	4.0
1985	2.3	2.6	2.9	2.4	1.8	1.8	1.9	1.3	1.8	2.2	2.2	2.2
1986	4.2	1.9	2.4	1.7	2.0	1.2	1.3	1.6	1.5	2.5	3.4	2.6
1987	2.4	3.3	1.9	1.6	1.1	1.0	1.3	1.4	1.3	2.3	2.3	2.6

32 YR. STATISTICS FOR WIS STATION M35

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
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)	1.3
LARGEST WAVE HS	(METERS)	5.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	212.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58111821

STATION M36 45.23N 85.93W 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	
0.00-0.24	1001	165	2	.	.	.	.	.	.	.	1168
0.25-0.49	137	1291	25	.	.	.	.	.	.	.	1453
0.50-0.74	.	592	1220	35	.	.	.	.	.	.	1847
0.75-0.99	.	2	513	398	.	.	.	.	.	.	913
1.00-1.24	.	.	258	762	1	.	.	.	.	.	1021
1.25-1.49	.	.	3	432	10	.	.	.	.	.	445
1.50-1.74	.	.	.	497	78	.	.	.	.	.	575
1.75-1.99	.	.	.	9	210	.	.	.	.	.	219
2.00-2.24	.	.	.	.	164	.	.	.	.	.	164
2.25-2.49	.	.	.	.	66	.	.	.	.	.	66
2.50-2.74	.	.	.	.	50	21	.	.	.	.	71
2.75-2.99	.	.	.	.	1	16	.	.	.	.	17
3.00-3.24	.	.	.	.	.	6	.	.	.	.	6
3.25-3.49	.	.	.	.	.	6	.	.	.	.	6
3.50+	.	.	.	.	.	11	4	.	.	.	15
TOTAL	1138	2050	2021	2133	580	60	4	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 7480.

STATION M36 45.23N 85.93W 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	
0.00-0.24	796	127	3	.	.	.	.	.	.	.	926
0.25-0.49	100	978	14	.	.	.	.	.	.	.	1092
0.50-0.74	.	351	623	18	.	.	.	.	.	.	992
0.75-0.99	.	1	250	130	.	.	.	.	.	.	381
1.00-1.24	.	.	128	265	.	.	.	.	.	.	393
1.25-1.49	.	.	4	183	1	.	.	.	.	.	188
1.50-1.74	.	.	.	176	17	.	.	.	.	.	193
1.75-1.99	.	.	.	10	43	.	.	.	.	.	53
2.00-2.24	.	.	.	.	31	.	.	.	.	.	31
2.25-2.49	.	.	.	.	5	.	.	.	.	.	5
2.50-2.74	.	.	.	.	4	3	.	.	.	.	7
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	1	.	.	.	.	1
TOTAL	896	1457	1022	782	101	5	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.5 NO. OF CASES= 3996.

STATION M36 45.23N 85.93W 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	
0.00-0.24	1275	217	1	.	.	.	.	.	.	.	1493
0.25-0.49	116	1061	17	.	.	.	.	.	.	.	1194
0.50-0.74	.	324	593	8	.	.	.	.	.	.	925
0.75-0.99	.	.	241	96	.	.	.	.	.	.	337
1.00-1.24	.	.	109	224	.	.	.	.	.	.	333
1.25-1.49	.	.	5	171	.	.	.	.	.	.	176
1.50-1.74	.	.	.	161	2	.	.	.	.	.	163
1.75-1.99	.	.	.	9	25	.	.	.	.	.	34
2.00-2.24	.	.	.	.	20	.	.	.	.	.	20
2.25-2.49	.	.	.	.	5	.	.	.	.	.	5
2.50-2.74	.	.	.	.	3	.	.	.	.	.	3
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1391	1602	966	669	55	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 4387.

STATION M36 45.23N 85.93W 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	
0.00-0.24	622	88	.	1	.	.	.	.	.	.	711
0.25-0.49	48	575	14	.	.	.	.	.	.	.	637
0.50-0.74	.	315	329	3	.	.	.	.	.	.	647
0.75-0.99	.	1	145	26	.	.	.	.	.	.	172
1.00-1.24	.	.	66	63	.	.	.	.	.	.	129
1.25-1.49	.	.	3	47	.	.	.	.	.	.	50
1.50-1.74	.	.	.	34	.	.	.	.	.	.	34
1.75-1.99	.	.	.	1	2	.	.	.	.	.	3
2.00-2.24	.	.	.	.	2	.	.	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	670	979	557	175	4	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 2236.

STATION M36 45.23N 85.93W 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	
0.00-0.24	669	139	1	.	.	.	.	.	.	.	809
0.25-0.49	53	515	28	.	.	.	.	.	.	.	596
0.50-0.74	.	423	201	4	.	.	.	.	.	.	628
0.75-0.99	.	.	120	11	.	.	.	.	.	.	131
1.00-1.24	.	.	68	3	.	.	.	.	.	.	71
1.25-1.49	.	.	2	5	.	.	.	.	.	.	7
1.50-1.74	.	.	.	3	.	.	.	.	.	.	3
1.75-1.99	.	.	.	.	1	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	722	1077	420	26	1	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 2.9 NO. OF CASES= 2106.

STATION M36 45.23N 85.93W 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	
0.00-0.24	546	90	2	.	1	.	.	.	.	.	639
0.25-0.49	43	423	7	.	.	.	.	.	.	.	473
0.50-0.74	.	497	93	2	.	.	.	.	.	.	592
0.75-0.99	.	.	63	4	.	.	.	.	.	.	67
1.00-1.24	.	.	43	.	.	.	.	.	.	.	43
1.25-1.49	.	.	2	.	.	.	.	.	.	.	2
1.50-1.74	.	.	.	2	.	.	.	.	.	.	2
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	589	1010	210	8	1	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.8 NO. OF CASES= 1705.

STATION M36 45.23N 85.93W 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	
0.00-0.24	683	116	2	.	.	.	.	.	.	.	801
0.25-0.49	59	501	8	.	.	.	.	.	.	.	568
0.50-0.74	.	644	48	.	.	.	.	.	.	.	692
0.75-0.99	.	.	70	2	.	.	.	.	.	.	72
1.00-1.24	.	.	24	.	.	.	.	.	.	.	24
1.25-1.49	.	.	3	.	.	.	.	.	.	.	3
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	742	1261	155	2	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 2.7 NO. OF CASES= 2025.

STATION M36 45.23N 85.93W 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	
0.00-0.24	852	146	5	.	.	.	.	.	.	.	1003
0.25-0.49	38	748	7	.	.	.	.	.	.	.	853
0.50-0.74	.	941	71	1	.	.	.	.	.	.	1013
0.75-0.99	.	2	115	.	.	.	.	.	.	.	117
1.00-1.24	.	.	36	.	.	.	.	.	.	.	36
1.25-1.49	.	.	4	1	.	.	.	.	.	.	5
1.50-1.74	.	.	.	3	.	.	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	950	1837	238	5	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.8 NO. OF CASES= 3838

STATION M36 45.23N 85.93W 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	
0.00-0.24	1748	336	12	2	.	2	.	.	.	.	2100
0.25-0.49	245	1267	26	6	.	3	.	.	.	.	1547
0.50-0.74	.	1774	333	1	.	.	.	.	.	.	2108
0.75-0.99	.	22	324	1	1	.	.	.	.	.	348
1.00-1.24	.	.	263	.	.	.	.	.	.	.	263
1.25-1.49	.	.	42	9	.	3	.	.	.	.	54
1.50-1.74	.	.	3	22	.	.	.	.	.	.	25
1.75-1.99	.	.	.	6	.	.	.	.	.	.	6
2.00-2.24	.	.	.	2	1	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1993	3399	1003	49	2	8	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 2.9 NO. OF CASES= 6044.

STATION M36 45.23N 85.93W 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	
0.00-0.24	1709	818	588	303	19	1	.	.	.	.	3438
0.25-0.49	310	2285	990	1178	221	10	.	.	.	.	4994
0.50-0.74	.	2263	1430	949	564	40	.	.	.	.	5246
0.75-0.99	.	18	1104	445	317	57	8	.	.	.	1949
1.00-1.24	.	.	990	419	279	77	17	1	.	.	1783
1.25-1.49	.	.	291	178	223	42	10	.	.	.	744
1.50-1.74	.	.	58	202	221	88	19	2	1	.	591
1.75-1.99	.	.	.	33	70	58	7	5	.	.	173
2.00-2.24	.	.	.	13	52	68	17	.	.	.	150
2.25-2.49	.	.	.	1	17	37	13	.	.	.	68
2.50-2.74	.	.	.	.	8	20	10	.	.	.	38
2.75-2.99	.	.	.	.	.	8	7	.	.	.	15
3.00-3.24	.	.	.	.	1	10	10	.	.	.	21
3.25-3.49	.	.	.	.	.	.	9	.	.	.	9
3.50+	.	.	.	.	.	.	17	4	.	.	21
TOTAL	2019	5384	5451	3721	1992	516	144	12	1	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 18017.

STATION M36 45.23N 85.93W 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	
0.00-0.24	1303	668	59	7	.	.	.	.	.	.	2037
0.25-0.49	265	2658	456	83	13	.	.	.	.	.	3475
0.50-0.74	.	1309	2550	760	105	9	.	.	.	.	4733
0.75-0.99	.	23	894	904	140	19	.	.	.	.	1980
1.00-1.24	.	.	680	1069	385	36	7	.	.	.	2177
1.25-1.49	.	.	78	476	401	32	2	1	.	.	990
1.50-1.74	.	.	10	353	433	63	11	.	.	.	870
1.75-1.99	.	.	.	58	202	102	8	1	.	.	371
2.00-2.24	.	.	.	8	173	118	10	.	.	.	309
2.25-2.49	.	.	.	.	56	64	8	.	.	.	128
2.50-2.74	.	.	.	.	12	99	24	3	.	.	138
2.75-2.99	.	.	.	.	5	38	16	.	.	.	59
3.00-3.24	.	.	.	.	2	41	27	2	.	.	72
3.25-3.49	.	.	.	.	.	5	14	1	.	.	20
3.50+	.	.	.	.	.	3	58	7	2	.	70
TOTAL	1568	4658	4727	3718	1927	629	185	15	2	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 16324.

STATION M36 45.23N 85.93W 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	
0.00-0.24	709	201	1	.	.	.	.	.	.	.	911
0.25-0.49	94	1275	28	.	.	.	.	.	.	.	1397
0.50-0.74	.	636	1285	67	.	.	.	.	.	.	1988
0.75-0.99	.	9	494	430	4	.	.	.	.	.	937
1.00-1.24	.	.	290	697	57	2	.	.	.	.	1046
1.25-1.49	.	.	19	317	150	1	.	.	.	.	487
1.50-1.74	.	.	.	309	204	7	.	.	.	.	520
1.75-1.99	.	.	.	19	151	19	.	.	.	.	189
2.00-2.24	.	.	.	.	146	26	2	.	.	.	174
2.25-2.49	.	.	.	.	37	19	3	.	.	.	59
2.50-2.74	.	.	.	.	18	31	3	.	.	.	52
2.75-2.99	.	.	.	.	1	18	.	.	.	.	19
3.00-3.24	.	.	.	.	.	16	3	.	.	.	19
3.25-3.49	.	.	.	.	.	6	2	.	.	.	8
3.50+	.	.	.	.	.	2	12	.	.	.	14
TOTAL	803	2121	2117	1839	768	147	25	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.0 NO. OF CASES= 9327.

STATION M36 45.23N 85.93W 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	
0.00-0.24	594	160	.	.	.	.	.	.	.	.	754
0.25-0.49	71	952	16	.	.	.	.	.	.	.	1039
0.50-0.74	.	401	853	29	1	.	.	.	.	.	1284
0.75-0.99	.	8	345	311	.	.	.	.	.	.	664
1.00-1.24	.	.	226	486	9	.	.	.	.	.	721
1.25-1.49	.	.	10	333	38	.	.	.	.	.	381
1.50-1.74	.	.	.	249	104	.	.	.	.	.	353
1.75-1.99	.	.	.	9	143	.	.	.	.	.	152
2.00-2.24	.	.	.	.	79	1	.	.	.	.	80
2.25-2.49	.	.	.	.	20	.	.	.	.	.	20
2.50-2.74	.	.	.	.	13	8	.	.	.	.	21
2.75-2.99	.	.	.	.	.	10	.	.	.	.	10
3.00-3.24	.	.	.	.	.	4	.	.	.	.	4
3.25-3.49	.	.	.	.	.	2	.	.	.	.	2
3.50+											0
TOTAL	665	1521	1450	1417	407	25	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 5142.

STATION M36 45.23N 85.93W 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	
0.00-0.24	408	105	3	.	.	.	.	.	.	.	516
0.25-0.49	52	848	12	.	.	.	.	.	.	.	912
0.50-0.74	.	347	781	29	.	.	.	.	.	.	1157
0.75-0.99	.	1	259	249	.	.	.	.	.	.	509
1.00-1.24	.	.	166	439	1	.	.	.	.	.	606
1.25-1.49	.	.	7	290	19	.	.	.	.	.	316
1.50-1.74	.	.	.	318	51	.	.	.	.	.	369
1.75-1.99	.	.	.	14	114	.	.	.	.	.	128
2.00-2.24	.	.	.	.	82	.	.	.	.	.	82
2.25-2.49	.	.	.	.	18	.	.	.	.	.	18
2.50-2.74	.	.	.	.	9	5	.	.	.	.	14
2.75-2.99	.	.	.	.	.	4	.	.	.	.	4
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	460	1301	1228	1339	294	10	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 4344.

STATION M36 45.23N 85.93W 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	
0.00-0.24	424	86	1	.	.	.	.	.	.	.	511
0.25-0.49	41	566	12	.	.	.	.	.	.	.	619
0.50-0.74	.	252	648	23	.	.	.	.	.	.	923
0.75-0.99	.	3	259	238	.	.	.	.	.	.	500
1.00-1.24	.	.	158	442	2	.	.	.	.	.	602
1.25-1.49	.	.	11	381	2	.	.	.	.	.	394
1.50-1.74	.	.	.	437	29	.	.	.	.	.	466
1.75-1.99	.	.	.	16	126	.	.	.	.	.	142
2.00-2.24	.	.	.	.	78	.	.	.	.	.	78
2.25-2.49	.	.	.	.	31	.	.	.	.	.	31
2.50-2.74	.	.	.	.	17	6	.	.	.	.	23
2.75-2.99	.	.	.	.	.	4	.	.	.	.	4
3.00-3.24	.	.	.	.	.	6	.	.	.	.	6
3.25-3.49	.	.	.	.	.	4	.	.	.	.	4
3.50+											0
TOTAL	465	907	1089	1537	285	20	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 4.1 NO. OF CASES= 4035.

STATION M36 45.23N 85.93W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

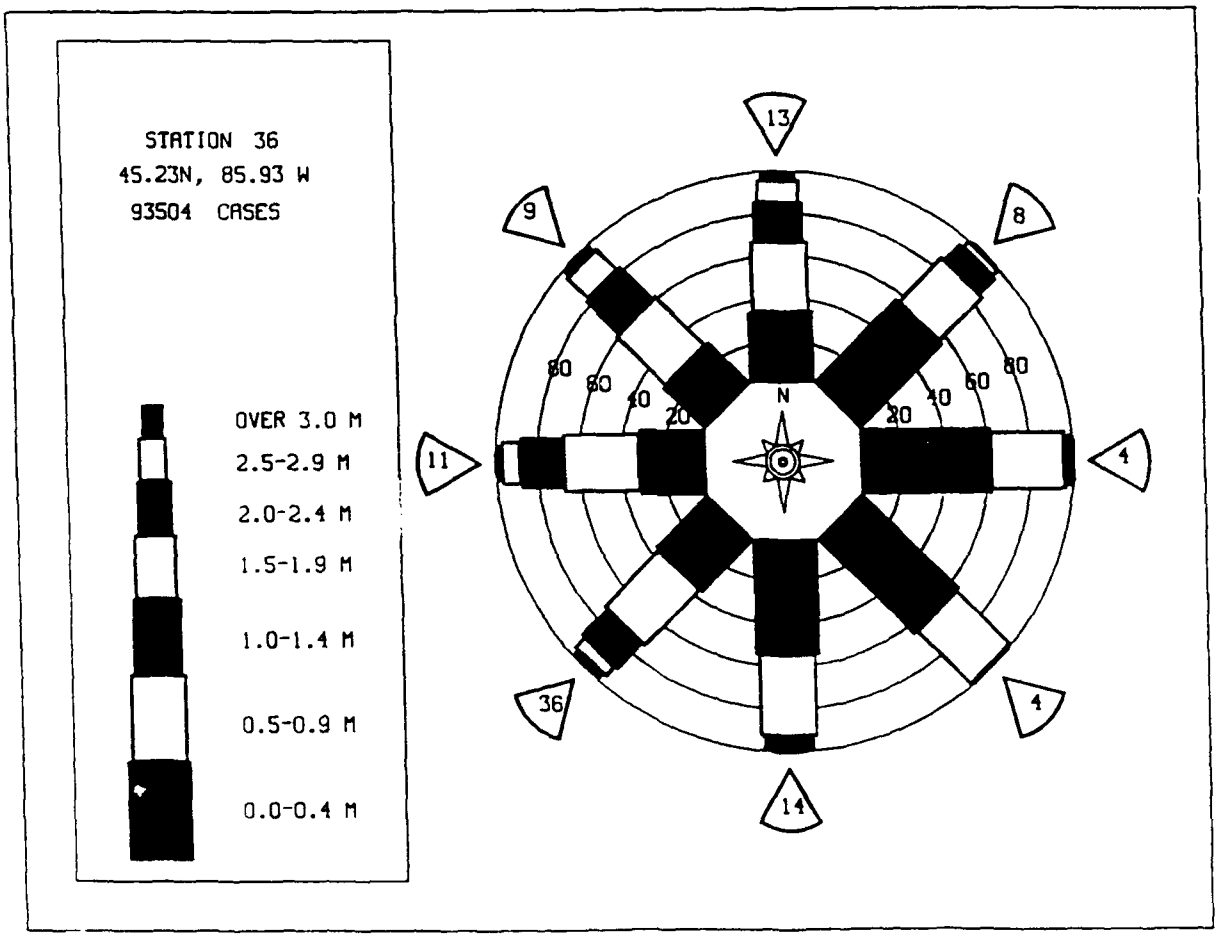
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	592	85	.	.	.	.	.	.	.	.	677
0.25-0.49	96	809	13	.	.	.	.	.	.	.	918
0.50-0.74	.	368	752	23	.	.	.	.	.	.	1143
0.75-0.99	.	2	367	278	.	.	.	.	.	.	647
1.00-1.24	.	.	171	629	6	.	.	.	.	.	806
1.25-1.49	.	.	10	412	26	.	.	.	.	.	448
1.50-1.74	.	.	.	493	120	.	.	.	.	.	613
1.75-1.99	.	.	.	18	212	.	.	.	.	.	230
2.00-2.24	.	.	.	.	227	.	.	.	.	.	227
2.25-2.49	.	.	.	.	68	1	.	.	.	.	69
2.50-2.74	.	.	.	.	25	20	.	.	.	.	45
2.75-2.99	.	.	.	.	.	12	.	.	.	.	12
3.00-3.24	.	.	.	.	.	12	.	.	.	.	12
3.25-3.49	.	.	.	.	.	6	.	.	.	.	6
3.50+						3	7				10
TOTAL	688	1264	1313	1853	684	54	7	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 5498.

STATION M36 45.23N 85.93W 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	
0.00-0.24	1383	355	68	31	2	.	.	.	.	.	1849
0.25-0.49	183	1676	168	126	23	1	.	.	.	.	2177
0.50-0.74	.	1144	1181	195	67	5	.	.	.	.	2592
0.75-0.99	.	9	557	353	46	7	.	.	.	.	972
1.00-1.24	.	.	368	550	74	11	2	.	.	.	1005
1.25-1.49	.	.	50	324	87	7	1	.	.	.	469
1.50-1.74	.	.	7	326	126	15	3	.	.	.	477
1.75-1.99	.	.	.	20	130	18	1	.	.	.	169
2.00-2.24	.	.	.	2	105	21	2	.	.	.	130
2.25-2.49	.	.	.	.	32	12	2	.	.	.	46
2.50-2.74	.	.	.	.	16	21	3	.	.	.	40
2.75-2.99	.	.	.	.	.	11	2	.	.	.	13
3.00-3.24	.	.	.	.	.	10	4	.	.	.	14
3.25-3.49	.	.	.	.	.	3	2	.	.	.	5
3.50+	.	.	.	.	.	2	10	1	.	.	13
TOTAL	1576	3184	2399	1927	708	144	32	1	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M36 (45.23N 85.93W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.7	0.6	0.6	0.6	0.4	0.3	0.3	0.6	0.8	0.9	0.9	0.6
1957	1.1	0.8	0.7	0.7	0.6	0.5	0.4	0.5	0.6	0.7	1.3	1.2	0.8
1958	0.8	1.0	0.3	0.6	0.5	0.5	0.5	0.5	0.8	0.8	1.1	0.9	0.7
1959	1.0	0.9	0.6	0.6	0.6	0.4	0.5	0.5	0.8	0.8	0.9	0.9	0.7
1960	0.9	0.9	0.6	0.6	0.4	0.5	0.4	0.6	0.6	0.7	1.1	1.2	0.7
1961	0.9	0.7	0.8	0.5	0.6	0.5	0.4	0.5	0.7	0.8	0.9	1.0	0.7
1962	1.2	0.8	0.4	0.8	0.6	0.4	0.4	0.4	0.7	0.7	0.7	1.0	0.7
1963	0.9	1.0	0.7	0.7	0.5	0.4	0.4	0.5	0.6	0.6	1.0	0.9	0.7
1964	1.1	1.2	1.0	0.8	0.6	0.5	0.4	0.7	0.7	0.9	0.9	0.8	0.8
1965	1.1	1.2	0.7	0.5	0.6	0.5	0.4	0.6	0.7	0.9	0.9	1.0	0.8
1966	0.9	0.8	0.9	0.5	0.5	0.5	0.5	0.6	0.7	1.1	1.1	0.9	0.8
1967	1.1	1.1	0.8	0.7	0.5	0.4	0.4	0.6	0.6	0.9	0.9	0.8	0.7
1968	0.9	1.0	0.8	0.7	0.4	0.4	0.5	0.6	0.6	0.8	0.8	1.0	0.7
1969	0.9	0.8	0.8	0.6	0.5	0.5	0.4	0.6	0.6	0.8	0.7	0.9	0.7
1970	0.8	1.1	0.6	0.7	0.5	0.5	0.5	0.5	0.7	0.7	0.8	0.8	0.7
1971	1.1	1.1	0.7	0.6	0.5	0.4	0.5	0.5	0.6	0.7	0.9	0.8	0.7
1972	1.2	0.8	0.7	0.4	0.3	0.5	0.5	0.5	0.7	0.9	0.7	0.8	0.7
1973	1.0	0.8	0.7	0.6	0.5	0.4	0.5	0.6	0.6	0.7	0.8	0.8	0.7
1974	0.8	0.8	0.7	0.7	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8	0.7
1975	1.0	0.8	0.7	0.5	0.4	0.4	0.5	0.5	0.6	0.8	0.9	0.8	0.7
1976	1.0	1.0	1.0	0.6	0.5	0.4	0.5	0.6	0.7	0.7	0.9	0.9	0.7
1977	1.0	1.0	0.6	0.5	0.4	0.4	0.5	0.6	0.6	0.8	0.8	0.8	0.7
1978	1.1	0.7	0.6	0.6	0.5	0.4	0.4	0.5	0.7	0.7	0.8	0.9	0.7
1979	0.9	0.7	0.6	0.5	0.4	0.4	0.4	0.5	0.7	1.2	1.4	1.3	0.8
1980	0.8	0.7	0.7	0.4	0.3	0.5	0.4	0.7	1.1	1.5	1.6	0.9	0.8
1981	0.7	0.9	0.7	0.6	0.5	0.5	0.4	0.5	0.9	1.0	1.1	0.7	0.7
1982	0.9	0.7	0.7	0.7	0.4	0.3	0.5	0.6	1.1	1.1	1.1	0.8	0.7
1983	0.8	0.7	0.6	0.5	0.4	0.3	0.4	0.6	1.1	1.0	1.1	0.7	0.7
1984	0.8	0.8	0.6	0.5	0.4	0.4	0.5	0.6	1.1	1.1	1.7	0.9	0.8
1985	0.9	0.8	0.8	0.6	0.4	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.6
1986	1.0	0.5	0.7	0.6	0.4	0.3	0.3	0.3	0.4	0.5	0.8	0.7	0.5
1987	0.8	0.7	0.6	0.4	0.2	0.2	0.3	0.4	0.4	0.7	0.7	0.9	0.5
MEAN	0.9	0.9	0.7	0.6	0.5	0.4	0.4	0.5	0.7	0.8	1.0	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M36 (45.23N 85.93W)

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

32 YR. STATISTICS FOR WIS STATION M36

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	5.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	207.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58111821

STATION M37 45.23N 86.15W 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	
0.00-0.24	963	160	2	.	.	.	.	.	.	.	1125
0.25-0.49	164	1315	22	.	.	.	.	.	.	.	1501
0.50-0.74	.	534	1224	29	.	.	.	.	.	.	1787
0.75-0.99	.	2	521	403	.	.	.	.	.	.	926
1.00-1.24	.	.	225	770	.	.	.	.	.	.	995
1.25-1.49	.	.	4	413	14	.	.	.	.	.	431
1.50-1.74	.	.	.	490	84	.	.	.	.	.	574
1.75-1.99	.	.	.	6	205	.	.	.	.	.	211
2.00-2.24	.	.	.	.	192	.	.	.	.	.	192
2.25-2.49	.	.	.	.	66	.	.	.	.	.	66
2.50-2.74	.	.	.	.	41	29	.	.	.	.	70
2.75-2.99	.	.	.	.	1	22	.	.	.	.	23
3.00-3.24	.	.	.	.	.	16	.	.	.	.	16
3.25-3.49	.	.	.	.	.	4	.	.	.	.	4
3.50+	.	.	.	.	.	11	4	.	.	.	15
TOTAL	1127	2011	1998	2111	603	82	4	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 7435.

STATION M37 45.23N 86.15W 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	
0.00-0.24	782	141	3	.	.	.	.	.	.	.	926
0.25-0.49	103	913	16	.	.	.	.	.	.	.	1032
0.50-0.74	.	329	621	13	.	.	.	.	.	.	963
0.75-0.99	.	1	232	179	.	.	.	.	.	.	412
1.00-1.24	.	.	112	285	.	.	.	.	.	.	397
1.25-1.49	.	.	2	199	2	.	.	.	.	.	203
1.50-1.74	.	.	.	182	24	.	.	.	.	.	206
1.75-1.99	.	.	.	4	49	.	.	.	.	.	53
2.00-2.24	.	.	.	.	45	.	.	.	.	.	45
2.25-2.49	.	.	.	.	14	.	.	.	.	.	14
2.50-2.74	.	.	.	.	9	3	.	.	.	.	12
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	2	1	.	.	.	3
TOTAL	885	1384	986	862	143	7	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(S)= 3.5 NO. OF CASES= 4002.

STATION M37 45.23N 86.15W 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	
0.00-0.24	1233	209	2	.	.	.	.	.	.	.	1444
0.25-0.49	111	1072	10	.	.	.	.	.	.	.	1193
0.50-0.74	.	294	610	9	.	.	.	.	.	.	913
0.75-0.99	.	.	240	119	.	.	.	.	.	.	359
1.00-1.24	.	.	78	243	.	.	.	.	.	.	321
1.25-1.49	.	.	2	189	2	.	.	.	.	.	193
1.50-1.74	.	.	.	174	5	.	.	.	.	.	179
1.75-1.99	.	.	.	5	28	.	.	.	.	.	33
2.00-2.24	.	.	.	.	23	.	.	.	.	.	23
2.25-2.49	.	.	.	.	7	.	.	.	.	.	7
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1344	1575	942	739	66	1	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.3 NO. OF CASES= 4373.

STATION M37 45.23N 86.15W 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	
0.00-0.24	560	96	1	.	.	.	.	.	.	.	657
0.25-0.49	41	586	7	.	.	.	.	.	.	.	634
0.50-0.74	.	195	372	5	.	.	.	.	.	.	572
0.75-0.99	.	.	142	59	.	.	.	.	.	.	201
1.00-1.24	.	.	97	81	.	.	.	.	.	.	178
1.25-1.49	.	.	2	70	1	.	.	.	.	.	73
1.50-1.74	.	.	.	42	8	.	.	.	.	.	50
1.75-1.99	.	.	.	4	3	.	.	.	.	.	7
2.00-2.24	.	.	.	.	2	.	.	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	601	877	621	261	14	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 2227.

STATION M37 45.23N 86.15W 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	
0.00-0.24	559	128	2	1	.	.	.	.	.	.	690
0.25-0.49	54	620	14	.	.	.	.	.	.	.	688
0.50-0.74	.	227	260	5	.	.	.	.	.	.	492
0.75-0.99	.	.	150	10	.	.	.	.	.	.	160
1.00-1.24	.	.	150	1	.	.	.	.	.	.	161
1.25-1.49	.	.	2	36	.	.	.	.	.	.	38
1.50-1.74	.	.	.	10	.	.	.	.	.	.	10
1.75-1.99	.	.	.	2	.	.	.	.	.	.	2
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	613	975	578	75	1	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 2105.

STATION M37 45.23N 86.15W 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	
0.00-0.24	474	66	2	.	.	.	.	.	.	.	542
0.25-0.49	39	497	3	.	.	.	.	.	.	.	539
0.50-0.74	.	240	205	1	.	.	.	.	.	.	446
0.75-0.99	.	.	121	4	.	.	.	.	.	.	125
1.00-1.24	.	.	116	5	.	.	.	.	.	.	121
1.25-1.49	.	.	.	23	.	.	.	.	.	.	23
1.50-1.74	.	.	.	4	.	.	.	.	.	.	4
1.75-1.99	.	.	.	2	.	.	.	.	.	.	2
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	513	803	447	39	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 1691.

STATION M37 45.23N 86.15W 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	
0.00-0.24	594	99	2	.	.	.	.	.	.	.	695
0.25-0.49	59	570	4	.	.	.	.	.	.	.	633
0.50-0.74	.	276	234	.	.	.	.	.	.	.	510
0.75-0.99	.	.	95	3	.	.	.	.	.	.	98
1.00-1.24	.	.	132	2	.	.	.	.	.	.	134
1.25-1.49	.	.	5	34	.	.	.	.	.	.	39
1.50-1.74	.	.	.	6	.	.	.	.	.	.	6
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	653	945	472	46	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.0 NO. OF CASES= 1984.

STATION M37 45.23N 86.15W 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	
0.00-0.24	823	188	2	1	.	.	.	.	.	.	1014
0.25-0.49	111	890	5	.	.	.	.	.	.	.	1006
0.50-0.74	.	493	342	.	.	.	.	.	.	.	835
0.75-0.99	.	.	186	4	.	.	.	.	.	.	190
1.00-1.24	.	.	213	3	.	.	.	.	.	.	216
1.25-1.49	.	.	9	63	.	.	.	.	.	.	72
1.50-1.74	.	.	.	17	.	.	.	.	.	.	17
1.75-1.99	.	.	.	4	.	.	.	.	.	.	4
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	934	1571	757	92	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 3141.

STATION M37 45.23N 86.15W 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	
0.00-0.24	1742	396	20	2	1	1	.	.	.	.	2162
0.25-0.49	213	1713	48	5	.	4	.	.	.	.	1983
0.50-0.74	.	947	1043	26	7	.	.	.	.	.	2023
0.75-0.99	.	3	572	111	1	.	.	.	.	.	687
1.00-1.24	.	.	372	309	4	.	.	.	.	.	685
1.25-1.49	.	.	11	239	1	.	.	.	.	.	251
1.50-1.74	.	.	.	181	.	2	.	.	.	.	183
1.75-1.99	.	.	.	21	13	1	.	.	.	.	35
2.00-2.24	.	.	.	2	16	.	.	.	.	.	18
2.25-2.49	.	.	.	.	8	2	.	.	.	.	10
2.50-2.74	.	.	.	.	3	.	.	.	.	.	3
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1955	3059	2066	896	54	11	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 7530.

STATION M37 45.23N 86.15W 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	
0.00-0.24	1729	1035	613	236	12	.	.	.	.	.	3625
0.25-0.49	279	2754	1369	1281	171	5	.	.	.	.	5859
0.50-0.74	.	1472	2378	1701	685	27	.	.	.	.	6263
0.75-0.99	.	34	907	910	398	59	2	.	.	.	2310
1.00-1.24	.	.	644	1056	503	109	8	.	.	.	2320
1.25-1.49	.	.	22	671	328	55	18	1	.	.	1095
1.50-1.74	.	.	.	579	290	102	21	1	.	.	993
1.75-1.99	.	.	.	116	180	85	13	.	1	.	395
2.00-2.24	.	.	.	18	183	91	26	5	.	.	323
2.25-2.49	.	.	.	.	64	68	14	3	.	.	149
2.50-2.74	.	.	.	.	27	73	21	1	.	.	122
2.75-2.99	.	.	.	.	8	35	9	.	1	.	53
3.00-3.24	.	.	.	.	4	25	19	1	.	.	49
3.25-3.49	.	.	.	.	.	3	14	.	.	.	17
3.50+	.	.	.	.	.	3	37	5	1	.	46
TOTAL	2008	5295	5933	6568	2853	740	202	17	3	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.3 NO. OF CASES= 22117.

STATION M37 45.23N 86.15W 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	
0.00-0.24	1286	546	55	6	2	.	.	.	.	.	1895
0.25-0.49	254	2298	257	75	14	.	.	.	.	.	2898
0.50-0.74	.	1189	1975	377	96	2	.	.	.	.	3639
0.75-0.99	.	19	755	633	86	9	.	.	.	.	1502
1.00-1.24	.	.	436	1036	241	36	2	.	.	.	1751
1.25-1.49	.	.	16	398	376	16	3	.	.	.	809
1.50-1.74	.	.	.	287	448	53	7	.	.	.	795
1.75-1.99	.	.	.	33	239	59	5	2	.	.	338
2.00-2.24	.	.	.	2	201	81	9	1	.	.	294
2.25-2.49	.	.	.	.	72	60	6	.	.	.	138
2.50-2.74	.	.	.	.	22	119	12	1	.	.	154
2.75-2.99	.	.	.	.	.	54	7	.	.	.	61
3.00-3.24	.	.	.	.	.	50	14	.	.	.	64
3.25-3.49	.	.	.	.	.	8	24	2	.	.	34
3.50+	.	.	.	.	.	4	56	7	1	.	68
TOTAL	1540	4052	3494	2847	1797	551	145	13	1	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.1 NO. OF CASES= 13527.

STATION M37 45.23N 86.15W 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	
0.00-0.24	634	191	2	.	.	.	.	.	.	.	827
0.25-0.49	115	1057	21	1	.	.	.	.	.	.	1194
0.50-0.74	.	572	993	33	4	.	.	.	.	.	1602
0.75-0.99	.	5	550	228	5	.	.	.	.	.	788
1.00-1.24	.	.	287	564	14	1	.	.	.	.	866
1.25-1.49	.	.	16	434	62	2	.	.	.	.	514
1.50-1.74	.	.	.	391	57	3	.	.	.	.	451
1.75-1.99	.	.	.	38	99	2	.	.	.	.	139
2.00-2.24	.	.	.	3	83	6	.	.	.	.	92
2.25-2.49	.	.	.	.	34	8	2	.	.	.	44
2.50-2.74	.	.	.	.	17	12	.	.	.	.	29
2.75-2.99	.	.	.	.	2	6	.	.	.	.	8
3.00-3.24	.	.	.	.	1	10	.	.	.	.	11
3.25-3.49	.	.	.	.	.	4	1	.	.	.	5
3.50+	.	.	.	.	.	.	5	.	.	.	5
TOTAL	749	1825	1869	1692	378	54	8	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 6163.

STATION M37 45.23N 86.15W 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	
0.00-0.24	519	167	1	.	.	.	.	.	.	.	687
0.25-0.49	87	790	13	1	.	.	.	.	.	.	891
0.50-0.74	.	379	701	8	2	.	.	.	.	.	1090
0.75-0.99	.	5	403	120	.	.	.	.	.	.	528
1.00-1.24	.	.	235	393	.	.	.	.	.	.	628
1.25-1.49	.	.	7	357	6	.	.	.	.	.	370
1.50-1.74	.	.	.	362	1	.	.	.	.	.	363
1.75-1.99	.	.	.	24	67	.	.	.	.	.	91
2.00-2.24	.	.	.	.	60	.	.	.	.	.	60
2.25-2.49	.	.	.	.	21	.	.	.	.	.	21
2.50-2.74	.	.	.	.	12	2	.	.	.	.	14
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	606	1341	1360	1265	169	6	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 4451.

STATION M37 45.23N 86.15W 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	
0.00-0.24	358	119	2	.	.	.	.	.	.	.	479
0.25-0.49	83	690	12	.	.	.	.	.	.	.	785
0.50-0.74	.	326	699	7	.	.	.	.	.	.	1032
0.75-0.99	.	1	296	139	.	.	.	.	.	.	436
1.00-1.24	.	.	168	342	.	.	.	.	.	.	510
1.25-1.49	.	.	3	304	2	.	.	.	.	.	309
1.50-1.74	.	.	.	344	11	.	.	.	.	.	355
1.75-1.99	.	.	.	13	83	.	.	.	.	.	96
2.00-2.24	.	.	.	.	71	.	.	.	.	.	71
2.25-2.49	.	.	.	.	19	.	.	.	.	.	19
2.50-2.74	.	.	.	.	14	2	.	.	.	.	16
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	441	1136	1180	1149	200	3	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 3853.

STATION M37 45.23N 86.15W 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	
0.00-0.24	424	90	1	.	.	.	.	.	.	.	515
0.25-0.49	52	551	12	.	.	.	.	.	.	.	615
0.50-0.74	.	248	594	9	.	.	.	.	.	.	851
0.75-0.99	.	3	302	183	.	.	.	.	.	.	488
1.00-1.24	.	.	144	391	.	.	.	.	.	.	535
1.25-1.49	.	.	8	335	1	.	.	.	.	.	344
1.50-1.74	.	.	.	371	3	.	.	.	.	.	374
1.75-1.99	.	.	.	6	113	.	.	.	.	.	119
2.00-2.24	.	.	.	.	77	.	.	.	.	.	77
2.25-2.49	.	.	.	.	22	.	.	.	.	.	22
2.50-2.74	.	.	.	.	11	3	.	.	.	.	14
2.75-2.99	.	.	.	.	.	8	.	.	.	.	8
3.00-3.24	.	.	.	.	.	7	.	.	.	.	7
3.25-3.49	.	.	.	.	.	4	.	.	.	.	4
3.50+	.	.	.	.	.	2	.	.	.	.	2
TOTAL	476	892	1061	1295	227	24	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 4.0 NO. OF CASES= 3729.

STATION M37 45.23N 86.15W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

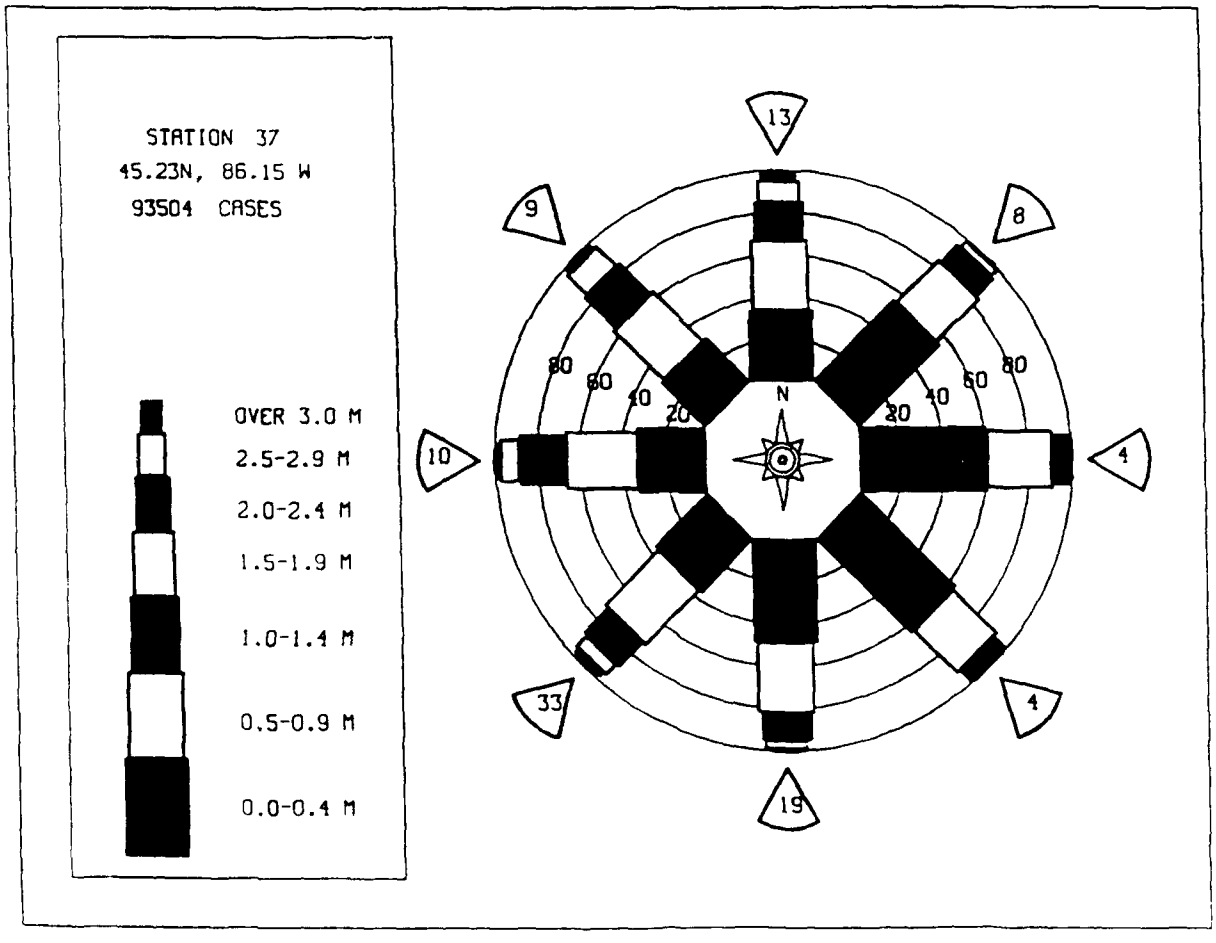
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	594	112	1	.	.	.	.	.	.	.	707
0.25-0.49	86	813	21	.	.	.	.	.	.	.	920
0.50-0.74	.	326	755	10	.	.	.	.	.	.	1091
0.75-0.99	.	1	370	221	.	.	.	.	.	.	592
1.00-1.24	.	.	158	564	4	.	.	.	.	.	726
1.25-1.49	.	.	9	393	13	.	.	.	.	.	415
1.50-1.74	.	.	.	465	71	.	.	.	.	.	536
1.75-1.99	.	.	.	22	194	.	.	.	.	.	216
2.00-2.24	.	.	.	.	181	.	.	.	.	.	181
2.25-2.49	.	.	.	.	59	.	.	.	.	.	59
2.50-2.74	.	.	.	.	27	10	.	.	.	.	37
2.75-2.99	.	.	.	.	1	14	.	.	.	.	15
3.00-3.24	.	.	.	.	.	11	.	.	.	.	11
3.25-3.49	.	.	.	.	.	4	.	.	.	.	4
3.50+	.	.	.	.	.	5	5	.	.	.	10
TOTAL	680	1252	1314	1675	550	44	5	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 5176.

STATION M37 45.23N 86.15W 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	
0.00-0.24	1328	375	71	24	1	.	.	.	.	.	1799
0.25-0.49	185	1713	184	136	18	.	.	.	.	.	2236
0.50-0.74	.	805	1301	224	79	2	.	.	.	.	2411
0.75-0.99	.	7	584	333	49	6	.	.	.	.	979
1.00-1.24	.	.	357	606	76	14	1	.	.	.	1054
1.25-1.49	.	.	12	416	81	7	2	.	.	.	518
1.50-1.74	.	.	.	391	100	16	2	.	.	.	509
1.75-1.99	.	.	.	30	127	14	1	.	.	.	172
2.00-2.24	.	.	.	2	114	17	3	.	.	.	136
2.25-2.49	.	.	.	.	39	14	2	.	.	.	55
2.50-2.74	.	.	.	.	19	25	3	.	.	.	47
2.75-2.99	.	.	.	.	1	14	1	.	.	.	16
3.00-3.24	.	.	.	.	.	12	3	.	.	.	15
3.25-3.49	.	.	.	.	.	2	4	.	.	.	6
3.50+	.	.	.	.	.	2	11	1	.	.	14
TOTAL	1513	2900	2509	2162	704	145	33	1	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M37 (45.23N 86.15W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.7	0.6	0.6	0.6	0.4	0.3	0.3	0.6	0.8	0.9	0.9	0.6
1957	1.1	0.8	0.7	0.6	0.6	0.5	0.4	0.4	0.6	0.7	1.3	1.2	0.7
1958	0.8	1.0	0.3	0.6	0.5	0.5	0.4	0.5	0.8	0.8	1.1	0.9	0.7
1959	1.0	0.9	0.7	0.6	0.6	0.4	0.5	0.5	0.8	0.8	0.9	0.9	0.7
1960	0.9	0.9	0.6	0.6	0.4	0.5	0.4	0.6	0.6	0.7	1.1	1.2	0.7
1961	0.9	0.7	0.8	0.5	0.6	0.5	0.4	0.5	0.7	0.9	0.9	1.0	0.7
1962	1.2	0.8	0.4	0.8	0.6	0.4	0.4	0.4	0.7	0.7	0.7	1.1	0.7
1963	0.9	1.0	0.8	0.7	0.5	0.4	0.4	0.5	0.6	0.6	1.0	0.8	0.7
1964	1.1	1.2	1.0	0.8	0.6	0.5	0.4	0.7	0.7	0.9	0.9	0.9	0.8
1965	1.1	1.3	0.7	0.5	0.5	0.5	0.4	0.5	0.7	0.9	1.0	1.0	0.8
1966	0.9	0.8	0.9	0.5	0.5	0.5	0.5	0.6	0.7	1.1	1.1	0.9	0.8
1967	1.2	1.1	0.8	0.7	0.5	0.4	0.4	0.6	0.6	0.9	0.9	0.9	0.7
1968	0.9	1.0	0.9	0.7	0.5	0.4	0.5	0.6	0.6	0.9	0.7	1.1	0.7
1969	0.9	0.7	0.8	0.6	0.5	0.5	0.4	0.6	0.7	0.8	0.7	0.9	0.7
1970	0.8	1.1	0.5	0.7	0.5	0.5	0.5	0.5	0.7	0.8	0.9	0.9	0.7
1971	1.1	1.1	0.7	0.6	0.5	0.4	0.5	0.5	0.6	0.7	0.9	0.8	0.7
1972	1.2	0.8	0.7	0.4	0.3	0.5	0.5	0.5	0.7	0.9	0.7	0.8	0.7
1973	1.1	0.8	0.7	0.7	0.5	0.4	0.5	0.6	0.7	0.7	0.9	0.9	0.7
1974	0.8	0.9	0.8	0.7	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.9	0.7
1975	1.0	0.8	0.7	0.5	0.4	0.4	0.5	0.5	0.6	0.9	0.9	0.8	0.7
1976	1.0	1.1	1.0	0.6	0.5	0.4	0.4	0.6	0.7	0.7	0.9	0.9	0.7
1977	0.9	1.0	0.7	0.5	0.4	0.4	0.5	0.6	0.6	0.8	0.8	0.8	0.7
1978	1.1	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.9	0.7
1979	0.9	0.7	0.6	0.5	0.4	0.4	0.4	0.5	0.7	1.3	1.6	1.5	0.8
1980	0.8	0.7	0.7	0.4	0.3	0.5	0.5	0.8	1.3	1.7	1.7	0.9	0.9
1981	0.7	0.9	0.7	0.7	0.5	0.5	0.5	0.6	1.0	1.2	1.1	0.7	0.8
1982	0.9	0.7	0.8	0.7	0.4	0.4	0.5	0.7	1.2	1.2	1.3	0.9	0.8
1983	0.8	0.7	0.6	0.5	0.4	0.3	0.4	0.6	1.2	1.1	1.2	0.7	0.7
1984	0.8	0.8	0.6	0.5	0.5	0.5	0.6	0.7	1.3	1.2	1.8	0.9	0.9
1985	0.9	0.8	0.8	0.7	0.5	0.4	0.5	0.4	0.6	0.6	0.7	0.8	0.6
1986	1.0	0.5	0.7	0.6	0.4	0.3	0.3	0.4	0.4	0.6	0.9	0.7	0.6
1987	0.8	0.7	0.6	0.4	0.3	0.3	0.3	0.5	0.4	0.8	0.7	0.9	0.6
MEAN	0.9	0.9	0.7	0.6	0.5	0.4	0.4	0.5	0.7	0.9	1.0	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M37 (45.23N 86.15W)

MONTH

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

32 YR. STATISTICS FOR WIS STATION M37

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	5.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	227.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011121

STATION M38 45.09N 86.15W 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	
0.00-0.24	847	165	1	.	.	.	.	.	.	.	1013
0.25-0.49	158	1290	40	.	.	.	.	.	.	.	1488
0.50-0.74	.	552	1213	78	.	.	.	.	.	.	1843
0.75-0.99	.	2	500	392	.	.	.	.	.	.	894
1.00-1.24	.	.	251	875	29	.	.	.	.	.	1155
1.25-1.49	.	.	3	333	139	.	.	.	.	.	475
1.50-1.74	.	.	.	201	347	.	.	.	.	.	548
1.75-1.99	.	.	.	7	202	1	.	.	.	.	210
2.00-2.24	.	.	.	.	221	1	.	.	.	.	222
2.25-2.49	.	.	.	.	87	2	.	.	.	.	89
2.50-2.74	.	.	.	.	28	69	.	.	.	.	97
2.75-2.99	.	.	.	.	1	43	.	.	.	.	44
3.00-3.24	.	.	.	.	.	38	.	.	.	.	38
3.25-3.49	.	.	.	.	.	8	.	.	.	.	8
3.50+	.	.	.	.	.	1	25	.	.	.	26
TOTAL	1005	2009	2008	1886	1054	163	25	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 7635.

STATION M38 45.09N 86.15W 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	
0.00-0.24	693	149	2	.	.	.	.	.	.	.	844
0.25-0.49	102	934	31	.	.	.	.	.	.	.	1067
0.50-0.74	.	340	649	33	.	.	.	.	.	.	1022
0.75-0.99	.	1	216	174	.	.	.	.	.	.	391
1.00-1.24	.	.	113	341	8	.	.	.	.	.	462
1.25-1.49	.	.	8	152	33	.	.	.	.	.	193
1.50-1.74	.	.	.	104	109	.	.	.	.	.	213
1.75-1.99	.	.	.	3	56	.	.	.	.	.	59
2.00-2.24	.	.	.	.	66	.	.	.	.	.	66
2.25-2.49	.	.	.	.	25	.	.	.	.	.	25
2.50-2.74	.	.	.	.	6	11	.	.	.	.	17
2.75-2.99	.	.	.	.	.	5	.	.	.	.	5
3.00-3.24	.	.	.	.	.	3	.	.	.	.	3
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	3	.	.	.	3
TOTAL	795	1424	1019	807	303	19	3	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 4096.

STATION M38 45.09N 86.15W 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	
0.00-0.24	1126	216	2	.	.	.	.	.	.	.	1344
0.25-0.49	115	1106	38	.	.	.	.	.	.	.	1259
0.50-0.74	.	334	591	26	.	.	.	.	.	.	951
0.75-0.99	.	.	209	156	.	.	.	.	.	.	365
1.00-1.24	.	.	101	287	3	.	.	.	.	.	391
1.25-1.49	.	.	6	135	24	.	.	.	.	.	165
1.50-1.74	.	.	.	65	80	.	.	.	.	.	145
1.75-1.99	.	.	.	.	57	.	.	.	.	.	57
2.00-2.24	.	.	.	.	64	.	.	.	.	.	64
2.25-2.49	.	.	.	.	10	.	.	.	.	.	10
2.50-2.74	.	.	.	.	3	2	.	.	.	.	5
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1241	1656	947	669	241	7	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 4462.

STATION M38 45.09N 86.15W 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	
0.00-0.24	524	98	1	.	.	.	.	.	.	.	623
0.25-0.49	45	555	42	.	.	.	.	.	.	.	642
0.50-0.74	.	306	336	32	.	.	.	.	.	.	674
0.75-0.99	.	.	105	64	.	.	.	.	.	.	169
1.00-1.24	.	.	60	57	.	.	.	.	.	.	117
1.25-1.49	.	.	2	35	3	.	.	.	.	.	40
1.50-1.74	.	.	.	21	13	.	.	.	.	.	34
1.75-1.99	.	.	.	.	3	.	.	.	.	.	3
2.00-2.24	.	.	.	.	2	.	.	.	.	.	2
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	569	959	546	209	22	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 2164.

STATION M38 45.09N 86.15W 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	
0.00-0.24	552	131	.	1	.	.	.	.	.	.	684
0.25-0.49	56	545	50	.	.	.	.	.	.	.	651
0.50-0.74	.	408	212	13	.	.	.	.	.	.	633
0.75-0.99	.	.	127	29	.	.	.	.	.	.	156
1.00-1.24	.	.	64	10	1	.	.	.	.	.	75
1.25-1.49	.	.	6	4	1	.	.	.	.	.	11
1.50-1.74	.	.	.	3	1	.	.	.	.	.	4
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	608	1084	459	60	4	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.0 NO. OF CASES= 2079.

STATION M38 45.09N 86.15W 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	
0.00-0.24	484	94	1	.	1	.	.	.	.	.	580
0.25-0.49	41	423	28	.	.	.	.	.	.	.	492
0.50-0.74	.	480	95	6	.	.	.	.	.	.	581
0.75-0.99	.	.	74	9	.	.	.	.	.	.	83
1.00-1.24	.	.	44	.	.	.	.	.	.	.	44
1.25-1.49	.	.	3	.	.	.	.	.	.	.	3
1.50-1.74	.	.	.	2	.	.	.	.	.	.	2
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	525	997	245	17	1	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.9 NO. OF CASES= 1675.

STATION M38 45.09N 86.15W 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	
0.00-0.24	574	128	2	.	.	.	.	.	.	.	704
0.25-0.49	64	490	23	.	.	.	.	.	.	.	577
0.50-0.74	.	620	49	5	.	.	.	.	.	.	674
0.75-0.99	.	.	71	4	.	.	.	.	.	.	75
1.00-1.24	.	.	20	1	.	.	.	.	.	.	21
1.25-1.49	.	.	4	.	.	.	.	.	.	.	4
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	638	1238	169	10	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 2.8 NO. OF CASES= 1926.

STATION M38 45.09N 86.15W 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	
0.00-0.24	728	178	2	1	.	.	.	.	.	.	909
0.25-0.49	105	773	19	.	.	.	.	.	.	.	897
0.50-0.74	.	828	94	4	.	.	.	.	.	.	926
0.75-0.99	.	4	128	.	.	.	.	.	.	.	132
1.00-1.24	.	.	52	.	.	.	.	.	.	.	52
1.25-1.49	.	.	4	3	.	.	.	.	.	.	7
1.50-1.74	.	.	.	3	.	.	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	833	1783	299	11	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.8 NO. OF CASES= 2741.

STATION M38 45.09N 86.15W 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	
0.00-0.24	1606	418	7		1						2032
0.25-0.49	207	1609	74	2		1					1893
0.50-0.74		1196	713	8							1917
0.75-0.99		18	637	3	2	1					661
1.00-1.24			598	20	1						619
1.25-1.49			32	165		2					199
1.50-1.74			1	75							76
1.75-1.99				10	1						11
2.00-2.24				3	2						5
2.25-2.49					3						3
2.50-2.74					1						1
2.75-2.99											0
3.00-3.24											0
3.25-3.49											0
3.50+											0
TOTAL	1813	3241	2062	286	11	4	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 6945.

STATION M38 45.09N 86.15W 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	
0.00-0.24	1617	919	534	191	12	3					3276
0.25-0.49	286	2692	1268	1238	149	9					5642
0.50-0.74		1548	2059	1518	663	21					5809
0.75-0.99		28	1004	570	347	69	1				2019
1.00-1.24			1294	587	393	93	11				2378
1.25-1.49			197	524	275	56	14	1			1067
1.50-1.74			7	456	304	105	16	1			889
1.75-1.99				84	156	72	14	3	1		330
2.00-2.24				28	120	94	26	4			272
2.25-2.49				1	32	63	19	2			117
2.50-2.74					14	60	19				93
2.75-2.99					5	27	14	1	1		48
3.00-3.24						20	11				31
3.25-3.49						4	10				14
3.50+						1	26	3	1		31
TOTAL	1903	5187	6363	5197	2470	697	181	15	3	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.2 NO. OF CASES= 20617.

STATION M38 45.09N 86.15W 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	
0.00-0.24	1181	603	39	7							1830
0.25-0.49	229	2441	301	71	12						3054
0.50-0.74		1217	2200	420	87	4					3928
0.75-0.99		25	795	784	97	7					1708
1.00-1.24			485	1068	270	34	1				1858
1.25-1.49			24	471	376	16	6				893
1.50-1.74				357	439	58	9				863
1.75-1.99				25	270	63	10	1			369
2.00-2.24				2	203	80	10	1			296
2.25-2.49				1	80	52	5				138
2.50-2.74					22	100	12	1			135
2.75-2.99					1	66	6				73
3.00-3.24						54	10	1			65
3.25-3.49						10	19	1			30
3.50+						4	47	8	1		60
TOTAL	1410	4286	3844	3206	1857	548	135	13	1	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.1 NO. OF CASES= 14332.

STATION M38 45.09N 86.15W 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	
0.00-0.24	654	183	1								838
0.25-0.49	111	1166	40	1							1318
0.50-0.74		603	1134	58	3						1798
0.75-0.99		6	481	371	4						862
1.00-1.24			272	671	25	1					969
1.25-1.49			14	343	102	2					461
1.50-1.74				319	159	4					482
1.75-1.99				12	172	3					187
2.00-2.24					152	6	1				159
2.25-2.49					49	6	3				58
2.50-2.74					18	26	1				45
2.75-2.99						16					16
3.00-3.24					1	16					17
3.25-3.49						6	2				8
3.50+						2	6				8
TOTAL	765	1958	1942	1775	685	88	13	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 6773.

STATION M38 45.09N 86.15W 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	
0.00-0.24	500	164	.	.	.	.	.	.	.	.	664
0.25-0.49	67	791	25	.	1	.	.	.	.	.	884
0.50-0.74	.	403	791	38	.	.	.	.	.	.	1232
0.75-0.99	.	5	345	268	.	.	.	.	.	.	618
1.00-1.24	.	.	212	465	2	.	.	.	.	.	679
1.25-1.49	.	.	7	311	28	.	.	.	.	.	346
1.50-1.74	.	.	.	272	96	.	.	.	.	.	368
1.75-1.99	.	.	.	13	135	.	.	.	.	.	148
2.00-2.24	.	.	.	.	96	.	.	.	.	.	96
2.25-2.49	.	.	.	.	24	.	.	.	.	.	24
2.50-2.74	.	.	.	.	13	6	.	.	.	.	19
2.75-2.99	.	.	.	.	.	10	.	.	.	.	10
3.00-3.24	.	.	.	.	.	4	.	.	.	.	4
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	567	1363	1380	1367	395	21	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 4775.

STATION M38 45.09N 86.15W 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	
0.00-0.24	342	124	1	.	.	.	.	.	.	.	467
0.25-0.49	66	714	27	.	.	.	.	.	.	.	807
0.50-0.74	.	358	729	35	1	.	.	.	.	.	1123
0.75-0.99	.	3	249	250	.	.	.	.	.	.	502
1.00-1.24	.	.	155	393	4	.	.	.	.	.	552
1.25-1.49	.	.	7	284	6	.	.	.	.	.	297
1.50-1.74	.	.	.	337	24	.	.	.	.	.	361
1.75-1.99	.	.	.	16	95	.	.	.	.	.	111
2.00-2.24	.	.	.	.	85	.	.	.	.	.	85
2.25-2.49	.	.	.	.	17	.	.	.	.	.	17
2.50-2.74	.	.	.	.	19	1	.	.	.	.	20
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	403	1199	1168	1315	251	4	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 4071.

STATION M38 45.09N 86.15W 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	
0.00-0.24	371	110	.	.	.	.	.	.	.	.	481
0.25-0.49	34	562	25	.	.	.	.	.	.	.	621
0.50-0.74	.	254	611	44	.	.	.	.	.	.	909
0.75-0.99	.	2	254	239	.	.	.	.	.	.	495
1.00-1.24	.	.	161	438	.	.	.	.	.	.	599
1.25-1.49	.	.	10	374	2	.	.	.	.	.	386
1.50-1.74	.	.	.	426	12	.	.	.	.	.	438
1.75-1.99	.	.	.	14	133	.	.	.	.	.	147
2.00-2.24	.	.	.	.	90	.	.	.	.	.	90
2.25-2.49	.	.	.	.	25	1	.	.	.	.	26
2.50-2.74	.	.	.	.	13	3	.	.	.	.	16
2.75-2.99	.	.	.	.	.	8	.	.	.	.	8
3.00-3.24	.	.	.	.	.	8	.	.	.	.	8
3.25-3.49	.	.	.	.	.	4	.	.	.	.	4
3.50+	.	.	.	.	.	2	.	.	.	.	2
TOTAL	405	928	1061	1535	275	26	0	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 3969.

STATION M38 45.09N 86.15W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

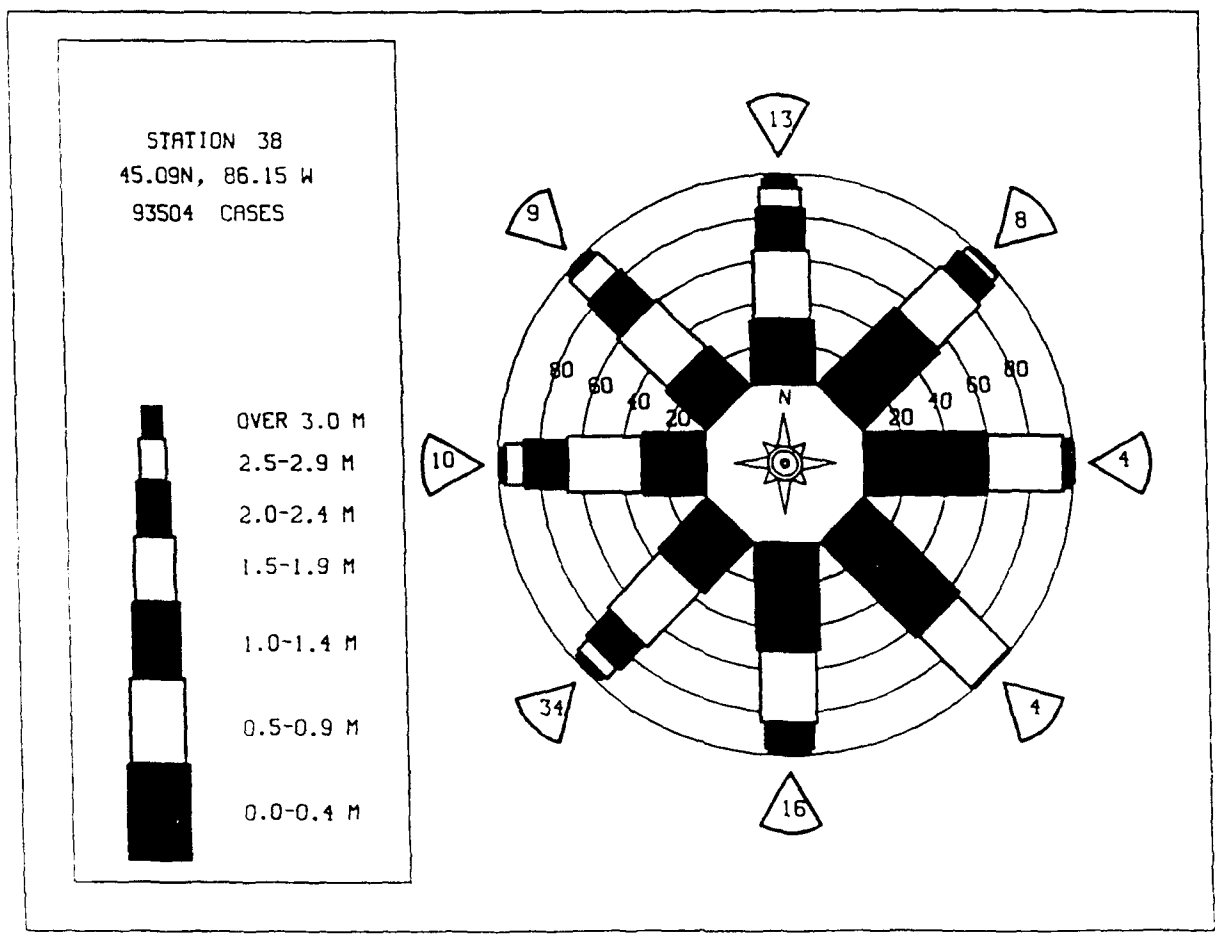
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	519	108	.	.	.	.	.	.	.	.	627
0.25-0.49	88	779	34	.	.	.	.	.	.	.	901
0.50-0.74	.	357	727	41	.	.	.	.	.	.	1125
0.75-0.99	.	4	340	269	.	.	.	.	.	.	613
1.00-1.24	.	.	168	596	22	.	.	.	.	.	786
1.25-1.49	.	.	9	342	58	.	.	.	.	.	409
1.50-1.74	.	.	.	359	162	.	.	.	.	.	521
1.75-1.99	.	.	.	16	204	.	.	.	.	.	220
2.00-2.24	.	.	.	.	195	2	.	.	.	.	197
2.25-2.49	.	.	.	.	69	4	.	.	.	.	73
2.50-2.74	.	.	.	.	25	42	.	.	.	.	67
2.75-2.99	.	.	.	.	.	19	.	.	.	.	19
3.00-3.24	.	.	.	.	.	12	.	.	.	.	12
3.25-3.49	.	.	.	.	.	9	.	.	.	.	9
3.50+	.	.	.	.	.	2	12	.	.	.	14
TOTAL	607	1248	1278	1623	735	90	12	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.2 NO. OF CASES= 5244.

STATION M38 45.09N 86.15W 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	
0.00-0.24	1232	379	59	20	1	.	.	.	.	.	1691
0.25-0.49	178	1687	207	131	16	1	.	.	.	.	2220
0.50-0.74	.	981	1221	236	75	2	.	.	.	.	2515
0.75-0.99	.	10	554	358	45	7	.	.	.	.	974
1.00-1.24	.	.	405	581	76	12	1	.	.	.	1075
1.25-1.49	.	.	34	348	105	7	2	.	.	.	496
1.50-1.74	.	.	.	300	175	16	2	.	.	.	493
1.75-1.99	.	.	.	20	148	14	2	.	.	.	184
2.00-2.24	.	.	.	3	130	18	3	.	.	.	154
2.25-2.49	.	.	.	.	42	12	2	.	.	.	56
2.50-2.74	.	.	.	.	16	32	3	.	.	.	51
2.75-2.99	.	.	.	.	.	20	2	.	.	.	22
3.00-3.24	.	.	.	.	.	16	2	.	.	.	18
3.25-3.49	.	.	.	.	.	4	3	.	.	.	7
3.50+	.	.	.	.	.	1	12	1	.	.	14
TOTAL	1410	3057	2480	1997	829	162	34	1	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M38 (45.09N 86.15W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.7	0.6	0.6	0.6	0.4	0.3	0.3	0.6	0.8	0.9	1.0	0.6
1957	1.1	0.9	0.7	0.7	0.6	0.5	0.4	0.5	0.6	0.7	1.3	1.2	0.8
1958	0.9	1.1	0.3	0.6	0.5	0.5	0.5	0.6	0.8	0.8	1.1	0.9	0.7
1959	1.0	1.0	0.7	0.6	0.6	0.5	0.5	0.5	0.8	0.8	0.9	1.0	0.7
1960	0.9	1.0	0.6	0.7	0.4	0.5	0.4	0.6	0.6	0.7	1.1	1.3	0.7
1961	0.9	0.7	0.8	0.5	0.6	0.5	0.4	0.5	0.7	0.9	0.9	1.0	0.7
1962	1.2	0.8	0.5	0.8	0.6	0.4	0.4	0.5	0.7	0.7	0.7	1.1	0.7
1963	0.9	1.0	0.8	0.7	0.6	0.4	0.4	0.5	0.6	0.6	1.0	0.9	0.7
1964	1.1	1.2	1.0	0.8	0.6	0.5	0.5	0.7	0.7	0.9	0.9	0.9	0.8
1965	1.1	1.3	0.7	0.5	0.6	0.5	0.5	0.6	0.7	1.0	1.0	1.0	0.8
1966	0.9	0.8	0.9	0.5	0.5	0.5	0.5	0.6	0.7	1.1	1.2	0.9	0.8
1967	1.2	1.2	0.8	0.7	0.5	0.4	0.4	0.6	0.6	0.9	1.0	0.9	0.8
1968	0.9	1.0	0.9	0.7	0.5	0.4	0.6	0.6	0.6	0.9	0.8	1.1	0.7
1969	0.9	0.8	0.8	0.6	0.5	0.5	0.4	0.6	0.7	0.8	0.8	0.9	0.7
1970	0.9	1.1	0.6	0.7	0.6	0.5	0.5	0.5	0.7	0.8	0.9	0.9	0.7
1971	1.1	1.1	0.7	0.6	0.5	0.4	0.5	0.6	0.6	0.7	0.9	0.9	0.7
1972	1.2	0.8	0.8	0.4	0.3	0.5	0.5	0.5	0.7	0.9	0.7	0.8	0.7
1973	1.1	0.8	0.7	0.7	0.5	0.4	0.5	0.6	0.7	0.7	0.9	0.9	0.7
1974	0.8	0.9	0.8	0.7	0.5	0.5	0.5	0.6	0.7	0.8	0.8	0.9	0.7
1975	1.0	0.8	0.7	0.6	0.4	0.4	0.5	0.5	0.6	0.9	0.9	0.9	0.7
1976	1.0	1.1	1.0	0.7	0.5	0.4	0.5	0.6	0.7	0.7	0.9	0.9	0.7
1977	1.0	1.0	0.7	0.5	0.4	0.4	0.5	0.6	0.6	0.8	0.8	0.8	0.7
1978	1.2	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.9	0.7
1979	0.9	0.7	0.7	0.5	0.4	0.4	0.4	0.5	0.8	1.3	1.5	1.4	0.8
1980	0.8	0.7	0.8	0.4	0.3	0.5	0.5	0.8	1.2	1.7	1.7	0.9	0.9
1981	0.7	0.9	0.7	0.7	0.5	0.5	0.5	0.5	1.0	1.1	1.1	0.7	0.7
1982	1.0	0.7	0.8	0.7	0.4	0.4	0.5	0.6	1.1	1.2	1.2	0.9	0.8
1983	0.8	0.7	0.7	0.5	0.4	0.3	0.4	0.6	1.2	1.1	1.2	0.7	0.7
1984	0.8	0.8	0.7	0.5	0.5	0.5	0.5	0.7	1.2	1.1	1.8	1.0	0.8
1985	0.9	0.9	0.8	0.6	0.5	0.3	0.5	0.4	0.6	0.6	0.7	0.8	0.6
1986	1.0	0.6	0.8	0.6	0.4	0.3	0.3	0.4	0.4	0.6	0.9	0.7	0.6
1987	0.9	0.8	0.6	0.5	0.3	0.3	0.3	0.4	0.4	0.8	0.7	0.9	0.6
MEAN	1.0	0.9	0.7	0.6	0.5	0.4	0.4	0.6	0.7	0.9	1.0	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M38 (45.09N 86.15W)

MONTH

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

32 YR. STATISTICS FOR WIS STATION M38

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	5.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	230.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011121

STATION M39 44.95N 86.17W 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	
0.00-0.24	867	211	2	.	.	.	.	.	.	.	1080
0.25-0.49	139	1226	108	2	.	.	.	.	.	.	1475
0.50-0.74	.	580	1198	116	.	.	.	.	.	.	1894
0.75-0.99	.	3	479	437	.	.	.	.	.	.	919
1.00-1.24	.	.	254	864	80	.	.	.	.	.	1198
1.25-1.49	.	.	5	220	308	.	.	.	.	.	533
1.50-1.74	.	.	.	136	399	1	.	.	.	.	536
1.75-1.99	.	.	.	2	223	11	.	.	.	.	236
2.00-2.24	.	.	.	.	198	17	.	.	.	.	215
2.25-2.49	.	.	.	.	71	39	.	.	.	.	110
2.50-2.74	.	.	.	.	7	98	2	.	.	.	107
2.75-2.99	.	.	.	.	.	56	1	.	.	.	57
3.00-3.24	.	.	.	.	.	56	.	.	.	.	56
3.25-3.49	.	.	.	.	.	5	4	.	.	.	9
3.50+	.	.	.	.	.	.	33	.	.	.	33
TOTAL	1006	2020	2046	1777	1286	283	40	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 7923.

STATION M39 44.95N 86.17W 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	
0.00-0.24	697	189	3	.	.	.	.	.	.	.	889
0.25-0.49	111	961	71	.	.	.	.	.	.	.	1143
0.50-0.74	.	373	622	74	.	.	.	.	.	.	1069
0.75-0.99	.	1	194	191	1	.	.	.	.	.	387
1.00-1.24	.	.	108	282	40	.	.	.	.	.	430
1.25-1.49	.	.	3	88	96	.	.	.	.	.	187
1.50-1.74	.	.	.	47	161	1	.	.	.	.	209
1.75-1.99	.	.	.	3	64	1	.	.	.	.	68
2.00-2.24	.	.	.	.	50	6	.	.	.	.	56
2.25-2.49	.	.	.	.	22	8	.	.	.	.	30
2.50-2.74	.	.	.	.	2	18	.	.	.	.	20
2.75-2.99	.	.	.	.	.	5	.	.	.	.	5
3.00-3.24	.	.	.	.	.	4	.	.	.	.	4
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	808	1524	1001	685	436	44	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.7 NO. OF CASES= 4217.

STATION M39 44.95N 86.17W 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	
0.00-0.24	1100	293	3	.	.	.	.	.	.	.	1396
0.25-0.49	111	977	103	1	.	.	.	.	.	.	1192
0.50-0.74	.	343	487	88	.	.	.	.	.	.	918
0.75-0.99	.	1	213	129	1	.	.	.	.	.	344
1.00-1.24	.	.	91	223	31	.	.	.	.	.	345
1.25-1.49	.	.	2	67	94	.	.	.	.	.	163
1.50-1.74	.	.	.	47	68	.	.	.	.	.	115
1.75-1.99	.	.	.	1	38	.	.	.	.	.	39
2.00-2.24	.	.	.	.	45	1	.	.	.	.	46
2.25-2.49	.	.	.	.	16	4	.	.	.	.	20
2.50-2.74	.	.	.	.	.	6	.	.	.	.	6
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	4	.	.	.	.	4
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1211	1614	899	556	293	17	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 4302.

STATION M39 44.95N 86.17W 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	
0.00-0.24	547	131	6	2	.	.	.	.	.	.	686
0.25-0.49	103	539	121	10	.	.	.	.	.	.	773
0.50-0.74	.	234	187	67	.	.	.	.	.	.	488
0.75-0.99	.	22	66	34	2	.	.	.	.	.	124
1.00-1.24	.	.	25	36	5	.	.	.	.	.	66
1.25-1.49	.	.	.	16	3	.	.	.	.	.	19
1.50-1.74	.	.	.	5	4	.	.	.	.	.	9
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	650	926	405	170	15	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 2033.

STATION M39 44.95N 86.17W 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	
0.00-0.24	549	162	10	.	.	.	.	.	.	.	721
0.25-0.49	166	530	120	19	.	.	.	.	.	.	835
0.50-0.74	.	310	82	64	.	.	.	.	.	.	456
0.75-0.99	.	49	7	28	1	.	.	.	.	.	85
1.00-1.24	.	.	7	6	5	.	.	.	.	.	18
1.25-1.49	.	.	1	.	4	.	.	.	.	.	5
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	1	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	715	1051	227	117	11	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 2.9 NO. OF CASES= 1991.

STATION M39 44.95N 86.17W 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	
0.00-0.24	485	124	3	.	1	.	.	.	.	.	613
0.25-0.49	120	436	81	9	.	.	.	.	.	.	646
0.50-0.74	.	355	38	16	.	.	.	.	.	.	409
0.75-0.99	.	19	19	7	.	.	.	.	.	.	45
1.00-1.24	.	.	5	1	.	.	.	.	.	.	6
1.25-1.49	.	.	.	.	.	.	.	.	.	.	0
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	605	934	146	33	1	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.2 MEAN TP(SEC)= 2.8 NO. OF CASES= 1612.

STATION M39 44.95N 86.17W 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	
0.00-0.24	601	175	5	1	.	.	.	.	.	.	782
0.25-0.49	59	399	63	7	.	.	.	.	.	.	528
0.50-0.74	.	501	31	9	.	.	.	.	.	.	541
0.75-0.99	.	3	38	4	.	.	.	.	.	.	45
1.00-1.24	.	.	10	.	.	.	.	.	.	.	10
1.25-1.49	.	.	2	.	.	.	.	.	.	.	2
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	660	1078	149	21	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.3 MEAN TP(SEC)= 2.8 NO. OF CASES= 1790.

STATION M39 44.95N 86.17W 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	
0.00-0.24	744	194	9	.	.	1	.	.	.	.	948
0.25-0.49	110	749	54	5	.	.	.	.	.	.	918
0.50-0.74	.	875	89	17	1	.	.	.	.	.	982
0.75-0.99	.	1	106	.	.	.	.	.	.	.	107
1.00-1.24	.	.	45	.	.	.	.	.	.	.	45
1.25-1.49	.	.	4	.	.	.	.	.	.	.	4
1.50-1.74	.	.	.	2	.	.	.	.	.	.	2
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	854	1819	307	24	1	1	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.8 NO. OF CASES= 2818.

STATION M39 44.95N 86.17W 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	
0.00-0.24	1525	433	12	1	.	.	.	.	.	.	1971
0.25-0.49	223	1316	119	8	3	3	1	.	.	.	1673
0.50-0.74	.	1797	326	16	.	.	.	.	.	.	2139
0.75-0.99	.	11	362	.	.	.	.	.	.	.	373
1.00-1.24	.	.	282	.	.	.	.	.	.	.	282
1.25-1.49	.	.	42	7	.	2	.	.	.	.	51
1.50-1.74	.	.	5	20	.	.	.	.	.	.	25
1.75-1.99	.	.	.	2	.	.	.	.	.	.	2
2.00-2.24	.	.	.	4	2	.	.	.	.	.	6
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1748	3557	1148	58	5	5	1	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 2.9 NO. OF CASES= 6107.

STATION M39 44.95N 86.17W 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	
0.00-0.24	1556	970	571	228	24	3	.	.	.	.	3352
0.25-0.49	313	2336	1132	1253	167	10	.	.	.	.	5211
0.50-0.74	.	2271	1430	1087	590	26	.	.	.	.	5404
0.75-0.99	.	13	1078	485	351	58	5	.	.	.	1990
1.00-1.24	.	.	930	427	320	85	16	1	.	.	1809
1.25-1.49	.	.	188	205	265	55	18	.	.	.	731
1.50-1.74	.	.	41	183	316	86	18	2	1	.	647
1.75-1.99	.	.	.	27	113	48	17	2	.	.	207
2.00-2.24	.	.	.	8	73	69	14	3	.	.	167
2.25-2.49	.	.	.	.	20	24	14	.	.	.	58
2.50-2.74	.	.	.	.	9	33	8	1	.	.	51
2.75-2.99	.	.	.	.	1	14	5	.	.	.	20
3.00-3.24	.	.	.	.	.	8	5	.	.	.	13
3.25-3.49	.	.	.	.	.	3	8	.	.	.	11
3.50+	.	.	.	.	.	.	17	.	1	.	18
TOTAL	1869	5590	5370	3933	2249	522	145	9	2	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 18439.

STATION M39 44.95N 86.17W 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	
0.00-0.24	1162	687	58	4	.	.	.	.	.	.	1911
0.25-0.49	218	2568	489	66	8	.	.	.	.	.	3349
0.50-0.74	.	1258	2423	667	91	3	.	.	.	.	4442
0.75-0.99	.	23	929	885	110	13	.	.	.	.	1960
1.00-1.24	.	.	674	1015	353	35	3	.	.	.	2080
1.25-1.49	.	.	70	483	395	35	5	.	.	.	988
1.50-1.74	.	.	7	328	452	77	11	.	.	.	875
1.75-1.99	.	.	.	40	219	71	13	1	.	.	344
2.00-2.24	.	.	.	3	190	102	12	.	.	.	307
2.25-2.49	.	.	.	.	60	70	12	.	.	.	142
2.50-2.74	.	.	.	.	21	85	19	2	.	.	127
2.75-2.99	.	.	.	.	1	47	13	1	.	.	62
3.00-3.24	.	.	.	.	.	41	19	.	.	.	60
3.25-3.49	.	.	.	.	.	4	14	.	1	.	19
3.50+	.	.	.	.	.	2	35	6	4	.	47
TOTAL	1380	4536	4650	3491	1900	585	156	10	5	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 15656.

STATION M39 44.95N 86.17W 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	
0.00-0.24	651	254	.	1	.	.	.	.	.	.	906
0.25-0.49	116	1279	84	2	1	.	.	.	.	.	1482
0.50-0.74	.	649	1301	87	2	.	.	.	.	.	2039
0.75-0.99	.	7	541	385	1	.	.	.	.	.	934
1.00-1.24	.	.	334	714	37	2	.	.	.	.	1087
1.25-1.49	.	.	20	329	118	1	.	.	.	.	468
1.50-1.74	.	.	.	297	218	1	1	.	.	.	517
1.75-1.99	.	.	.	18	172	6	.	.	.	.	196
2.00-2.24	.	.	.	.	131	14	1	.	.	.	146
2.25-2.49	.	.	.	.	50	6	1	.	.	.	57
2.50-2.74	.	.	.	.	17	29	2	.	.	.	48
2.75-2.99	.	.	.	.	.	14	.	.	.	.	14
3.00-3.24	.	.	.	.	.	16	2	.	.	.	18
3.25-3.49	.	.	.	.	.	4	2	.	.	.	6
3.50+	.	.	.	.	.	2	4	.	.	.	6
TOTAL	767	2189	2280	1833	749	95	13	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 7423.

STATION M39 44.95N 86.17W 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	
0.00-0.24	513	185	1	.	.	.	.	.	.	.	699
0.25-0.49	68	869	53	1	.	.	.	.	.	.	991
0.50-0.74	.	426	834	69	.	.	.	.	.	.	1329
0.75-0.99	.	5	367	293	.	.	.	.	.	.	665
1.00-1.24	.	.	243	481	7	.	.	.	.	.	731
1.25-1.49	.	.	6	313	38	.	.	.	.	.	357
1.50-1.74	.	.	.	231	120	.	.	.	.	.	351
1.75-1.99	.	.	.	7	131	.	.	.	.	.	138
2.00-2.24	.	.	.	.	74	.	.	.	.	.	74
2.25-2.49	.	.	.	.	28	1	.	.	.	.	29
2.50-2.74	.	.	.	.	9	6	.	.	.	.	15
2.75-2.99	.	.	.	.	.	7	.	.	.	.	7
3.00-3.24	.	.	.	.	.	3	.	.	.	.	3
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	581	1485	1504	1395	407	17	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 5051.

STATION M39 44.95N 86.17W 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	
0.00-0.24	317	146	1	.	.	.	.	.	.	.	464
0.25-0.49	58	792	33	.	.	.	.	.	.	.	883
0.50-0.74	.	370	758	64	.	.	.	.	.	.	1192
0.75-0.99	.	6	269	309	.	.	.	.	.	.	584
1.00-1.24	.	.	160	485	7	.	.	.	.	.	652
1.25-1.49	.	.	9	199	49	.	.	.	.	.	257
1.50-1.74	.	.	.	180	140	.	.	.	.	.	320
1.75-1.99	.	.	.	2	121	.	.	.	.	.	123
2.00-2.24	.	.	.	.	105	.	.	.	.	.	105
2.25-2.49	.	.	.	.	34	2	.	.	.	.	36
2.50-2.74	.	.	.	.	4	16	.	.	.	.	20
2.75-2.99	.	.	.	.	.	5	.	.	.	.	5
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	375	1314	1230	1239	460	23	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 4350.

STATION M39 44.95N 86.17W 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	
0.00-0.24	362	114	.	.	.	.	.	.	.	.	476
0.25-0.49	39	550	42	.	.	.	.	.	.	.	631
0.50-0.74	.	257	634	67	.	.	.	.	.	.	958
0.75-0.99	.	3	232	296	.	.	.	.	.	.	531
1.00-1.24	.	.	144	568	14	.	.	.	.	.	726
1.25-1.49	.	.	10	263	93	.	.	.	.	.	366
1.50-1.74	.	.	.	197	207	.	.	.	.	.	404
1.75-1.99	.	.	.	7	167	.	.	.	.	.	174
2.00-2.24	.	.	.	.	146	1	.	.	.	.	147
2.25-2.49	.	.	.	.	51	0	.	.	.	.	59
2.50-2.74	.	.	.	.	10	23	.	.	.	.	33
2.75-2.99	.	.	.	.	.	14	.	.	.	.	14
3.00-3.24	.	.	.	.	.	10	1	.	.	.	11
3.25-3.49	.	.	.	.	.	4	.	.	.	.	4
3.50+	.	.	.	.	.	1	5	.	.	.	6
TOTAL	401	924	1062	1398	688	61	6	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 4260.

STATION M39 44.95N 86.17W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

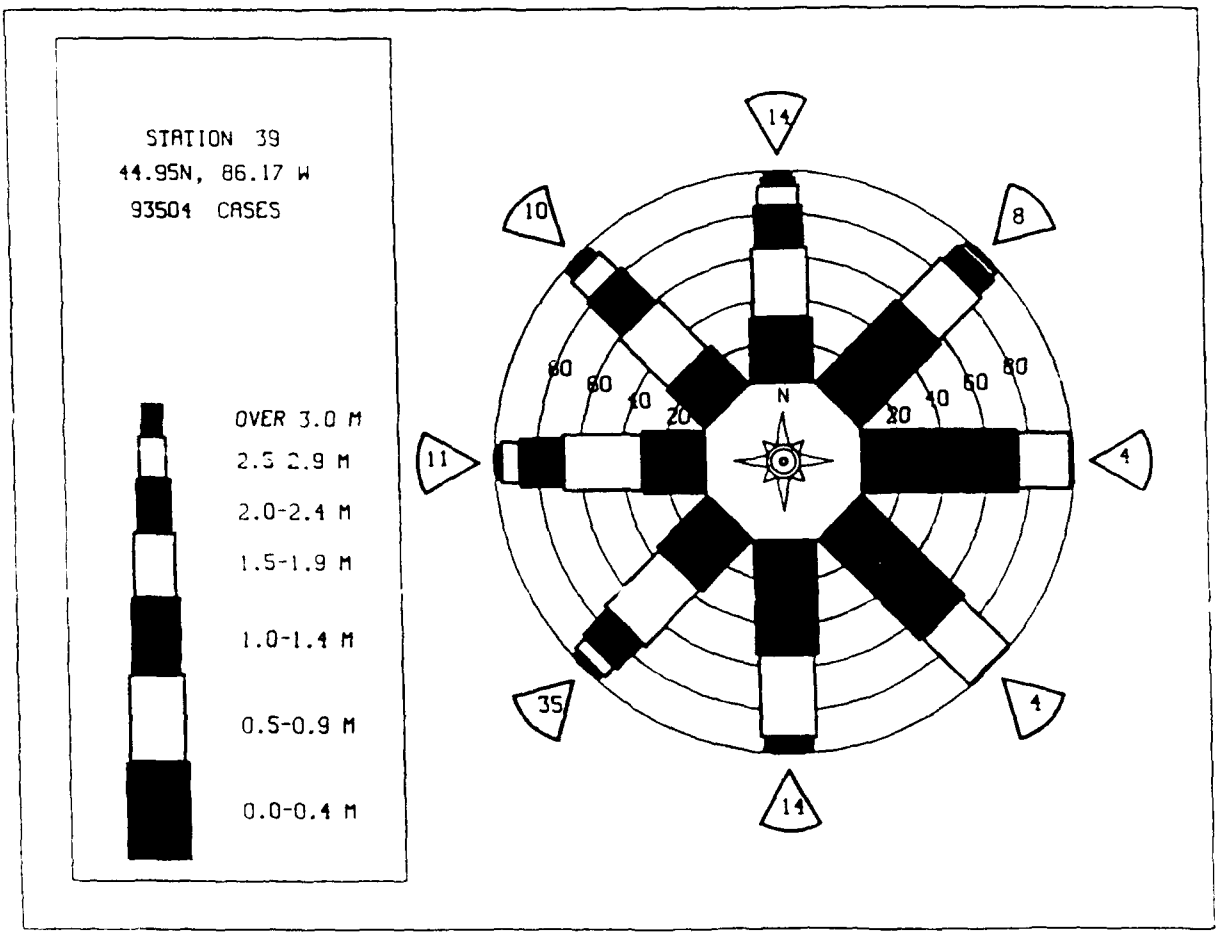
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	483	124	.	.	.	.	.	.	.	.	607
0.25-0.49	91	782	49	.	.	.	.	.	.	.	922
0.50-0.74	.	375	792	64	.	.	.	.	.	.	1231
0.75-0.99	.	3	309	324	1	.	.	.	.	.	637
1.00-1.24	.	.	171	628	67	.	.	.	.	.	866
1.25-1.49	.	.	6	244	154	.	.	.	.	.	404
1.50-1.74	.	.	.	194	300	1	.	.	.	.	495
1.75-1.99	.	.	.	8	222	11	.	.	.	.	241
2.00-2.24	.	.	.	.	204	18	.	.	.	.	222
2.25-2.49	.	.	.	.	74	34	.	.	.	.	108
2.50-2.74	.	.	.	.	16	69	.	.	.	.	85
2.75-2.99	.	.	.	.	.	27	.	.	.	.	27
3.00-3.24	.	.	.	.	.	23	1	.	.	.	24
3.25-3.49	.	.	.	.	.	2	4	.	.	.	6
3.50+	.	.	.	.	.	1	26	.	.	.	27
TOTAL	574	1284	1327	1462	1038	186	31	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.3 NO. OF CASES= 5532.

STATION M39 44.95N 86.17W 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	
0.00-0.24	1216	439	68	23	2	.	.	.	.	.	1748
0.25-0.49	205	1631	273	138	18	1	.	.	.	.	2266
0.50-0.74	.	1098	1123	257	68	2	.	.	.	.	2548
0.75-0.99	.	17	521	381	46	7	.	.	.	.	972
1.00-1.24	.	.	349	576	97	12	1	.	.	.	1035
1.25-1.49	.	.	37	243	162	9	2	.	.	.	453
1.50-1.74	.	.	5	187	239	16	3	.	.	.	450
1.75-1.99	.	.	.	12	147	15	3	.	.	.	177
2.00-2.24	.	.	.	1	122	23	2	.	.	.	148
2.25-2.49	.	.	.	.	43	19	2	.	.	.	64
2.50-2.74	.	.	.	.	9	38	3	.	.	.	50
2.75-2.99	.	.	.	.	.	19	2	.	.	.	21
3.00-3.24	.	.	.	.	.	16	2	.	.	.	18
3.25-3.49	.	.	.	.	.	2	3	.	.	.	5
3.50+	.	.	.	.	.	.	12	.	.	.	12
TOTAL	1421	3185	2376	1818	953	179	35	0	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M39 (44.95N 86.17W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.7	0.6	0.6	0.6	0.4	0.3	0.3	0.6	0.8	0.9	1.0	0.6
1957	1.1	0.8	0.7	0.7	0.6	0.5	0.4	0.5	0.6	0.8	1.3	1.2	0.8
1958	0.9	1.1	0.3	0.6	0.5	0.5	0.5	0.6	0.8	0.8	1.1	0.9	0.7
1959	1.0	1.0	0.7	0.6	0.6	0.5	0.5	0.5	0.8	0.8	0.9	1.0	0.7
1960	0.9	1.0	0.6	0.6	0.4	0.5	0.4	0.6	0.6	0.7	1.1	1.3	0.7
1961	0.9	0.7	0.8	0.5	0.6	0.5	0.4	0.5	0.7	0.9	0.9	1.0	0.7
1962	1.2	0.8	0.5	0.8	0.6	0.4	0.4	0.5	0.7	0.7	0.7	1.1	0.7
1963	0.9	1.0	0.8	0.7	0.6	0.4	0.4	0.5	0.6	0.6	1.0	0.9	0.7
1964	1.1	1.2	1.0	0.8	0.6	0.5	0.4	0.7	0.7	0.9	0.9	0.9	0.8
1965	1.1	1.3	0.7	0.5	0.6	0.5	0.5	0.6	0.7	1.0	1.0	1.0	0.8
1966	0.9	0.8	0.9	0.5	0.5	0.5	0.6	0.6	0.7	1.1	1.2	0.9	0.8
1967	1.2	1.2	0.8	0.7	0.5	0.4	0.4	0.6	0.7	0.9	1.0	0.8	0.8
1968	0.9	1.0	0.9	0.7	0.5	0.4	0.6	0.6	0.6	0.9	0.8	1.1	0.7
1969	0.9	0.8	0.8	0.6	0.5	0.5	0.4	0.6	0.7	0.8	0.8	0.9	0.7
1970	0.8	1.1	0.6	0.7	0.5	0.5	0.5	0.5	0.7	0.7	0.9	0.9	0.7
1971	1.1	1.1	0.8	0.6	0.5	0.4	0.5	0.6	0.6	0.7	0.9	0.8	0.7
1972	1.2	0.8	0.8	0.4	0.3	0.5	0.5	0.5	0.7	0.9	0.7	0.8	0.7
1973	1.1	0.8	0.7	0.6	0.5	0.4	0.5	0.6	0.7	0.7	0.9	0.9	0.7
1974	0.8	0.8	0.8	0.7	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8	0.7
1975	1.0	0.8	0.7	0.6	0.4	0.4	0.5	0.5	0.6	0.9	0.9	0.8	0.7
1976	1.0	1.1	1.0	0.7	0.5	0.4	0.5	0.6	0.7	0.7	0.9	0.9	0.7
1977	1.0	1.0	0.6	0.5	0.4	0.4	0.5	0.6	0.6	0.8	0.8	0.8	0.7
1978	1.2	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.9	0.7
1979	0.9	0.7	0.7	0.5	0.4	0.4	0.4	0.5	0.7	1.2	1.2	1.2	0.7
1980	0.8	0.7	0.7	0.4	0.3	0.4	0.4	0.6	1.1	1.5	1.6	0.9	0.8
1981	0.7	0.9	0.8	0.6	0.4	0.4	0.4	0.5	0.9	1.0	1.0	0.7	0.7
1982	1.0	0.7	0.7	0.7	0.3	0.3	0.5	0.6	1.0	1.0	1.1	0.8	0.7
1983	0.8	0.7	0.7	0.5	0.4	0.3	0.4	0.5	1.0	0.9	1.1	0.7	0.7
1984	0.8	0.8	0.7	0.5	0.4	0.4	0.5	0.6	1.0	1.0	1.6	0.9	0.8
1985	0.9	0.9	0.8	0.6	0.4	0.3	0.4	0.4	0.6	0.6	0.7	0.8	0.6
1986	1.0	0.5	0.8	0.6	0.4	0.3	0.3	0.4	0.4	0.5	0.8	0.7	0.6
1987	0.9	0.8	0.6	0.4	0.2	0.2	0.3	0.4	0.4	0.7	0.7	0.9	0.6
MEAN	1.0	0.9	0.7	0.6	0.5	0.4	0.4	0.5	0.7	0.8	1.0	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M39 (44.95N 86.17W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.4	3.1	3.5	2.3	2.3	1.5	1.6	1.3	2.3	2.9	3.5	4.6
1957	3.3	3.0	3.4	4.2	3.2	2.0	2.2	2.0	2.8	3.0	4.3	4.7
1958	3.8	3.0	1.4	3.0	3.5	2.8	2.3	2.0	2.9	2.5	5.7	2.7
1959	2.9	3.2	3.5	2.7	1.9	1.6	1.9	1.9	2.8	2.9	2.4	3.4
1960	2.3	2.8	2.6	2.0	1.6	1.5	2.0	2.5	2.0	2.6	3.2	4.0
1961	3.4	2.5	2.7	1.7	1.8	1.7	1.5	2.1	2.4	2.8	2.4	2.8
1962	3.7	2.7	1.8	2.4	2.1	1.6	1.7	2.0	2.3	2.7	2.9	3.8
1963	3.2	3.0	3.0	3.8	1.8	2.0	1.4	2.3	2.3	2.1	2.9	3.4
1964	3.1	3.5	2.5	3.7	2.5	1.7	1.2	1.8	3.0	3.3	3.2	2.2
1965	3.2	3.8	2.7	2.1	1.9	1.4	1.4	1.7	2.4	2.9	3.5	3.7
1966	2.8	2.0	4.2	1.5	1.6	1.4	1.4	1.8	2.1	3.8	4.9	3.0
1967	3.3	3.1	2.3	2.4	1.7	1.3	1.5	2.2	2.3	2.3	2.9	2.1
1968	2.8	2.9	2.3	3.3	1.8	1.4	1.7	2.1	1.9	2.5	2.3	3.3
1969	2.4	2.5	2.1	1.6	1.2	2.7	1.4	2.5	2.1	2.3	1.9	3.1
1970	2.2	2.9	1.8	2.4	2.3	1.5	1.6	1.7	2.4	2.5	2.8	3.0
1971	4.5	5.6	2.5	2.1	1.5	1.2	1.7	1.9	2.1	2.9	2.6	2.4
1972	3.3	2.6	2.3	1.3	1.3	1.6	1.4	1.6	2.2	3.0	2.2	2.8
1973	2.9	2.7	3.8	1.8	1.5	1.8	1.7	1.7	2.3	2.6	2.1	2.4
1974	3.0	3.0	2.3	1.7	1.4	1.2	1.3	1.8	2.5	1.9	2.0	2.4
1975	5.6	2.5	2.3	1.8	1.6	1.6	1.2	1.6	1.9	2.2	3.1	2.8
1976	2.5	3.6	3.1	1.8	2.1	1.5	1.6	2.4	2.3	2.2	2.4	3.1
1977	2.5	2.5	3.0	1.9	1.6	1.4	1.7	2.4	2.3	2.2	3.4	2.5
1978	4.9	2.4	1.9	1.7	2.2	1.5	1.2	1.4	2.3	2.1	2.4	2.3
1979	2.9	2.0	2.3	1.6	1.2	1.5	1.3	1.4	1.9	3.6	4.1	3.1
1980	3.4	2.5	2.2	1.5	1.4	1.6	1.5	1.8	3.2	3.7	3.8	4.5
1981	2.2	2.3	2.3	1.9	1.9	2.3	1.4	1.7	3.4	3.8	3.2	2.1
1982	3.3	2.1	3.2	2.1	1.4	1.1	1.6	2.1	2.5	3.2	3.3	2.8
1983	3.4	2.2	2.1	2.2	1.2	1.1	1.2	1.5	2.6	3.0	3.7	2.5
1984	2.4	3.2	2.8	2.0	2.4	1.7	1.6	2.3	3.1	4.0	3.9	4.2
1985	2.7	2.6	2.9	2.5	1.8	1.6	2.3	1.3	1.8	2.4	2.7	2.8
1986	4.1	2.5	2.4	1.8	2.1	1.2	1.5	1.7	1.7	2.5	3.5	2.6
1987	2.5	4.3	2.4	1.9	1.1	0.9	1.3	1.5	1.8	3.1	2.7	2.9

32 YR STATISTICS FOR WIS STATION M39

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	5.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	208.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		78111821

STATION M40 44.80N 86.18W 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	
0.00-0.24	998	250	7	3	.	.	.	.	.	.	1258
0.25-0.49	130	1284	142	4	.	.	.	.	.	.	1560
0.50-0.74	.	663	1148	174	.	.	.	.	.	.	1985
0.75-0.99	.	5	489	467	.	.	.	.	.	.	961
1.00-1.24	.	.	270	752	145	.	.	.	.	.	1167
1.25-1.49	.	.	10	213	342	.	.	.	.	.	565
1.50-1.74	.	.	.	120	356	4	.	.	.	.	480
1.75-1.99	.	.	.	6	220	28	.	.	.	.	254
2.00-2.24	.	.	.	.	139	71	1	.	.	.	211
2.25-2.49	.	.	.	.	40	58	5	.	.	.	103
2.50-2.74	.	.	.	.	4	93	12	.	.	.	109
2.75-2.99	.	.	.	.	.	37	4	.	.	.	41
3.00-3.24	.	.	.	.	.	35	7	.	.	.	42
3.25-3.49	.	.	.	.	.	4	11	.	.	.	15
3.50+	.	.	.	.	.	3	34	3	.	.	40
TOTAL	1128	2202	2066	1739	1246	333	74	3	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.1 NO. OF CASES= 8238.

STATION M40 44.80N 86.18W 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	
0.00-0.24	804	209	7	3	1	.	.	.	.	.	1024
0.25-0.49	106	995	91	3	.	.	.	.	.	.	1195
0.50-0.74	.	488	455	96	.	.	.	.	.	.	1039
0.75-0.99	.	7	221	204	3	.	.	.	.	.	435
1.00-1.24	.	.	60	185	88	.	.	.	.	.	333
1.25-1.49	.	.	5	35	80	.	.	.	.	.	120
1.50-1.74	.	.	.	20	83	3	.	.	.	.	106
1.75-1.99	.	.	.	2	41	5	.	.	.	.	48
2.00-2.24	.	.	.	.	23	20	.	.	.	.	43
2.25-2.49	.	.	.	.	2	6	.	.	.	.	8
2.50-2.74	.	.	.	.	1	10	.	.	.	.	11
2.75-2.99	.	.	.	.	.	3	1	.	.	.	4
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	910	1699	839	548	322	48	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 4097.

STATION M40 44.80N 86.18W 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	
0.00-0.24	1167	350	21	.	.	.	.	.	.	.	1538
0.25-0.49	112	965	144	14	.	.	.	.	.	.	1235
0.50-0.74	.	640	191	115	.	.	.	.	.	.	946
0.75-0.99	.	28	132	235	22	.	.	.	.	.	417
1.00-1.24	.	.	20	108	168	.	.	.	.	.	296
1.25-1.49	.	.	3	13	54	1	.	.	.	.	71
1.50-1.74	.	.	2	1	54	16	.	.	.	.	73
1.75-1.99	.	.	.	1	9	9	.	.	.	.	19
2.00-2.24	.	.	.	.	.	10	.	.	.	.	10
2.25-2.49	.	.	.	.	.	3	1	.	.	.	4
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1279	1983	513	487	307	39	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 4323.

STATION M40 44.80N 86.18W 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	
0.00-0.24	614	140	16	1	.	.	.	.	.	.	771
0.25-0.49	117	559	134	29	.	.	.	.	.	.	839
0.50-0.74	.	375	80	94	2	.	.	.	.	.	561
0.75-0.99	.	18	49	111	28	.	.	.	.	.	206
1.00-1.24	.	.	6	22	41	.	.	.	.	.	69
1.25-1.49	.	.	.	1	8	2	.	.	.	.	11
1.50-1.74	.	.	.	.	6	.	.	.	.	.	6
1.75-1.99	.	.	.	.	.	1	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	731	1092	285	258	85	3	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.1 NO. OF CASES= 2313.

STATION M40 44.80N 86.18W 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	
0.00-0.24	607	155	18	1	.	.	.	.	.	.	781
0.25-0.49	192	506	136	47	.	.	.	.	.	.	881
0.50-0.74	.	315	52	98	1	.	.	.	.	.	466
0.75-0.99	.	23	10	22	9	.	.	.	.	.	64
1.00-1.24	.	.	3	3	7	.	.	.	.	.	13
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	1	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	799	999	220	171	17	1	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.9 NO. OF CASES= 2071.

STATION M40 44.80N 86.18W 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	
0.00-0.24	521	121	11	.	1	.	.	.	.	.	654
0.25-0.49	135	441	84	23	.	.	.	.	.	.	683
0.50-0.74	.	372	31	25	.	.	.	.	.	.	428
0.75-0.99	.	7	16	6	2	.	.	.	.	.	31
1.00-1.24	.	.	4	1	3	.	.	.	.	.	8
1.25-1.49	.	.	.	.	.	.	.	.	.	.	0
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	656	941	146	55	6	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.2 MEAN TP(SEC)= 2.8 NO. OF CASES= 1694.

STATION M40 44.80N 86.18W 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	
0.00-0.24	698	202	23	1	.	.	.	.	.	.	924
0.25-0.49	72	491	67	13	.	.	.	.	.	.	643
0.50-0.74	.	574	41	21	2	.	.	.	.	.	638
0.75-0.99	.	1	48	4	1	.	.	.	.	.	54
1.00-1.24	.	.	14	.	.	.	.	.	.	.	14
1.25-1.49	.	.	.	.	.	.	.	.	.	.	0
1.50-1.74	.	.	.	1	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	770	1268	193	40	3	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.8 NO. OF CASES= 2133.

STATION M40 44.80N 86.18W 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	
0.00-0.24	843	218	13	2	.	.	.	.	.	.	1076
0.25-0.49	182	767	78	12	.	.	.	.	.	.	1039
0.50-0.74	.	823	60	20	1	.	.	.	.	.	904
0.75-0.99	.	13	65	.	.	.	.	.	.	.	78
1.00-1.24	.	.	20	1	.	.	.	.	.	.	21
1.25-1.49	.	.	2	.	.	.	.	.	.	.	2
1.50-1.74	.	.	.	2	.	.	.	.	.	.	2
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1025	1821	238	37	1	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.8 NO. OF CASES= 2927.

STATION M40 44.80N 86.18W 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	
0.00-0.24	1545	445	32	2	.	2	.	.	.	.	2026
0.25-0.49	540	1444	179	21	1	1	.	.	.	.	2186
0.50-0.74	.	1048	27	29	1	.	.	.	.	.	1105
0.75-0.99	.	80	50	1	.	.	.	.	.	.	131
1.00-1.24	.	.	18	.	.	.	.	.	.	.	18
1.25-1.49	.	.	4	.	.	.	.	.	.	.	4
1.50-1.74	.	.	6	1	.	.	.	.	.	.	7
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2085	3017	316	54	2	3	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.7 NO. OF CASES= 5128.

STATION M40 44.80N 86.18W 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	
0.00-0.24	1549	801	577	308	25	1	.	.	.	.	3261
0.25-0.49	693	2481	902	1161	259	11	.	.	.	.	5507
0.50-0.74	.	2159	386	419	352	39	5	.	.	.	3360
0.75-0.99	.	621	262	388	136	32	3	.	.	.	1442
1.00-1.24	.	.	133	229	141	32	14	.	.	.	549
1.25-1.49	.	.	13	67	84	6	2	.	.	.	172
1.50-1.74	.	.	7	59	67	7	.	.	.	.	140
1.75-1.99	.	.	.	5	40	9	.	.	.	.	54
2.00-2.24	.	.	.	2	24	10	1	.	.	.	37
2.25-2.49	.	.	.	.	6	5	2	.	.	.	13
2.50-2.74	.	.	.	.	2	16	5	.	.	.	23
2.75-2.99	.	.	.	.	.	5	2	.	.	.	7
3.00-3.24	.	.	.	.	.	2	4	.	.	.	6
3.25-3.49	.	.	.	.	.	2	3	.	.	.	5
3.50+	.	.	.	.	.	.	6	.	1	.	7
TOTAL	2242	6062	2280	2638	1136	177	47	0	1	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 13657.

STATION M40 44.80N 86.18W 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	
0.00-0.24	1187	882	68	6	.	.	.	.	.	.	2143
0.25-0.49	256	2614	970	173	14	.	.	.	.	.	4027
0.50-0.74	.	1601	2046	1140	197	8	.	.	.	.	4992
0.75-0.99	.	139	1005	805	251	29	3	.	.	.	2232
1.00-1.24	.	.	658	957	509	132	11	.	.	.	2267
1.25-1.49	.	.	75	331	325	63	21	.	.	.	815
1.50-1.74	.	.	9	303	275	50	20	.	.	.	657
1.75-1.99	.	.	1	55	137	55	9	1	.	.	258
2.00-2.24	.	.	.	11	118	83	10	1	.	.	223
2.25-2.49	.	.	.	1	36	28	7	.	.	.	72
2.50-2.74	.	.	.	.	20	39	17	.	.	.	76
2.75-2.99	.	.	.	.	3	23	11	.	.	.	37
3.00-3.24	.	.	.	.	.	9	9	.	.	.	18
3.25-3.49	.	.	.	.	.	2	8	.	.	.	10
3.50+	.	.	.	.	.	2	12	5	2	.	21
TOTAL	1443	5236	4832	3782	1885	523	138	7	2	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 16716.

STATION M40 44.80N 86.18W 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	
0.00-0.24	688	281	4	.	.	.	.	.	.	.	973
0.25-0.49	126	1537	183	3	.	.	.	.	.	.	1849
0.50-0.74	.	696	1482	181	2	.	.	.	.	.	2361
0.75-0.99	.	13	604	417	7	1	.	.	.	.	1042
1.00-1.24	.	.	366	618	86	.	.	.	.	.	1070
1.25-1.49	.	.	25	281	193	.	.	.	.	.	499
1.50-1.74	.	.	1	189	259	3	.	.	.	.	452
1.75-1.99	.	.	.	7	160	21	.	.	.	.	188
2.00-2.24	.	.	.	1	120	35	1	.	.	.	157
2.25-2.49	.	.	.	.	42	22	2	.	.	.	66
2.50-2.74	.	.	.	.	8	45	5	.	.	.	58
2.75-2.99	.	.	.	.	3	17	.	.	.	.	20
3.00-3.24	.	.	.	.	.	18	8	.	.	.	26
3.25-3.49	.	.	.	.	.	4	.	.	.	.	4
3.50+	.	.	.	.	.	3	5	2	3	.	13
TOTAL	814	2527	2665	1697	880	169	21	2	3	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 8226.

STATION M40 44.80N 86.18W 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	
0.00-0.24	543	241	2	.	.	.	.	.	.	.	786
0.25-0.49	68	1058	101	3	.	.	.	.	.	.	1230
0.50-0.74	.	497	1146	143	.	.	.	.	.	.	1786
0.75-0.99	.	8	399	417	1	.	.	.	.	.	825
1.00-1.24	.	.	271	626	35	.	.	.	.	.	932
1.25-1.49	.	.	6	249	156	.	.	.	.	.	411
1.50-1.74	.	.	.	163	203	.	.	.	.	.	366
1.75-1.99	.	.	.	9	130	2	.	.	.	.	141
2.00-2.24	.	.	.	1	112	5	.	.	.	.	118
2.25-2.49	.	.	.	.	26	6	.	.	.	.	32
2.50-2.74	.	.	.	.	8	26	.	.	.	.	34
2.75-2.99	.	.	.	.	.	9	.	.	.	.	9
3.00-3.24	.	.	.	.	.	3	.	.	.	.	3
3.25-3.49	.	.	.	.	.	2	.	.	.	.	2
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	611	1804	1925	1611	671	53	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 6256.

STATION M40 44.80N 86.18W 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	
0.00-0.24	364	166	1	1	.	.	.	.	.	.	532
0.25-0.49	72	869	53	2	.	.	.	.	.	.	996
0.50-0.74	.	429	875	95	.	.	.	.	.	.	1399
0.75-0.99	.	9	302	383	2	.	.	.	.	.	696
1.00-1.24	.	.	189	514	31	.	.	.	.	.	734
1.25-1.49	.	.	6	220	118	.	.	.	.	.	344
1.50-1.74	.	.	.	158	181	.	.	.	.	.	339
1.75-1.99	.	.	.	5	108	.	.	.	.	.	113
2.00-2.24	.	.	.	.	109	3	.	.	.	.	112
2.25-2.49	.	.	.	.	28	6	.	.	.	.	34
2.50-2.74	.	.	.	.	3	13	.	.	.	.	16
2.75-2.99	.	.	.	.	.	4	.	.	.	.	4
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	436	1473	1426	1378	580	28	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 4989.

STATION M40 44.80N 86.18W 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	
0.00-0.24	377	161	1	1	.	.	.	.	.	.	540
0.25-0.49	47	650	71	2	.	.	.	.	.	.	770
0.50-0.74	.	288	645	110	.	.	.	.	.	.	1043
0.75-0.99	.	3	245	344	.	.	.	.	.	.	592
1.00-1.24	.	.	171	601	67	.	.	.	.	.	839
1.25-1.49	.	.	5	285	106	.	.	.	.	.	396
1.50-1.74	.	.	.	217	279	1	.	.	.	.	497
1.75-1.99	.	.	.	7	212	3	.	.	.	.	222
2.00-2.24	.	.	.	.	183	8	.	.	.	.	191
2.25-2.49	.	.	.	.	53	11	.	.	.	.	64
2.50-2.74	.	.	.	.	8	28	.	.	.	.	36
2.75-2.99	.	.	.	.	.	11	.	.	.	.	11
3.00-3.24	.	.	.	.	.	9	2	.	.	.	11
3.25-3.49	.	.	.	.	.	1	1	.	.	.	2
3.50+	.	.	.	.	.	.	2	.	.	.	2
TOTAL	424	1102	1138	1567	908	72	5	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 4892.

STATION M40 44.80N 86.18W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

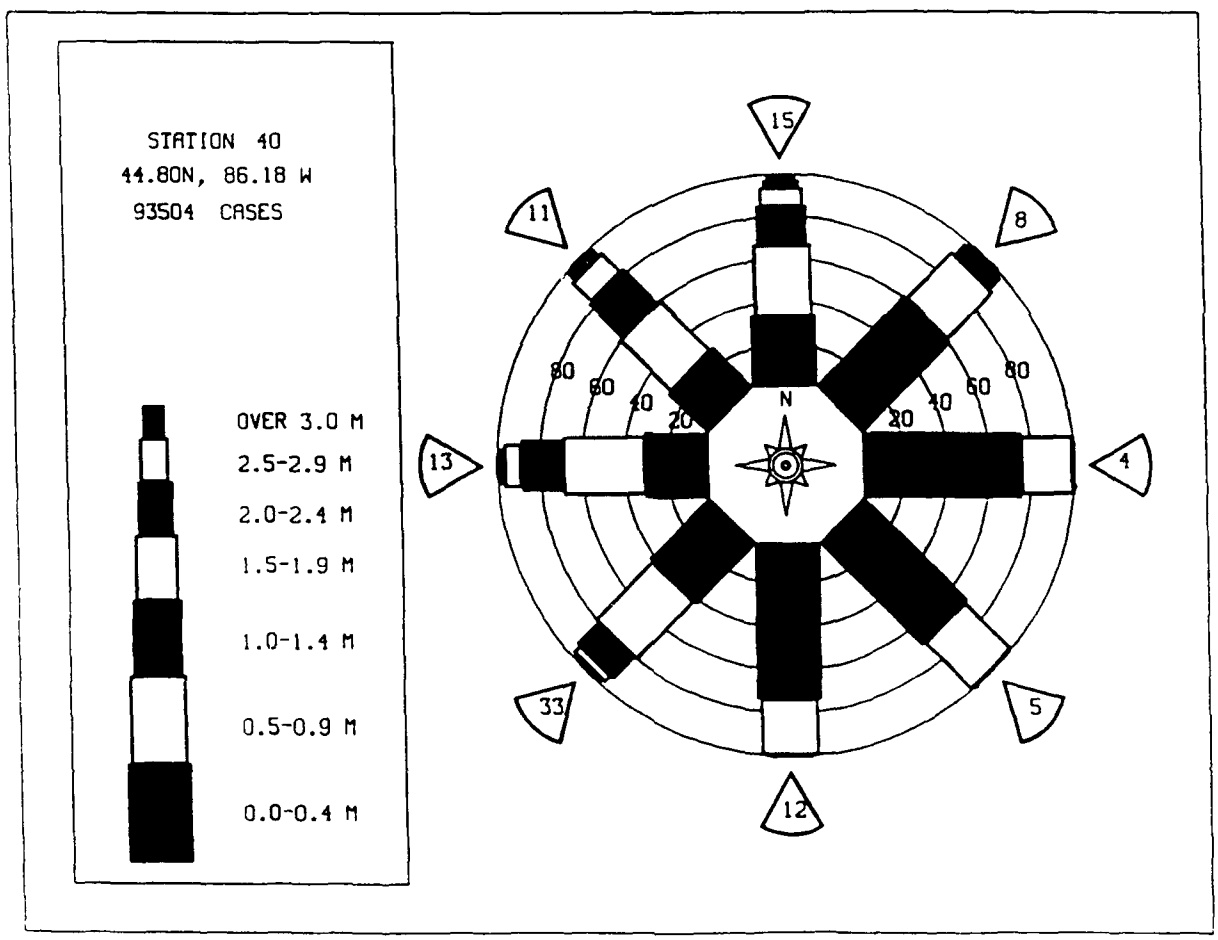
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	535	131	2	1	.	.	.	.	.	.	669
0.25-0.49	98	791	84	1	.	.	.	.	.	.	974
0.50-0.74	.	433	776	104	.	.	.	.	.	.	1313
0.75-0.99	.	4	332	331	.	.	.	.	.	.	667
1.00-1.24	.	.	197	561	111	.	.	.	.	.	869
1.25-1.49	.	.	12	232	190	.	.	.	.	.	434
1.50-1.74	.	.	.	177	342	8	.	.	.	.	527
1.75-1.99	.	.	.	9	216	32	.	.	.	.	257
2.00-2.24	.	.	.	.	168	57	.	.	.	.	225
2.25-2.49	.	.	.	.	58	41	1	.	.	.	100
2.50-2.74	.	.	.	.	9	77	7	.	.	.	93
2.75-2.99	.	.	.	.	1	35	2	.	.	.	38
3.00-3.24	.	.	.	.	.	21	1	.	.	.	22
3.25-3.49	.	.	.	.	.	6	8	.	.	.	14
3.50+	.	.	.	.	.	1	26	3	.	.	30
TOTAL	633	1359	1403	1416	1095	278	45	3	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.3 NO. OF CASES= 5844.

STATION M40 44.80N 86.18W 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	
0.00-0.24	1304	476	80	33	2	.	.	.	.	.	1895
0.25-0.49	295	1746	342	151	27	1	.	.	.	.	2562
0.50-0.74	.	1140	946	287	56	4	.	.	.	.	2433
0.75-0.99	.	98	423	413	46	6	.	.	.	.	986
1.00-1.24	.	.	240	518	143	16	2	.	.	.	919
1.25-1.49	.	.	17	193	166	7	2	.	.	.	385
1.50-1.74	.	.	2	141	211	9	2	.	.	.	365
1.75-1.99	.	.	.	11	127	16	.	.	.	.	154
2.00-2.24	.	.	.	1	100	30	1	.	.	.	132
2.25-2.49	.	.	.	.	29	19	1	.	.	.	49
2.50-2.74	.	.	.	.	6	35	4	.	.	.	45
2.75-2.99	.	.	.	.	.	14	2	.	.	.	16
3.00-3.24	.	.	.	.	.	10	3	.	.	.	13
3.25-3.49	.	.	.	.	.	2	3	.	.	.	5
3.50+	.	.	.	.	.	.	8	1	.	.	9
TOTAL	1599	3460	2050	1748	913	169	28	1	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M40 (44.80N 86.18W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.7	0.6	0.6	0.5	0.4	0.3	0.3	0.6	0.7	0.9	0.9	0.6
1957	1.0	0.8	0.7	0.6	0.5	0.5	0.4	0.4	0.6	0.7	1.2	1.2	0.7
1958	0.9	1.1	0.3	0.6	0.5	0.5	0.4	0.5	0.8	0.7	1.0	0.8	0.7
1959	1.0	0.9	0.6	0.6	0.5	0.4	0.5	0.5	0.7	0.7	0.9	0.9	0.7
1960	0.8	0.9	0.6	0.6	0.4	0.5	0.4	0.5	0.6	0.6	1.0	1.2	0.7
1961	0.9	0.7	0.8	0.5	0.6	0.5	0.4	0.5	0.6	0.8	0.9	0.9	0.7
1962	1.1	0.7	0.4	0.7	0.5	0.4	0.4	0.4	0.7	0.7	0.6	1.1	0.6
1963	0.9	1.0	0.7	0.7	0.5	0.4	0.4	0.5	0.6	0.6	0.9	0.8	0.7
1964	1.0	1.2	1.0	0.7	0.6	0.5	0.4	0.6	0.7	0.8	0.8	0.8	0.8
1965	1.0	1.2	0.7	0.5	0.5	0.5	0.4	0.6	0.6	0.9	0.9	1.0	0.7
1966	0.9	0.8	0.8	0.5	0.5	0.5	0.5	0.6	0.7	1.0	1.1	0.9	0.7
1967	1.1	1.1	0.7	0.7	0.5	0.4	0.4	0.6	0.6	0.8	0.9	0.8	0.7
1968	0.9	1.0	0.8	0.6	0.4	0.4	0.5	0.6	0.6	0.8	0.7	1.0	0.7
1969	0.9	0.8	0.8	0.6	0.5	0.5	0.4	0.6	0.6	0.7	0.7	0.8	0.6
1970	0.8	1.0	0.6	0.7	0.5	0.5	0.5	0.5	0.6	0.7	0.8	0.8	0.7
1971	1.1	1.1	0.7	0.6	0.5	0.4	0.5	0.5	0.5	0.6	0.8	0.8	0.7
1972	1.1	0.8	0.8	0.4	0.3	0.5	0.4	0.5	0.6	0.8	0.6	0.7	0.6
1973	1.0	0.8	0.7	0.6	0.5	0.4	0.5	0.5	0.6	0.7	0.8	0.8	0.6
1974	0.7	0.8	0.7	0.6	0.5	0.5	0.4	0.5	0.7	0.7	0.7	0.8	0.6
1975	0.9	0.8	0.6	0.6	0.4	0.4	0.5	0.5	0.6	0.8	0.8	0.8	0.6
1976	0.9	1.0	0.9	0.6	0.5	0.4	0.5	0.6	0.7	0.7	0.9	0.9	0.7
1977	0.9	1.0	0.6	0.5	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.6
1978	1.1	0.6	0.6	0.6	0.4	0.4	0.4	0.5	0.6	0.7	0.7	0.9	0.6
1979	0.9	0.7	0.6	0.5	0.4	0.4	0.4	0.5	0.7	1.0	1.0	1.0	0.7
1980	0.8	0.6	0.7	0.4	0.3	0.4	0.3	0.5	0.9	1.3	1.3	0.8	0.7
1981	0.7	0.8	0.8	0.6	0.4	0.4	0.3	0.4	0.8	0.8	0.9	0.7	0.6
1982	0.9	0.7	0.7	0.7	0.3	0.3	0.4	0.5	0.9	0.9	0.9	0.8	0.7
1983	0.8	0.6	0.7	0.5	0.4	0.3	0.4	0.4	0.8	0.8	1.0	0.7	0.6
1984	0.7	0.8	0.7	0.4	0.4	0.3	0.4	0.5	0.8	0.7	1.3	0.9	0.7
1985	0.9	0.8	0.7	0.5	0.4	0.3	0.4	0.4	0.5	0.5	0.6	0.8	0.6
1986	1.0	0.5	0.7	0.5	0.4	0.3	0.2	0.3	0.4	0.5	0.8	0.7	0.5
1987	0.8	0.8	0.6	0.4	0.2	0.2	0.3	0.4	0.3	0.7	0.7	0.9	0.5
MEAN	0.9	0.9	0.7	0.6	0.4	0.4	0.4	0.5	0.6	0.8	0.9	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M40 (44.80N 86.18W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.4	3.1	3.3	2.2	2.3	1.6	1.6	1.3	2.3	2.9	3.5	4.6
1957	3.3	2.8	3.2	4.1	3.2	1.8	2.3	1.9	2.6	2.9	4.0	5.0
1958	3.6	3.2	1.2	3.0	3.5	2.7	2.3	1.9	2.8	2.5	5.5	2.3
1959	3.0	3.0	3.2	2.6	1.9	1.5	1.6	1.7	2.7	2.8	2.4	3.4
1960	2.2	2.8	2.9	1.8	1.4	1.5	2.0	2.4	2.0	2.7	3.0	4.0
1961	3.6	2.6	2.8	1.7	1.8	1.7	1.6	2.0	2.4	2.5	2.4	2.4
1962	3.7	2.7	2.0	2.4	2.0	1.6	1.7	2.1	2.3	2.9	2.6	4.0
1963	2.7	3.0	3.2	3.8	1.8	1.8	1.3	2.4	2.2	2.1	2.9	3.3
1964	2.9	2.9	2.7	3.7	2.4	1.7	1.2	1.7	2.5	3.2	2.8	2.1
1965	3.3	4.1	2.7	2.1	1.9	1.2	1.4	1.8	2.3	3.1	3.4	3.5
1966	3.0	2.1	4.1	1.5	1.6	1.4	1.4	1.9	2.1	3.5	5.3	3.0
1967	3.4	3.0	2.3	2.2	1.6	1.2	1.5	2.1	2.3	2.4	2.9	2.0
1968	3.0	3.2	2.3	3.2	1.7	1.4	1.6	2.0	1.9	2.6	2.3	3.0
1969	2.4	2.6	2.2	1.4	1.2	2.5	1.4	2.3	1.9	2.3	1.8	3.3
1970	2.2	2.9	1.8	2.3	2.2	1.5	1.6	1.7	2.6	2.4	3.0	2.9
1971	4.6	5.2	2.5	2.1	1.4	1.2	1.8	1.9	1.5	2.4	2.7	2.4
1972	3.3	2.6	2.5	1.3	1.3	1.6	1.4	1.6	2.0	3.0	2.2	2.8
1973	3.0	2.7	4.0	1.6	1.5	1.6	1.7	1.7	2.2	2.2	2.1	2.3
1974	3.1	3.2	2.1	1.6	1.4	1.2	1.3	1.7	2.2	1.8	2.0	2.5
1975	4.9	2.7	2.3	1.8	1.4	1.6	1.1	1.6	1.9	2.1	2.7	2.4
1976	2.5	3.7	3.1	1.8	2.1	1.2	1.6	2.4	2.1	2.3	2.6	3.3
1977	2.7	2.5	2.7	1.9	1.6	1.3	1.7	2.2	2.2	2.2	2.9	2.5
1978	5.2	2.4	2.0	1.8	1.8	1.3	1.2	1.5	1.7	2.1	2.3	2.5
1979	2.8	2.1	2.3	1.7	1.2	1.4	1.3	1.4	1.9	3.4	2.8	3.1
1980	3.0	2.3	2.2	1.5	1.3	1.5	1.2	1.6	2.5	3.3	3.3	4.1
1981	2.3	2.3	2.3	1.9	1.7	1.7	1.4	1.6	3.2	3.5	3.2	2.1
1982	3.3	2.2	3.4	2.1	1.3	1.1	1.5	1.8	2.2	2.9	2.7	2.7
1983	3.7	1.9	2.3	1.9	1.2	1.1	1.1	1.4	1.9	2.9	3.0	2.8
1984	2.6	3.5	3.0	1.8	2.0	1.5	1.4	1.9	2.5	3.3	3.3	4.0
1985	2.8	2.6	2.9	2.0	1.8	1.8	1.6	1.3	1.8	2.2	2.2	2.9
1986	4.1	2.7	2.4	1.9	2.1	1.2	1.4	1.6	1.9	2.5	3.4	2.6
1987	2.4	4.6	2.1	1.9	1.1	0.9	1.2	1.5	1.5	3.2	2.8	3.0

32 YR. STATISTICS FOR WIS STATION M40

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.8
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)	1.3
LARGEST WAVE HS	(METERS)	5.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	213.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58111821

STATION M41 44.67N 86.40W 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	
0.00-0.24	849	316	3	1	.	.	.	.	.	.	1169
0.25-0.49	126	1155	162	6	.	.	.	.	.	.	1449
0.50-0.74	.	516	1114	243	1	.	.	.	.	.	1874
0.75-0.99	.	3	404	485	9	.	.	.	.	.	901
1.00-1.24	.	.	226	680	203	.	.	.	.	.	1109
1.25-1.49	.	.	11	178	319	.	.	.	.	.	508
1.50-1.74	.	.	.	126	274	19	.	.	.	.	419
1.75-1.99	.	.	.	5	144	57	.	.	.	.	206
2.00-2.24	.	.	.	.	79	118	2	.	.	.	199
2.25-2.49	.	.	.	.	25	60	2	.	.	.	87
2.50-2.74	.	.	.	.	1	75	20	.	.	.	96
2.75-2.99	.	.	.	.	1	29	20	.	.	.	50
3.00-3.24	.	.	.	.	.	31	9	.	.	.	40
3.25-3.49	.	.	.	.	.	2	10	.	.	.	12
3.50+	.	.	.	.	.	1	37	11	.	.	49
TOTAL	975	1990	1920	1724	1056	392	100	11	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 7656.

STATION M41 44.67N 86.40W 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	
0.00-0.24	717	310	8	.	.	.	.	.	.	.	1035
0.25-0.49	96	837	140	7	.	.	.	.	.	.	1080
0.50-0.74	.	293	553	132	.	.	.	.	.	.	978
0.75-0.99	.	1	168	170	6	.	.	.	.	.	345
1.00-1.24	.	.	195	144	78	.	.	.	.	.	417
1.25-1.49	.	.	26	50	81	.	.	.	.	.	157
1.50-1.74	.	.	.	44	89	9	.	.	.	.	142
1.75-1.99	.	.	.	2	33	17	.	.	.	.	52
2.00-2.24	.	.	.	.	22	25	.	.	.	.	47
2.25-2.49	.	.	.	.	4	5	.	.	.	.	9
2.50-2.74	.	.	.	.	1	9	1	.	.	.	11
2.75-2.99	.	.	.	.	.	3	2	.	.	.	5
3.00-3.24	.	.	.	.	.	.	3	.	.	.	3
3.25-3.49	.	.	.	.	.	.	2	.	.	.	2
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	813	1441	1090	549	314	68	8	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.6 NO. OF CASES= 4018.

STATION M41 44.67N 86.40W 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	
0.00-0.24	1086	423	13	2	.	.	.	.	.	.	1524
0.25-0.49	105	894	165	13	.	.	.	.	.	.	1177
0.50-0.74	.	336	435	163	3	.	.	.	.	.	937
0.75-0.99	.	1	183	86	10	.	.	.	.	.	280
1.00-1.24	.	.	268	24	56	.	.	.	.	.	348
1.25-1.49	.	.	83	64	38	1	.	.	.	.	186
1.50-1.74	.	.	1	32	52	16	.	.	.	.	101
1.75-1.99	.	.	.	6	9	25	.	.	.	.	40
2.00-2.24	.	.	.	.	5	17	.	.	.	.	22
2.25-2.49	.	.	.	.	.	5	.	.	.	.	5
2.50-2.74	.	.	.	.	.	2	2	.	.	.	4
2.75-2.99	.	.	.	.	.	.	1	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1191	1654	1148	390	173	66	3	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.3 NO. OF CASES= 4339.

STATION M41 44.67N 86.40W 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	
0.00-0.24	548	203	13	1	.	.	.	.	.	.	765
0.25-0.49	82	438	157	25	.	.	.	.	.	.	702
0.50-0.74	.	242	186	108	7	.	.	.	.	.	543
0.75-0.99	.	22	64	31	18	.	.	.	.	.	135
1.00-1.24	.	.	75	4	13	1	.	.	.	.	93
1.25-1.49	.	.	11	9	3	.	.	.	.	.	23
1.50-1.74	.	.	.	6	3	2	.	.	.	.	11
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	1	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	630	905	506	184	44	4	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.2 NO. OF CASES= 2135.

STATION M41 44.67N 86.40W 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	
0.00-0.24	493	183	19	3	.	.	.	.	.	.	698
0.25-0.49	165	512	125	39	2	.	.	.	.	.	843
0.50-0.74	.	259	48	79	11	.	.	.	.	.	397
0.75-0.99	.	44	4	18	12	.	.	.	.	.	78
1.00-1.24	.	.	7	1	10	.	.	.	.	.	18
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	1	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	658	998	204	140	35	1	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 1912.

STATION M41 44.67N 86.40W 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	
0.00-0.24	451	152	19	.	2	.	.	.	.	.	624
0.25-0.49	102	379	84	13	1	.	.	.	.	.	579
0.50-0.74	.	313	37	33	3	.	.	.	.	.	386
0.75-0.99	.	16	19	11	1	.	.	.	.	.	47
1.00-1.24	.	.	1	.	2	.	.	.	.	.	3
1.25-1.49	.	.	.	.	1	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	553	860	160	57	10	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.3 MEAN TP(SEC)= 2.9 NO. OF CASES= 1540.

STATION M41 44.67N 86.40W 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	
0.00-0.24	543	242	33	2	.	.	.	.	.	.	820
0.25-0.49	49	402	74	22	.	.	.	.	.	.	547
0.50-0.74	.	399	36	20	2	.	.	.	.	.	457
0.75-0.99	.	1	25	2	1	.	.	.	.	.	29
1.00-1.24	.	.	8	1	3	.	.	.	.	.	12
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	592	1044	177	47	6	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.3 MEAN TP(SEC)= 2.8 NO. OF CASES= 1751.

STATION M41 44.67N 86.40W 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	
0.00-0.24	683	263	22	1	.	.	.	.	.	.	969
0.25-0.49	119	702	75	10	1	.	.	.	.	.	907
0.50-0.74	.	663	91	22	2	.	.	.	.	.	778
0.75-0.99	.	2	84	1	1	.	.	.	.	.	88
1.00-1.24	.	.	23	2	.	.	.	.	.	.	25
1.25-1.49	.	.	3	1	.	.	.	.	.	.	4
1.50-1.74	.	.	.	3	.	.	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	802	1630	298	40	4	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.9 NO. OF CASES= 2601.

STATION M41 44.67N 86.40W 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	
0.00-0.24	1244	574	41	8	2	.	.	.	.	.	1869
0.25-0.49	225	1369	196	27	3	2	1	.	.	.	1823
0.50-0.74	.	958	693	40	3	2	.	.	.	.	1686
0.75-0.99	.	20	512	50	1	.	.	.	.	.	583
1.00-1.24	.	.	335	188	2	.	.	.	.	.	525
1.25-1.49	.	.	12	186	.	.	.	.	.	.	198
1.50-1.74	.	.	.	114	.	.	.	.	.	.	114
1.75-1.99	.	.	.	18	9	.	.	.	.	.	27
2.00-2.24	.	.	.	.	4	.	.	.	.	.	4
2.25-2.49	.	.	.	.	2	.	.	.	.	.	2
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1469	2921	1779	631	26	4	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 6399.

STATION M41 44.67N 86.40W 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	
0.00-0.24	1345	1425	642	214	20	1	.	.	.	.	3647
0.25-0.49	301	2472	1759	1269	147	10	.	.	.	.	5958
0.50-0.74	.	1362	1837	1807	593	19	.	.	.	.	5618
0.75-0.99	.	21	826	744	472	33	1	.	.	.	2097
1.00-1.24	.	.	707	857	465	102	5	.	.	.	2136
1.25-1.49	.	.	37	607	249	63	9	.	.	.	965
1.50-1.74	.	.	2	442	305	100	23	1	.	.	873
1.75-1.99	.	.	.	93	143	89	16	1	.	.	342
2.00-2.24	.	.	.	17	167	109	39	3	1	.	336
2.25-2.49	.	.	.	.	34	58	14	2	1	.	109
2.50-2.74	.	.	.	.	8	23	20	3	.	.	84
2.75-2.99	.	.	.	.	.	18	13	3	.	.	34
3.00-3.24	.	.	.	.	2	19	10	1	.	.	32
3.25-3.49	.	.	.	.	.	.	11	.	.	.	11
3.50+	.	.	.	.	.	.	7	2	.	.	9
TOTAL	1646	5280	5810	6050	2605	674	168	16	2	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 20833.

STATION M41 44.67N 86.40W 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	
0.00-0.24	1209	854	78	9	.	.	.	.	.	.	2150
0.25-0.49	232	2427	457	73	7	.	.	.	.	.	3196
0.50-0.74	.	1137	2048	449	91	.	.	.	.	.	3725
0.75-0.99	.	21	733	702	119	4	.	.	.	.	1579
1.00-1.24	.	.	429	890	294	32	1	.	.	.	1646
1.25-1.49	.	.	14	362	310	36	1	.	.	.	723
1.50-1.74	.	.	.	276	412	75	8	.	.	.	771
1.75-1.99	.	.	.	20	196	79	11	.	.	.	306
2.00-2.24	.	.	.	2	160	100	16	1	.	.	279
2.25-2.49	.	.	.	.	58	44	12	.	.	.	114
2.50-2.74	.	.	.	.	22	82	16	1	.	.	121
2.75-2.99	.	.	.	.	4	28	9	1	.	.	42
3.00-3.24	.	.	.	.	.	28	12	.	1	.	41
3.25-3.49	.	.	.	.	.	6	17	1	.	.	24
3.50+	.	.	.	.	.	3	24	7	4	.	38
TOTAL	1441	4439	3759	2783	1673	517	127	11	5	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 13824.

STATION M41 44.67N 86.40W 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	
0.00-0.24	703	359	9	1	2	.	.	.	.	.	1074
0.25-0.49	112	1295	130	7	2	.	.	.	.	.	1546
0.50-0.74	.	621	1191	112	6	.	.	.	.	.	1930
0.75-0.99	.	4	507	306	4	.	.	.	.	.	821
1.00-1.24	.	.	254	609	28	.	.	.	.	.	891
1.25-1.49	.	.	12	332	86	1	.	.	.	.	431
1.50-1.74	.	.	.	263	173	6	.	.	.	.	442
1.75-1.99	.	.	.	11	154	8	.	.	.	.	173
2.00-2.24	.	.	.	.	127	9	.	.	.	.	136
2.25-2.49	.	.	.	.	37	3	1	.	.	.	41
2.50-2.74	.	.	.	.	9	20	2	.	.	.	31
2.75-2.99	.	.	.	.	2	9	1	.	.	.	12
3.00-3.24	.	.	.	.	.	14	.	.	.	.	14
3.25-3.49	.	.	.	.	.	2	1	.	.	.	3
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	815	2279	2103	1641	630	72	5	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 7072.

STATION M41 44.67N 86.40W 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	
0.00-0.24	488	276	9	.	.	.	.	.	.	.	773
0.25-0.49	78	922	112	4	.	.	.	.	.	.	1116
0.50-0.74	.	397	880	135	1	.	.	.	.	.	1413
0.75-0.99	.	7	387	296	4	.	.	.	.	.	694
1.00-1.24	.	.	202	540	16	.	.	.	.	.	758
1.25-1.49	.	.	18	278	64	.	.	.	.	.	360
1.50-1.74	.	.	.	202	149	1	.	.	.	.	352
1.75-1.99	.	.	.	8	125	.	.	.	.	.	133
2.00-2.24	.	.	.	.	97	.	.	.	.	.	97
2.25-2.49	.	.	.	.	26	1	.	.	.	.	27
2.50-2.74	.	.	.	.	6	12	.	.	.	.	18
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	3	.	.	.	.	3
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	566	1602	1608	1463	488	19	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 4.0 NO. OF CASES= 5384.

STATION M41 44.67N 86.40W 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	
0.00-0.24	294	204	3	.	.	.	.	.	.	.	501
0.25-0.49	79	807	89	3	.	.	.	.	.	.	978
0.50-0.74	.	359	755	134	.	.	.	.	.	.	1248
0.75-0.99	.	6	264	331	3	.	.	.	.	.	604
1.00-1.24	.	.	163	444	16	.	.	.	.	.	623
1.25-1.49	.	.	6	190	65	.	.	.	.	.	261
1.50-1.74	.	.	.	157	128	1	.	.	.	.	286
1.75-1.99	.	.	.	5	117	1	.	.	.	.	123
2.00-2.24	.	.	.	.	102	1	.	.	.	.	103
2.25-2.49	.	.	.	.	28	3	.	.	.	.	31
2.50-2.74	.	.	.	.	2	11	.	.	.	.	13
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	373	1376	1280	1264	461	18	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 4473.

STATION M41 44.67N 86.40W 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	
0.00-0.24	291	194	2	.	.	.	.	.	.	.	487
0.25-0.49	43	526	88	1	.	.	.	.	.	.	658
0.50-0.74	.	243	605	133	1	.	.	.	.	.	982
0.75-0.99	.	3	227	303	3	.	.	.	.	.	536
1.00-1.24	.	.	155	560	51	.	.	.	.	.	766
1.25-1.49	.	.	5	284	99	.	.	.	.	.	388
1.50-1.74	.	.	.	191	231	2	.	.	.	.	424
1.75-1.99	.	.	.	4	159	2	.	.	.	.	165
2.00-2.24	.	.	.	.	140	5	.	.	.	.	145
2.25-2.49	.	.	.	.	45	6	.	.	.	.	51
2.50-2.74	.	.	.	.	10	20	.	.	.	.	30
2.75-2.99	.	.	.	.	.	4	.	.	.	.	4
3.00-3.24	.	.	.	.	.	6	2	.	.	.	8
3.25-3.49	.	.	.	.	.	1	1	.	.	.	2
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	334	966	1082	1476	739	46	4	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 4359.

STATION M41 44.67N 86.40W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

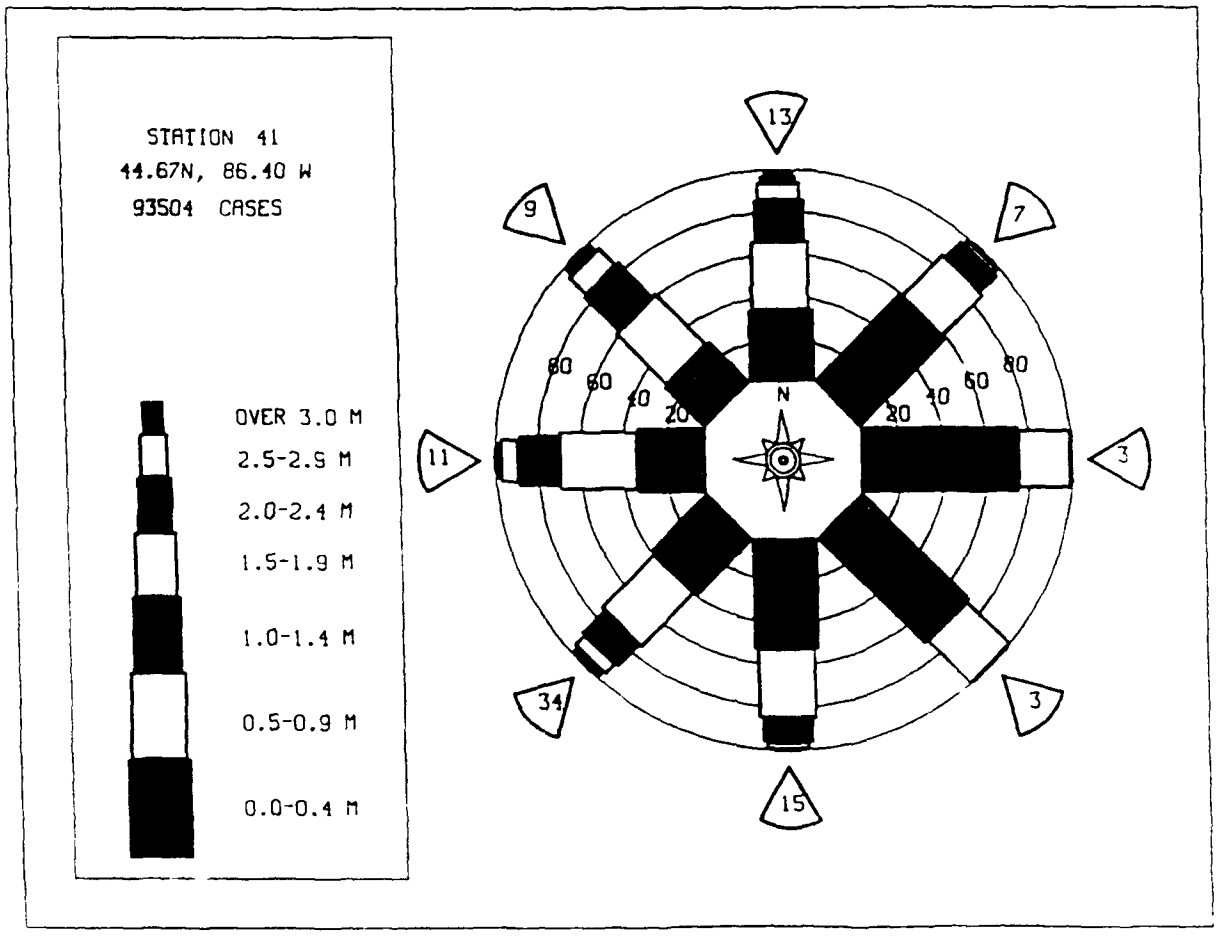
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	436	180	5	.	.	.	.	.	.	.	621
0.25-0.49	93	697	117	3	.	.	.	.	.	.	910
0.50-0.74	.	296	664	143	.	.	.	.	.	.	1103
0.75-0.99	.	2	257	309	2	.	.	.	.	.	570
1.00-1.24	.	.	157	556	127	.	.	.	.	.	840
1.25-1.49	.	.	10	223	196	1	.	.	.	.	430
1.50-1.74	.	.	.	172	254	13	.	.	.	.	439
1.75-1.99	.	.	.	8	166	38	.	.	.	.	212
2.00-2.24	.	.	.	.	120	60	2	.	.	.	182
2.25-2.49	.	.	.	.	50	35	.	.	.	.	85
2.50-2.74	.	.	.	.	10	55	8	.	.	.	73
2.75-2.99	.	.	.	.	.	19	5	.	.	.	24
3.00-3.24	.	.	.	.	.	18	5	.	.	.	23
3.25-3.49	.	.	.	.	.	2	9	.	.	.	11
3.50+	.	.	.	.	.	1	22	6	.	.	29
TOTAL	529	1175	1210	1414	925	242	51	6	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.4 NO. OF CASES= 5208.

STATION M41 44.67N 86.40W 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	
0.00-0.24	1138	616	92	24	2	.	.	.	.	.	1872
0.25-0.49	201	1584	393	153	16	1	.	.	.	.	2348
0.50-0.74	.	840	1116	376	72	2	.	.	.	.	2406
0.75-0.99	.	17	467	385	67	3	.	.	.	.	939
1.00-1.24	.	.	321	550	136	13	.	.	.	.	1020
1.25-1.49	.	.	25	276	151	10	1	.	.	.	463
1.50-1.74	.	.	.	203	207	24	3	.	.	.	437
1.75-1.99	.	.	.	18	125	32	2	.	.	.	177
2.00-2.24	.	.	.	1	102	44	5	.	.	.	152
2.25-2.49	.	.	.	.	31	22	3	.	.	.	56
2.50-2.74	.	.	.	.	7	34	7	.	.	.	48
2.75-2.99	.	.	.	.	.	11	5	.	.	.	16
3.00-3.24	.	.	.	.	.	12	4	.	.	.	16
3.25-3.49	.	.	.	.	.	1	5	.	.	.	6
3.50+	.	.	.	.	.	.	9	2	.	.	11
TOTAL	1339	3057	2414	1986	916	209	44	2	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M41 (44.67N 86.40W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.7	0.6	0.6	0.5	0.3	0.3	0.3	0.6	0.8	0.9	0.9	0.6
1957	1.1	0.8	0.7	0.6	0.5	0.5	0.4	0.4	0.6	0.7	1.2	1.2	0.7
1958	0.9	1.1	0.3	0.5	0.5	0.5	0.4	0.5	0.8	0.8	1.1	0.9	0.7
1959	1.0	0.9	0.7	0.6	0.6	0.4	0.4	0.5	0.8	0.7	0.9	0.9	0.7
1960	0.9	1.0	0.6	0.7	0.4	0.4	0.4	0.6	0.5	0.6	1.1	1.3	0.7
1961	0.9	0.7	0.8	0.5	0.6	0.5	0.4	0.5	0.7	0.9	0.9	1.0	0.7
1962	1.2	0.8	0.4	0.8	0.6	0.4	0.4	0.4	0.7	0.7	0.7	1.1	0.7
1963	0.9	1.0	0.8	0.7	0.5	0.4	0.4	0.5	0.6	0.7	1.0	0.9	0.7
1964	1.1	1.3	1.0	0.8	0.6	0.5	0.4	0.6	0.7	0.9	0.9	0.9	0.8
1965	1.1	1.3	0.7	0.5	0.5	0.5	0.4	0.5	0.7	1.0	1.0	1.1	0.8
1966	0.9	0.8	0.9	0.5	0.5	0.5	0.5	0.6	0.6	1.1	1.2	0.9	0.8
1967	1.2	1.2	0.8	0.7	0.5	0.4	0.4	0.6	0.6	0.9	1.0	0.8	0.8
1968	0.9	1.0	0.9	0.7	0.4	0.4	0.5	0.6	0.6	0.9	0.7	1.1	0.7
1969	0.9	0.7	0.8	0.6	0.5	0.5	0.4	0.6	0.6	0.8	0.8	0.9	0.7
1970	0.9	1.1	0.6	0.7	0.6	0.5	0.5	0.5	0.7	0.8	0.9	0.9	0.7
1971	1.1	1.1	0.8	0.6	0.5	0.4	0.5	0.6	0.6	0.7	0.9	0.8	0.7
1972	1.3	0.9	0.8	0.4	0.3	0.5	0.5	0.5	0.7	0.9	0.7	0.8	0.7
1973	1.1	0.8	0.7	0.7	0.5	0.4	0.5	0.6	0.7	0.7	0.9	0.9	0.7
1974	0.8	0.9	0.8	0.7	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.9	0.7
1975	1.0	0.8	0.7	0.6	0.4	0.4	0.5	0.5	0.6	0.9	0.9	0.9	0.7
1976	1.0	1.1	1.0	0.7	0.5	0.4	0.5	0.6	0.7	0.7	0.9	1.0	0.8
1977	1.0	1.1	0.7	0.5	0.4	0.4	0.5	0.6	0.6	0.8	0.9	0.8	0.7
1978	1.2	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.9	0.7
1979	0.9	0.7	0.7	0.5	0.4	0.4	0.4	0.5	0.7	1.0	1.0	1.1	0.7
1980	0.8	0.7	0.7	0.5	0.3	0.4	0.3	0.5	0.9	1.3	1.3	0.9	0.7
1981	0.7	0.9	0.7	0.6	0.4	0.4	0.3	0.4	0.8	0.9	0.9	0.7	0.7
1982	0.9	0.7	0.8	0.7	0.3	0.3	0.4	0.5	0.9	0.9	1.0	0.9	0.7
1983	0.8	0.6	0.6	0.5	0.4	0.3	0.4	0.4	0.8	0.8	1.0	0.8	0.6
1984	0.8	0.8	0.7	0.5	0.4	0.4	0.4	0.5	0.9	0.8	1.4	1.0	0.7
1985	0.9	0.9	0.8	0.6	0.4	0.3	0.4	0.4	0.6	0.6	0.6	0.8	0.6
1986	1.1	0.5	0.8	0.6	0.4	0.3	0.3	0.4	0.4	0.5	0.9	0.8	0.6
1987	0.8	0.8	0.6	0.4	0.3	0.2	0.3	0.4	0.3	0.7	0.7	0.9	0.5
MEAN	1.0	0.9	0.7	0.6	0.5	0.4	0.4	0.5	0.7	0.8	0.9	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M41 (44.67N 86.40W)

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

32 YR. STATISTICS FOR WIS STATION M41

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	6.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	225.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011121

STATION M42 44.53N 86.40W 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	
0.00-0.24	868	371	5	2	.	.	.	.	.	.	1246
0.25-0.49	132	1099	214	16	.	.	.	.	.	.	1461
0.50-0.74	.	518	1026	304	2	.	.	.	.	.	1850
0.75-0.99	.	5	380	484	27	.	.	.	.	.	896
1.00-1.24	.	.	205	551	254	.	.	.	.	.	1010
1.25-1.49	.	.	17	155	301	.	.	.	.	.	473
1.50-1.74	.	.	.	109	232	41	.	.	.	.	382
1.75-1.99	.	.	.	4	78	85	1	.	.	.	168
2.00-2.24	.	.	.	.	59	112	6	.	.	.	177
2.25-2.49	.	.	.	.	7	58	5	.	.	.	70
2.50-2.74	.	.	.	.	4	53	35	.	.	.	92
2.75-2.99	.	.	.	.	.	18	12	.	.	.	30
3.00-3.24	.	.	.	.	.	13	19	.	.	.	32
3.25-3.49	.	.	.	.	.	1	8	.	.	.	9
3.50+	.	.	.	.	.	.	33	17	.	.	50
TOTAL	1000	1993	1847	1625	964	381	119	17	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.2 NO. OF CASES= 7448.

STATION M42 44.53N 86.40W 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	
0.00-0.24	773	367	13	1	.	.	.	.	.	.	1154
0.25-0.49	81	818	187	13	.	.	.	.	.	.	1099
0.50-0.74	.	379	436	164	4	.	.	.	.	.	983
0.75-0.99	.	8	229	155	21	.	.	.	.	.	413
1.00-1.24	.	.	87	136	119	.	.	.	.	.	342
1.25-1.49	.	.	9	24	78	7	.	.	.	.	118
1.50-1.74	.	.	.	19	47	19	.	.	.	.	85
1.75-1.99	.	.	.	.	17	19	.	.	.	.	36
2.00-2.24	.	.	.	.	5	12	1	.	.	.	18
2.25-2.49	.	.	.	.	.	6	1	.	.	.	7
2.50-2.74	.	.	.	.	1	2	4	.	.	.	7
2.75-2.99	.	.	.	.	.	1	1	.	.	.	2
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	854	1572	961	512	292	67	8	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 4003.

STATION M42 44.53N 86.40W 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	
0.00-0.24	1056	513	35	5	1	.	.	.	.	.	1610
0.25-0.49	108	751	207	38	1	.	.	.	.	.	1105
0.50-0.74	.	542	209	156	9	.	.	.	.	.	916
0.75-0.99	.	29	237	102	44	.	.	.	.	.	412
1.00-1.24	.	.	53	100	150	9	.	.	.	.	312
1.25-1.49	.	.	9	8	29	12	.	.	.	.	58
1.50-1.74	.	.	1	4	16	32	.	.	.	.	53
1.75-1.99	.	.	.	1	2	10	1	.	.	.	14
2.00-2.24	.	.	.	.	.	4	1	.	.	.	5
2.25-2.49	.	.	.	.	.	1	2	.	.	.	3
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1164	1835	751	414	252	68	4	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 4211.

STATION M42 44.53N 86.40W 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	
0.00-0.24	629	233	27	5	.	.	.	.	.	.	894
0.25-0.49	102	422	170	45	1	.	.	.	.	.	740
0.50-0.74	.	368	68	116	20	.	.	.	.	.	572
0.75-0.99	.	34	88	33	29	1	.	.	.	.	185
1.00-1.24	.	.	11	18	29	4	.	.	.	.	62
1.25-1.49	.	.	1	.	1	3	.	.	.	.	5
1.50-1.74	.	.	.	.	2	2	.	.	.	.	4
1.75-1.99	.	.	.	.	.	1	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	731	1057	365	217	82	11	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.2 NO. OF CASES= 2314.

STATION M42 44.53N 86.40W 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	
0.00-0.24	520	198	38	5	.	.	.	.	.	.	761
0.25-0.49	157	468	132	56	6	.	.	.	.	.	819
0.50-0.74	.	314	34	71	8	.	.	.	.	.	427
0.75-0.99	.	17	14	13	12	.	.	.	.	.	56
1.00-1.24	.	.	.	.	5	1	.	.	.	.	6
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	1	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	677	997	219	145	31	2	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 3.0 NO. OF CASES= 1946.

STATION M42 44.53N 86.40W 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	
0.00-0.24	459	170	31	2	2	.	.	.	.	.	664
0.25-0.49	101	376	88	21	1	.	.	.	.	.	587
0.50-0.74	.	297	27	27	6	.	.	.	.	.	357
0.75-0.99	.	7	20	4	3	.	.	.	.	.	34
1.00-1.24	.	.	1	.	2	.	.	.	.	.	3
1.25-1.49	.	.	.	.	1	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	560	850	167	54	15	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 2.9 NO. OF CASES= 1546.

STATION M42 44.53N 86.40W 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	
0.00-0.24	590	266	41	10	.	.	.	.	.	.	907
0.25-0.49	59	376	96	32	2	.	.	.	.	.	565
0.50-0.74	.	380	44	28	3	.	.	.	.	.	455
0.75-0.99	.	3	23	3	.	.	.	.	.	.	29
1.00-1.24	.	.	8	1	.	.	.	.	.	.	9
1.25-1.49	.	.	.	.	.	.	.	.	.	.	0
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	649	1025	212	74	5	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.2 MEAN TP(SEC)= 2.9 NO. OF CASES= 1845.

STATION M42 44.53N 86.40W 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	
0.00-0.24	734	318	39	7	.	.	.	.	.	.	1098
0.25-0.49	116	628	103	13	1	.	.	.	.	.	861
0.50-0.74	.	688	89	27	3	.	.	.	.	.	807
0.75-0.99	.	1	68	1	2	.	.	.	.	.	72
1.00-1.24	.	.	18	.	1	.	.	.	.	.	19
1.25-1.49	.	.	2	2	.	.	.	.	.	.	4
1.50-1.74	.	.	.	3	.	.	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	850	1635	319	53	7	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.9 NO OF CASES= 2687

STATION M42 44.53N 86.40W 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	
0.00-0.24	1096	549	65	11	2	1	.	.	.	.	1724
0.25-0.49	245	1168	225	42	3	2	1	.	.	.	1686
0.50-0.74	.	998	474	45	2	3	.	.	.	.	1522
0.75-0.99	.	21	416	5	3	.	.	.	.	.	445
1.00-1.24	.	.	419	18	1	.	.	.	.	.	438
1.25-1.49	.	.	21	128	.	.	.	.	.	.	149
1.50-1.74	.	.	1	41	.	.	.	.	.	.	42
1.75-1.99	.	.	.	8	.	.	.	.	.	.	8
2.00-2.24	.	.	.	.	2	.	.	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1341	2736	1621	298	13	6	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.2 NO. OF CASES= 5637.

STATION M42 44.53N 86.40W 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	
0.00-0.24	1271	1515	782	244	33	1	.	.	.	.	3846
0.25-0.49	313	2090	1805	1335	134	10	.	.	.	.	5687
0.50-0.74	.	1303	1515	1746	608	17	.	.	.	.	5189
0.75-0.99	.	18	839	459	450	34	2	.	.	.	1802
1.00-1.24	.	.	1041	449	389	89	4	.	.	.	1972
1.25-1.49	.	.	159	419	213	57	12	.	.	.	860
1.50-1.74	.	.	3	324	250	100	13	1	.	.	691
1.75-1.99	.	.	.	54	114	103	23	2	.	.	296
2.00-2.24	.	.	.	10	88	97	41	3	2	.	241
2.25-2.49	.	.	.	.	18	43	19	3	.	.	83
2.50-2.74	.	.	.	.	2	36	21	3	.	.	62
2.75-2.99	.	.	.	.	2	11	9	2	.	.	24
3.00-3.24	.	.	.	.	2	9	10	1	.	.	22
3.25-3.49	.	.	.	.	.	1	7	.	.	.	8
3.50+	.	.	.	.	.	.	4	.	.	.	4
TOTAL	1584	4926	6144	5040	2303	608	165	15	2	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 19465.

STATION M42 44.53N 86.40W 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	
0.00-0.24	1249	1087	102	19	1	.	.	.	.	.	2458
0.25-0.49	225	2511	585	89	10	.	.	.	.	.	3420
0.50-0.74	.	1095	2031	639	95	.	.	.	.	.	3860
0.75-0.99	.	25	695	807	127	6	.	.	.	.	1660
1.00-1.24	.	.	440	825	387	39	1	.	.	.	1692
1.25-1.49	.	.	24	363	320	37	2	.	.	.	746
1.50-1.74	.	.	1	290	397	97	10	.	.	.	795
1.75-1.99	.	.	.	25	198	71	10	.	.	.	304
2.00-2.24	.	.	.	2	155	126	16	1	.	.	300
2.25-2.49	.	.	.	.	58	51	13	.	.	.	122
2.50-2.74	.	.	.	.	10	79	18	2	.	.	109
2.75-2.99	.	.	.	.	1	29	10	.	1	.	41
3.00-3.24	.	.	.	.	2	25	16	1	.	.	44
3.25-3.49	.	.	.	.	.	4	13	1	.	.	18
3.50+	.	.	.	.	.	3	22	11	2	.	38
TOTAL	1474	4718	3878	3059	1761	567	131	16	3	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.1 NO. OF CASES= 14619.

STATION M42 44.53N 86.40W 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	
0.00-0.24	727	465	12	3	.	.	.	.	.	.	1207
0.25-0.49	114	1367	162	18	.	.	.	.	.	.	1661
0.50-0.74	.	632	1266	152	2	.	.	.	.	.	2052
0.75-0.99	.	4	494	373	11	.	.	.	.	.	882
1.00-1.24	.	.	256	596	45	1	.	.	.	.	898
1.25-1.49	.	.	9	343	103	3	.	.	.	.	458
1.50-1.74	.	.	.	252	191	3	2	.	.	.	448
1.75-1.99	.	.	.	8	145	12	.	.	.	.	165
2.00-2.24	.	.	.	.	137	14	1	.	.	.	152
2.25-2.49	.	.	.	.	38	13	2	.	.	.	53
2.50-2.74	.	.	.	.	8	25	4	.	.	.	37
2.75-2.99	.	.	.	.	1	12	3	.	.	.	16
3.00-3.24	.	.	.	.	.	11	1	.	.	.	12
3.25-3.49	.	.	.	.	.	3	1	.	.	.	4
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	841	2468	2199	1745	681	97	15	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 7543.

STATION M42 44.53N 86.40W 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	
0.00-0.24	525	339	7	1	.	.	.	.	.	.	872
0.25-0.49	100	989	155	9	.	.	.	.	.	.	1253
0.50-0.74	.	408	897	175	3	.	.	.	.	.	1483
0.75-0.99	.	7	403	320	12	.	.	.	.	.	742
1.00-1.24	.	.	211	529	23	.	.	.	.	.	763
1.25-1.49	.	.	21	267	62	.	.	.	.	.	350
1.50-1.74	.	.	1	202	159	1	.	.	.	.	363
1.75-1.99	.	.	.	16	118	.	.	.	.	.	134
2.00-2.24	.	.	.	.	94	.	.	.	.	.	94
2.25-2.49	.	.	.	.	20	2	.	.	.	.	22
2.50-2.74	.	.	.	.	5	12	.	.	.	.	17
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	5	.	.	.	.	5
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	625	1743	1695	1519	496	23	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 5716.

STATION M42 44.53N 86.40W 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	
0.00-0.24	300	221	8	.	.	.	.	.	.	.	529
0.25-0.49	88	780	112	7	.	.	.	.	.	.	987
0.50-0.74	.	335	774	186	.	.	.	.	.	.	1295
0.75-0.99	.	3	260	337	8	.	.	.	.	.	608
1.00-1.24	.	.	179	504	40	.	.	.	.	.	723
1.25-1.49	.	.	11	195	77	.	.	.	.	.	283
1.50-1.74	.	.	.	145	171	2	.	.	.	.	318
1.75-1.99	.	.	.	2	109	.	.	.	.	.	111
2.00-2.24	.	.	.	.	116	1	.	.	.	.	117
2.25-2.49	.	.	.	.	24	1	.	.	.	.	25
2.50-2.74	.	.	.	.	3	11	.	.	.	.	14
2.75-2.99	.	.	.	.	.	5	1	.	.	.	6
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	388	1339	1344	1376	548	20	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 4.1 NO. OF CASES= 4704.

STATION M42 44.53N 86.40W 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	
0.00-0.24	281	206	12	.	.	.	.	.	.	.	499
0.25-0.49	50	543	113	4	.	.	.	.	.	.	710
0.50-0.74	.	260	602	177	1	.	.	.	.	.	1040
0.75-0.99	.	8	234	331	18	.	.	.	.	.	591
1.00-1.24	.	.	144	570	82	.	.	.	.	.	796
1.25-1.49	.	.	9	268	120	.	.	.	.	.	397
1.50-1.74	.	.	.	181	248	7	.	.	.	.	436
1.75-1.99	.	.	.	6	185	5	.	.	.	.	196
2.00-2.24	.	.	.	.	158	8	.	.	.	.	166
2.25-2.49	.	.	.	.	55	4	1	.	.	.	60
2.50-2.74	.	.	.	.	7	19	.	.	.	.	26
2.75-2.99	.	.	.	.	.	9	.	.	.	.	9
3.00-3.24	.	.	.	.	.	5	1	.	.	.	6
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	331	1017	1114	1537	874	58	3	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.4 NO. OF CASES= 4627.

STATION M42 44.53N 86.40W 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	
0.00-0.24	408	226	8	.	.	.	.	.	.	.	642
0.25-0.49	71	645	132	9	.	.	.	.	.	.	857
0.50-0.74	.	280	656	178	1	.	.	.	.	.	1115
0.75-0.99	.	1	245	324	21	.	.	.	.	.	591
1.00-1.24	.	.	163	496	162	1	.	.	.	.	822
1.25-1.49	.	.	9	213	214	.	.	.	.	.	436
1.50-1.74	.	.	.	152	240	36	.	.	.	.	428
1.75-1.99	.	.	.	9	142	53	.	.	.	.	204
2.00-2.24	.	.	.	.	121	75	3	.	.	.	199
2.25-2.49	.	.	.	.	37	33	7	.	.	.	77
2.50-2.74	.	.	.	.	7	57	11	.	.	.	75
2.75-2.99	.	.	.	.	.	14	10	.	.	.	24
3.00-3.24	.	.	.	.	.	12	11	.	.	.	23
3.25-3.49	.	.	.	.	.	.	3	.	.	.	3
3.50+	.	.	.	.	.	2	22	9	.	.	33
TOTAL	479	1152	1213	1381	945	283	67	9	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.4 NO. OF CASES= 5193.

MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M42 (44.53N 86.40W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.6	0.6	0.6	0.5	0.3	0.3	0.3	0.6	0.7	0.9	0.9	0.6
1957	1.0	0.8	0.6	0.6	0.5	0.4	0.4	0.4	0.5	0.6	1.1	1.1	0.7
1958	0.8	1.1	0.4	0.5	0.5	0.4	0.4	0.5	0.7	0.7	1.0	0.9	0.7
1959	0.9	0.9	0.6	0.5	0.5	0.4	0.4	0.5	0.7	0.7	0.8	0.8	0.7
1960	0.9	0.9	0.6	0.7	0.4	0.4	0.4	0.5	0.5	0.6	1.1	1.2	0.7
1961	0.9	0.7	0.8	0.5	0.5	0.5	0.3	0.4	0.7	0.9	0.9	0.9	0.7
1962	1.1	0.7	0.4	0.8	0.6	0.4	0.3	0.4	0.7	0.7	0.6	1.1	0.6
1963	0.9	1.0	0.7	0.7	0.5	0.4	0.4	0.5	0.5	0.6	1.0	0.8	0.7
1964	1.1	1.2	1.0	0.8	0.6	0.5	0.4	0.6	0.7	0.9	0.9	0.9	0.8
1965	1.1	1.3	0.7	0.5	0.5	0.4	0.4	0.5	0.6	1.0	1.0	1.0	0.8
1966	0.9	0.8	0.8	0.5	0.5	0.5	0.5	0.6	0.6	1.1	1.2	0.9	0.7
1967	1.2	1.1	0.8	0.7	0.5	0.3	0.4	0.6	0.6	0.8	0.9	0.8	0.7
1968	0.9	1.0	0.9	0.7	0.4	0.4	0.5	0.6	0.6	0.9	0.7	1.1	0.7
1969	0.9	0.7	0.8	0.6	0.5	0.5	0.3	0.6	0.6	0.8	0.8	0.9	0.7
1970	0.8	1.2	0.6	0.7	0.5	0.5	0.5	0.5	0.7	0.7	0.9	0.9	0.7
1971	1.1	1.1	0.8	0.6	0.5	0.4	0.5	0.5	0.6	0.7	0.9	0.8	0.7
1972	1.3	0.8	0.8	0.4	0.3	0.5	0.5	0.5	0.7	0.9	0.7	0.8	0.7
1973	1.1	0.8	0.7	0.6	0.5	0.4	0.5	0.6	0.6	0.7	0.8	0.8	0.7
1974	0.8	0.8	0.8	0.7	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.8	0.7
1975	1.0	0.8	0.7	0.5	0.4	0.4	0.5	0.5	0.6	0.9	0.9	0.8	0.7
1976	1.0	1.1	1.0	0.6	0.5	0.4	0.5	0.6	0.7	0.7	0.9	1.0	0.8
1977	1.0	1.1	0.7	0.5	0.4	0.4	0.5	0.6	0.6	0.8	0.9	0.8	0.7
1978	1.2	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.7	0.8	0.8	0.9	0.7
1979	0.9	0.7	0.7	0.5	0.4	0.4	0.4	0.5	0.7	0.9	0.9	1.0	0.7
1980	0.8	0.7	0.7	0.4	0.2	0.4	0.3	0.5	0.8	1.2	1.2	0.9	0.7
1981	0.7	0.9	0.7	0.6	0.4	0.4	0.3	0.4	0.7	0.8	0.8	0.7	0.6
1982	0.9	0.7	0.8	0.7	0.3	0.3	0.4	0.5	0.8	0.8	0.9	0.8	0.7
1983	0.8	0.6	0.6	0.5	0.3	0.3	0.4	0.4	0.7	0.7	1.0	0.8	0.6
1984	0.8	0.8	0.7	0.5	0.4	0.4	0.4	0.5	0.8	0.7	1.3	1.0	0.7
1985	0.9	0.9	0.8	0.6	0.4	0.3	0.4	0.4	0.6	0.6	0.6	0.8	0.6
1986	1.1	0.5	0.8	0.5	0.4	0.3	0.3	0.4	0.4	0.5	0.9	0.8	0.6
1987	0.8	0.7	0.6	0.4	0.3	0.2	0.3	0.4	0.3	0.6	0.7	0.9	0.5
MEAN	0.9	0.9	0.7	0.6	0.4	0.4	0.4	0.5	0.6	0.8	0.9	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M42 (44.53N 86.40W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.2	3.0	2.9	1.9	1.8	1.3	1.4	1.2	1.9	2.6	3.0	3.7
1957	3.3	2.7	2.8	3.3	2.6	1.9	2.1	1.7	2.2	3.0	3.0	5.2
1958	3.5	3.2	1.2	2.7	3.1	2.1	2.5	1.8	2.7	2.3	5.2	2.3
1959	2.9	3.0	3.2	2.3	1.6	1.6	1.8	1.7	2.5	2.7	2.2	3.3
1960	2.5	2.8	2.7	2.0	1.5	1.2	1.7	2.3	1.9	2.2	3.1	3.8
1961	3.4	2.2	2.9	1.6	1.6	1.5	1.2	1.9	2.3	3.0	2.6	3.2
1962	3.7	2.7	1.8	2.4	2.1	1.4	1.7	1.8	2.0	2.6	3.7	4.2
1963	2.5	3.0	3.2	3.9	1.8	1.8	1.2	2.2	2.1	2.0	2.8	3.4
1964	3.3	3.8	3.0	4.0	2.5	2.0	1.1	1.9	3.5	2.7	3.5	2.2
1965	3.2	4.5	2.6	1.9	1.8	1.4	1.3	1.7	2.3	3.1	3.1	3.7
1966	3.1	2.0	3.7	1.4	1.7	1.3	1.3	1.8	2.1	3.5	5.5	3.0
1967	3.8	3.1	2.1	2.3	1.9	1.3	1.5	2.4	2.2	2.5	2.6	2.1
1968	3.2	3.2	2.6	3.1	1.9	1.3	1.8	2.4	1.8	2.6	2.4	3.6
1969	2.4	2.8	2.1	1.6	1.3	2.5	1.4	2.5	1.9	2.5	2.2	3.6
1970	2.2	3.2	1.9	2.4	2.3	1.3	1.6	1.6	2.4	2.7	3.1	3.3
1971	4.6	5.6	2.6	2.0	1.6	1.0	1.7	2.2	3.3	3.0	3.0	2.5
1972	3.5	2.5	2.6	1.4	1.1	1.4	1.3	1.4	2.1	3.0	2.1	2.7
1973	3.2	2.7	4.4	1.7	1.3	1.7	1.6	1.7	2.0	2.7	2.5	2.4
1974	3.1	3.2	2.5	1.9	1.4	1.1	1.3	1.9	2.6	2.1	2.2	2.6
1975	6.1	2.7	2.1	2.1	1.6	1.6	1.3	1.8	1.5	2.4	3.2	2.9
1976	2.8	3.7	3.2	1.7	2.2	1.7	1.4	2.2	2.5	2.4	2.4	3.6
1977	2.8	2.6	3.3	2.0	1.6	1.4	1.6	2.7	2.4	2.7	3.4	2.5
1978	5.6	2.2	2.0	1.9	2.1	1.7	1.2	1.5	2.3	2.4	3.0	2.6
1979	3.0	1.9	2.4	2.2	1.3	1.5	1.1	1.4	1.7	3.3	3.3	2.8
1980	3.8	2.4	2.3	1.4	1.2	1.3	1.0	1.5	2.5	2.9	3.0	4.3
1981	2.2	2.3	2.2	1.8	1.6	1.7	1.3	1.4	2.8	3.2	2.9	2.1
1982	3.5	2.5	3.3	2.8	1.0	1.1	1.6	1.6	2.2	2.9	2.9	2.7
1983	3.6	2.1	2.2	2.4	1.1	1.1	1.2	1.2	1.8	2.8	2.9	2.6
1984	2.4	3.7	3.2	2.0	2.0	2.0	1.2	1.7	2.4	3.1	3.1	3.7
1985	2.8	2.9	2.9	2.1	1.7	1.6	1.4	1.2	2.2	2.3	2.2	2.7
1986	3.8	2.4	2.6	1.7	1.9	1.1	1.7	1.8	1.7	2.5	3.4	2.8
1987	2.4	4.8	2.0	1.8	1.2	0.8	1.2	1.3	1.4	3.1	2.6	3.1

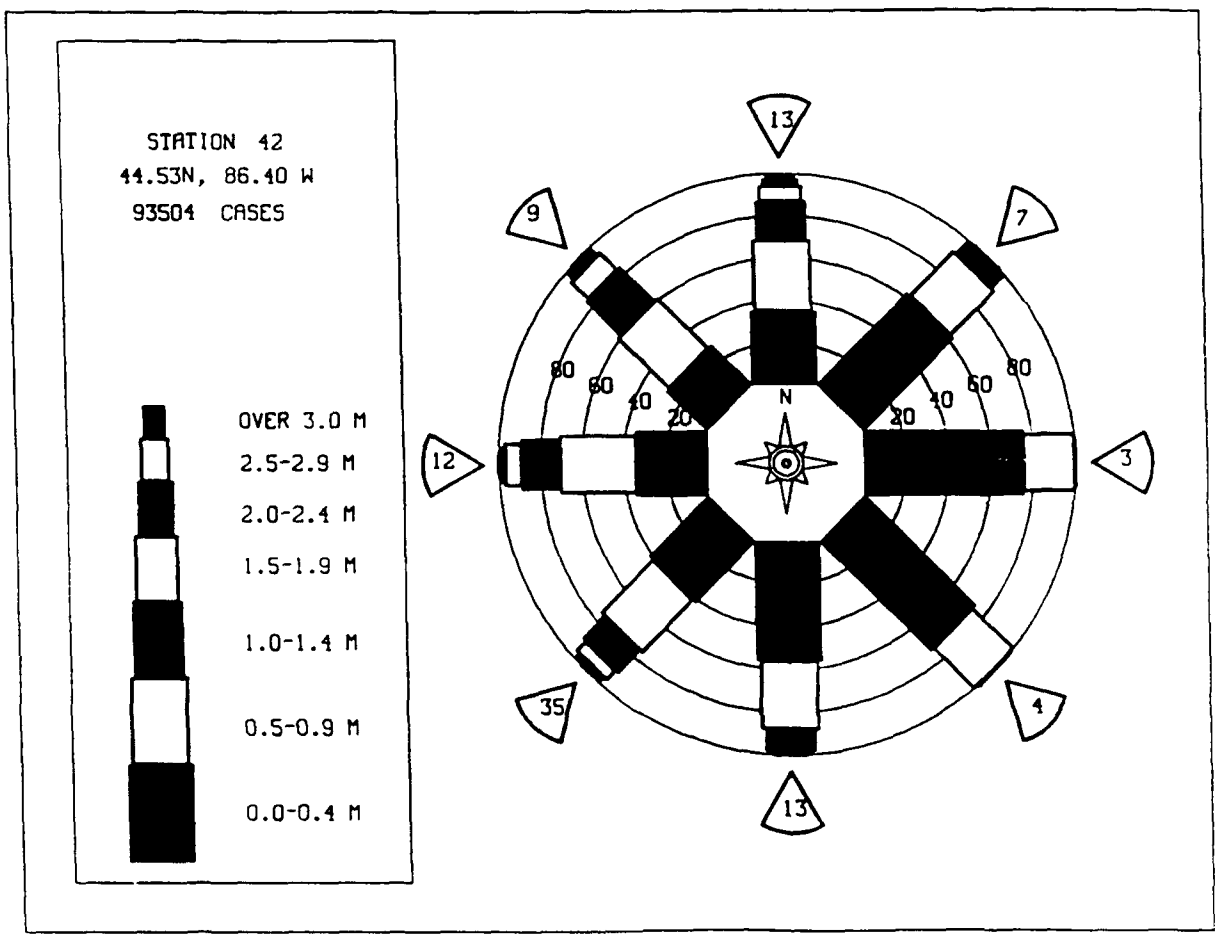
32 YR. STATISTICS FOR WIS STATION M42

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	6.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	226.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011121

STATION M42 44.53N 86.40W 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	
0.00-0.24	1149	705	123	31	3	.	.	.	.	.	2011
0.25-0.49	207	1503	449	175	16	1	.	.	.	.	2351
0.50-0.74	.	880	1015	420	77	2	.	.	.	.	2394
0.75-0.99	.	19	465	375	79	4	.	.	.	.	942
1.00-1.24	.	.	324	479	169	14	.	.	.	.	986
1.25-1.49	.	.	30	239	152	12	1	.	.	.	434
1.50-1.74	.	.	.	172	195	34	2	.	.	.	403
1.75-1.99	.	.	.	13	111	36	3	.	.	.	163
2.00-2.24	.	.	.	1	94	45	7	.	.	.	147
2.25-2.49	.	.	.	.	26	21	5	.	.	.	52
2.50-2.74	.	.	.	.	5	29	9	.	.	.	43
2.75-2.99	.	.	.	.	.	10	4	.	.	.	14
3.00-3.24	.	.	.	.	.	8	5	.	.	.	13
3.25-3.49	.	.	.	.	.	1	3	.	.	.	4
3.50+	.	.	.	.	.	.	8	3	.	.	11
TOTAL	1356	3107	2406	1905	927	217	47	3	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



STATION M43 44.38N 86.41W 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	
0.00-0.24	823	448	19	4	.	.	.	.	.	.	1294
0.25-0.49	113	989	258	19	.	.	.	.	.	.	1379
0.50-0.74	.	474	953	363	3	.	.	.	.	.	1793
0.75-0.99	.	4	317	481	54	.	.	.	.	.	856
1.00-1.24	.	.	211	454	296	1	.	.	.	.	962
1.25-1.49	.	.	21	141	251	5	.	.	.	.	418
1.50-1.74	.	.	1	88	204	80	.	.	.	.	373
1.75-1.99	.	.	.	8	54	69	2	.	.	.	133
2.00-2.24	.	.	.	3	40	112	5	.	.	.	160
2.25-2.49	.	.	.	.	14	47	14	.	.	.	75
2.50-2.74	.	.	.	.	4	32	35	.	.	.	71
2.75-2.99	.	.	.	.	1	8	13	.	.	.	22
3.00-3.24	.	.	.	.	.	9	17	.	.	.	26
3.25-3.49	.	.	.	.	.	.	4	2	.	.	6
3.50+	.	.	.	.	.	1	27	16	.	.	44
TOTAL	936	1915	1780	1561	921	364	117	18	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.2 NO. OF CASES= 7137.

STATION M43 44.38N 86.41W 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	
0.00-0.24	784	429	33	3	.	.	.	.	.	.	1249
0.25-0.49	90	826	256	26	.	.	.	.	.	.	1198
0.50-0.74	.	399	404	241	9	.	.	.	.	.	1053
0.75-0.99	.	22	211	160	54	1	.	.	.	.	448
1.00-1.24	.	.	66	87	136	9	.	.	.	.	298
1.25-1.49	.	.	7	23	49	13	.	.	.	.	92
1.50-1.74	.	.	1	13	31	18	.	.	.	.	63
1.75-1.99	.	.	.	1	4	12	.	.	.	.	17
2.00-2.24	.	.	.	1	6	10	1	.	.	.	18
2.25-2.49	.	.	.	.	1	.	2	.	.	.	3
2.50-2.74	.	.	.	.	.	4	.	.	.	.	4
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	874	1676	978	555	290	67	4	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 4173.

STATION M43 44.38N 86.41W 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	
0.00-0.24	999	546	50	8	2	.	.	.	.	.	1605
0.25-0.49	89	673	242	66	3	.	.	.	.	.	1073
0.50-0.74	.	651	186	189	19	.	.	.	.	.	1045
0.75-0.99	.	45	139	122	108	4	.	.	.	.	418
1.00-1.24	.	.	42	35	104	14	.	.	.	.	195
1.25-1.49	.	.	17	2	12	21	.	.	.	.	52
1.50-1.74	.	.	3	2	5	21	.	.	.	.	31
1.75-1.99	.	.	.	.	.	3	1	.	.	.	4
2.00-2.24	.	.	.	.	.	1	2	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1088	1915	679	424	253	64	3	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.3 NO. OF CASES= 4152.

STATION M43 44.38N 86.41W 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	
0.00-0.24	652	309	31	6	.	.	.	.	.	.	998
0.25-0.49	93	445	170	53	2	.	.	.	.	.	763
0.50-0.74	.	444	73	100	21	.	.	.	.	.	638
0.75-0.99	.	33	56	23	34	1	.	.	.	.	147
1.00-1.24	.	.	20	3	20	5	.	.	.	.	48
1.25-1.49	.	.	1	.	.	4	.	.	.	.	5
1.50-1.74	.	.	.	.	.	2	.	.	.	.	2
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	1	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	745	1231	351	185	77	12	1	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 2441.

STATION M43 44.38N 86.41W 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	
0.00-0.24	561	280	38	10	1	.	.	.	.	.	890
0.25-0.49	154	479	148	48	7	.	.	.	.	.	836
0.50-0.74	.	348	31	70	10	.	.	.	.	.	459
0.75-0.99	.	27	12	6	9	1	.	.	.	.	55
1.00-1.24	.	.	.	1	2	1	.	.	.	.	4
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	1	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	715	1134	230	135	29	3	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 3.0 NO. OF CASES= 2108.

STATION M43 44.38N 86.41W 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	
0.00-0.24	521	198	50	7	.	.	.	.	.	.	776
0.25-0.49	100	352	105	27	3	.	.	.	.	.	587
0.50-0.74	.	322	23	39	3	.	.	.	.	.	387
0.75-0.99	.	8	29	2	4	.	.	.	.	.	43
1.00-1.24	.	.	2	.	2	.	.	.	.	.	4
1.25-1.49	.	.	.	.	1	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	621	880	209	75	13	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 2.9 NO. OF CASES= 1691.

STATION M43 44.38N 86.41W 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	
0.00-0.24	667	346	42	17	.	.	.	.	.	.	1072
0.25-0.49	57	375	129	42	.	.	.	.	.	.	603
0.50-0.74	.	412	44	44	5	.	.	.	.	.	505
0.75-0.99	.	3	28	6	1	.	.	.	.	.	38
1.00-1.24	.	.	6	.	1	.	.	.	.	.	7
1.25-1.49	.	.	.	.	1	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	724	1136	249	109	8	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.3 MEAN TP(SEC)= 2.9 NO. OF CASES= 2090.

STATION M43 44.38N 86.41W 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	
0.00-0.24	759	313	49	2	.	.	.	.	.	.	1123
0.25-0.49	131	551	102	26	1	.	.	.	.	.	811
0.50-0.74	.	727	78	37	4	.	.	.	.	.	846
0.75-0.99	.	1	62	.	1	.	.	.	.	.	64
1.00-1.24	.	.	21	.	.	.	.	.	.	.	21
1.25-1.49	.	.	.	1	.	.	.	.	.	.	1
1.50-1.74	.	.	.	1	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	890	1592	312	67	6	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.9 NO. OF CASES= 2686.

STATION M43 44.38N 86.41W 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	
0.00-0.24	1056	548	85	11	3	1	.	.	.	.	1704
0.25-0.49	234	871	237	40	2	3	.	.	.	.	1387
0.50-0.74	.	1189	221	63	2	1	.	.	.	.	1476
0.75-0.99	.	11	243	2	4	1	.	.	.	.	261
1.00-1.24	.	.	207	1	1	.	.	.	.	.	209
1.25-1.49	.	.	29	5	.	.	.	.	.	.	34
1.50-1.74	.	.	1	8	.	.	.	.	.	.	9
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	1	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1290	2619	1023	130	12	6	1	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.0 NO. OF CASES= 4761.

STATION M43 44.38N 86.41W 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	
0.00-0.24	1101	1491	911	313	49	1	.	.	.	.	3866
0.25-0.49	319	1577	1655	1413	143	10	.	.	.	.	5117
0.50-0.74	.	1720	895	1413	565	20	.	.	.	.	4613
0.75-0.99	.	17	767	380	422	41	2	.	.	.	1629
1.00-1.24	.	.	606	281	290	83	11	.	.	.	1271
1.25-1.49	.	.	154	139	171	52	12	.	.	.	528
1.50-1.74	.	.	18	115	212	104	32	3	.	.	484
1.75-1.99	.	.	.	20	63	58	27	2	.	.	170
2.00-2.24	.	.	.	4	41	81	22	2	2	.	152
2.25-2.49	.	.	.	.	12	24	13	2	.	.	51
2.50-2.74	.	.	.	.	.	17	20	1	.	.	38
2.75-2.99	.	.	.	.	.	10	3	1	.	.	14
3.00-3.24	.	.	.	.	.	2	6	1	.	.	9
3.25-3.49	.	.	.	.	.	.	2	.	.	.	2
3.50+	.	.	.	.	.	.	5	.	.	.	5
TOTAL	1420	4805	5006	4078	1968	503	155	12	2	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 16809.

STATION M43 44.38N 86.41W 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	
0.00-0.24	1220	1363	127	10	.	.	.	.	.	.	2720
0.25-0.49	235	2443	710	130	7	.	.	.	.	.	3525
0.50-0.74	.	1017	1913	881	131	.	.	.	.	.	3942
0.75-0.99	.	26	680	909	195	11	.	.	.	.	1821
1.00-1.24	.	.	528	725	424	45	1	.	.	.	1723
1.25-1.49	.	.	56	355	335	35	4	.	.	.	785
1.50-1.74	.	.	5	279	394	99	5	.	.	.	782
1.75-1.99	.	.	.	31	159	97	10	1	.	.	298
2.00-2.24	.	.	.	3	130	120	24	1	.	.	278
2.25-2.49	.	.	.	1	39	70	13	2	.	.	125
2.50-2.74	.	.	.	.	12	70	18	2	.	.	102
2.75-2.99	.	.	.	.	1	27	21	1	1	.	51
3.00-3.24	.	.	.	.	1	23	17	.	.	.	41
3.25-3.49	.	.	.	.	1	2	12	.	.	.	15
3.50+	.	.	.	.	.	1	19	9	4	.	33
TOTAL	1455	4849	4019	3324	1829	600	144	16	5	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.1 NO. OF CASES= 15210.

STATION M43 44.38N 86.41W 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	
0.00-0.24	834	627	23	5	.	.	.	.	.	.	1489
0.25-0.49	113	1540	218	28	.	.	.	.	.	.	1899
0.50-0.74	.	578	1287	193	4	.	.	.	.	.	2062
0.75-0.99	.	14	434	403	14	.	.	.	.	.	865
1.00-1.24	.	.	255	597	80	4	.	.	.	.	936
1.25-1.49	.	.	14	227	180	1	.	.	.	.	422
1.50-1.74	.	.	.	141	276	4	.	.	.	.	421
1.75-1.99	.	.	.	10	140	21	.	.	.	.	171
2.00-2.24	.	.	.	1	144	35	.	.	.	.	180
2.25-2.49	.	.	.	.	47	24	3	.	.	.	74
2.50-2.74	.	.	.	.	11	42	2	.	.	.	55
2.75-2.99	.	.	.	.	.	16	3	.	.	.	19
3.00-3.24	.	.	.	.	.	9	2	.	.	.	11
3.25-3.49	.	.	.	.	.	6	4	.	.	.	10
3.50+	.	.	.	.	.	1	1	.	.	.	2
TOTAL	947	2759	2231	1605	896	163	15	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 8075.

STATION M43 44.38N 86.41W 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	
0.00-0.24	621	452	16	2	.	.	.	.	.	.	1091
0.25-0.49	108	1213	179	18	.	.	.	.	.	.	1518
0.50-0.74	.	452	1134	207	8	.	.	.	.	.	1801
0.75-0.99	.	4	447	390	22	.	.	.	.	.	863
1.00-1.24	.	.	188	650	60	1	.	.	.	.	899
1.25-1.49	.	.	14	224	170	1	.	.	.	.	409
1.50-1.74	.	.	1	164	245	.	.	.	.	.	410
1.75-1.99	.	.	.	9	159	4	.	.	.	.	172
2.00-2.24	.	.	.	.	112	7	.	.	.	.	119
2.25-2.49	.	.	.	.	42	11	.	.	.	.	53
2.50-2.74	.	.	.	.	3	24	.	.	.	.	27
2.75-2.99	.	.	.	.	.	13	.	.	.	.	13
3.00-3.24	.	.	.	.	.	8	1	.	.	.	9
3.25-3.49	.	.	.	.	.	1	2	.	.	.	3
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	729	2121	1979	1664	821	70	3	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 4.0 NO. OF CASES= 6923.

STATION M43 44.38N 86.41W 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	
0.00-0.24	312	299	14	2	.	.	.	.	.	.	627
0.25-0.49	87	948	129	11	.	.	.	.	.	.	1175
0.50-0.74	.	335	799	229	3	.	.	.	.	.	1366
0.75-0.99	.	4	274	380	26	.	.	.	.	.	684
1.00-1.24	.	.	189	505	79	.	.	.	.	.	773
1.25-1.49	.	.	6	164	117	.	.	.	.	.	287
1.50-1.74	.	.	.	114	201	4	.	.	.	.	319
1.75-1.99	.	.	.	5	145	1	.	.	.	.	151
2.00-2.24	.	.	.	.	121	3	.	.	.	.	124
2.25-2.49	.	.	.	.	36	12	1	.	.	.	49
2.50-2.74	.	.	.	.	1	24	1	.	.	.	26
2.75-2.99	.	.	.	.	.	7	.	.	.	.	7
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	399	1586	1411	1410	729	53	3	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 5245.

STATION M43 44.38N 86.41W 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	
0.00-0.24	285	206	19	1	1	.	.	.	.	.	512
0.25-0.49	50	607	139	8	.	.	.	.	.	.	804
0.50-0.74	.	256	622	226	5	.	.	.	.	.	1109
0.75-0.99	.	9	229	356	27	.	.	.	.	.	621
1.00-1.24	.	.	139	563	136	.	.	.	.	.	838
1.25-1.49	.	.	10	258	133	2	.	.	.	.	403
1.50-1.74	.	.	.	151	254	11	.	.	.	.	416
1.75-1.99	.	.	.	5	196	4	.	.	.	.	205
2.00-2.24	.	.	.	1	177	8	2	.	.	.	188
2.25-2.49	.	.	.	.	54	5	2	.	.	.	61
2.50-2.74	.	.	.	.	10	22	.	.	.	.	32
2.75-2.99	.	.	.	.	.	8	.	.	.	.	8
3.00-3.24	.	.	.	.	.	5	2	.	.	.	7
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	1	1	.	.	.	2
TOTAL	335	1078	1158	1569	993	67	7	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 4887.

STATION M43 44.38N 86.41W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

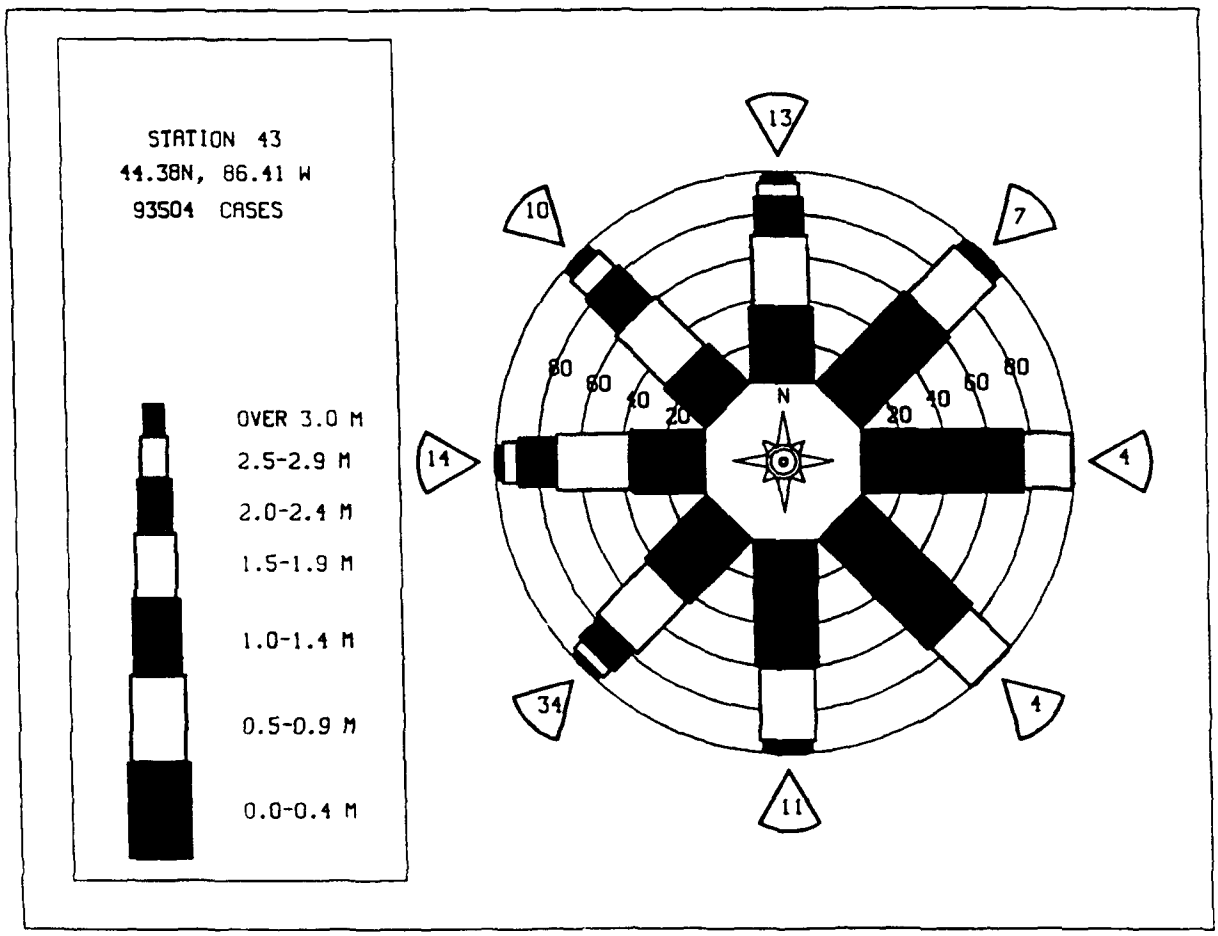
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	365	242	11	1	.	.	.	.	.	.	619
0.25-0.49	64	616	142	16	.	.	.	.	.	.	838
0.50-0.74	.	259	613	190	2	.	.	.	.	.	1064
0.75-0.99	.	3	249	332	44	.	.	.	.	.	628
1.00-1.24	.	.	159	460	195	.	.	.	.	.	814
1.25-1.49	.	.	10	205	225	7	.	.	.	.	447
1.50-1.74	.	.	1	128	211	56	.	.	.	.	396
1.75-1.99	.	.	.	7	149	55	1	.	.	.	212
2.00-2.24	.	.	.	.	110	60	6	.	.	.	176
2.25-2.49	.	.	.	.	34	41	10	.	.	.	85
2.50-2.74	.	.	.	.	10	50	17	.	.	.	77
2.75-2.99	.	.	.	.	.	16	16	.	.	.	32
3.00-3.24	.	.	.	.	.	11	8	.	.	.	19
3.25-3.49	.	.	.	.	.	1	5	1	.	.	7
3.50+	.	.	.	.	.	1	20	11	3	.	35
TOTAL	429	1120	1185	1339	980	298	83	12	3	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 5116.

STATION M43 44.38N 86.41W 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	
0.00-0.24	1156	810	152	40	5						2163
0.25-0.49	204	1451	482	197	17	1					2352
0.50-0.74	.	959	928	449	79	2					2417
0.75-0.99	.	23	418	395	102	6					944
1.00-1.24	.	.	264	436	183	16	1				900
1.25-1.49	.	.	34	174	165	14	1				388
1.50-1.74	.	.	3	120	203	40	3				369
1.75-1.99	.	.	.	9	107	32	4				152
2.00-2.24	.	.	.	1	88	44	6				139
2.25-2.49	.	.	.	.	28	23	6				57
2.50-2.74	.	.	.	.	5	28	9				42
2.75-2.99	.	.	.	.	.	10	5				15
3.00-3.24	.	.	.	.	.	7	5				12
3.25-3.49	.	.	.	.	.	1	3				4
3.50+	.	.	.	.	.	.	7	3			10
TOTAL	1360	3243	2281	1821	982	224	50	3	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M43 (44.38N 86.41W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.5	0.6	0.6	0.6	0.4	0.3	0.3	0.3	0.5	0.6	0.8	0.8	0.5
1957	1.0	0.7	0.6	0.5	0.5	0.4	0.3	0.4	0.5	0.6	1.0	1.0	0.6
1958	0.8	1.0	0.4	0.5	0.5	0.4	0.4	0.5	0.7	0.7	1.0	0.8	0.6
1959	0.9	0.8	0.6	0.5	0.5	0.4	0.4	0.4	0.6	0.7	0.8	0.8	0.6
1960	0.9	0.9	0.6	0.6	0.4	0.4	0.3	0.5	0.5	0.6	1.1	1.2	0.7
1961	0.9	0.7	0.8	0.5	0.5	0.5	0.3	0.4	0.7	0.8	0.9	0.9	0.7
1962	1.1	0.7	0.4	0.7	0.5	0.3	0.3	0.4	0.6	0.6	0.6	1.0	0.6
1963	0.8	0.9	0.7	0.7	0.5	0.4	0.4	0.4	0.5	0.6	1.0	0.8	0.6
1964	1.1	1.2	1.0	0.8	0.6	0.5	0.4	0.6	0.6	0.8	0.9	0.9	0.8
1965	1.1	1.3	0.7	0.5	0.5	0.4	0.4	0.5	0.6	0.9	1.0	1.0	0.7
1966	0.9	0.7	0.8	0.5	0.5	0.4	0.4	0.5	0.6	1.1	1.2	0.9	0.7
1967	1.2	1.1	0.7	0.7	0.5	0.3	0.4	0.5	0.6	0.8	0.9	0.8	0.7
1968	0.9	1.1	0.9	0.7	0.4	0.4	0.5	0.6	0.6	0.9	0.7	1.1	0.7
1969	0.9	0.7	0.8	0.6	0.4	0.5	0.3	0.5	0.6	0.8	0.8	0.9	0.6
1970	0.8	1.1	0.6	0.7	0.5	0.5	0.5	0.5	0.7	0.7	0.9	0.9	0.7
1971	1.1	1.1	0.8	0.6	0.5	0.3	0.5	0.5	0.6	0.6	0.9	0.8	0.7
1972	1.3	0.8	0.8	0.4	0.3	0.5	0.4	0.5	0.6	0.9	0.7	0.8	0.7
1973	1.1	0.8	0.7	0.6	0.5	0.4	0.4	0.6	0.6	0.7	0.8	0.8	0.7
1974	0.8	0.8	0.7	0.7	0.4	0.4	0.4	0.5	0.7	0.8	0.8	0.8	0.7
1975	1.0	0.8	0.7	0.5	0.3	0.4	0.4	0.5	0.6	0.8	0.9	0.8	0.7
1976	1.0	1.1	1.0	0.6	0.5	0.4	0.4	0.5	0.7	0.7	1.0	1.0	0.7
1977	1.0	1.1	0.7	0.5	0.4	0.4	0.5	0.6	0.6	0.8	0.9	0.8	0.7
1978	1.2	0.7	0.6	0.6	0.5	0.4	0.4	0.5	0.6	0.8	0.8	1.0	0.7
1979	0.9	0.7	0.6	0.5	0.4	0.4	0.3	0.5	0.6	0.9	0.9	1.0	0.6
1980	0.8	0.7	0.7	0.4	0.2	0.4	0.3	0.4	0.7	1.1	1.1	0.8	0.6
1981	0.6	0.9	0.7	0.6	0.4	0.4	0.3	0.3	0.7	0.7	0.8	0.7	0.6
1982	0.9	0.7	0.8	0.7	0.3	0.3	0.4	0.4	0.7	0.8	0.9	0.8	0.6
1983	0.7	0.6	0.6	0.5	0.3	0.3	0.4	0.4	0.7	0.7	1.0	0.8	0.6
1984	0.8	0.8	0.7	0.5	0.4	0.4	0.4	0.4	0.7	0.6	1.2	0.9	0.6
1985	0.9	0.9	0.8	0.6	0.4	0.3	0.4	0.4	0.6	0.6	0.6	0.8	0.6
1986	1.1	0.5	0.8	0.5	0.4	0.3	0.3	0.4	0.4	0.5	0.9	0.8	0.6
1987	0.7	0.7	0.5	0.4	0.3	0.3	0.3	0.4	0.3	0.6	0.7	0.8	0.5
MEAN	0.9	0.9	0.7	0.6	0.4	0.4	0.4	0.5	0.6	0.7	0.9	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M43 (44.38N 86.41W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.0	3.1	2.7	2.0	1.6	1.3	1.2	1.2	1.9	2.5	3.3	3.2
1957	3.1	2.6	2.7	2.9	2.3	1.7	2.1	1.6	2.0	2.8	3.0	5.1
1958	3.4	3.1	1.1	2.5	2.9	2.0	2.2	1.9	2.7	2.7	4.9	2.5
1959	2.9	2.7	3.2	2.1	1.7	1.5	1.7	1.5	2.1	2.9	2.3	3.2
1960	2.7	2.8	2.7	1.7	1.5	1.1	1.6	2.1	1.7	2.2	3.2	3.7
1961	3.2	2.3	2.8	1.6	1.5	1.4	1.1	1.7	2.3	2.9	2.6	3.4
1962	3.7	2.7	1.9	2.3	1.9	1.5	1.7	1.8	2.0	2.5	3.7	4.1
1963	2.6	3.0	3.1	4.1	1.7	1.7	1.2	2.0	1.9	1.9	2.6	3.2
1964	3.6	3.7	3.1	3.8	2.3	2.0	1.0	1.8	3.5	2.6	3.3	2.4
1965	3.2	4.6	2.7	1.9	1.8	1.4	1.2	1.6	2.3	3.1	3.3	3.5
1966	2.8	2.1	3.6	1.4	1.7	1.3	1.4	1.8	2.2	3.4	5.5	2.7
1967	3.7	3.0	2.1	2.3	1.9	1.3	1.5	2.4	2.2	2.5	2.5	2.3
1968	3.4	3.5	2.6	3.1	1.8	1.4	1.7	2.4	1.7	2.8	2.5	3.5
1969	2.4	2.8	2.1	1.8	1.2	2.3	1.4	2.5	1.9	2.4	2.0	3.5
1970	2.4	3.3	1.9	2.2	2.3	1.3	1.6	1.5	2.7	2.7	3.4	3.4
1971	4.6	5.9	2.7	1.9	1.6	1.0	1.7	2.2	2.1	2.9	3.0	2.5
1972	3.6	2.7	3.0	1.5	1.1	1.4	1.3	1.3	2.0	3.1	2.1	2.8
1973	3.2	2.7	4.1	1.8	1.3	1.8	1.6	1.7	1.8	2.5	2.5	2.3
1974	3.1	3.3	2.6	1.9	1.3	1.1	1.3	1.7	2.4	2.1	2.2	2.7
1975	6.3	3.0	2.3	2.2	1.5	1.6	1.1	1.7	1.5	2.3	3.1	2.8
1976	2.6	3.8	3.3	1.7	2.2	1.6	1.4	2.0	2.4	2.4	2.3	3.7
1977	2.8	2.8	3.2	2.0	1.5	1.4	1.7	2.5	2.3	2.8	3.3	2.7
1978	5.7	2.2	1.9	1.9	1.8	1.7	1.1	1.5	2.1	2.2	3.0	2.6
1979	2.9	2.0	2.6	2.6	1.3	1.5	1.1	1.4	1.7	3.0	2.8	2.6
1980	3.7	2.5	2.4	1.5	1.1	1.2	0.9	1.4	2.4	2.7	2.8	4.1
1981	2.2	2.3	2.2	1.8	1.5	1.5	1.2	1.3	2.8	3.1	2.9	2.1
1982	3.5	2.6	3.5	2.8	1.0	1.0	1.6	1.6	2.1	2.8	2.7	2.7
1983	3.6	1.9	2.0	2.4	1.1	0.9	1.3	1.2	1.7	2.7	2.9	2.8
1984	2.6	3.8	3.3	2.0	2.0	1.9	1.2	1.7	2.2	2.9	3.0	3.4
1985	2.7	3.1	2.9	2.1	1.7	1.7	1.4	1.1	2.3	2.1	2.4	2.8
1986	4.1	2.3	2.8	1.6	1.8	1.0	1.6	1.7	1.7	2.4	3.4	2.9
1987	2.3	5.0	2.0	1.8	1.3	0.7	1.2	1.3	1.5	3.1	2.5	3.0

32 YR. STATISTICS FOR WIS STATION M43

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.9
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	6.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	229.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011121

STATION M44 44.23N 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	
0.00-0.24	760	532	34	5	1	.	.	.	.	.	1332
0.25-0.49	102	925	341	26	.	.	.	.	.	.	1394
0.50-0.74	.	419	869	418	9	.	.	.	.	.	1715
0.75-0.99	.	6	295	428	85	1	.	.	.	.	815
1.00-1.24	.	.	176	393	310	2	.	.	.	.	881
1.25-1.49	.	.	18	127	228	18	.	.	.	.	391
1.50-1.74	.	.	1	81	140	80	.	.	.	.	302
1.75-1.99	.	.	.	13	36	79	3	.	.	.	131
2.00-2.24	.	.	.	.	48	95	7	.	.	.	150
2.25-2.49	.	.	.	.	6	31	17	.	.	.	54
2.50-2.74	.	.	.	.	5	20	35	.	.	.	60
2.75-2.99	.	.	.	.	.	9	19	.	.	.	28
3.00-3.24	.	.	.	.	.	6	11	.	.	.	17
3.25-3.49	.	.	.	.	.	.	9	2	.	.	11
3.50+	.	.	.	.	.	1	12	14	1	.	28
TOTAL	862	1882	1734	1491	868	342	113	16	1	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.2 NO. OF CASES= 6852.

STATION M44 44.23N 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	
0.00-0.24	793	457	50	9	1	.	.	.	.	.	1310
0.25-0.49	67	774	290	43	.	.	.	.	.	.	1174
0.50-0.74	.	445	419	308	20	.	.	.	.	.	1192
0.75-0.99	.	31	143	163	104	2	.	.	.	.	443
1.00-1.24	.	.	77	65	128	17	.	.	.	.	287
1.25-1.49	.	.	10	17	29	22	.	.	.	.	78
1.50-1.74	.	.	.	14	23	14	.	.	.	.	51
1.75-1.99	.	.	.	1	8	6	.	.	.	.	15
2.00-2.24	.	.	.	.	3	3	.	.	.	.	6
2.25-2.49	.	.	.	.	1	2	.	.	.	.	3
2.50-2.74	.	.	.	.	.	1	1	.	.	.	2
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	1	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	860	1707	989	620	317	68	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 4281.

STATION M44 44.23N 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	
0.00-0.24	888	606	57	8	.	.	.	.	.	.	1559
0.25-0.49	96	636	269	88	4	.	.	.	.	.	1093
0.50-0.74	.	694	189	199	28	.	.	.	.	.	1110
0.75-0.99	.	36	134	100	90	5	.	.	.	.	365
1.00-1.24	.	.	54	14	73	14	.	.	.	.	155
1.25-1.49	.	.	11	3	11	18	.	.	.	.	43
1.50-1.74	.	.	2	1	3	17	.	.	.	.	23
1.75-1.99	.	.	.	.	.	1	1	.	.	.	2
2.00-2.24	.	.	.	.	.	1	2	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	984	1972	716	413	209	56	3	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 4085.

STATION M44 44.23N 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	
0.00-0.24	675	382	50	9	.	.	.	.	.	.	1116
0.25-0.49	120	487	206	44	7	.	.	.	.	.	864
0.50-0.74	.	526	83	113	26	1	.	.	.	.	749
0.75-0.99	.	37	51	22	34	4	.	.	.	.	148
1.00-1.24	.	.	23	.	13	4	.	.	.	.	40
1.25-1.49	.	.	4	.	.	3	.	.	.	.	7
1.50-1.74	.	.	.	.	.	1	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	795	1432	417	188	80	13	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 3.1 NO. OF CASES= 2746.

STATION M44 44.23N 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	
0.00-0.24	703	406	50	17	3	.	.	.	.	.	1179
0.25-0.49	181	520	179	54	3	.	.	.	.	.	937
0.50-0.74	.	429	31	68	14	.	.	.	.	.	542
0.75-0.99	.	28	26	7	16	1	.	.	.	.	78
1.00-1.24	.	.	1	1	2	.	.	.	.	.	4
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	1	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	884	1383	288	147	38	2	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.9 NO. OF CASES= 2573.

STATION M44 44.23N 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	
0.00-0.24	667	339	55	17	.	.	.	.	.	.	1078
0.25-0.49	119	375	119	54	5	.	.	.	.	.	672
0.50-0.74	.	418	25	39	5	.	.	.	.	.	487
0.75-0.99	.	14	36	3	1	.	.	.	.	.	54
1.00-1.24	.	.	6	.	.	.	.	.	.	.	6
1.25-1.49	.	.	.	.	.	.	.	.	.	.	0
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	786	1146	241	113	11	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.2 MEAN TP(SEC)= 2.9 NO. OF CASES= 2155.

STATION M44 44.23N 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	
0.00-0.24	840	457	60	5	1	.	.	.	.	.	1363
0.25-0.49	71	395	130	22	1	.	.	.	.	.	619
0.50-0.74	.	534	60	42	4	.	.	.	.	.	640
0.75-0.99	.	1	40	3	2	.	.	.	.	.	46
1.00-1.24	.	.	9	.	2	.	.	.	.	.	11
1.25-1.49	.	.	.	.	.	.	.	.	.	.	0
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	911	1387	299	72	10	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.2 MEAN TP(SEC)= 2.8 NO. OF CASES= 2514.

STATION M44 44.23N 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	
0.00-0.24	751	348	58	10	.	.	.	.	.	.	1167
0.25-0.49	142	562	140	41	1	.	.	.	.	.	886
0.50-0.74	.	640	48	41	5	.	.	.	.	.	734
0.75-0.99	.	6	66	3	1	.	.	.	.	.	76
1.00-1.24	.	.	16	.	1	.	.	.	.	.	17
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	1	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	893	1556	329	95	8	0	1	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 2.9 NO. OF CASES= 2702.

STATION M44 44.23N 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	
0.00-0.24	1135	543	90	18	6	.	.	.	.	.	1792
0.25-0.49	381	895	219	51	1	1	.	.	.	.	1548
0.50-0.74	.	710	29	74	2	.	.	.	.	.	815
0.75-0.99	.	45	36	3	5	.	.	.	.	.	89
1.00-1.24	.	.	12	1	.	.	.	.	.	.	13
1.25-1.49	.	.	.	.	.	.	.	.	.	.	0
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	1	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1516	2193	386	147	14	1	1	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 2.8 NO. OF CASES= 3990.

STATION M44 44.23N 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	
0.00-0.24	1059	1335	1132	527	63	1	.	.	.	.	4117
0.25-0.49	489	1443	1056	1452	231	8	.	.	.	.	4679
0.50-0.74	.	1464	188	489	386	33	2	.	.	.	2562
0.75-0.99	.	519	152	173	172	33	12	.	.	.	1061
1.00-1.24	.	.	95	145	93	68	26	2	.	.	429
1.25-1.49	.	.	19	38	62	8	6	.	1	.	134
1.50-1.74	.	.	4	32	45	7	1	.	.	.	89
1.75-1.99	.	.	.	2	19	11	1	.	.	.	33
2.00-2.24	.	.	.	2	19	28	5	.	.	.	54
2.25-2.49	.	.	.	.	7	6	3	.	.	.	16
2.50-2.74	.	.	.	.	1	8	10	.	.	.	19
2.75-2.99	.	.	.	.	.	4	5	.	.	.	9
3.00-3.24	.	.	.	.	.	1	1	.	.	.	2
3.25-3.49	.	.	.	.	.	.	4	1	.	.	5
3.50+	.	.	.	.	.	.	2	.	.	.	2
TOTAL	1548	4761	2646	2860	1098	216	78	3	1	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 12374.

STATION M44 44.23N 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	
0.00-0.24	1158	1766	194	32	2	.	.	.	.	.	3152
0.25-0.49	306	2122	1255	291	18	2	.	.	.	.	3994
0.50-0.74	.	1063	1408	1291	235	6	.	.	.	.	4003
0.75-0.99	.	108	742	616	322	24	.	.	.	.	1812
1.00-1.24	.	.	465	562	380	133	17	.	.	.	1557
1.25-1.49	.	.	74	271	250	42	22	2	.	.	661
1.50-1.74	.	.	8	259	236	49	26	1	.	.	579
1.75-1.99	.	.	.	41	114	54	10	1	.	.	220
2.00-2.24	.	.	.	6	94	103	14	.	.	.	217
2.25-2.49	.	.	.	.	37	52	18	.	.	.	107
2.50-2.74	.	.	.	.	16	31	24	1	.	.	72
2.75-2.99	.	.	.	.	1	16	14	2	.	.	33
3.00-3.24	.	.	.	.	1	6	16	1	.	.	24
3.25-3.49	.	.	.	.	.	.	4	.	.	.	4
3.50+	.	.	.	.	.	1	10	5	2	.	18
TOTAL	1464	5059	4146	3369	1706	519	175	13	2	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.1 NO. OF CASES= 15410.

STATION M44 44.23N 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	
0.00-0.24	882	850	37	4	.	.	.	.	.	.	1773
0.25-0.49	149	1499	367	43	.	.	.	.	.	.	2058
0.50-0.74	.	577	1183	347	7	.	.	.	.	.	2114
0.75-0.99	.	28	396	414	32	.	.	.	.	.	870
1.00-1.24	.	.	227	459	135	3	.	.	.	.	824
1.25-1.49	.	.	21	179	188	2	.	.	.	.	390
1.50-1.74	.	.	1	131	239	11	.	.	.	.	382
1.75-1.99	.	.	.	6	125	25	.	.	.	.	156
2.00-2.24	.	.	.	1	111	52	3	.	.	.	167
2.25-2.49	.	.	.	.	35	28	3	.	.	.	66
2.50-2.74	.	.	.	.	8	47	11	.	.	.	66
2.75-2.99	.	.	.	.	.	12	8	.	.	.	20
3.00-3.24	.	.	.	.	.	14	12	.	.	.	26
3.25-3.49	.	.	.	.	.	2	3	.	.	.	5
3.50+	.	.	.	.	.	.	3	4	3	1	11
TOTAL	1031	2954	2232	1584	880	196	43	4	3	1	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 3.9 NO. OF CASES= 8371.

STATION M44 44.23N 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	
0.00-0.24	837	632	29	3	.	.	.	.	.	.	1501
0.25-0.49	106	1275	272	37	1	.	.	.	.	.	1691
0.50-0.74	.	420	1285	271	11	.	.	.	.	.	1987
0.75-0.99	.	9	421	463	32	.	.	.	.	.	925
1.00-1.24	.	.	222	702	69	1	.	.	.	.	994
1.25-1.49	.	.	6	242	191	1	.	.	.	.	440
1.50-1.74	.	.	.	156	266	.	.	.	.	.	422
1.75-1.99	.	.	.	5	194	4	.	.	.	.	203
2.00-2.24	.	.	.	.	147	7	1	.	.	.	155
2.25-2.49	.	.	.	.	48	11	.	.	.	.	59
2.50-2.74	.	.	.	.	5	33	.	.	.	.	38
2.75-2.99	.	.	.	.	1	11	.	.	.	.	12
3.00-3.24	.	.	.	.	.	16	.	.	.	.	16
3.25-3.49	.	.	.	.	.	4	1	.	.	.	5
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	943	2336	2235	1879	965	88	3	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 7916.

STATION M44 44.23N 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	
0.00-0.24	379	412	19	5	2	.	.	.	.	.	817
0.25-0.49	98	1063	187	37	.	.	.	.	.	.	1405
0.50-0.74	.	375	975	264	6	.	.	.	.	.	1620
0.75-0.99	.	11	370	442	36	.	.	.	.	.	859
1.00-1.24	.	.	175	622	108	.	.	.	.	.	905
1.25-1.49	.	.	10	173	164	2	.	.	.	.	349
1.50-1.74	.	.	.	124	238	5	.	.	.	.	367
1.75-1.99	.	.	.	3	174	2	.	.	.	.	179
2.00-2.24	.	.	.	.	154	14	.	.	.	.	168
2.25-2.49	.	.	.	.	47	27	2	.	.	.	76
2.50-2.74	.	.	.	.	3	50	.	.	.	.	53
2.75-2.99	.	.	.	.	.	11	.	.	.	.	11
3.00-3.24	.	.	.	.	.	9	.	.	.	.	9
3.25-3.49	.	.	.	.	.	2	2	.	.	.	4
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	477	1881	1736	1670	932	122	5	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 6394.

STATION M44 44.23N 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	
0.00-0.24	372	283	24	3	1	.	.	.	.	.	683
0.25-0.49	54	707	186	17	2	.	.	.	.	.	966
0.50-0.74	.	258	711	268	13	.	.	.	.	.	1250
0.75-0.99	.	16	251	416	49	.	.	.	.	.	732
1.00-1.24	.	.	148	580	181	2	.	.	.	.	911
1.25-1.49	.	.	9	156	253	6	.	.	.	.	424
1.50-1.74	.	.	.	102	281	16	.	.	.	.	399
1.75-1.99	.	.	.	4	219	14	.	.	.	.	237
2.00-2.24	.	.	.	.	162	32	2	.	.	.	196
2.25-2.49	.	.	.	.	49	28	1	.	.	.	78
2.50-2.74	.	.	.	.	2	79	.	.	.	.	81
2.75-2.99	.	.	.	.	.	17	.	.	.	.	17
3.00-3.24	.	.	.	.	.	16	.	.	.	.	16
3.25-3.49	.	.	.	.	.	.	4	.	.	.	4
3.50+	.	.	.	.	.	.	2	.	.	.	2
TOTAL	426	1264	1329	1546	1212	210	9	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 5621.

STATION M44 44.23N 86.43W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

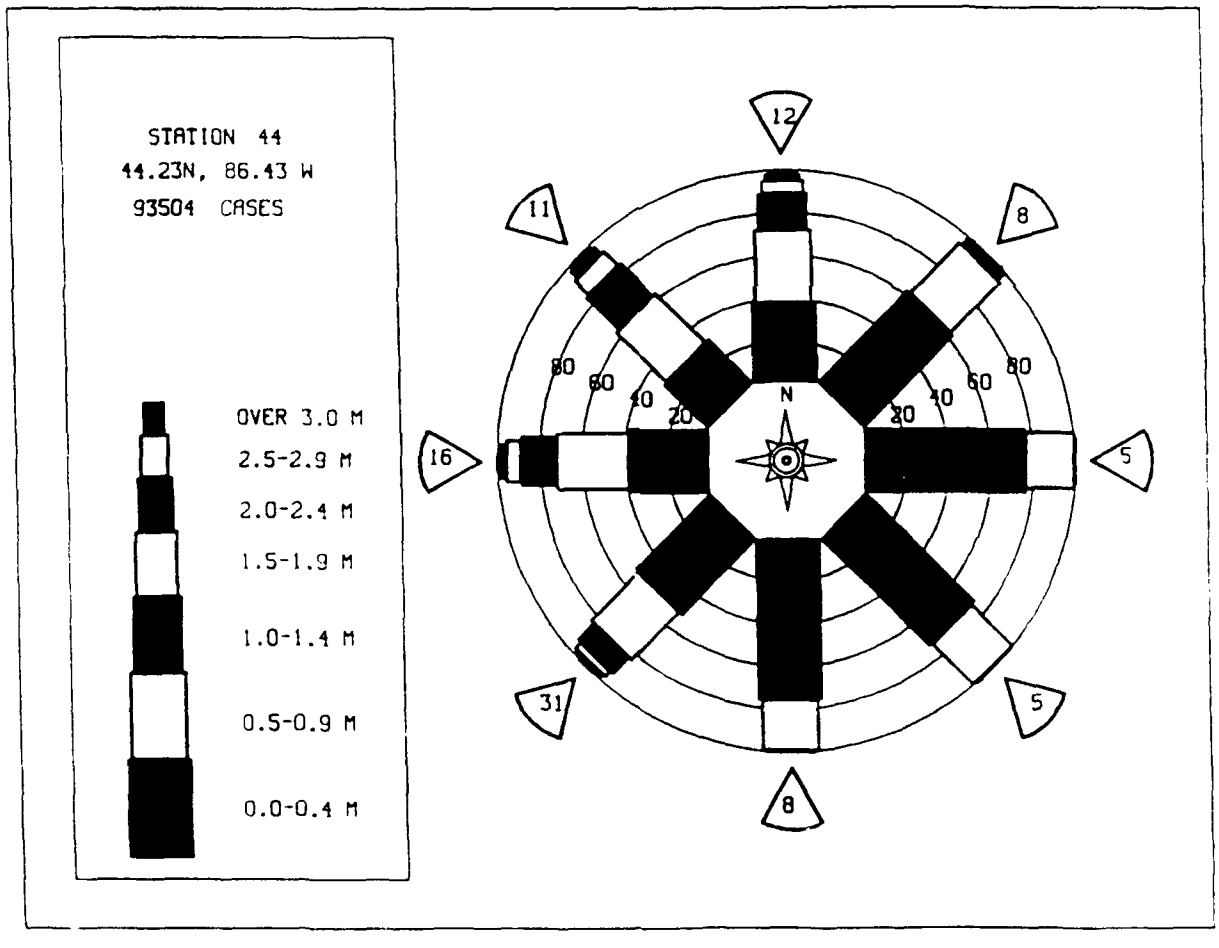
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	435	348	31	2	.	.	.	.	.	.	816
0.25-0.49	74	598	171	24	2	.	.	.	.	.	869
0.50-0.74	.	273	632	256	5	.	.	.	.	.	1166
0.75-0.99	.	4	239	339	65	.	.	.	.	.	647
1.00-1.24	.	.	148	423	258	1	.	.	.	.	830
1.25-1.49	.	.	17	163	264	21	.	.	.	.	465
1.50-1.74	.	.	1	113	216	73	.	.	.	.	403
1.75-1.99	.	.	.	5	126	65	2	.	.	.	198
2.00-2.24	.	.	.	.	96	65	16	.	.	.	177
2.25-2.49	.	.	.	.	38	37	18	.	.	.	93
2.50-2.74	.	.	.	.	6	71	26	.	.	.	103
2.75-2.99	.	.	.	.	.	22	12	.	.	.	34
3.00-3.24	.	.	.	.	.	16	7	.	.	.	23
3.25-3.49	.	.	.	.	.	2	5	.	.	.	7
3.50+	.	.	.	.	.	1	32	16	5	.	54
TOTAL	509	1223	1239	1325	1076	374	118	16	5	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.5 NO. OF CASES= 5520.

STATION M44 44 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	
0.00-0.24	1234	970	197	67	8	.	.	.	.	.	2476
0.25-0.49	256	1430	539	233	27	1	.	.	.	.	2486
0.50-0.74	.	925	814	449	78	4	.	.	.	.	2270
0.75-0.99	.	90	340	360	105	7	1	.	.	.	903
1.00-1.24	.	.	186	397	175	24	4	.	.	.	786
1.25-1.49	.	.	20	137	164	14	2	.	.	.	337
1.50-1.74	.	.	1	101	169	27	2	.	.	.	300
1.75-1.99	.	.	.	8	101	26	1	.	.	.	136
2.00-2.24	.	.	.	.	83	40	5	.	.	.	128
2.25-2.49	.	.	.	.	27	22	6	.	.	.	55
2.50-2.74	.	.	.	.	4	34	11	.	.	.	49
2.75-2.99	.	.	.	.	.	10	6	.	.	.	16
3.00-3.24	.	.	.	.	.	8	5	.	.	.	13
3.25-3.49	.	.	.	.	.	1	3	.	.	.	4
3.50+	.	.	.	.	.	.	6	4	1	.	11
TOTAL	1490	3415	2097	1752	941	218	52	4	1	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M44 (44.23N 86.43W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													MEAN
1956	0.5	0.5	0.5	0.5	0.4	0.3	0.2	0.3	0.5	0.5	0.8	0.7	0.5
1957	0.9	0.7	0.6	0.5	0.4	0.3	0.3	0.3	0.4	0.5	0.9	0.9	0.6
1958	0.7	1.0	0.4	0.5	0.4	0.4	0.3	0.4	0.6	0.6	0.9	0.7	0.6
1959	0.8	0.7	0.6	0.5	0.4	0.3	0.3	0.4	0.5	0.6	0.8	0.8	0.6
1960	0.9	0.9	0.6	0.6	0.3	0.4	0.3	0.4	0.4	0.6	1.0	1.1	0.6
1961	0.9	0.6	0.7	0.5	0.5	0.4	0.3	0.4	0.6	0.8	0.8	0.9	0.6
1962	1.0	0.7	0.4	0.7	0.5	0.3	0.3	0.3	0.6	0.6	0.5	1.0	0.6
1963	0.8	0.9	0.7	0.7	0.5	0.3	0.3	0.4	0.5	0.6	1.0	0.8	0.6
1964	1.0	1.2	1.0	0.7	0.5	0.4	0.3	0.5	0.6	0.8	0.8	0.8	0.7
1965	1.1	1.3	0.7	0.5	0.5	0.4	0.4	0.4	0.5	0.9	1.0	1.0	0.7
1966	0.8	0.7	0.8	0.5	0.5	0.4	0.4	0.5	0.6	1.1	1.2	0.9	0.7
1967	1.1	1.1	0.7	0.6	0.5	0.3	0.4	0.5	0.5	0.7	0.9	0.8	0.7
1968	0.9	1.1	0.9	0.6	0.4	0.4	0.5	0.5	0.5	0.8	0.7	1.0	0.7
1969	0.8	0.7	0.8	0.5	0.4	0.4	0.3	0.5	0.6	0.7	0.7	0.9	0.6
1970	0.8	1.1	0.6	0.7	0.5	0.4	0.4	0.4	0.6	0.6	0.8	0.8	0.7
1971	1.1	1.1	0.8	0.6	0.4	0.3	0.5	0.5	0.5	0.6	0.9	0.8	0.7
1972	1.2	0.8	0.8	0.4	0.3	0.4	0.4	0.4	0.6	0.8	0.6	0.7	0.6
1973	1.1	0.8	0.7	0.6	0.4	0.4	0.4	0.5	0.6	0.6	0.8	0.8	0.6
1974	0.7	0.8	0.7	0.6	0.4	0.4	0.4	0.4	0.6	0.7	0.8	0.8	0.6
1975	1.0	0.8	0.7	0.5	0.3	0.4	0.4	0.4	0.5	0.7	0.8	0.8	0.6
1976	0.9	1.1	1.0	0.6	0.5	0.4	0.4	0.5	0.7	0.7	1.0	0.9	0.7
1977	1.0	1.0	0.7	0.5	0.3	0.4	0.5	0.5	0.6	0.8	0.8	0.8	0.7
1978	1.2	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.5	0.7	0.8	1.0	0.6
1979	0.9	0.7	0.6	0.5	0.4	0.4	0.3	0.4	0.6	0.8	0.8	0.9	0.6
1980	0.8	0.7	0.7	0.4	0.2	0.3	0.3	0.4	0.6	1.0	1.1	0.8	0.6
1981	0.6	0.8	0.7	0.6	0.4	0.4	0.3	0.3	0.6	0.7	0.7	0.7	0.6
1982	0.9	0.7	0.7	0.6	0.3	0.3	0.3	0.4	0.7	0.7	0.8	0.8	0.6
1983	0.7	0.5	0.6	0.4	0.3	0.3	0.3	0.3	0.6	0.6	0.9	0.8	0.5
1984	0.7	0.8	0.7	0.5	0.3	0.3	0.3	0.4	0.6	0.5	1.1	0.9	0.6
1985	0.9	0.9	0.7	0.5	0.3	0.3	0.3	0.3	0.5	0.5	0.6	0.8	0.6
1986	1.0	0.5	0.8	0.5	0.4	0.3	0.3	0.4	0.4	0.5	0.8	0.7	0.5
1987	0.7	0.7	0.5	0.4	0.2	0.2	0.2	0.3	0.3	0.6	0.6	0.8	0.5
MEAN	0.9	0.8	0.7	0.5	0.4	0.4	0.3	0.4	0.5	0.7	0.8	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M44 (44.23N 86.43W)

	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR												
1956	2.0	3.2	2.7	1.9	1.4	1.2	1.1	1.2	1.8	2.6	3.3	3.0
1957	2.9	2.4	2.6	2.4	1.9	1.5	1.9	1.4	1.7	2.7	2.9	4.8
1958	3.2	2.8	1.2	2.4	2.5	2.0	1.9	1.7	2.1	2.6	4.2	2.6
1959	2.7	2.3	3.2	1.9	1.5	1.2	1.5	1.4	1.7	2.9	2.5	3.2
1960	3.0	2.6	2.8	1.7	1.3	1.1	1.4	2.0	1.8	2.4	3.1	3.5
1961	3.1	2.2	2.6	1.6	1.4	1.4	1.1	1.6	2.5	2.4	2.5	3.3
1962	3.9	3.1	1.9	2.2	1.7	1.5	1.7	1.7	2.0	2.4	3.7	4.0
1963	2.7	3.4	3.2	4.3	1.7	1.5	1.2	2.0	1.8	1.9	2.9	3.0
1964	4.0	3.8	3.3	3.1	2.2	1.9	1.0	1.6	2.9	2.7	2.9	2.5
1965	3.2	4.9	2.8	1.9	1.5	1.2	1.2	1.6	2.2	3.0	3.3	3.2
1966	2.8	2.0	3.5	1.3	1.7	1.4	1.2	1.8	2.2	3.2	5.6	2.6
1967	3.6	3.0	2.1	2.1	2.0	1.3	1.4	2.2	2.4	2.5	2.5	2.3
1968	3.3	3.7	2.8	2.9	1.6	1.5	1.6	2.3	1.6	2.8	2.9	3.3
1969	2.6	2.9	2.2	1.9	1.2	2.1	1.2	2.3	1.8	2.5	2.3	3.3
1970	2.4	3.5	2.0	2.2	2.1	1.3	1.7	1.5	2.7	2.6	3.6	3.4
1971	4.6	6.1	2.8	2.0	1.6	0.9	1.7	2.1	1.6	2.4	3.1	2.7
1972	3.4	3.0	3.1	1.6	1.1	1.4	1.2	1.2	1.8	3.1	2.2	3.0
1973	3.4	3.0	4.1	1.7	1.3	1.5	1.5	1.8	1.7	2.6	2.3	2.3
1974	3.1	3.6	2.3	1.8	1.3	1.0	1.2	1.5	2.3	2.2	2.6	2.8
1975	6.5	3.2	2.4	2.4	1.1	1.7	1.1	1.7	1.5	2.5	3.1	2.5
1976	2.3	3.9	2.6	1.7	2.4	1.4	1.3	1.6	2.2	2.8	2.4	3.7
1977	2.8	2.8	2.9	2.1	1.5	1.5	1.8	1.9	2.3	2.8	3.1	3.1
1978	6.1	2.1	1.9	2.1	1.5	1.7	1.1	1.6	1.6	2.2	2.9	2.9
1979	2.9	2.1	2.9	2.8	1.2	1.4	1.2	1.4	1.7	2.8	2.9	2.6
1980	3.3	2.7	2.5	1.4	1.1	1.2	0.8	1.4	2.3	2.5	2.6	4.1
1981	2.2	2.4	2.0	1.8	1.4	1.4	1.2	1.3	2.7	3.3	2.7	2.4
1982	3.5	2.7	3.4	3.3	1.1	1.0	1.4	1.5	2.0	2.5	2.7	2.7
1983	3.7	1.6	2.0	2.1	1.0	0.9	1.1	1.1	1.7	2.7	3.2	2.8
1984	2.8	4.0	3.3	1.9	1.9	1.6	1.1	1.6	2.1	2.5	2.9	3.0
1985	2.9	3.3	2.9	2.3	1.7	1.6	1.2	1.0	2.1	2.1	2.5	2.9
1986	4.3	2.1	3.0	1.6	1.8	1.1	1.5	1.7	1.6	2.1	3.4	3.2
1987	2.5	5.2	2.1	1.9	1.3	0.8	1.2	1.3	1.5	3.1	2.5	3.0

32 YR. STATISTICS FOR WIS STATION M44

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	225.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARL DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	6.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	240.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011121

STATION M45 44.10N 86.63W 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	
0.00-0.24	532	459	32								1023
0.25-0.49	59	728	361	33	3						1184
0.50-0.74	.	269	783	425	19						1496
0.75-0.99	.	2	210	412	64						688
1.00-1.24	.	.	106	403	203	3					715
1.25-1.49	.	.	4	106	191	11					312
1.50-1.74	.	.	.	71	129	43	1				244
1.75-1.99	.	.	.	4	67	49					120
2.00-2.24	.	.	.	.	44	71	6				121
2.25-2.49	.	.	.	.	9	35	8				52
2.50-2.74	.	.	.	.	5	20	16				41
2.75-2.99	.	.	.	.	.	13	7				20
3.00-3.24	.	.	.	.	.	10	16				26
3.25-3.49	.	.	.	.	.	.	6				6
3.50+	.	.	.	.	.	.	14	13			27
TOTAL	591	1458	1496	1454	734	255	74	13	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 5702.

STATION M45 44.10N 86.63W 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	
0.00-0.24	466	383	41	3	.	.	.	.	.	.	893
0.25-0.49	44	614	301	48	.	.	.	.	.	.	1007
0.50-0.74	.	241	634	350	16	1	.	.	.	.	1242
0.75-0.99	.	1	196	186	40	.	.	.	.	.	423
1.00-1.24	.	.	179	133	80	7	.	.	.	.	399
1.25-1.49	.	.	20	80	37	6	.	.	.	.	143
1.50-1.74	.	.	.	59	31	7	.	.	.	.	97
1.75-1.99	.	.	.	4	8	7	.	.	.	.	19
2.00-2.24	.	.	.	2	6	2	1	.	.	.	11
2.25-2.49	.	.	.	.	.	1	1	.	.	.	2
2.50-2.74	.	.	.	.	.	3	1	.	.	.	4
2.75-2.99	.	.	.	.	.	1	1	.	.	.	2
3.00-3.24	.	.	.	.	.	1	1	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	510	1239	1371	865	218	36	5	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 3983.

STATION M45 44.10N 86.63W 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	
0.00-0.24	597	475	64	11	.	.	.	.	.	.	1147
0.25-0.49	60	622	298	42	.	.	.	.	.	.	1022
0.50-0.74	.	290	404	206	12	.	.	.	.	.	912
0.75-0.99	.	1	199	37	29	4	.	.	.	.	270
1.00-1.24	.	.	356	8	8	2	.	.	.	.	374
1.25-1.49	.	.	41	101	7	3	.	.	.	.	152
1.50-1.74	.	.	.	66	3	3	1	.	.	.	73
1.75-1.99	.	.	.	16	.	5	1	.	.	.	22
2.00-2.24	.	.	.	2	2	3	2	.	.	.	9
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	657	1388	1362	489	62	20	4	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 3738.

STATION M45 44.10N 86.63W 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	
0.00-0.24	468	388	45	6	1	.	.	.	.	.	908
0.25-0.49	122	503	222	41	9	.	.	.	.	.	897
0.50-0.74	.	328	205	97	10	1	.	.	.	.	641
0.75-0.99	.	54	119	14	12	.	.	.	.	.	199
1.00-1.24	.	.	125	2	5	1	.	.	.	.	133
1.25-1.49	.	.	11	17	2	3	.	.	.	.	33
1.50-1.74	.	.	.	11	.	3	.	.	.	.	14
1.75-1.99	.	.	.	2	.	.	.	.	.	.	2
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	590	1273	727	190	39	8	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 2656.

STATION M45 44.10N 86.63W 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	
0.00-0.24	581	386	57	9	1	.	.	.	.	.	1034
0.25-0.49	139	479	168	48	2	.	.	.	.	.	836
0.50-0.74	.	345	27	53	8	1	.	.	.	.	434
0.75-0.99	.	111	32	5	3	1	.	.	.	.	152
1.00-1.24	.	.	22	3	1	.	.	.	.	.	26
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	720	1321	307	118	15	2	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.3 MEAN TP(SEC)= 3.0 NO. OF CASES= 2329.

STATION M45 44.10N 86.63W 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	
0.00-0.24	395	318	36	7	.	.	.	.	.	.	756
0.25-0.49	102	280	121	16	2	.	.	.	.	.	521
0.50-0.74	.	276	19	26	6	.	.	.	.	.	327
0.75-0.99	.	32	28	2	3	.	.	.	.	.	65
1.00-1.24	.	.	8	.	.	.	.	.	.	.	8
1.25-1.49	.	.	2	.	.	.	.	.	.	.	2
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	497	906	214	51	11	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.3 MEAN TP(SEC)= 2.9 NO. OF CASES= 1578.

STATION M45 44.10N 86.63W 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	
0.00-0.24	421	335	49	3	1	.	.	.	.	.	809
0.25-0.49	62	233	118	18	3	.	.	.	.	.	434
0.50-0.74	.	310	28	32	.	.	.	.	.	.	370
0.75-0.99	.	7	35	3	1	.	.	.	.	.	46
1.00-1.24	.	.	9	.	.	.	.	.	.	.	9
1.25-1.49	.	.	1	.	.	.	.	.	.	.	1
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	483	885	240	56	5	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 2.9 NO. OF CASES= 1566.

STATION M45 44.10N 86.63W 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	
0.00-0.24	476	360	86	16	1	.	.	.	.	.	939
0.25-0.49	147	546	190	62	4	.	.	.	.	.	949
0.50-0.74	.	669	47	39	4	.	.	.	.	.	759
0.75-0.99	.	31	84	16	17	2	.	.	.	.	150
1.00-1.24	.	.	35	2	7	1	.	.	.	.	45
1.25-1.49	.	.	2	.	1	2	.	.	.	.	5
1.50-1.74	.	.	.	1	.	1	.	.	.	.	2
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	623	1606	444	136	34	6	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 3.1 NO. OF CASES= 2671.

STATION M45 44.10N 86.63W 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	
0.00-0.24	693	1396	741	247	4	.	.	.	.	.	3081
0.25-0.49	177	1290	1790	1053	88	1	.	.	.	.	4399
0.50-0.74	.	797	1128	2174	395	14	.	.	.	.	4508
0.75-0.99	.	39	368	770	531	27	.	.	.	.	1735
1.00-1.24	.	.	256	357	629	79	.	.	.	.	1321
1.25-1.49	.	.	39	157	225	95	4	.	.	.	520
1.50-1.74	.	.	4	95	137	141	9	.	.	.	386
1.75-1.99	.	.	.	13	45	69	24	.	.	.	151
2.00-2.24	.	.	.	1	37	43	37	.	.	.	118
2.25-2.49	.	.	.	.	10	13	26	1	.	.	50
2.50-2.74	.	.	.	.	5	20	33	4	.	.	62
2.75-2.99	.	.	.	.	.	6	12	2	.	.	20
3.00-3.24	.	.	.	.	.	4	11	5	.	.	20
3.25-3.49	.	.	.	.	.	.	4	2	.	.	6
3.50+	.	.	.	.	.	.	6	8	2	.	16
TOTAL	870	3522	4326	4867	2106	512	166	22	2	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.4 NO. OF CASES= 15355.

STATION M45 44.10N 86.63W 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	
0.00-0.24	761	1405	347	88	9	.	.	.	.	.	2610
0.25-0.49	213	1984	1315	498	94	1	.	.	.	.	4105
0.50-0.74	.	796	1580	1578	426	43	1	.	.	.	4424
0.75-0.99	.	24	480	857	441	77	4	.	.	.	1883
1.00-1.24	.	.	385	743	819	180	7	.	.	.	2134
1.25-1.49	.	.	40	289	450	197	18	.	.	.	994
1.50-1.74	.	.	6	229	426	319	40	.	.	.	1020
1.75-1.99	.	.	.	16	195	197	50	.	.	.	458
2.00-2.24	.	.	.	6	178	225	101	1	.	.	511
2.25-2.49	.	.	.	.	52	99	89	1	.	.	241
2.50-2.74	.	.	.	.	14	127	99	5	.	.	245
2.75-2.99	.	.	.	.	1	47	44	2	.	.	94
3.00-3.24	.	.	.	.	1	47	52	19	.	.	119
3.25-3.49	.	.	.	.	.	1	38	9	1	.	49
3.50+	.	.	.	.	.	.	42	19	10	.	71
TOTAL	974	4209	4153	4304	3106	1560	585	56	11	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.6 NO. OF CASES= 17757.

STATION M45 44.10N 86.63W 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	
0.00-0.24	867	771	53	5	.	.	.	.	.	.	1696
0.25-0.49	151	1383	329	53	3	.	.	.	.	.	1919
0.50-0.74	.	668	1032	242	62	5	1	.	.	.	2010
0.75-0.99	.	25	472	352	75	20	1	.	.	.	945
1.00-1.24	.	.	294	513	181	36	3	.	.	.	1027
1.25-1.49	.	.	26	229	222	51	4	.	.	.	532
1.50-1.74	.	.	7	228	252	88	14	.	.	.	589
1.75-1.99	.	.	.	27	146	54	6	.	.	.	233
2.00-2.24	.	.	.	5	144	90	29	.	.	.	268
2.25-2.49	.	.	.	2	48	51	27	.	.	.	128
2.50-2.74	.	.	.	.	19	77	38	1	.	.	135
2.75-2.99	.	.	.	.	8	35	13	.	.	.	56
3.00-3.24	.	.	.	.	1	39	29	1	.	.	70
3.25-3.49	.	.	.	.	.	9	14	1	.	.	24
3.50+	.	.	.	.	.	1	37	13	3	.	54
TOTAL	1018	2847	2213	1656	1161	556	216	16	3	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.2 NO. OF CASES= 9086.

STATION M45 44.10N 86.63W 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	
0.00-0.24	681	478	25	2	.	.	.	.	.	.	1186
0.25-0.49	97	890	181	18	.	.	.	.	.	.	1186
0.50-0.74	.	411	832	136	10	1	.	.	.	.	1390
0.75-0.99	.	5	330	221	12	4	.	.	.	.	572
1.00-1.24	.	.	219	429	43	12	1	.	.	.	704
1.25-1.49	.	.	9	287	66	5	3	.	.	.	370
1.50-1.74	.	.	1	309	144	8	1	.	.	.	463
1.75-1.99	.	.	.	49	182	7	1	.	.	.	239
2.00-2.24	.	.	.	1	204	12	.	.	.	.	217
2.25-2.49	.	.	.	.	68	4	1	.	.	.	73
2.50-2.74	.	.	.	.	27	13	1	.	.	.	41
2.75-2.99	.	.	.	.	.	17	1	.	.	.	18
3.00-3.24	.	.	.	.	.	13	.	.	.	.	13
3.25-3.49	.	.	.	.	.	5	.	.	.	.	5
3.50+	.	.	.	.	.	1	2	.	.	.	3
TOTAL	778	1784	1597	1452	756	102	11	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 6079.

STATION M45 44.10N 86.63W 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	
0.00-0.24	556	478	20	1	.	.	.	.	.	.	1055
0.25-0.49	91	904	163	25	.	.	.	.	.	.	1183
0.50-0.74	.	358	798	172	12	1	1	.	.	.	1342
0.75-0.99	.	4	315	268	11	4	1	.	.	.	603
1.00-1.24	.	.	163	531	14	6	1	.	.	.	715
1.25-1.49	.	.	11	263	34	2	1	.	.	.	311
1.50-1.74	.	.	1	270	125	2	1	.	.	.	399
1.75-1.99	.	.	.	16	206	2	.	.	.	.	224
2.00-2.24	.	.	.	1	189	2	1	.	.	.	193
2.25-2.49	.	.	.	.	62	3	1	.	.	.	66
2.50-2.74	.	.	.	.	22	19	1	.	.	.	42
2.75-2.99	.	.	.	.	.	22	.	.	.	.	22
3.00-3.24	.	.	.	.	.	6	.	.	.	.	6
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	2	1	.	.	.	3
TOTAL	647	1744	1471	1547	675	71	9	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 4.0 NO. OF CASES= 5779.

STATION M45 44.10N 86.63W 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	
0.00-0.24	365	361	20	1	.	.	.	.	.	.	747
0.25-0.49	58	878	180	19	2	.	.	.	.	.	1137
0.50-0.74	.	346	755	198	7	1	.	.	.	.	1307
0.75-0.99	.	5	288	313	18	1	.	.	.	.	625
1.00-1.24	.	.	172	491	29	2	.	.	.	.	694
1.25-1.49	.	.	9	219	73	2	.	.	.	.	303
1.50-1.74	.	.	2	167	130	1	1	.	.	.	301
1.75-1.99	.	.	.	7	140	2	.	.	.	.	149
2.00-2.24	.	.	.	.	139	1	1	.	.	.	141
2.25-2.49	.	.	.	.	56	3	.	.	.	.	59
2.50-2.74	.	.	.	.	23	31	.	.	.	.	54
2.75-2.99	.	.	.	.	1	10	.	.	.	.	11
3.00-3.24	.	.	.	.	.	7	.	.	.	.	7
3.25-3.49	.	.	.	.	.	2	.	.	.	.	2
3.50+	.	.	.	.	.	1	2	.	.	.	3
TOTAL	423	1590	1426	1415	618	64	4	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 5196.

STATION M45 44.10N 86.63W 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	
0.00-0.24	358	293	24	1	.	1	.	.	.	.	676
0.25-0.49	42	590	216	13	.	.	.	.	.	.	862
0.50-0.74	.	199	752	306	8	.	.	.	.	.	1265
0.75-0.99	.	8	241	388	40	2	.	.	.	.	679
1.00-1.24	.	.	117	553	103	3	.	.	.	.	776
1.25-1.49	.	.	3	203	110	2	.	.	.	.	318
1.50-1.74	.	.	.	176	231	6	.	.	.	.	413
1.75-1.99	.	.	.	7	192	4	.	.	.	.	203
2.00-2.24	.	.	.	.	182	3	1	.	.	.	186
2.25-2.49	.	.	.	.	68	3	.	.	.	.	71
2.50-2.74	.	.	.	.	16	27	1	.	.	.	44
2.75-2.99	.	.	.	.	1	9	.	.	.	.	10
3.00-3.24	.	.	.	.	.	8	.	.	.	.	8
3.25-3.49	.	.	.	.	.	3	.	.	.	.	3
3.50+	.	.	.	.	.	.	5	.	.	.	5
TOTAL	400	1090	1353	1647	951	71	7	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.3 NO. OF CASES= 5178.

STATION M45 44.10N 86.63W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

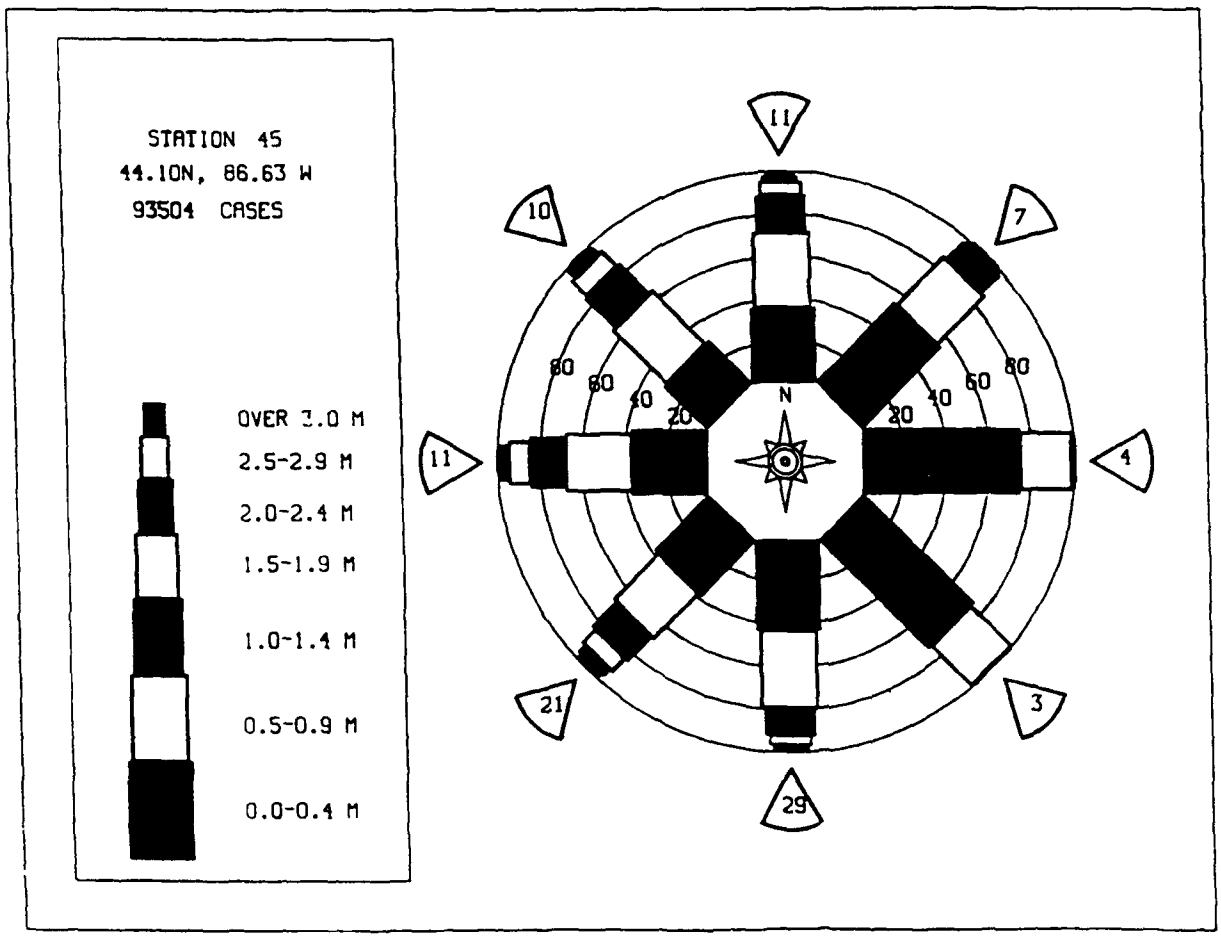
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	349	283	19	.	1	.	.	.	.	.	651
0.25-0.49	38	465	199	22	1	.	.	.	.	.	725
0.50-0.74	.	213	597	316	3	.	1	.	.	.	1130
0.75-0.99	.	3	185	362	54	.	.	.	.	.	604
1.00-1.24	.	.	120	429	209	3	.	.	.	.	761
1.25-1.49	.	.	18	135	175	7	.	.	.	.	335
1.50-1.74	.	.	2	122	193	56	.	.	.	.	373
1.75-1.99	.	.	.	7	116	54	1	.	.	.	178
2.00-2.24	.	.	.	.	82	58	1	.	.	.	141
2.25-2.49	.	.	.	.	51	31	8	.	.	.	90
2.50-2.74	.	.	.	.	11	58	6	.	.	.	75
2.75-2.99	.	.	.	.	1	23	4	.	.	.	28
3.00-3.24	.	.	.	.	.	13	8	.	.	.	21
3.25-3.49	.	.	.	.	.	3	7	.	.	.	10
3.50+	.	.	.	.	.	3	26	9	3	.	41
TOTAL	387	964	1140	1393	896	309	62	9	3	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.5 NO. OF CASES= 4851.

STATION M45 44.10N 86.63W 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	
0.00-0.24	857	857	166	40	1	.	.	.	.	.	1921
0.25-0.49	161	1239	616	201	21	.	.	.	.	.	2238
0.50-0.74	.	652	962	635	100	7	.	.	.	.	2356
0.75-0.99	.	35	359	421	135	14	.	.	.	.	964
1.00-1.24	.	.	257	460	233	33	1	.	.	.	984
1.25-1.49	.	.	24	209	159	39	3	.	.	.	434
1.50-1.74	.	.	2	181	180	68	7	.	.	.	438
1.75-1.99	.	.	.	17	130	45	8	.	.	.	200
2.00-2.24	.	.	.	1	121	51	18	.	.	.	191
2.25-2.49	.	.	.	.	42	24	16	.	.	.	82
2.50-2.74	.	.	.	.	14	39	19	1	.	.	73
2.75-2.99	.	.	.	.	1	18	8	.	.	.	27
3.00-3.24	.	.	.	.	.	15	11	2	.	.	28
3.25-3.49	.	.	.	.	.	2	7	1	.	.	10
3.50+	.	.	.	.	.	.	13	6	1	.	20
TOTAL	1018	2783	2386	2165	1137	355	111	10	1	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M45 (44.10N 86.63W)

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M45 (44.10N 86.63W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.9	3.0	2.8	1.8	1.3	1.3	1.1	1.7	1.7	2.2	3.0	2.6
1957	2.5	2.3	3.1	2.1	1.5	1.3	1.6	1.3	1.8	2.4	3.0	3.9
1958	3.2	2.3	1.2	2.2	2.3	1.6	1.7	1.8	2.3	2.6	4.0	2.6
1959	2.5	2.4	3.3	1.8	1.6	1.2	1.6	1.5	1.9	2.8	2.5	3.0
1960	3.4	3.1	2.7	1.9	1.3	1.3	1.2	2.0	1.5	2.4	4.5	3.7
1961	3.0	2.2	3.2	1.7	1.3	1.3	1.2	1.5	2.3	3.3	3.2	3.3
1962	4.0	2.8	1.9	2.5	1.9	1.4	1.7	1.7	2.0	2.7	3.8	3.8
1963	2.9	3.0	3.3	4.1	2.1	1.5	1.4	2.2	1.9	2.2	3.2	3.0
1964	4.3	4.3	3.6	4.4	2.7	2.0	1.2	2.0	4.5	2.9	3.5	2.8
1965	3.1	4.8	3.3	1.8	1.9	1.4	1.4	1.6	2.3	2.8	3.4	3.3
1966	3.1	3.0	3.2	1.9	1.7	1.8	1.4	1.7	2.3	4.0	5.2	2.7
1967	4.8	3.6	2.7	2.1	2.3	1.4	1.4	2.1	2.6	2.7	2.5	2.7
1968	3.2	3.5	3.1	3.2	2.1	1.8	1.6	2.6	1.8	2.8	2.8	4.4
1969	3.1	3.0	2.4	2.1	1.5	2.0	1.2	2.4	1.8	2.8	3.0	3.1
1970	2.7	3.5	2.3	2.7	2.2	1.5	1.7	1.6	2.5	3.1	3.8	4.3
1971	4.0	6.2	3.3	2.4	1.9	1.1	1.7	2.3	3.1	3.6	4.1	2.8
1972	4.7	2.7	3.0	1.8	1.2	1.4	1.3	1.4	2.6	3.2	2.3	3.4
1973	3.7	2.8	4.3	2.6	2.0	2.5	1.6	2.0	1.8	2.8	3.0	3.0
1974	4.2	3.7	3.3	2.7	1.6	1.7	1.5	1.7	3.0	3.0	2.5	3.0
1975	6.9	3.1	2.4	2.4	1.7	1.9	1.4	1.8	1.5	2.5	4.7	4.1
1976	3.7	4.0	4.6	2.3	2.7	2.0	1.6	2.4	2.6	2.9	2.5	4.1
1977	3.2	3.2	4.0	2.4	1.6	1.7	2.1	3.3	2.9	3.6	3.7	3.3
1978	6.0	2.2	2.8	2.1	2.3	2.1	1.4	1.8	2.1	2.8	3.5	3.4
1979	3.4	2.1	2.8	3.0	2.2	1.8	1.2	1.5	1.7	2.8	3.2	3.5
1980	4.2	3.3	2.7	1.5	1.3	1.2	0.8	1.1	1.8	2.9	2.3	4.3
1981	2.5	2.6	2.0	3.3	1.6	1.6	1.1	1.2	2.5	2.9	2.5	2.7
1982	4.2	3.2	3.7	3.5	1.2	0.9	1.4	1.6	1.9	3.1	3.1	3.2
1983	3.7	2.0	1.8	2.8	1.1	1.0	1.6	1.2	2.0	2.8	3.3	2.9
1984	3.1	3.8	3.3	2.7	2.0	2.5	1.1	1.4	2.7	3.1	2.7	3.6
1985	3.0	3.4	2.9	2.1	1.8	1.7	1.3	1.5	2.9	2.5	2.6	2.9
1986	4.2	2.2	3.8	1.9	2.1	1.2	2.1	1.8	1.6	2.1	3.5	3.3
1987	2.3	5.4	2.1	2.1	1.3	1.0	1.3	1.4	1.7	3.0	2.2	2.6

32 YR. STATISTICS FOR WIS STATION M45

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	4.1
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	6.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	210.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011118

STATION M46 43.95N 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	
0.00-0.24	556	472	42	1	.	.	.	.	.	.	1071
0.25-0.49	68	674	371	68	2	.	.	.	.	.	1183
0.50-0.74	.	293	747	532	22	.	.	.	.	.	1594
0.75-0.99	.	1	248	373	96	1	.	.	.	.	719
1.00-1.24	.	.	125	375	216	7	.	.	.	.	723
1.25-1.49	.	.	6	104	165	14	.	.	.	.	289
1.50-1.74	.	.	.	77	135	53	1	.	.	.	266
1.75-1.99	.	.	.	8	63	37	.	.	.	.	108
2.00-2.24	.	.	.	.	47	54	4	.	.	.	105
2.25-2.49	.	.	.	.	14	25	12	.	.	.	51
2.50-2.74	.	.	.	.	1	19	18	.	.	.	38
2.75-2.99	.	.	.	.	.	4	7	.	.	.	11
3.00-3.24	.	.	.	.	.	10	12	1	.	.	23
3.25-3.49	.	.	.	.	.	.	6	.	.	.	6
3.50+	.	.	.	.	.	.	18	11	1	.	30
TOTAL	624	1440	1539	1538	761	224	78	12	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 5832.

STATION M46 43.95N 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	
0.00-0.24	452	318	47	4	.	.	.	.	.	.	821
0.25-0.49	40	593	367	45	1	.	.	.	.	.	1046
0.50-0.74	.	325	420	371	22	.	.	.	.	.	1138
0.75-0.99	.	16	201	164	50	1	.	.	.	.	432
1.00-1.24	.	.	88	130	64	6	.	.	.	.	288
1.25-1.49	.	.	4	41	27	6	.	.	.	.	78
1.50-1.74	.	.	1	28	16	10	.	.	.	.	55
1.75-1.99	.	.	.	2	7	1	2	.	.	.	12
2.00-2.24	.	.	.	.	3	3	1	.	.	.	7
2.25-2.49	.	.	.	.	.	1	.	.	.	.	1
2.50-2.74	.	.	.	.	.	2	1	.	.	.	3
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	1	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	492	1252	1128	785	190	31	5	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 3644.

STATION M46 43.95N 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	
0.00-0.24	473	424	60	16	2	.	.	.	.	.	975
0.25-0.49	58	590	304	57	6	.	.	.	.	.	1015
0.50-0.74	.	438	179	225	14	1	.	.	.	.	857
0.75-0.99	.	23	300	49	31	2	.	.	.	.	405
1.00-1.24	.	.	70	108	41	8	.	.	.	.	227
1.25-1.49	.	.	17	19	7	9	.	.	.	.	52
1.50-1.74	.	.	2	14	2	12	2	.	.	.	32
1.75-1.99	.	.	.	3	1	3	2	.	.	.	9
2.00-2.24	.	.	.	.	.	1	1	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	531	1475	932	491	104	36	5	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 3357.

STATION M46 43.95N 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	
0.00-0.24	416	329	50	6	1	.	.	.	.	.	802
0.25-0.49	109	578	245	45	4	.	.	.	.	.	981
0.50-0.74	.	522	100	105	13	1	.	.	.	.	741
0.75-0.99	.	66	210	38	20	.	.	.	.	.	334
1.00-1.24	.	.	47	55	14	2	.	.	.	.	118
1.25-1.49	.	.	19	4	2	4	1	.	.	.	30
1.50-1.74	.	.	3	3	.	2	.	.	.	.	8
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	525	1495	674	256	54	9	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 2830.

STATION M46 43.95N 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	
0.00-0.24	642	407	55	10	.	.	.	.	.	.	1114
0.25-0.49	198	517	224	57	1	.	.	.	.	.	997
0.50-0.74	.	520	32	69	8	.	.	.	.	.	629
0.75-0.99	.	100	71	5	3	2	.	.	.	.	181
1.00-1.24	.	.	20	5	1	3	.	.	.	.	29
1.25-1.49	.	.	2	.	.	.	.	.	.	.	2
1.50-1.74	.	.	.	1	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	840	1544	404	147	13	5	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 3.0 NO. OF CASES= 2771.

STATION M46 43.95N 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	
0.00-0.24	428	297	36	4	.	.	.	.	.	.	765
0.25-0.49	103	381	139	38	1	.	.	.	.	.	662
0.50-0.74	.	319	24	41	6	1	.	.	.	.	391
0.75-0.99	.	19	48	.	2	1	.	.	.	.	70
1.00-1.24	.	.	18	.	1	.	.	.	.	.	19
1.25-1.49	.	.	2	.	.	.	.	.	.	.	2
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	531	1016	267	83	10	2	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 3.0 NO. OF CASES= 1792.

STATION M46 43.95N 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	
0.00-0.24	397	344	48	7	.	.	.	.	.	.	796
0.25-0.49	73	254	128	14	2	.	.	.	.	.	471
0.50-0.74	.	375	36	43	2	.	.	.	.	.	456
0.75-0.99	.	21	35	1	5	.	.	.	.	.	62
1.00-1.24	.	.	18	.	1	.	.	.	.	.	19
1.25-1.49	.	.	2	.	.	.	.	.	.	.	2
1.50-1.74	.	.	1	.	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	470	994	268	65	10	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 3.0 NO. OF CASES= 1697.

STATION M46 43.95N 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	
0.00-0.24	462	347	77	19	1	.	.	.	.	.	906
0.25-0.49	140	595	245	95	3	.	.	.	.	.	1078
0.50-0.74	.	786	47	85	6	.	.	.	.	.	924
0.75-0.99	.	64	86	38	25	.	.	.	.	.	213
1.00-1.24	.	.	48	3	7	1	.	.	.	.	59
1.25-1.49	.	.	9	1	6	1	.	.	.	.	17
1.50-1.74	.	.	.	2	.	2	.	.	.	.	4
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	602	1792	512	243	48	4	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 3001.

STATION M46 43.95N 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	
0.00-0.24	618	1143	628	180	1	.	.	.	.	.	2570
0.25-0.49	186	1269	1653	857	57	.	.	.	.	.	4022
0.50-0.74	.	790	1148	1876	270	2	.	.	.	.	4086
0.75-0.99	.	64	391	844	374	13	.	.	.	.	1686
1.00-1.24	.	.	318	408	571	28	.	.	.	.	1325
1.25-1.49	.	.	36	192	234	65	2	.	.	.	529
1.50-1.74	.	.	1	106	155	108	2	.	.	.	372
1.75-1.99	.	.	.	10	65	68	16	.	.	.	159
2.00-2.24	.	.	.	4	60	58	21	.	.	.	143
2.25-2.49	.	.	.	.	9	32	23	.	.	.	64
2.50-2.74	.	.	.	.	6	27	38	1	.	.	72
2.75-2.99	.	.	.	.	.	9	10	1	.	.	20
3.00-3.24	.	.	.	.	.	6	10	4	.	.	20
3.25-3.49	.	.	.	.	.	2	9	3	.	.	14
3.50+	.	.	.	.	.	.	8	9	4	.	21
TOTAL	804	3266	4175	4477	1802	418	139	18	4	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 14147.

STATION M46 43.95N 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	
0.00-0.24	633	1406	309	67	6	.	.	.	.	.	2421
0.25-0.49	201	1941	1259	470	69	1	.	.	.	.	3941
0.50-0.74	.	801	1675	1577	335	32	.	.	.	.	4420
0.75-0.99	.	40	509	986	416	51	.	.	.	.	2002
1.00-1.24	.	.	379	725	794	131	.	.	.	.	2029
1.25-1.49	.	.	35	336	469	155	9	.	.	.	1004
1.50-1.74	.	.	3	254	467	305	19	.	.	.	1048
1.75-1.99	.	.	.	32	186	217	33	.	.	.	468
2.00-2.24	.	.	.	6	220	227	86	.	.	.	539
2.25-2.49	.	.	.	.	57	106	72	.	.	.	235
2.50-2.74	.	.	.	.	14	147	91	4	.	.	256
2.75-2.99	.	.	.	.	1	71	49	3	.	.	124
3.00-3.24	.	.	.	.	1	55	71	11	.	.	138
3.25-3.49	.	.	.	.	.	7	44	13	1	.	65
3.50+	.	.	.	.	.	3	64	24	9	.	100
TOTAL	834	4188	4169	4453	3035	1508	538	55	10	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.6 NO. OF CASES= 17596.

STATION M46 43.95N 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	
0.00-0.24	706	671	38	5	.	.	.	.	.	.	1420
0.25-0.49	158	1317	288	43	3	.	.	.	.	.	1809
0.50-0.74	.	630	981	256	40	5	.	.	.	.	1912
0.75-0.99	.	23	414	298	87	13	2	.	.	.	837
1.00-1.24	.	.	313	451	201	37	2	.	.	.	1004
1.25-1.49	.	.	32	206	219	39	2	.	.	.	498
1.50-1.74	.	.	3	213	239	85	6	.	.	.	546
1.75-1.99	.	.	.	26	159	62	11	.	.	.	258
2.00-2.24	.	.	.	1	152	108	23	.	.	.	284
2.25-2.49	.	.	.	.	52	63	21	.	.	.	136
2.50-2.74	.	.	.	.	28	86	26	.	.	.	140
2.75-2.99	.	.	.	.	3	60	22	1	.	.	86
3.00-3.24	.	.	.	.	1	50	24	.	.	.	75
3.25-3.49	.	.	.	.	.	7	28	.	.	.	35
3.50+	.	.	.	.	.	8	55	10	6	.	79
TOTAL	864	2641	2069	1499	1184	623	222	11	6	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 8555.

STATION M46 43.95N 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	
0.00-0.24	611	422	13	1	.	.	.	.	.	.	1047
0.25-0.49	95	812	154	17	.	.	.	.	.	.	1078
0.50-0.74	.	393	715	109	4	.	.	.	.	.	1221
0.75-0.99	.	8	287	201	19	5	1	.	.	.	521
1.00-1.24	.	.	206	438	54	9	2	.	.	.	709
1.25-1.49	.	.	19	216	130	11	2	.	.	.	378
1.50-1.74	.	.	.	187	235	9	3	.	.	.	434
1.75-1.99	.	.	.	14	233	8	.	.	.	.	255
2.00-2.24	.	.	.	2	206	10	.	.	.	.	218
2.25-2.49	.	.	.	.	94	7	1	.	.	.	102
2.50-2.74	.	.	.	.	24	66	1	.	.	.	91
2.75-2.99	.	.	.	.	.	20	.	.	.	.	20
3.00-3.24	.	.	.	.	.	18	.	.	.	.	18
3.25-3.49	.	.	.	.	.	4	2	.	.	.	6
3.50+	.	.	.	.	.	3	6	.	.	.	9
TOTAL	706	1635	1394	1185	999	170	18	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 5727.

STATION M46 43.95N 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	
0.00-0.24	601	448	19	.	.	.	.	.	.	.	1068
0.25-0.49	87	883	149	26	.	.	.	.	.	.	1145
0.50-0.74	.	328	812	145	12	.	.	.	.	.	1297
0.75-0.99	.	9	220	263	12	4	.	.	.	.	608
1.00-1.24	.	.	160	572	29	1	.	.	.	.	762
1.25-1.49	.	.	12	227	111	.	1	.	.	.	351
1.50-1.74	.	.	.	194	250	1	.	.	.	.	445
1.75-1.99	.	.	.	18	202	1	.	.	.	.	221
2.00-2.24	.	.	.	.	264	5	1	.	.	.	270
2.25-2.49	.	.	.	.	102	10	.	.	.	.	112
2.50-2.74	.	.	.	.	27	54	1	.	.	.	82
2.75-2.99	.	.	.	.	.	26	.	.	.	.	26
3.00-3.24	.	.	.	.	.	23	.	.	.	.	23
3.25-3.49	.	.	.	.	.	6	1	.	.	.	7
3.50+	.	.	.	.	.	1	6	.	.	.	7
TOTAL	688	1668	1472	1445	1009	132	10	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 6024.

STATION M46 43.95N 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	
0.00-0.24	391	365	18	.	.	.	.	.	.	.	774
0.25-0.49	73	870	167	23	.	.	.	.	.	.	1133
0.50-0.74	.	313	793	204	9	.	.	.	.	.	1319
0.75-0.99	.	10	287	297	14	.	.	.	.	.	608
1.00-1.24	.	.	175	494	32	2	.	.	.	.	703
1.25-1.49	.	.	7	217	98	1	.	.	.	.	323
1.50-1.74	.	.	.	185	159	1	.	.	.	.	345
1.75-1.99	.	.	.	10	157	1	.	.	.	.	168
2.00-2.24	.	.	.	1	170	4	.	.	.	.	175
2.25-2.49	.	.	.	.	82	4	.	.	.	.	86
2.50-2.74	.	.	.	.	22	42	.	.	.	.	64
2.75-2.99	.	.	.	.	.	26	.	.	.	.	26
3.00-3.24	.	.	.	.	.	16	.	.	.	.	16
3.25-3.49	.	.	.	.	.	6	.	.	.	.	6
3.50+	.	.	.	.	.	.	3	.	.	.	3
TOTAL	464	1558	1447	1431	743	103	3	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 5390.

STATION M46 43.95N 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	
0.00-0.24	420	399	24	1	1	.	.	.	.	.	845
0.25-0.49	47	664	257	31	1	.	.	.	.	.	1000
0.50-0.74	.	248	691	320	11	1	.	.	.	.	1271
0.75-0.99	.	6	241	414	43	.	.	.	.	.	704
1.00-1.24	.	.	152	525	108	3	.	.	.	.	788
1.25-1.49	.	.	2	242	122	4	.	.	.	.	370
1.50-1.74	.	.	.	208	221	6	1	.	.	.	436
1.75-1.99	.	.	.	9	226	4	2	.	.	.	241
2.00-2.24	.	.	.	.	233	3	1	.	.	.	237
2.25-2.49	.	.	.	.	66	6	.	.	.	.	72
2.50-2.74	.	.	.	.	41	36	.	.	.	.	77
2.75-2.99	.	.	.	.	.	12	1	.	.	.	13
3.00-3.24	.	.	.	.	.	14	.	.	.	.	14
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	5	5	.	.	.	10
TOTAL	467	1317	1367	1750	1073	94	10	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.3 NO. OF CASES= 5702.

STATION M46 43.95N 86.65W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

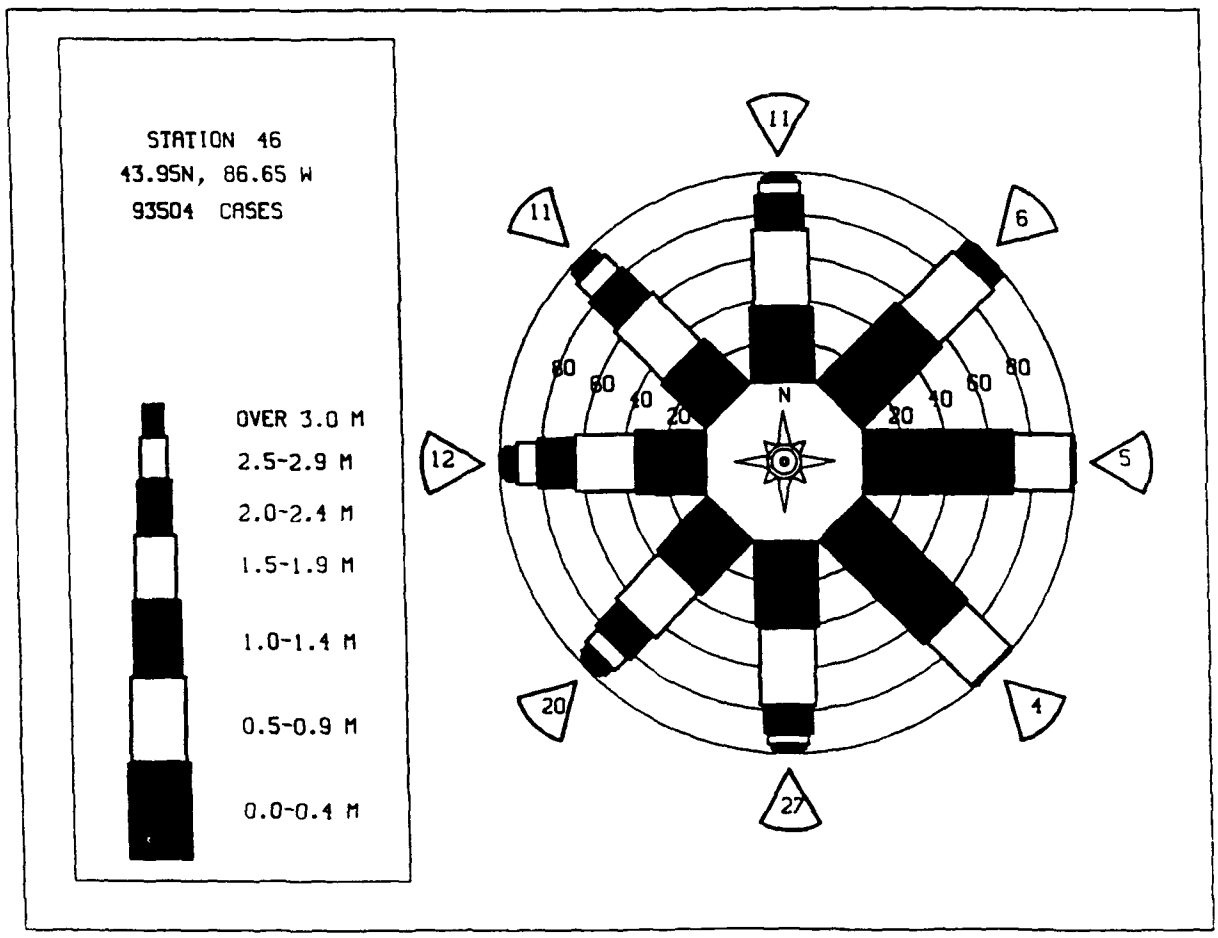
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	425	357	31	1	.	.	.	.	.	.	814
0.25-0.49	41	585	244	27	1	.	.	.	.	.	878
0.50-0.74	.	226	664	348	10	.	.	.	.	.	1248
0.75-0.99	.	4	210	381	75	.	.	.	.	.	670
1.00-1.24	.	1	115	423	223	3	.	.	.	.	765
1.25-1.49	.	.	9	158	190	13	.	.	.	.	370
1.50-1.74	.	.	.	144	189	53	1	.	.	.	387
1.75-1.99	.	.	.	7	145	55	.	.	.	.	207
2.00-2.24	.	.	.	.	103	59	5	.	.	.	167
2.25-2.49	.	.	.	.	48	27	8	.	.	.	83
2.50-2.74	.	.	.	.	21	48	9	.	.	.	78
2.75-2.99	.	.	.	.	1	33	6	.	.	.	40
3.00-3.24	.	.	.	.	.	14	16	.	.	.	30
3.25-3.49	.	.	.	.	.	3	4	1	.	.	8
3.50+	.	.	.	.	.	1	32	12	3	0	48
TOTAL	466	1153	1273	1489	1006	309	81	13	3		

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.5 NO. OF CASES= 5439.

STATION M46 43.95N 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	
0.00-0.24	823	815	150	32	1	.	.	.	.	.	1821
0.25-0.49	168	1251	620	192	15	.	.	.	.	.	2246
0.50-0.74	.	731	907	631	79	4	.	.	.	.	2352
0.75-0.99	.	48	386	435	127	9	.	.	.	.	1005
1.00-1.24	.	.	225	471	236	24	.	.	.	.	956
1.25-1.49	.	.	21	196	178	32	1	.	.	.	428
1.50-1.74	.	.	1	162	207	65	3	.	.	.	438
1.75-1.99	.	.	.	14	144	45	6	.	.	.	209
2.00-2.24	.	.	.	1	146	53	14	.	.	.	214
2.25-2.49	.	.	.	.	52	28	14	.	.	.	94
2.50-2.74	.	.	.	.	18	53	18	.	.	.	89
2.75-2.99	.	.	.	.	.	26	9	.	.	.	35
3.00-3.24	.	.	.	.	.	21	13	1	.	.	35
3.25-3.49	.	.	.	.	.	3	9	1	.	.	13
3.50+	.	.	.	.	.	2	19	6	2	0	29
TOTAL	991	2845	2310	2134	1203	365	106	8	2	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M46 (43.95N 86.65W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M46 (43.95N 86.65W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.9	3.0	2.7	1.8	1.4	1.3	1.1	1.8	1.7	2.2	3.3	2.7
1957	2.5	2.4	3.5	2.2	1.5	1.3	1.4	1.2	1.7	2.2	3.3	3.9
1958	3.5	2.5	1.3	2.3	2.2	1.7	1.6	1.9	2.1	3.0	3.5	2.7
1959	2.4	2.5	2.2	1.9	1.5	1.3	1.6	1.5	1.8	3.1	2.7	3.3
1960	3.6	3.3	2.5	2.2	1.3	1.4	1.2	1.8	1.5	2.5	4.8	3.5
1961	3.2	2.5	3.4	1.7	1.3	1.4	1.1	1.6	2.2	3.2	3.6	3.5
1962	4.3	2.9	2.0	2.4	2.0	1.5	1.7	1.7	2.2	2.7	4.0	3.9
1963	3.2	3.1	3.1	4.2	2.3	1.5	1.5	2.3	1.9	2.3	3.4	3.1
1964	4.7	4.2	3.8	4.5	2.8	2.1	1.4	2.1	4.6	3.2	3.4	3.0
1965	3.3	5.2	3.8	1.9	2.0	1.5	1.5	1.6	2.5	2.9	3.9	3.4
1966	3.2	3.2	3.2	2.0	2.0	1.9	1.4	1.6	2.4	4.2	5.4	2.9
1967	5.2	3.9	2.7	2.1	2.4	1.5	1.4	2.1	2.9	2.9	2.8	2.8
1968	3.1	3.8	3.2	3.2	1.9	2.1	1.5	2.5	1.8	2.8	2.9	4.5
1969	3.3	3.2	2.6	2.1	1.5	1.9	1.1	2.4	2.0	2.8	3.1	3.2
1970	3.0	3.5	2.5	2.7	2.3	1.6	1.8	1.7	2.8	3.2	4.2	4.4
1971	4.2	6.4	3.6	2.6	2.0	1.1	1.7	2.5	3.3	3.5	4.3	3.0
1972	5.0	3.0	3.2	1.9	1.2	1.4	1.4	1.5	2.7	3.3	2.4	3.7
1973	4.0	2.8	4.7	2.7	2.0	2.7	1.6	2.1	1.9	2.8	3.2	3.2
1974	4.3	3.8	3.3	2.8	1.6	1.9	1.5	1.7	2.8	3.1	2.6	3.2
1975	7.0	3.6	2.6	2.6	1.8	2.1	1.4	1.9	1.6	2.6	5.0	4.4
1976	3.9	4.4	4.7	2.4	2.9	2.0	1.7	2.6	2.7	3.0	2.7	4.5
1977	3.2	3.5	4.2	2.4	1.6	1.7	2.1	3.4	2.9	4.0	3.8	3.8
1978	6.4	2.4	3.0	2.2	2.4	2.2	1.5	2.0	2.0	3.0	3.7	3.6
1979	3.5	2.3	2.9	3.3	2.2	2.0	1.4	1.5	1.8	2.8	3.3	3.5
1980	4.4	3.3	2.9	1.6	1.3	1.3	0.9	1.1	1.7	2.7	2.5	4.2
1981	2.6	2.7	2.0	3.5	1.8	1.6	1.1	1.3	2.8	2.9	2.5	2.8
1982	4.5	3.2	3.8	3.5	1.3	0.9	1.4	1.7	1.9	3.0	3.1	3.3
1983	3.7	1.8	1.8	2.9	1.1	1.0	1.6	1.3	2.1	2.8	3.6	3.0
1984	3.4	3.9	3.3	2.9	2.0	2.4	1.2	1.4	2.7	3.0	2.8	3.5
1985	3.1	3.6	3.3	2.2	1.8	1.7	1.3	1.6	3.1	2.7	2.9	3.1
1986	4.4	2.5	4.2	1.9	2.3	1.3	2.2	1.8	1.7	2.0	3.7	3.3
1987	2.3	5.8	2.2	2.3	1.4	1.2	1.4	1.5	1.8	2.9	2.1	2.8

32 YR. STATISTICS FOR WIS STATION M46

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	4.1
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	211.0
DATE OF LARGEST HS OCCURRENCE IS (YR.MO.DA.HR)		75011118

STATION M47 43.82N 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	
0.00-0.24	658	494	58	4	1	.	.	.	.	.	1215
0.25-0.49	58	758	394	82	1	.	.	.	.	.	1293
0.50-0.74	.	331	764	579	28	1	.	.	.	.	1703
0.75-0.99	.	2	304	403	100	2	.	.	.	.	811
1.00-1.24	.	.	163	322	231	11	.	.	.	.	727
1.25-1.49	.	.	7	135	175	24	.	.	.	.	341
1.50-1.74	.	.	2	87	127	48	2	.	.	.	266
1.75-1.99	.	.	.	7	63	40	3	.	.	.	113
2.00-2.24	.	.	.	3	45	55	6	.	.	.	109
2.25-2.49	.	.	.	.	14	25	7	.	.	.	46
2.50-2.74	.	.	.	.	1	18	16	.	.	.	35
2.75-2.99	.	.	.	.	.	6	8	.	.	.	14
3.00-3.24	.	.	.	.	.	5	12	3	.	.	20
3.25-3.49	.	.	.	.	.	1	8	.	.	.	9
3.50+	.	.	.	.	.	.	14	13	6	.	33
TOTAL	716	1585	1692	1622	786	236	76	16	6	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.2 NO. OF CASES= 6322.

STATION M47 43.82N 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	
0.00-0.24	429	282	39	8	1	.	.	.	.	.	759
0.25-0.49	38	501	343	56	3	.	.	.	.	.	941
0.50-0.74	.	375	381	357	22	.	.	.	.	.	1135
0.75-0.99	.	19	170	181	72	1	.	.	.	.	443
1.00-1.24	.	.	74	83	63	7	.	.	.	.	227
1.25-1.49	.	.	24	22	21	11	.	.	.	.	78
1.50-1.74	.	.	2	18	18	5	.	.	.	.	43
1.75-1.99	.	.	.	.	6	3	1	.	.	.	10
2.00-2.24	.	.	.	1	2	5	.	.	.	.	8
2.25-2.49	.	.	.	.	1	1	.	.	.	.	2
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	1	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	467	1177	1033	726	209	33	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 3424.

STATION M47 43.82N 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	
0.00-0.24	411	336	45	5	.	.	.	.	.	.	797
0.25-0.49	47	536	286	62	5	.	.	.	.	.	936
0.50-0.74	.	534	174	236	23	1	.	.	.	.	968
0.75-0.99	.	34	191	91	44	3	.	.	.	.	363
1.00-1.24	.	.	56	47	43	10	.	.	.	.	156
1.25-1.49	.	.	25	6	6	9	2	.	.	.	48
1.50-1.74	.	.	3	3	.	8	4	.	.	.	18
1.75-1.99	.	.	.	1	1	1	.	.	.	.	3
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	458	1440	780	452	122	32	6	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.5 NO. OF CASES= 3091.

STATION M47 43.82N 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	
0.00-0.24	394	296	41	10	.	.	.	.	.	.	741
0.25-0.49	114	551	266	68	1	.	.	.	.	.	1000
0.50-0.74	.	634	74	132	13	.	.	.	.	.	873
0.75-0.99	.	63	161	56	23	.	.	.	.	.	303
1.00-1.24	.	.	75	19	11	4	.	.	.	.	109
1.25-1.49	.	.	26	1	1	4	.	.	.	.	32
1.50-1.74	.	.	3	3	.	.	.	.	.	.	6
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	508	1544	666	289	49	8	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 2876.

STATION M47 43.82N 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	
0.00-0.24	651	376	51	8	1	.	.	.	.	.	1087
0.25-0.49	238	659	273	59	3	.	.	.	.	.	1232
0.50-0.74	.	725	48	105	16	1	.	.	.	.	895
0.75-0.99	.	156	89	4	12	1	.	.	.	.	262
1.00-1.24	.	.	28	1	4	4	.	.	.	.	37
1.25-1.49	.	.	9	.	.	1	.	.	.	.	10
1.50-1.74	.	.	1	.	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	889	1916	499	177	36	7	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 3.0 NO. OF CASES= 3305.

STATION M47 43.82N 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	
0.00-0.24	445	281	41	5	.	.	.	.	.	.	772
0.25-0.49	128	409	149	37	4	.	.	.	.	.	727
0.50-0.74	.	455	31	60	6	1	.	.	.	.	553
0.75-0.99	.	21	63	3	4	1	.	.	.	.	92
1.00-1.24	.	.	25	.	1	.	.	.	.	.	26
1.25-1.49	.	.	7	.	.	.	.	.	.	.	7
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	573	1166	316	105	15	2	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 3.0 NO. OF CASES= 2044.

STATION M47 43.82N 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	
0.00-0.24	439	325	35	8	.	.	.	.	.	.	807
0.25-0.49	80	321	188	50	.	.	.	.	.	.	639
0.50-0.74	.	408	45	81	3	.	.	.	.	.	537
0.75-0.99	.	24	58	4	8	1	.	.	.	.	95
1.00-1.24	.	.	19	.	2	.	.	.	.	.	21
1.25-1.49	.	.	9	.	.	.	.	.	.	.	9
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	519	1078	354	143	13	1	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 3.1 NO. OF CASES= 1979.

STATION M47 43.82N 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	
0.00-0.24	439	300	93	14	.	.	.	.	.	.	846
0.25-0.49	144	605	284	122	6	.	.	.	.	.	1161
0.50-0.74	.	870	112	141	8	.	.	.	.	.	1131
0.75-0.99	.	103	157	121	33	.	.	.	.	.	414
1.00-1.24	.	.	59	21	32	1	.	.	.	.	113
1.25-1.49	.	.	18	2	9	1	.	.	.	.	30
1.50-1.74	.	.	5	2	10	3	.	.	.	.	20
1.75-1.99	.	.	.	.	1	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	583	1878	728	423	99	5	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 3486.

STATION M47 43.82N 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	
0.00-0.24	484	913	448	103	.	.	.	.	.	.	1948
0.25-0.49	151	1214	1479	632	25	.	.	.	.	.	3501
0.50-0.74	.	798	1174	1501	162	2	.	.	.	.	3637
0.75-0.99	.	63	483	802	237	10	.	.	.	.	1595
1.00-1.24	.	.	349	500	460	16	.	.	.	.	1325
1.25-1.49	.	.	37	226	258	38	1	.	.	.	560
1.50-1.74	.	.	9	171	183	89	1	.	.	.	453
1.75-1.99	.	.	.	14	103	59	5	.	.	.	181
2.00-2.24	.	.	.	1	81	69	20	.	.	.	171
2.25-2.49	.	.	.	.	28	29	13	.	.	.	70
2.50-2.74	.	.	.	.	9	29	36	.	.	.	74
2.75-2.99	.	.	.	.	.	17	14	2	.	.	33
3.00-3.24	.	.	.	.	.	11	22	1	.	.	34
3.25-3.49	.	.	.	.	.	1	9	.	.	.	10
3.50+	.	.	.	.	.	.	22	14	1	.	37
TOTAL	635	2988	3979	3950	1546	370	143	17	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 12771.

STATION M47 43.82N 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	
0.00-0.24	560	1211	286	42	1	.	.	.	.	.	2100
0.25-0.49	160	1975	1187	419	47	.	.	.	.	.	3788
0.50-0.74	.	795	1692	1464	259	12	.	.	.	.	4222
0.75-0.99	.	47	505	1010	356	32	.	.	.	.	1950
1.00-1.24	.	.	407	758	737	71	.	.	.	.	1973
1.25-1.49	.	.	52	352	444	97	2	.	.	.	947
1.50-1.74	.	.	4	302	488	243	7	.	.	.	1044
1.75-1.99	.	.	.	31	242	192	13	.	.	.	478
2.00-2.24	.	.	.	1	254	258	52	.	.	.	565
2.25-2.49	.	.	.	1	78	102	63	.	.	.	244
2.50-2.74	.	.	.	.	26	178	78	1	.	.	283
2.75-2.99	.	.	.	.	2	89	51	1	.	.	143
3.00-3.24	.	.	.	.	.	78	65	9	.	.	152
3.25-3.49	.	.	.	.	.	13	47	8	.	.	68
3.50+	.	.	.	.	.	.	111	37	7	.	155
TOTAL	720	4028	4133	4380	2934	1365	489	56	7	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.6 NO. OF CASES= 16962.

STATION M47 43.82N 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	
0.00-0.24	682	654	36	2	.	.	.	.	.	.	1374
0.25-0.49	179	1302	285	53	1	1	.	.	.	.	1821
0.50-0.74	.	623	967	281	27	5	.	.	.	.	1903
0.75-0.99	.	31	399	333	86	9	1	.	.	.	859
1.00-1.24	.	.	291	440	214	19	.	.	.	.	964
1.25-1.49	.	.	28	199	244	35	3	.	.	.	509
1.50-1.74	.	.	2	198	256	100	3	.	.	.	559
1.75-1.99	.	.	.	25	151	73	6	.	.	.	255
2.00-2.24	.	.	.	4	164	121	17	.	.	.	306
2.25-2.49	.	.	.	1	62	65	22	.	.	.	150
2.50-2.74	.	.	.	.	27	111	27	.	.	.	165
2.75-2.99	.	.	.	.	2	74	22	.	.	.	98
3.00-3.24	.	.	.	.	2	75	31	1	.	.	109
3.25-3.49	.	.	.	.	.	13	31	1	.	.	45
3.50+	.	.	.	.	.	2	75	9	6	.	92
TOTAL	861	2610	2008	1536	1236	703	238	11	6	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 8640.

STATION M47 43.82N 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	
0.00-0.24	530	329	12	.	.	.	.	.	.	.	871
0.25-0.49	96	783	118	17	.	.	.	.	.	.	1014
0.50-0.74	.	379	651	114	8	1	.	.	.	.	1153
0.75-0.99	.	7	272	156	13	3	.	.	.	.	451
1.00-1.24	.	.	205	438	44	6	.	.	.	.	693
1.25-1.49	.	.	13	212	129	6	1	.	.	.	361
1.50-1.74	.	.	.	175	242	14	2	.	.	.	433
1.75-1.99	.	.	.	13	249	3	.	.	.	.	265
2.00-2.24	.	.	.	2	238	11	2	.	.	.	253
2.25-2.49	.	.	.	.	97	6	.	.	.	.	103
2.50-2.74	.	.	.	.	29	65	1	.	.	.	95
2.75-2.99	.	.	.	.	1	37	.	.	.	.	38
3.00-3.24	.	.	.	.	.	18	.	.	.	.	18
3.25-3.49	.	.	.	.	.	11	1	.	.	.	12
3.50+	.	.	.	.	.	3	8	.	.	.	11
TOTAL	626	1498	1271	1127	1050	184	15	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.2 NO. OF CASES= 5417.

STATION M47 43.82N 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	
0.00-0.24	546	362	17	1	.	.	.	.	.	.	926
0.25-0.49	82	818	164	21	.	.	.	.	.	.	1085
0.50-0.74	.	319	688	118	13	1	.	.	.	.	1139
0.75-0.99	.	5	309	250	13	1	1	.	.	.	579
1.00-1.24	.	.	157	536	27	2	.	.	.	.	722
1.25-1.49	.	.	16	223	100	1	.	.	.	.	340
1.50-1.74	.	.	.	195	240	7	.	.	.	.	442
1.75-1.99	.	.	.	13	240	1	1	.	.	.	255
2.00-2.24	.	.	.	2	296	1	.	.	.	.	299
2.25-2.49	.	.	.	.	114	8	.	.	.	.	122
2.50-2.74	.	.	.	.	32	74	1	.	.	.	107
2.75-2.99	.	.	.	.	1	35	.	.	.	.	36
3.00-3.24	.	.	.	.	.	33	.	.	.	.	33
3.25-3.49	.	.	.	.	.	9	.	.	.	.	9
3.50+	.	.	.	.	.	4	11	.	.	.	15
TOTAL	628	1504	1351	1359	1076	177	14	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 5730.

STATION M47 43.82N 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	
0.00-0.24	363	334	19	.	1	.	.	.	.	.	717
0.25-0.49	84	890	140	20	.	.	.	.	.	.	1134
0.50-0.74	.	360	835	176	7	2	.	.	.	.	1380
0.75-0.99	.	11	299	321	16	2	.	.	.	.	649
1.00-1.24	.	.	171	522	43	2	.	.	.	.	738
1.25-1.49	.	.	7	234	115	4	.	.	.	.	360
1.50-1.74	.	.	.	203	216	1	.	.	.	.	420
1.75-1.99	.	.	.	5	196	2	.	.	.	.	203
2.00-2.24	.	.	.	.	223	6	.	.	.	.	229
2.25-2.49	.	.	.	.	106	17	.	.	.	.	123
2.50-2.74	.	.	.	.	22	74	.	.	.	.	96
2.75-2.99	.	.	.	.	2	36	.	.	.	.	38
3.00-3.24	.	.	.	.	.	33	.	.	.	.	33
3.25-3.49	.	.	.	.	.	4	1	.	.	.	5
3.50+	.	.	.	.	.	1	10	.	.	.	11
TOTAL	447	1595	1471	1481	947	184	11	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.2 NO. OF CASES= 5754.

STATION M47 43.82N 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	
0.00-0.24	411	318	14	.	.	.	.	.	.	.	743
0.25-0.49	60	669	221	28	.	.	.	.	.	.	978
0.50-0.74	.	330	683	253	10	.	.	.	.	.	1276
0.75-0.99	.	10	259	346	41	4	.	.	.	.	660
1.00-1.24	.	.	174	497	100	1	.	.	.	.	772
1.25-1.49	.	.	8	213	174	7	1	.	.	.	403
1.50-1.74	.	.	.	173	254	11	.	.	.	.	438
1.75-1.99	.	.	.	6	235	6	.	.	.	.	247
2.00-2.24	.	.	.	.	244	20	.	.	.	.	264
2.25-2.49	.	.	.	.	86	36	.	.	.	.	122
2.50-2.74	.	.	.	.	12	85	1	.	.	.	98
2.75-2.99	.	.	.	.	.	58	.	.	.	.	58
3.00-3.24	.	.	.	.	.	38	1	.	.	.	39
3.25-3.49	.	.	.	.	.	7	1	.	.	.	8
3.50+	.	.	.	.	.	.	23	1	1	0	25
TOTAL	471	1327	1359	1516	1156	273	27	1	1	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.4 NO. OF CASES= 5754.

STATION M47 43.82N 86.65W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

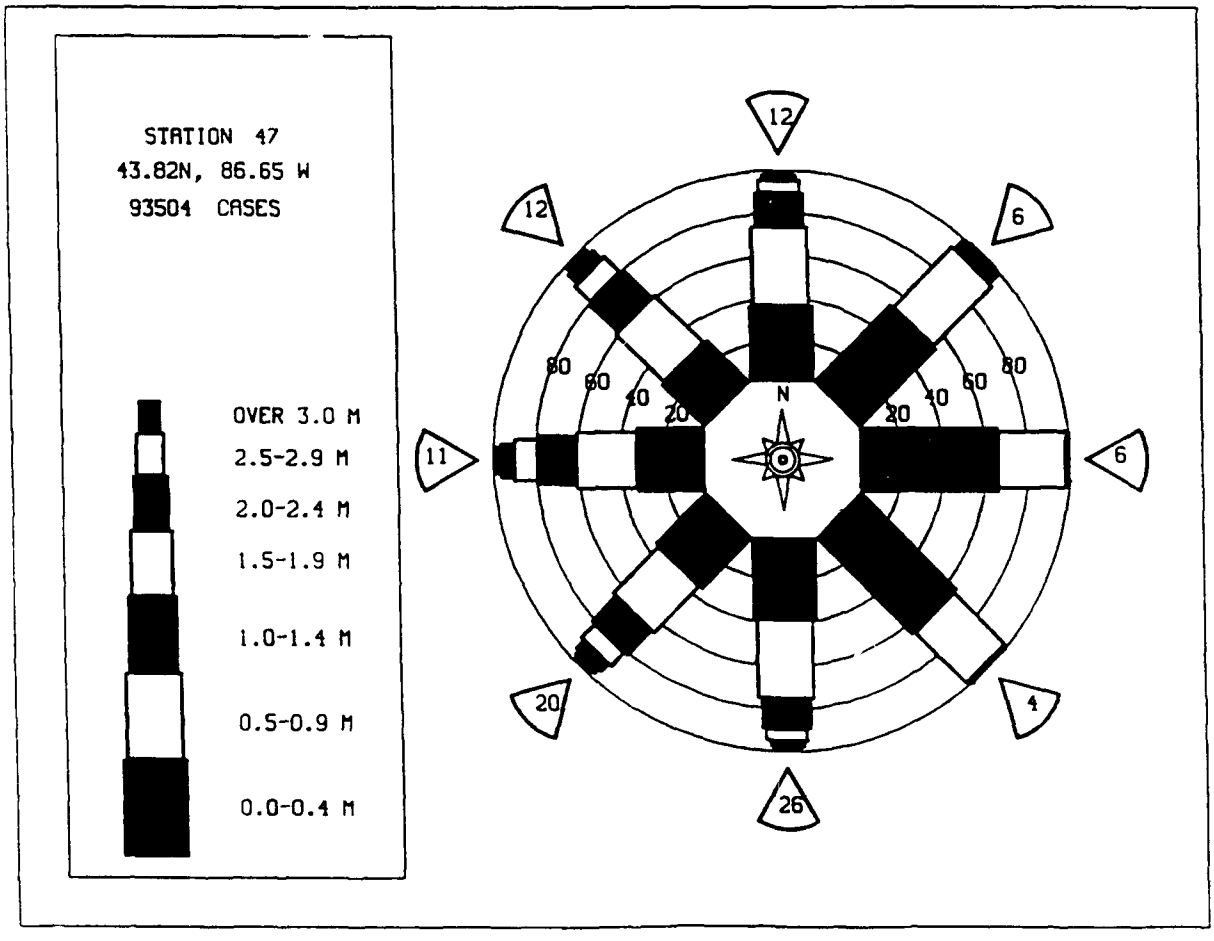
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	458	325	23	.	1	.	.	.	.	.	807
0.25-0.49	48	582	266	39	2	.	.	.	.	.	937
0.50-0.74	.	282	702	350	17	.	.	.	.	.	1351
0.75-0.99	.	2	262	11	86	.	.	.	.	.	761
1.00-1.24	.	1	140	443	214	4	.	.	.	.	802
1.25-1.49	.	.	14	195	220	25	.	.	.	.	454
1.50-1.74	.	.	.	127	244	47	.	.	.	.	418
1.75-1.99	.	.	.	11	177	32	1	.	.	.	221
2.00-2.24	.	.	.	1	141	70	9	.	.	.	221
2.25-2.49	.	.	.	1	50	42	9	.	.	.	102
2.50-2.74	.	.	.	.	10	75	16	1	.	.	102
2.75-2.99	.	.	.	.	1	41	8	.	.	.	50
3.00-3.24	.	.	.	.	.	31	13	.	.	.	44
3.25-3.49	.	.	.	.	.	9	10	1	.	.	20
3.50+	.	.	.	.	.	2	36	7	3	.	48
TOTAL	506	1192	1407	1578	1163	378	102	9	3	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.5 NO. OF CASES= 5949.

STATION M47 43.82N 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	
0.00-0.24	790	714	126	21	.	.	.	.	.	.	1651
0.25-0.49	171	1258	605	177	10	.	.	.	.	.	2221
0.50-0.74	.	822	904	595	63	2	.	.	.	.	2386
0.75-0.99	.	60	398	450	115	7	.	.	.	.	1030
1.00-1.24	.	.	240	463	223	16	.	.	.	.	942
1.25-1.49	.	.	30	202	190	26	1	.	.	.	449
1.50-1.74	.	.	3	166	228	58	2	.	.	.	457
1.75-1.99	.	.	.	13	166	41	3	.	.	.	223
2.00-2.24	.	.	.	1	169	62	10	.	.	.	242
2.25-2.49	.	.	.	.	64	33	11	.	.	.	108
2.50-2.74	.	.	.	.	17	71	17	.	.	.	105
2.75-2.99	.	.	.	.	.	39	10	.	.	.	49
3.00-3.24	.	.	.	.	.	32	14	1	.	.	47
3.25-3.49	.	.	.	.	.	7	11	1	.	.	19
3.50+	.	.	.	.	.	1	31	8	2	.	42
TOTAL	961	2854	2306	2088	1245	395	110	10	2	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.2 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M47 (43.82N 86.65W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.6	0.6	0.6	0.4	0.3	0.3	0.4	0.5	0.6	0.9	0.8	0.6
1957	1.0	0.7	0.6	0.5	0.5	0.3	0.3	0.3	0.4	0.5	0.9	1.1	0.6
1958	0.8	1.1	0.5	0.6	0.5	0.4	0.4	0.5	0.6	0.7	1.0	0.8	0.7
1959	0.9	0.8	0.7	0.6	0.5	0.3	0.3	0.4	0.6	0.6	0.9	0.8	0.6
1960	1.0	1.1	0.7	0.7	0.4	0.4	0.4	0.5	0.4	0.6	1.4	1.2	0.7
1961	1.0	0.7	0.9	0.6	0.5	0.5	0.4	0.4	0.8	0.9	0.9	1.0	0.7
1962	1.1	0.8	0.5	0.8	0.6	0.4	0.4	0.5	0.7	0.8	0.7	1.2	0.7
1963	1.0	1.1	0.9	0.8	0.6	0.4	0.4	0.6	0.6	0.8	1.3	1.0	0.8
1964	1.4	1.4	1.2	1.0	0.7	0.5	0.4	0.7	0.7	0.9	1.1	1.2	0.9
1965	1.4	1.7	0.9	0.6	0.6	0.4	0.4	0.5	0.7	1.1	1.2	1.3	0.9
1966	1.0	0.8	1.0	0.6	0.6	0.5	0.4	0.5	0.6	1.4	1.5	1.1	0.8
1967	1.5	1.4	0.9	0.8	0.6	0.4	0.4	0.5	0.6	1.0	1.2	1.1	0.9
1968	1.1	1.3	1.1	0.9	0.5	0.5	0.6	0.7	0.7	1.2	1.0	1.4	0.9
1969	1.1	0.8	0.9	0.7	0.5	0.6	0.3	0.6	0.7	1.0	1.0	1.1	0.8
1970	1.0	1.4	0.7	0.9	0.7	0.5	0.5	0.5	0.8	0.9	1.2	1.1	0.9
1971	1.4	1.4	1.0	0.8	0.6	0.4	0.6	0.6	0.7	0.8	1.2	1.0	0.9
1972	1.7	1.1	1.0	0.5	0.4	0.5	0.5	0.6	0.8	1.0	0.9	1.0	0.8
1973	1.5	1.0	1.0	0.8	0.6	0.5	0.5	0.7	0.7	0.8	1.1	1.1	0.9
1974	1.1	1.1	1.0	0.9	0.5	0.6	0.5	0.5	0.8	1.0	1.1	1.0	0.8
1975	1.4	1.1	0.9	0.7	0.4	0.5	0.5	0.5	0.7	1.0	1.1	1.1	0.8
1976	1.3	1.4	1.4	0.8	0.6	0.5	0.5	0.6	0.8	0.8	1.2	1.3	0.9
1977	1.3	1.3	1.0	0.7	0.4	0.5	0.7	0.8	0.8	1.1	1.2	1.2	0.9
1978	1.4	0.9	0.8	0.6	0.5	0.5	0.5	0.6	0.7	1.0	1.0	1.3	0.8
1979	1.1	0.9	0.8	0.6	0.6	0.6	0.4	0.6	0.7	1.0	1.1	1.2	0.8
1980	1.0	0.9	0.9	0.5	0.3	0.4	0.3	0.4	0.6	0.9	1.1	1.0	0.7
1981	0.7	1.0	0.8	0.8	0.4	0.5	0.3	0.4	0.7	0.9	0.8	0.9	0.7
1982	1.2	0.8	0.9	0.8	0.4	0.3	0.4	0.5	0.7	0.9	1.0	1.0	0.7
1983	0.8	0.6	0.6	0.5	0.4	0.3	0.4	0.4	0.7	0.7	1.1	1.1	0.6
1984	1.0	1.0	0.8	0.6	0.5	0.5	0.4	0.5	0.8	0.7	1.2	1.2	0.7
1985	1.2	1.1	1.0	0.7	0.5	0.4	0.4	0.4	0.8	0.7	0.8	1.2	0.8
1986	1.3	0.7	1.1	0.7	0.5	0.4	0.4	0.4	0.5	0.6	1.1	1.0	0.7
1987	0.9	0.8	0.6	0.5	0.4	0.3	0.4	0.5	0.4	0.7	0.8	0.9	0.6
MEAN	1.1	1.0	0.9	0.7	0.5	0.4	0.4	0.5	0.7	0.9	1.1	1.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M47 (43.82N 86.65W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.8	3.4	2.9	2.0	1.3	1.3	1.1	2.0	1.8	2.4	3.6	2.7
1957	2.7	2.7	3.9	2.5	1.6	1.3	1.4	1.5	1.7	2.1	3.6	4.1
1958	3.8	2.8	1.6	2.5	2.1	1.9	1.6	2.1	2.1	3.1	3.3	2.7
1959	2.4	2.6	3.1	2.0	1.6	1.3	1.5	1.6	1.8	3.1	2.6	3.6
1960	3.9	3.5	2.9	2.3	1.4	1.6	1.3	1.8	1.6	2.5	5.3	3.7
1961	3.4	2.7	3.6	1.8	1.5	1.4	1.1	1.6	2.5	3.6	3.8	3.8
1962	4.3	3.2	2.1	2.5	2.2	1.5	1.8	1.8	2.2	2.8	4.2	4.1
1963	3.3	3.6	3.3	4.1	2.5	1.7	1.6	2.5	1.9	2.6	3.6	3.3
1964	5.0	4.2	3.8	4.5	3.1	2.2	1.7	2.3	5.1	3.4	3.3	3.1
1965	3.6	5.6	3.9	2.1	2.0	1.6	1.6	1.6	2.6	3.1	4.2	3.6
1966	3.5	3.2	3.2	2.3	2.3	2.0	1.3	1.8	2.6	4.3	5.7	3.1
1967	5.5	4.3	3.2	2.1	2.6	1.5	1.5	2.1	3.1	3.1	3.2	2.9
1968	3.1	4.4	3.3	3.1	1.9	2.3	1.7	2.7	1.9	3.1	3.2	5.0
1969	3.4	3.4	2.6	2.3	1.6	2.0	1.1	2.3	2.0	3.0	3.2	3.3
1970	3.2	4.0	2.8	2.8	2.4	1.7	2.0	1.9	3.0	3.3	4.4	4.4
1971	5.0	6.5	3.8	2.8	2.2	1.2	1.8	2.5	3.5	3.6	4.5	3.3
1972	5.1	3.2	3.6	2.0	1.4	1.6	1.6	1.7	2.7	3.4	2.7	4.0
1973	4.4	3.2	5.1	2.8	2.2	2.8	1.6	2.3	1.9	2.8	3.4	3.4
1974	4.9	4.1	3.5	3.1	1.7	2.1	1.6	2.0	3.0	3.4	3.0	3.3
1975	7.2	3.9	2.6	2.8	1.9	2.2	1.6	2.1	1.8	2.8	5.0	4.7
1976	4.3	4.7	5.0	2.5	3.1	2.2	1.9	2.8	2.7	3.2	2.7	4.7
1977	3.7	3.6	4.4	2.6	1.6	1.7	2.3	3.6	3.0	4.2	3.9	4.1
1978	6.7	2.6	3.2	2.3	2.4	2.3	1.5	2.2	1.9	3.2	3.9	3.9
1979	3.5	2.4	3.2	3.6	2.2	2.0	1.4	1.6	2.0	3.0	3.4	3.8
1980	4.7	3.5	3.1	1.6	1.5	1.5	1.0	1.0	1.7	2.6	2.7	4.1
1981	2.7	2.6	2.0	3.7	1.9	1.6	1.1	1.4	3.0	3.3	2.5	3.3
1982	4.6	3.4	3.8	3.8	1.4	1.0	1.4	1.7	2.0	3.1	3.4	3.6
1983	3.9	1.8	2.0	3.0	1.1	1.0	1.6	1.2	2.2	2.8	3.8	3.3
1984	3.6	3.9	3.1	3.1	2.0	2.7	1.2	1.4	2.9	3.0	3.0	3.4
1985	3.4	3.9	3.6	2.5	1.8	1.7	1.4	1.7	3.2	2.9	2.9	3.4
1986	4.6	2.8	4.5	2.1	2.5	1.4	2.4	1.8	1.9	2.1	3.7	3.5
1987	2.4	6.2	2.5	2.6	1.4	1.3	1.5	1.6	2.0	2.9	2.4	3.1

32 YR. STATISTICS FOR WIS STATION M47

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	4.2
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	7.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	212.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011118

STATION M48 43.67N 86.67W 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	
0.00-0.24	891	511	43	6	.	.	.	.	.	.	1451
0.25-0.49	64	978	425	96	2	.	.	.	.	.	1565
0.50-0.74	.	528	872	627	47	.	.	.	.	.	2074
0.75-0.99	.	2	390	396	126	2	.	.	.	.	916
1.00-1.24	.	.	219	344	243	16	.	.	.	.	822
1.25-1.49	.	.	17	162	170	33	.	.	.	.	382
1.50-1.74	.	.	4	104	132	56	2	.	.	.	298
1.75-1.99	.	.	.	9	74	39	2	.	.	.	124
2.00-2.24	.	.	.	4	55	52	9	.	.	.	120
2.25-2.49	.	.	.	.	16	21	11	.	.	.	48
2.50-2.74	.	.	.	.	4	28	10	.	.	.	42
2.75-2.99	.	.	.	.	.	10	10	.	.	.	20
3.00-3.24	.	.	.	.	.	3	11	1	.	.	15
3.25-3.49	.	.	.	.	.	1	9	3	.	.	13
3.50+							14	9	7		30
TOTAL	955	2019	1970	1748	869	261	78	13	7	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.1 NO. OF CASES= 7429.

STATION M48 43.67N 86.67W 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	
0.00-0.24	319	188	18	2	.	.	.	.	.	.	527
0.25-0.49	39	476	239	50	.	.	.	.	.	.	804
0.50-0.74	.	390	332	344	27	.	.	.	.	.	1093
0.75-0.99	.	12	125	190	67	.	.	.	.	.	394
1.00-1.24	.	.	48	77	68	7	.	.	.	.	200
1.25-1.49	.	.	14	19	24	10	.	.	.	.	67
1.50-1.74	.	.	5	12	16	5	1	.	.	.	39
1.75-1.99	.	.	.	.	2	3	.	.	.	.	5
2.00-2.24	.	.	.	1	2	4	.	.	.	.	7
2.25-2.49	.	.	.	.	.	.	1	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	358	1066	781	695	206	29	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 2946.

STATION M48 43.67N 86.67W 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	
0.00-0.24	413	260	24	1	.	.	.	.	.	.	698
0.25-0.49	45	572	315	63	3	.	.	.	.	.	998
0.50-0.74	.	563	189	274	22	.	.	.	.	.	1048
0.75-0.99	.	33	147	91	67	3	.	.	.	.	341
1.00-1.24	.	.	65	36	44	10	.	.	.	.	155
1.25-1.49	.	.	22	1	6	11	3	.	.	.	43
1.50-1.74	.	.	3	3	1	5	4	.	.	.	16
1.75-1.99	.	.	.	.	1	1	.	.	.	.	2
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	458	1428	765	470	144	30	7	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 3101.

STATION M48 43.67N 86.67W 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	
0.00-0.24	403	217	34	5	.	.	.	.	.	.	659
0.25-0.49	111	576	243	56	3	.	.	.	.	.	989
0.50-0.74	.	695	108	145	17	2	.	.	.	.	967
0.75-0.99	.	74	152	55	23	2	.	.	.	.	306
1.00-1.24	.	.	97	16	18	4	.	.	.	.	135
1.25-1.49	.	.	35	.	.	2	.	.	.	.	37
1.50-1.74	.	.	2	5	.	.	.	.	.	.	7
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	514	1562	671	282	62	10	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.3 NO. OF CASES= 2908.

STATION M48 43.67N 86.67W 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	
0.00-0.24	614	339	43	11	.	.	.	.	.	.	1007
0.25-0.49	263	791	281	71	2	.	.	.	.	.	1408
0.50-0.74	.	894	73	146	17	1	.	.	.	.	1131
0.75-0.99	.	188	137	13	24	.	.	.	.	.	362
1.00-1.24	.	.	38	3	7	5	.	.	.	.	53
1.25-1.49	.	.	13	.	.	2	.	.	.	.	15
1.50-1.74	.	.	3	.	.	.	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	877	2212	588	244	50	8	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 3731.

STATION M48 43.67N 86.67W 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	
0.00-0.24	442	263	26	5	1	.	.	.	.	.	737
0.25-0.49	163	468	170	47	4	.	.	.	.	.	852
0.50-0.74	.	518	37	110	14	.	.	.	.	.	679
0.75-0.99	.	40	69	3	9	2	.	.	.	.	123
1.00-1.24	.	.	25	1	3	1	.	.	.	.	30
1.25-1.49	.	.	16	.	.	.	.	.	.	.	16
1.50-1.74	.	.	1	1	.	.	.	.	.	.	2
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	605	1289	344	167	31	3	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 2289.

STATION M48 43.67N 86.67W 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	
0.00-0.24	427	280	36	6	.	.	.	.	.	.	749
0.25-0.49	81	407	218	69	1	.	.	.	.	.	776
0.50-0.74	.	517	63	110	4	1	.	.	.	.	695
0.75-0.99	.	56	87	10	11	1	.	.	.	.	165
1.00-1.24	.	.	39	6	3	.	.	.	.	.	48
1.25-1.49	.	.	8	1	.	.	.	.	.	.	9
1.50-1.74	.	.	6	.	.	.	.	.	.	.	6
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	508	1260	457	203	19	2	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.2 NO. OF CASES= 2299.

STATION M48 43.67N 86.67W 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	
0.00-0.24	385	233	60	9	.	.	.	.	.	.	687
0.25-0.49	136	645	281	113	2	.	.	.	.	.	1177
0.50-0.74	.	761	186	179	4	.	.	.	.	.	1130
0.75-0.99	.	131	406	206	29	1	.	.	.	.	773
1.00-1.24	.	.	73	228	86	.	.	.	.	.	387
1.25-1.49	.	.	13	22	54	1	.	.	.	.	90
1.50-1.74	.	.	.	12	43	3	.	.	.	.	58
1.75-1.99	.	.	.	.	2	1	.	.	.	.	3
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	521	1770	1019	769	221	6	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 4040.

STATION M48 43.67N 86.67W 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	
0.00-0.24	426	640	263	39	.	.	.	.	.	.	1368
0.25-0.49	142	1209	1180	404	14	.	.	.	.	.	2949
0.50-0.74	.	709	1176	1180	100	.	.	.	.	.	3165
0.75-0.99	.	49	474	621	135	4	.	.	.	.	1283
1.00-1.24	.	.	402	578	335	8	.	.	.	.	1324
1.25-1.49	.	.	49	253	226	11	.	.	.	.	539
1.50-1.74	.	.	5	219	239	73	.	.	.	.	536
1.75-1.99	.	.	.	26	122	51	2	.	.	.	201
2.00-2.24	.	.	.	3	119	88	12	.	.	.	222
2.25-2.49	.	.	.	.	42	44	13	.	.	.	99
2.50-2.74	.	.	.	.	10	38	29	.	.	.	77
2.75-2.99	.	.	.	.	.	26	17	.	.	.	43
3.00-3.24	.	.	.	.	.	19	26	2	.	.	47
3.25-3.49	.	.	.	.	.	2	23	.	.	.	25
3.50+	.	.	.	.	.	.	32	16	1	.	49
TOTAL	568	2607	3549	3324	1342	364	154	18	1	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.3 NO. OF CASES= 11178.

STATION M48 43.67N 86.67W 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	
0.00-0.24	473	998	198	18	1	.	.	.	.	.	1688
0.25-0.49	159	1931	1026	322	23	.	.	.	.	.	3461
0.50-0.74	.	782	1714	1309	193	7	.	.	.	.	4005
0.75-0.99	.	37	503	963	238	14	.	.	.	.	1755
1.00-1.24	.	.	463	767	598	45	1	.	.	.	1874
1.25-1.49	.	.	41	356	451	50	.	.	.	.	898
1.50-1.74	.	.	.	327	476	172	3	.	.	.	978
1.75-1.99	.	.	.	39	298	155	5	.	.	.	497
2.00-2.24	.	.	.	3	290	257	33	.	.	.	583
2.25-2.49	.	.	.	.	95	127	42	.	.	.	264
2.50-2.74	.	.	.	.	27	210	62	.	.	.	299
2.75-2.99	.	.	.	.	4	102	35	1	.	.	142
3.00-3.24	.	.	.	.	.	113	59	6	.	.	178
3.25-3.49	.	.	.	.	.	21	65	.	.	.	86
3.50+	.	.	.	.	.	2	150	37	3	.	192
TOTAL	632	3748	3945	4104	2694	1275	455	44	3	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.6 NO. OF CASES= 15829.

STATION M48 43.67N 86.67W 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	
0.00-0.24	590	550	27	.	1	.	.	.	.	.	1168
0.25-0.49	157	1343	279	37	1	.	.	.	.	.	1817
0.50-0.74	.	664	1048	297	33	.	.	.	.	.	2042
0.75-0.99	.	32	417	392	68	6	.	.	.	.	915
1.00-1.24	.	.	309	449	218	9	.	.	.	.	985
1.25-1.49	.	.	34	232	254	23	2	.	.	.	545
1.50-1.74	.	.	.	197	294	67	2	.	.	.	560
1.75-1.99	.	.	.	26	183	63	3	.	.	.	275
2.00-2.24	.	.	.	4	195	117	12	.	.	.	328
2.25-2.49	.	.	.	.	80	78	10	.	.	.	168
2.50-2.74	.	.	.	.	29	151	16	.	.	.	196
2.75-2.99	.	.	.	.	3	82	17	.	.	.	102
3.00-3.24	.	.	.	.	.	89	27	.	.	.	116
3.25-3.49	.	.	.	.	.	14	37	.	.	.	51
3.50+	.	.	.	.	.	9	100	12	7	.	128
TOTAL	747	2589	2114	1634	1359	708	226	12	7	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.4 NO. OF CASES= 8807.

STATION M48 43.67N 86.67W 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	
0.00-0.24	505	269	8	.	.	.	.	.	.	.	782
0.25-0.49	90	821	122	19	.	.	.	.	.	.	1052
0.50-0.74	.	383	611	95	7	.	.	.	.	.	1096
0.75-0.99	.	6	279	180	12	.	.	.	.	.	477
1.00-1.24	.	.	201	423	47	8	.	.	.	.	679
1.25-1.49	.	.	21	206	118	4	.	.	.	.	349
1.50-1.74	.	.	1	226	213	9	.	.	.	.	449
1.75-1.99	.	.	.	16	228	4	.	.	.	.	248
2.00-2.24	.	.	.	2	274	25	.	.	.	.	301
2.25-2.49	.	.	.	.	102	13	1	.	.	.	116
2.50-2.74	.	.	.	.	38	62	.	.	.	.	100
2.75-2.99	.	.	.	.	2	45	1	.	.	.	48
3.00-3.24	.	.	.	.	.	28	1	.	.	.	29
3.25-3.49	.	.	.	.	.	8	2	.	.	.	10
3.50+	.	.	.	.	.	3	20	.	.	.	23
TOTAL	595	1479	1243	1167	1041	209	25	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.2 NO. OF CASES= 5406.

STATION M48 43.67N 86.67W 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	
0.00-0.24	468	268	10	.	.	.	.	.	.	.	746
0.25-0.49	100	818	148	21	.	.	.	.	.	.	1087
0.50-0.74	.	375	636	133	8	.	.	.	.	.	1152
0.75-0.99	.	6	316	250	14	1	.	.	.	.	587
1.00-1.24	.	.	151	480	31	1	.	.	.	.	663
1.25-1.49	.	.	23	240	96	3	.	.	.	.	362
1.50-1.74	.	.	2	185	217	9	.	.	.	.	413
1.75-1.99	.	.	.	17	259	2	.	.	.	.	278
2.00-2.24	.	.	.	3	301	4	.	.	.	.	308
2.25-2.49	.	.	.	.	131	4	.	.	.	.	135
2.50-2.74	.	.	.	.	29	83	1	.	.	.	113
2.75-2.99	.	.	.	.	1	45	.	.	.	.	46
3.00-3.24	.	.	.	.	.	36	.	.	.	.	36
3.25-3.49	.	.	.	.	.	9	.	.	.	.	9
3.50+	.	.	.	.	.	7	12	.	.	.	19
TOTAL	568	1467	1286	1329	1087	204	13	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.3 NO. OF CASES= 5585.

STATION M48 43.67N 86.67W 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	
0.00-0.24	359	249	16	.	.	.	.	.	.	.	624
0.25-0.49	88	942	146	25	.	.	.	.	.	.	1201
0.50-0.74	.	471	816	155	10	2	.	.	.	.	1454
0.75-0.99	.	8	297	316	20	.	.	.	.	.	641
1.00-1.24	.	.	189	542	38	.	.	.	.	.	769
1.25-1.49	.	.	14	250	136	1	.	.	.	.	401
1.50-1.74	.	.	.	238	224	.	.	.	.	.	462
1.75-1.99	.	.	.	11	245	2	.	.	.	.	258
2.00-2.24	.	.	.	.	281	5	.	.	.	.	286
2.25-2.49	.	.	.	.	143	19	.	.	.	.	162
2.50-2.74	.	.	.	.	29	82	.	.	.	.	111
2.75-2.99	.	.	.	.	1	45	.	.	.	.	46
3.00-3.24	.	.	.	.	.	45	.	.	.	.	45
3.25-3.49	.	.	.	.	.	3	3	.	.	.	6
3.50+	.	.	.	.	.	2	19	.	.	.	21
TOTAL	447	1670	1478	1537	1127	206	22	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 6082.

STATION M48 43.67N 86.67W 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	
0.00-0.24	333	199	9	.	.	.	.	.	.	.	541
0.25-0.49	70	676	180	18	1	.	.	.	.	.	945
0.50-0.74	.	432	739	232	11	.	.	.	.	.	1414
0.75-0.99	.	9	290	327	42	1	.	.	.	.	669
1.00-1.24	.	.	232	445	85	3	.	.	.	.	765
1.25-1.49	.	.	10	260	165	6	.	.	.	.	441
1.50-1.74	.	.	.	228	284	16	.	.	.	.	528
1.75-1.99	.	.	.	10	254	12	.	.	.	.	276
2.00-2.24	.	.	.	2	305	25	1	.	.	.	333
2.25-2.49	.	.	.	.	133	35	.	.	.	.	168
2.50-2.74	.	.	.	.	23	113	.	.	.	.	136
2.75-2.99	.	.	.	.	.	64	1	.	.	.	65
3.00-3.24	.	.	.	.	.	58	1	.	.	.	59
3.25-3.49	.	.	.	.	.	16	2	.	.	.	18
3.50+	.	.	.	.	.	3	29	.	.	.	32
TOTAL	403	1316	1460	1522	1303	352	34	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 5996.

STATION M48 43.67N 86.67W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

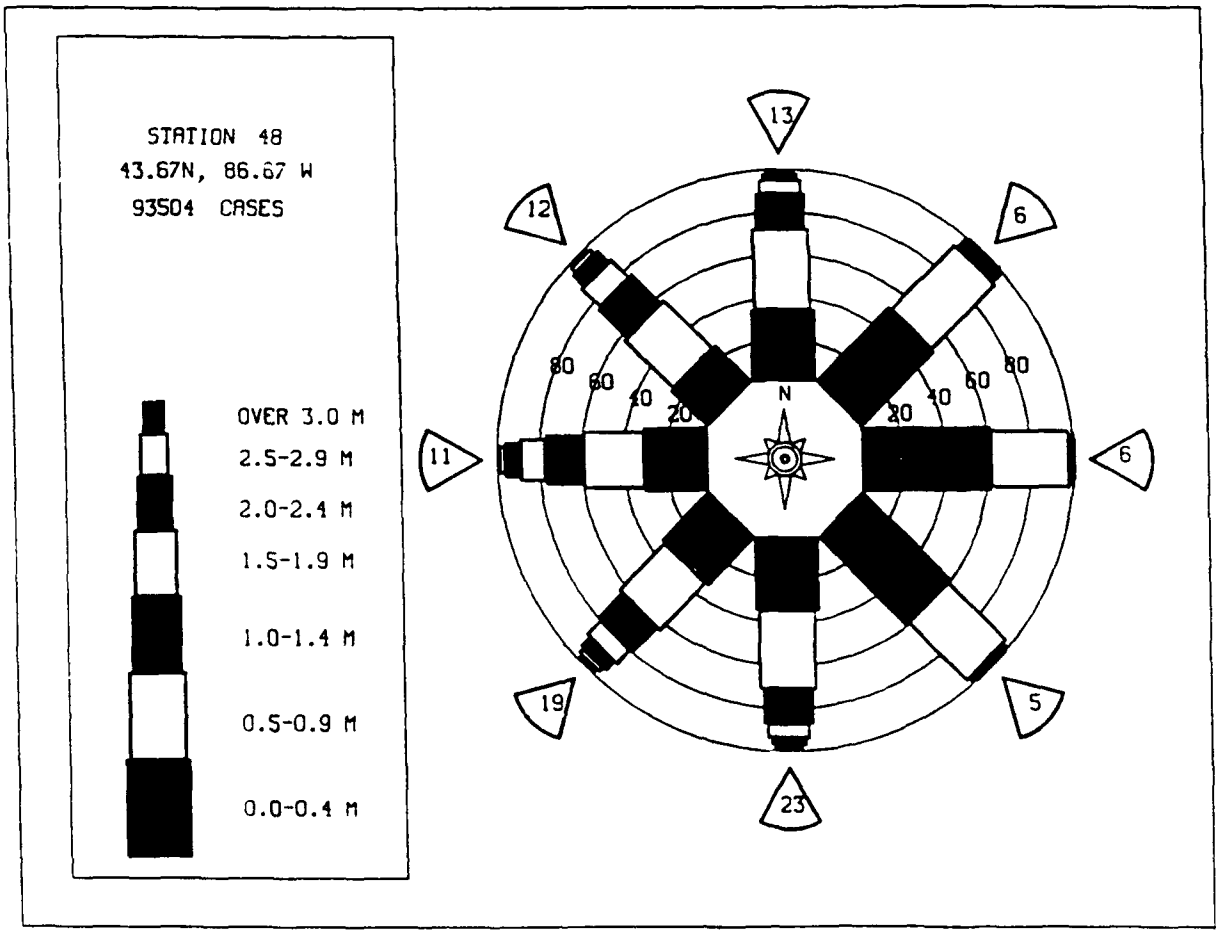
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	315	187	8	.	.	.	.	.	.	.	510
0.25-0.49	50	537	186	28	.	.	.	.	.	.	801
0.50-0.74	.	358	642	306	20	.	.	.	.	.	1326
0.75-0.99	.	6	293	397	73	.	.	.	.	.	769
1.00-1.24	.	.	211	478	199	6	.	.	.	.	894
1.25-1.49	.	.	24	216	216	22	.	.	.	.	478
1.50-1.74	.	.	1	186	279	41	.	.	.	.	507
1.75-1.99	.	.	.	7	208	35	2	.	.	.	252
2.00-2.24	.	.	.	1	192	70	9	.	.	.	272
2.25-2.49	.	.	.	.	59	55	11	.	.	.	125
2.50-2.74	.	.	.	.	9	84	19	.	.	.	112
2.75-2.99	.	.	.	.	2	44	7	1	.	.	54
3.00-3.24	.	.	.	.	.	49	8	2	.	.	59
3.25-3.49	.	.	.	.	.	16	13	.	.	.	29
3.50+	.	.	.	.	.	4	51	12	7	.	74
TOTAL	365	1088	1365	1619	1257	426	120	15	7	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.1 MEAN TP(SEC)= 4.7 NO. OF CASES= 5878.

STATION M48 43.67N 86.67W 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	
0.00-0.24	737	565	83	10	.	.	.	.	.	.	1395
0.25-0.49	176	1319	544	144	5	.	.	.	.	.	2188
0.50-0.74	.	904	924	564	54	1	.	.	.	.	2447
0.75-0.99	.	69	439	441	96	3	.	.	.	.	1048
1.00-1.24	.	.	276	488	203	12	.	.	.	.	979
1.25-1.49	.	.	36	222	192	18	.	.	.	.	468
1.50-1.74	.	.	3	194	242	46	1	.	.	.	486
1.75-1.99	.	.	.	16	188	37	1	.	.	.	242
2.00-2.24	.	.	.	2	202	65	7	.	.	.	276
2.25-2.49	.	.	.	.	80	39	9	.	.	.	128
2.50-2.74	.	.	.	.	20	85	13	.	.	.	118
2.75-2.99	.	.	.	.	1	46	8	.	.	.	55
3.00-3.24	.	.	.	.	.	44	13	1	.	.	58
3.25-3.49	.	.	.	.	.	9	15	.	.	.	24
3.50+	.	.	.	.	.	3	43	8	2	0	56
TOTAL	913	2857	2305	2081	1283	408	110	9	2	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.2 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M48 (43.67N 86.67W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M48 (43.67N 86.67W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.8	3.4	3.0	2.3	1.4	1.3	1.2	2.2	1.9	2.5	4.0	3.0
1957	3.0	2.8	4.2	2.5	1.9	1.4	1.5	1.6	1.7	2.1	3.6	4.4
1958	4.1	3.1	1.7	2.6	2.0	2.1	1.7	2.2	2.1	3.2	3.4	2.8
1959	2.4	2.7	3.3	2.1	1.7	1.4	1.6	1.8	1.8	3.1	2.9	3.7
1960	4.1	3.6	3.3	2.5	1.6	1.7	1.4	2.0	1.6	2.6	5.7	5.9
1961	3.6	3.1	3.7	1.9	1.6	1.4	1.2	1.8	2.7	3.8	3.9	4.0
1962	4.3	3.3	2.3	2.5	2.3	1.6	1.7	1.8	2.5	3.1	4.4	4.3
1963	3.5	3.8	3.7	4.1	2.7	1.7	1.8	2.8	2.1	2.9	3.9	3.4
1964	5.3	4.4	3.7	4.2	3.3	2.2	1.8	2.5	5.4	3.7	3.2	3.4
1965	3.9	6.0	4.3	2.2	2.2	1.6	1.6	1.6	2.7	3.1	4.4	3.7
1966	3.7	3.6	3.4	2.4	2.5	2.0	1.5	1.8	2.7	4.4	6.2	3.3
1967	5.7	4.2	3.6	2.2	2.9	1.6	1.6	2.0	3.3	3.4	3.6	3.2
1968	3.3	4.6	3.3	3.1	2.1	2.5	1.9	2.7	2.0	3.3	3.3	5.1
1969	3.5	3.6	2.7	2.4	1.7	2.3	1.1	2.3	2.0	2.9	3.3	3.3
1970	3.5	4.1	3.0	2.9	2.4	1.9	2.2	2.0	3.0	3.3	4.4	4.4
1971	5.2	6.6	4.2	3.1	2.2	1.3	2.0	2.6	3.8	3.8	4.7	3.5
1972	5.2	3.4	3.6	2.1	1.4	1.7	1.7	1.8	2.7	3.4	3.0	4.3
1973	4.5	3.2	5.6	3.2	2.3	3.0	1.7	2.6	2.0	2.9	3.5	3.6
1974	5.0	4.3	3.6	3.3	1.8	2.2	1.8	2.2	3.0	3.7	3.2	3.5
1975	7.3	4.1	2.6	2.8	2.0	2.3	1.7	2.3	2.0	3.1	5.1	4.7
1976	4.4	4.9	5.2	2.8	3.4	2.3	2.1	3.0	2.7	3.3	2.9	4.9
1977	3.7	3.7	4.5	2.9	1.7	1.7	2.5	3.9	3.1	4.3	4.0	4.3
1978	7.1	2.6	3.4	2.3	2.6	2.5	1.6	2.4	2.0	3.4	4.1	4.1
1979	3.6	2.7	3.3	3.8	2.3	2.1	1.5	1.7	2.1	3.3	3.5	4.1
1980	4.9	3.7	3.3	1.7	1.6	1.5	1.2	1.1	1.7	2.6	2.9	3.9
1981	3.0	2.6	2.3	3.8	1.9	1.7	1.1	1.5	3.1	3.3	2.6	3.7
1982	4.9	3.6	4.4	4.0	1.5	1.1	1.4	1.8	2.0	3.3	3.7	4.2
1983	3.9	1.7	2.2	3.2	1.2	1.1	1.6	1.4	2.4	2.8	3.7	3.5
1984	3.6	4.4	3.1	3.3	2.0	2.8	1.3	1.3	2.9	3.2	3.1	3.6
1985	3.5	4.2	3.8	2.6	1.9	1.8	1.5	1.9	3.5	3.1	3.0	3.6
1986	4.7	3.1	4.9	2.2	2.7	1.6	2.5	1.8	2.0	2.4	3.8	3.6
1987	2.7	6.4	2.6	2.8	1.4	1.5	1.6	1.8	2.1	3.3	2.6	3.5

32 YR. STATISTICS FOR WIS STATION M48

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	4.2
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
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)	214.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011118

STATION M49 43.53N 86.68W 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	
0.00-0.24	911	424	25	8	.	.	.	.	.	.	1368
0.25-0.49	43	1127	394	94	3	.	.	.	.	.	1661
0.50-0.74	.	664	1066	623	63	.	.	.	.	.	2416
0.75-0.99	.	1	467	436	134	3	.	.	.	.	1041
1.00-1.24	.	.	286	439	279	17	.	.	.	.	1021
1.25-1.49	.	.	21	201	178	35	.	.	.	.	435
1.50-1.74	.	.	2	170	158	65	2	.	.	.	397
1.75-1.99	.	.	.	19	95	43	1	.	.	.	158
2.00-2.24	.	.	.	5	59	60	10	.	.	.	134
2.25-2.49	.	.	.	.	22	26	16	.	.	.	64
2.50-2.74	.	.	.	.	9	29	12	.	.	.	50
2.75-2.99	.	.	.	.	.	14	9	.	.	.	23
3.00-3.24	.	.	.	.	.	11	9	1	.	.	21
3.25-3.49	.	.	.	.	.	2	8	.	.	.	10
3.50+	.	.	.	.	.	.	14	11	9	.	34
TOTAL	954	2216	2261	1995	1000	305	81	12	9	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.1 NO. OF CASES= 8282.

STATION M49 43.53N 86.68W 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	
0.00-0.24	264	148	14	3	.	.	.	.	.	.	429
0.25-0.49	31	498	227	37	.	.	.	.	.	.	793
0.50-0.74	.	370	351	326	36	.	.	.	.	.	1083
0.75-0.99	.	12	131	204	73	.	.	.	.	.	420
1.00-1.24	.	.	55	67	67	10	.	.	.	.	199
1.25-1.49	.	.	14	19	31	9	.	.	.	.	73
1.50-1.74	.	.	3	14	11	9	1	.	.	.	38
1.75-1.99	.	.	.	.	7	2	.	.	.	.	9
2.00-2.24	.	.	.	1	3	3	.	.	.	.	7
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	295	1028	795	671	228	33	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 2867.

STATION M49 43.53N 86.68W 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	
0.00-0.24	368	234	22	.	.	.	.	.	.	.	624
0.25-0.49	38	570	279	56	1	.	.	.	.	.	944
0.50-0.74	.	606	220	305	24	.	.	.	.	.	1155
0.75-0.99	.	36	109	94	71	4	.	.	.	.	314
1.00-1.24	.	.	69	26	49	8	.	.	.	.	152
1.25-1.49	.	.	22	5	6	12	3	.	.	.	48
1.50-1.74	.	.	.	5	4	4	3	.	.	.	16
1.75-1.99	.	.	.	.	1	1	.	.	.	.	2
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	406	1446	721	492	156	29	6	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 3056.

STATION M49 43.53N 86.68W 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	
0.00-0.24	387	178	20	1	.	.	.	.	.	.	586
0.25-0.49	117	639	224	59	3	.	.	.	.	.	1042
0.50-0.74	.	711	95	180	18	.	.	.	.	.	1004
0.75-0.99	.	74	174	56	25	3	.	.	.	.	332
1.00-1.24	.	.	105	22	25	6	.	.	.	.	158
1.25-1.49	.	.	38	1	1	1	1	.	.	.	42
1.50-1.74	.	.	2	8	.	.	.	.	.	.	10
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	1	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	504	1602	658	327	72	11	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 2980.

STATION M49 43.53N 86.68W 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	
0.00-0.24	533	275	29	6	.	.	.	.	.	.	843
0.25-0.49	260	922	289	82	.	.	.	.	.	.	1553
0.50-0.74	.	971	96	161	20	.	.	.	.	.	1248
0.75-0.99	.	293	176	21	27	1	.	.	.	.	518
1.00-1.24	.	.	69	4	14	4	.	.	.	.	91
1.25-1.49	.	.	14	.	.	2	.	.	.	.	16
1.50-1.74	.	.	7	.	.	.	.	.	.	.	7
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	793	2461	680	274	61	7	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 4010.

STATION M49 43.53N 86.68W 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	
0.00-0.24	422	227	25	4	.	.	.	.	.	.	678
0.25-0.49	160	572	180	55	5	.	.	.	.	.	972
0.50-0.74	.	494	112	134	14	1	.	.	.	.	755
0.75-0.99	.	97	102	9	20	2	.	.	.	.	230
1.00-1.24	.	.	82	3	3	1	.	.	.	.	89
1.25-1.49	.	.	11	9	.	.	.	.	.	.	20
1.50-1.74	.	.	2	14	.	.	.	.	.	.	16
1.75-1.99	.	.	.	2	.	.	.	.	.	.	2
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	582	1390	514	230	42	4	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.2 NO. OF CASES= 2594.

STATION M49 43.53N 86.68W 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	
0.00-0.24	426	232	28	8	.	.	.	.	.	.	694
0.25-0.49	72	507	245	64	1	.	.	.	.	.	889
0.50-0.74	.	471	259	156	14	.	.	.	.	.	900
0.75-0.99	.	75	183	14	14	.	.	.	.	.	286
1.00-1.24	.	.	245	13	4	.	.	.	.	.	262
1.25-1.49	.	.	35	48	1	.	.	.	.	.	84
1.50-1.74	.	.	.	48	3	.	.	.	.	.	51
1.75-1.99	.	.	.	11	4	.	.	.	.	.	15
2.00-2.24	.	.	.	2	2	1	.	.	.	.	5
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	498	1285	995	364	43	1	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 2994.

STATION M49 43.53N 86.68W 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	
0.00-0.24	262	204	32	7	.	.	.	.	.	.	505
0.25-0.49	110	664	259	74	1	.	.	.	.	.	1108
0.50-0.74	.	519	455	217	8	1	.	.	.	.	1200
0.75-0.99	.	88	303	157	21	2	.	.	.	.	571
1.00-1.24	.	.	448	156	33	1	.	.	.	.	638
1.25-1.49	.	.	83	157	40	.	.	.	.	.	280
1.50-1.74	.	.	.	106	99	2	.	.	.	.	207
1.75-1.99	.	.	.	21	33	2	.	.	.	.	56
2.00-2.24	.	.	.	2	9	.	.	.	.	.	11
2.25-2.49	.	.	.	.	1	3	.	.	.	.	4
2.50-2.74	.	.	.	.	.	.	1	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	372	1475	1580	897	245	11	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 4295.

STATION M49 43.53N 86.68W 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	
0.00-0.24	381	485	114	16	.	.	.	.	.	.	996
0.25-0.49	135	1150	929	214	4	.	.	.	.	.	2432
0.50-0.74	.	607	1210	691	56	.	.	.	.	.	2764
0.75-0.99	.	35	387	548	79	3	.	.	.	.	1052
1.00-1.24	.	.	411	442	243	3	.	.	.	.	1099
1.25-1.49	.	.	41	300	202	5	.	.	.	.	548
1.50-1.74	.	.	1	289	243	49	.	.	.	.	582
1.75-1.99	.	.	.	45	147	55	1	.	.	.	248
2.00-2.24	.	.	.	7	131	113	6	.	.	.	257
2.25-2.49	.	.	.	.	67	60	12	.	.	.	139
2.50-2.74	.	.	.	.	16	60	31	.	.	.	107
2.75-2.99	.	.	.	.	2	36	17	.	.	.	55
3.00-3.24	.	.	.	.	.	28	31	1	.	.	60
3.25-3.49	.	.	.	.	.	7	26	.	.	.	33
3.50+	.	.	.	.	.	1	60	13	.	.	74
TOTAL	516	2277	3093	2752	1190	420	184	14	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.4 NO. OF CASES= 9793.

STATION M49 43.53N 86.68W 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	
0.00-0.24	414	711	118	9	.	.	.	.	.	.	1252
0.25-0.49	139	1833	844	202	11	.	.	.	.	.	3029
0.50-0.74	.	767	1670	1020	135	1	.	.	.	.	3593
0.75-0.99	.	40	507	894	156	4	.	.	.	.	1601
1.00-1.24	.	.	450	803	458	22	.	.	.	.	1733
1.25-1.49	.	.	43	356	417	11	.	.	.	.	827
1.50-1.74	.	.	1	325	488	108	.	.	.	.	922
1.75-1.99	.	.	.	47	297	139	2	.	.	.	485
2.00-2.24	.	.	.	4	317	233	18	.	.	.	572
2.25-2.49	.	.	.	.	117	149	26	.	.	.	292
2.50-2.74	.	.	.	.	24	210	42	.	.	.	276
2.75-2.99	.	.	.	.	2	124	34	2	.	.	162
3.00-3.24	.	.	.	.	2	120	54	1	.	.	177
3.25-3.49	.	.	.	.	.	19	74	.	.	.	93
3.50+	.	.	.	.	.	6	192	33	.	.	231
TOTAL	553	3351	3633	3660	2424	1146	442	36	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 14277.

STATION M49 43.53N 86.68W 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	
0.00-0.24	484	444	17	1	.	.	.	.	.	.	946
0.25-0.49	146	1454	253	22	2	.	.	.	.	.	1877
0.50-0.74	.	681	1175	287	19	1	.	.	.	.	2163
0.75-0.99	.	25	423	411	67	2	.	.	.	.	928
1.00-1.24	.	.	331	493	194	4	.	.	.	.	1022
1.25-1.49	.	.	26	238	240	13	1	.	.	.	518
1.50-1.74	.	.	.	198	326	49	1	.	.	.	574
1.75-1.99	.	.	.	19	201	60	.	.	.	.	280
2.00-2.24	.	.	.	.	226	98	6	.	.	.	330
2.25-2.49	.	.	.	.	79	101	9	.	.	.	189
2.50-2.74	.	.	.	.	24	159	12	.	.	.	195
2.75-2.99	.	.	.	.	1	89	18	.	.	.	108
3.00-3.24	.	.	.	.	.	98	23	.	.	.	121
3.25-3.49	.	.	.	.	.	13	41	.	.	.	54
3.50+	.	.	.	.	.	4	110	16	7	.	137
TOTAL	630	2604	2225	1669	1379	691	221	16	7	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 4.4 NO. OF CASES= 8851.

STATION M49 43.53N 86.68W 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	
0.00-0.24	439	216	4	1	.	.	.	.	.	.	660
0.25-0.49	116	866	100	10	.	.	.	.	.	.	1092
0.50-0.74	.	428	634	102	6	.	.	.	.	.	1170
0.75-0.99	.	12	278	204	19	.	.	.	.	.	513
1.00-1.24	.	.	205	381	55	3	.	.	.	.	644
1.25-1.49	.	.	24	216	142	1	.	.	.	.	383
1.50-1.74	.	.	2	216	237	6	.	.	.	.	461
1.75-1.99	.	.	.	19	222	8	.	.	.	.	249
2.00-2.24	.	.	.	1	262	28	.	.	.	.	291
2.25-2.49	.	.	.	.	122	29	.	.	.	.	152
2.50-2.74	.	.	.	.	42	84	1	.	.	.	127
2.75-2.99	.	.	.	.	1	52	2	.	.	.	55
3.00-3.24	.	.	.	.	2	38	2	.	.	.	42
3.25-3.49	.	.	.	.	.	9	3	.	.	.	12
3.50+	.	.	.	.	.	3	33	1	.	.	37
TOTAL	555	1522	1247	1150	1110	261	72	1	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.3 NO. OF CASES= 5523.

STATION M49 43.53N 86.68W 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	
0.00-0.24	386	232	9	.	.	.	.	.	.	.	627
0.25-0.49	79	830	145	21	.	.	.	.	.	.	1075
0.50-0.74	.	423	672	118	12	.	.	.	.	.	1225
0.75-0.99	.	5	325	255	12	1	.	.	.	.	598
1.00-1.24	.	.	171	449	19	2	.	.	.	.	641
1.25-1.49	.	.	27	263	87	2	.	.	.	.	379
1.50-1.74	.	.	.	206	190	2	.	.	.	.	398
1.75-1.99	.	.	.	23	255	2	.	.	.	.	280
2.00-2.24	.	.	.	.	313	.	.	.	.	.	313
2.25-2.49	.	.	.	1	122	9	.	.	.	.	132
2.50-2.74	.	.	.	.	42	70	.	.	.	.	112
2.75-2.99	.	.	.	.	.	52	.	.	.	.	52
3.00-3.24	.	.	.	.	.	41	.	.	.	.	41
3.25-3.49	.	.	.	.	.	13	1	.	.	.	14
3.50+	.	.	.	.	.	3	13	.	.	.	16
TOTAL	465	1490	1349	1336	1052	197	14	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.3 NO. OF CASES= 5537.

STATION M49 43.53N 86.68W 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	
0.00-0.24	349	176	6	1	.	.	.	.	.	.	532
0.25-0.49	96	987	147	18	.	.	.	.	.	.	1248
0.50-0.74	.	527	813	159	7	1	.	.	.	.	1507
0.75-0.99	.	11	361	310	29	.	.	.	.	.	711
1.00-1.24	.	.	229	548	51	1	.	.	.	.	829
1.25-1.49	.	.	11	252	126	4	.	.	.	.	393
1.50-1.74	.	.	.	249	245	.	.	.	.	.	494
1.75-1.99	.	.	.	21	278	.	.	.	.	.	301
2.00-2.24	.	.	.	.	315	10	.	.	.	.	325
2.25-2.49	.	.	.	.	140	23	.	.	.	.	163
2.50-2.74	.	.	.	.	49	111	.	.	.	.	160
2.75-2.99	.	.	.	.	1	52	.	.	.	.	53
3.00-3.24	.	.	.	.	.	49	.	.	.	.	49
3.25-3.49	.	.	.	.	.	17	3	.	.	.	20
3.50+	.	.	.	.	.	2	24	.	.	.	26
TOTAL	445	1701	1567	1558	1241	272	27	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.4 NO. OF CASES= 6384.

STATION M49 43.53N 86.68W 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	
0.00-0.24	264	141	7	1	.	.	.	.	.	.	413
0.25-0.49	64	668	155	19	.	.	.	.	.	.	906
0.50-0.74	.	522	782	193	11	.	.	.	.	.	1508
0.75-0.99	.	10	363	339	43	2	.	.	.	.	757
1.00-1.24	.	.	270	481	109	4	.	.	.	.	864
1.25-1.49	.	.	16	278	161	5	.	.	.	.	460
1.50-1.74	.	.	2	239	343	12	.	.	.	.	596
1.75-1.99	.	.	.	9	276	20	1	.	.	.	306
2.00-2.24	.	.	.	.	373	25	.	.	.	.	398
2.25-2.49	.	.	.	.	191	50	1	.	.	.	242
2.50-2.74	.	.	.	.	31	145	1	.	.	.	177
2.75-2.99	.	.	.	.	.	65	1	.	.	.	66
3.00-3.24	.	.	.	.	.	93	1	.	.	.	94
3.25-3.49	.	.	.	.	.	20	4	.	.	.	24
3.50+	.	.	.	.	.	1	43	2	.	.	46
TOTAL	328	1341	1595	1559	1538	442	52	2	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.6 NO. OF CASES= 6428.

STATION M49 43.53N 86.68W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

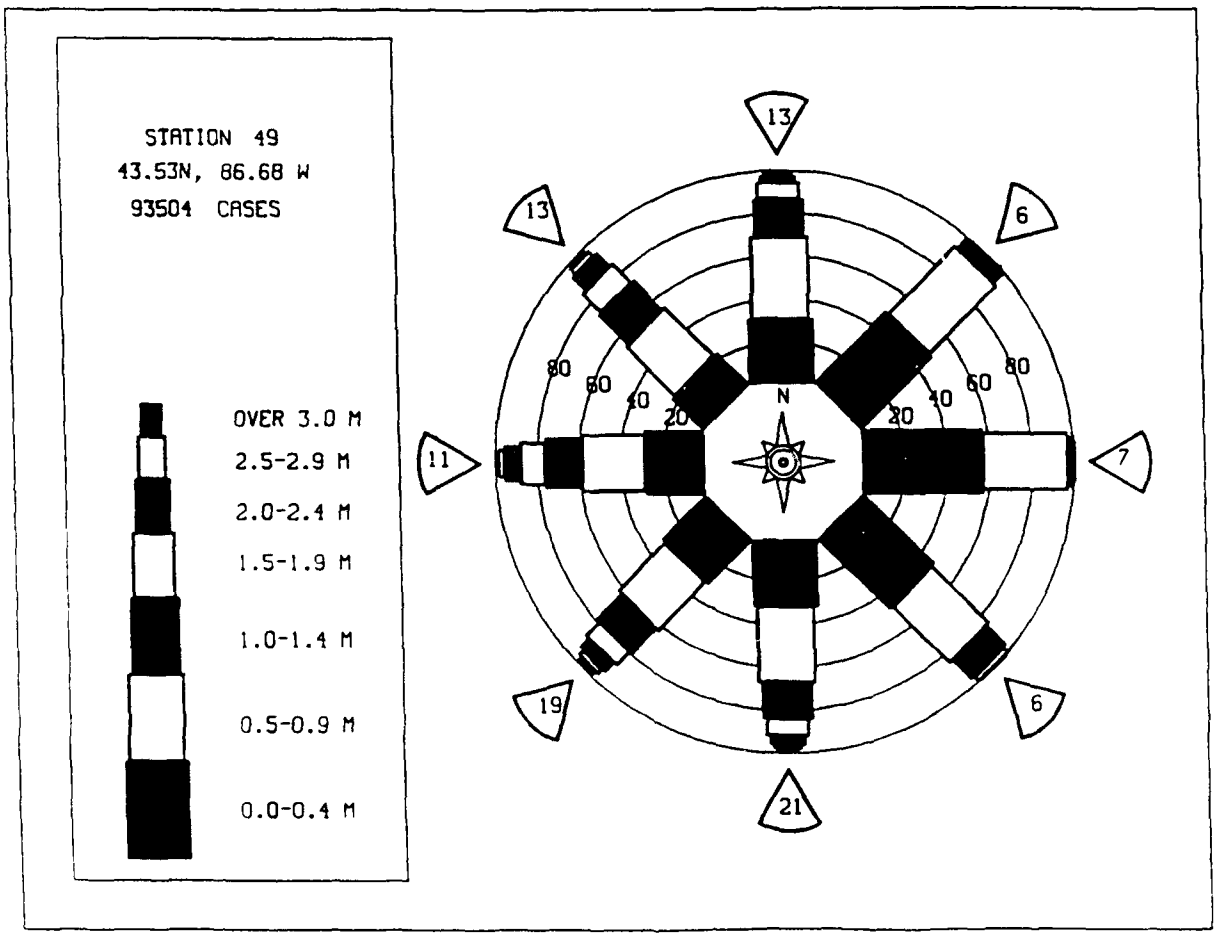
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	253	118	3	.	.	.	.	.	.	.	374
0.25-0.49	57	503	120	12	.	.	.	.	.	.	692
0.50-0.74	.	864	561	239	7	.	.	.	.	.	1171
0.75-0.99	.	6	291	348	63	1	.	.	.	.	709
1.00-1.24	.	.	205	489	188	9	.	.	.	.	891
1.25-1.49	.	.	18	229	222	14	.	.	.	.	483
1.50-1.74	.	.	.	196	321	48	.	.	.	.	565
1.75-1.99	.	.	.	24	206	39	1	.	.	.	270
2.00-2.24	.	.	.	1	210	72	8	.	.	.	291
2.25-2.49	.	.	.	.	96	55	12	.	.	.	163
2.50-2.74	.	.	.	.	23	90	17	.	.	.	130
2.75-2.99	.	.	.	.	1	51	16	.	.	.	68
3.00-3.24	.	.	.	.	1	55	14	1	.	.	71
3.25-3.49	.	.	.	.	.	13	9	1	.	.	23
3.50+	.	.	.	.	.	7	68	12	8	.	95
TOTAL	310	991	1198	1538	1338	454	145	14	8	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.8 NO. OF CASES= 5633.

STATION M49 43.53N 86.68W 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	
0.00-0.24	655	445	48	6	.	.	.	.	.	.	1154
0.25-0.49	167	1379	479	104	3	.	.	.	.	.	2132
0.50-0.74	.	913	1017	511	45	.	.	.	.	.	2486
0.75-0.99	.	82	458	430	86	2	.	.	.	.	1058
1.00-1.24	.	.	363	482	179	9	.	.	.	.	1033
1.25-1.49	.	.	45	257	185	11	.	.	.	.	498
1.50-1.74	.	.	2	229	267	35	.	.	.	.	533
1.75-1.99	.	.	.	26	202	37	.	.	.	.	265
2.00-2.24	.	.	.	2	222	64	5	.	.	.	293
2.25-2.49	.	.	.	.	96	51	8	.	.	.	155
2.50-2.74	.	.	.	.	26	96	11	.	.	.	133
2.75-2.99	.	.	.	.	.	53	9	.	.	.	62
3.00-3.24	.	.	.	.	.	53	13	.	.	.	66
3.25-3.49	.	.	.	.	.	11	17	.	.	.	28
3.50+	.	.	.	.	.	2	56	9	2	.	69
TOTAL	822	2819	2412	2047	1311	424	119	9	2	0	

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.5 MEAN TP(SEC)= 4.2 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M49 (43.53N 86.68W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M49 (43.53N 86.68W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.8	3.5	3.2	2.5	1.5	1.5	1.3	2.4	2.1	2.5	4.3	3.1
1957	3.2	2.9	4.3	2.6	2.2	1.5	1.5	1.7	1.9	2.1	3.7	4.4
1958	4.2	3.3	1.8	2.7	2.0	2.2	1.8	2.4	2.2	3.3	3.6	2.8
1959	2.5	2.9	3.7	2.2	1.7	1.5	1.6	2.0	2.0	3.1	3.0	3.8
1960	4.2	3.7	3.5	2.7	1.8	1.9	1.6	2.3	1.6	2.6	5.6	4.0
1961	3.7	3.2	3.8	2.0	1.8	1.4	1.4	1.9	2.8	3.7	4.1	4.1
1962	4.0	3.3	2.4	2.6	2.3	1.6	1.8	1.9	2.5	3.4	4.5	4.6
1963	3.5	4.0	4.0	4.1	2.8	1.7	2.0	3.1	2.1	3.2	4.1	3.6
1964	5.5	4.5	3.8	4.4	3.4	2.2	1.9	2.6	5.6	3.9	3.2	3.6
1965	4.3	6.6	4.6	2.3	2.3	1.8	1.8	1.8	2.9	3.2	4.5	3.7
1966	3.9	3.9	3.8	2.5	2.7	2.3	1.5	2.0	2.7	4.3	6.6	3.6
1967	5.7	4.2	3.8	2.3	2.9	1.7	1.6	2.0	3.5	3.6	3.8	3.5
1968	3.4	4.7	3.3	3.1	2.1	2.6	2.0	2.8	2.1	3.5	3.4	5.0
1969	3.6	3.7	2.8	2.5	1.8	2.5	1.1	2.3	2.2	2.9	3.6	3.5
1970	3.7	4.2	3.1	3.0	2.5	2.0	2.3	2.1	3.1	3.4	4.6	4.2
1971	5.5	6.7	4.5	3.3	2.3	1.4	2.2	2.6	4.0	3.8	4.9	3.5
1972	5.2	3.6	3.7	2.3	1.6	1.7	1.9	2.0	2.9	3.4	3.2	4.5
1973	4.6	3.4	5.8	3.3	2.4	3.1	1.7	2.9	2.1	3.1	3.5	3.7
1974	4.8	4.3	3.7	3.4	1.9	2.4	2.0	2.3	3.1	3.6	3.2	3.5
1975	7.5	4.2	2.6	2.8	2.0	2.3	1.6	2.5	2.0	3.2	5.0	4.6
1976	4.3	5.2	5.2	2.8	3.5	2.3	2.2	3.3	2.9	3.4	2.9	4.6
1977	4.0	3.8	4.3	3.0	1.7	1.9	2.5	4.2	3.3	4.4	4.0	4.5
1978	7.0	2.7	3.7	2.2	2.8	2.6	1.7	2.4	2.2	3.5	4.1	4.2
1979	3.6	3.0	3.3	3.8	2.4	2.1	1.7	1.8	2.2	3.7	3.5	4.4
1980	5.1	3.6	3.4	1.7	1.6	1.7	1.2	1.1	1.8	2.6	3.0	3.9
1981	3.0	2.6	2.2	3.8	1.9	1.7	1.1	1.7	3.2	3.4	2.7	3.9
1982	5.5	3.6	4.3	4.3	1.6	1.1	1.4	2.1	2.0	3.5	3.9	4.4
1983	3.9	1.7	2.2	3.4	1.3	1.2	1.7	1.4	2.4	2.7	3.9	3.7
1984	3.5	4.7	3.2	3.5	2.0	3.0	1.5	1.4	3.1	3.3	3.3	3.7
1985	3.6	4.4	3.9	2.8	2.0	1.9	1.7	2.1	3.7	3.1	3.2	3.9
1986	4.8	3.5	4.8	2.4	2.8	1.7	2.7	1.9	2.2	2.7	3.8	3.6
1987	3.0	6.6	2.8	2.9	1.6	1.5	1.6	1.9	2.1	3.7	3.0	3.8

32 YR. STATISTICS FOR WIS STATION M49

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.9
MEAN PEAK WAVE PERIOD	(SECONDS)	4.2
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	7.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	215.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011115

STATION M50 43.38N 86.48W 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	
0.00-0.24	1337	278	31	14	2	.	.	.	.	.	1662
0.25-0.49	562	1448	403	176	10	.	.	.	.	.	2599
0.50-0.74	.	1255	155	366	120	1	.	.	.	.	1897
0.75-0.99	.	483	127	180	262	60	6	.	.	.	1118
1.00-1.24	.	.	89	60	196	147	32	.	.	.	524
1.25-1.49	.	.	34	2	29	33	10	1	.	.	109
1.50-1.74	.	.	34	1	11	11	11	.	.	.	68
1.75-1.99	.	.	6	6	3	8	8	2	.	.	33
2.00-2.24	.	.	.	8	.	1	6	.	1	.	16
2.25-2.49	.	.	.	1	.	1	.	2	.	.	4
2.50-2.74	.	.	.	2	.	1	1	.	.	.	4
2.75-2.99	.	.	.	1	.	.	.	1	.	.	2
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1899	3464	879	817	633	263	74	6	1	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 7534.

STATION M50 43.38N 86.48W 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	
0.00-0.24	516	121	20	7	2	.	.	.	.	.	666
0.25-0.49	170	668	156	106	10	.	.	.	.	.	1110
0.50-0.74	.	657	49	93	50	1	.	.	.	.	850
0.75-0.99	.	84	72	13	38	10	2	.	.	.	219
1.00-1.24	.	.	31	3	5	1	1	.	.	.	41
1.25-1.49	.	.	9	.	.	.	.	.	1	.	10
1.50-1.74	.	.	1	4	.	.	.	.	.	.	5
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	2	.	.	.	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	686	1530	338	229	105	12	3	0	1	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.2 NO. OF CASES= 2726.

STATION M50 43.38N 86.48W 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	
0.00-0.24	710	197	53	13	2	.	.	.	.	.	975
0.25-0.49	103	681	112	48	5	.	.	.	.	.	949
0.50-0.74	.	833	42	22	11	1	.	.	.	.	909
0.75-0.99	.	6	114	3	3	1	.	.	.	.	127
1.00-1.24	.	.	55	.	.	.	.	.	.	.	55
1.25-1.49	.	.	16	.	.	.	.	.	.	.	16
1.50-1.74	.	.	.	3	.	.	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	813	1717	392	89	22	2	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 2.9 NO. OF CASES= 2846.

STATION M50 43.38N 86.48W 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	
0.00-0.24	745	124	29	3	1	.	.	.	.	.	902
0.25-0.49	190	683	63	23	1	.	.	.	.	.	960
0.50-0.74	.	909	56	9	1	.	.	.	.	.	975
0.75-0.99	.	36	192	.	.	.	.	.	.	.	228
1.00-1.24	.	.	99	.	.	.	.	.	.	.	99
1.25-1.49	.	.	40	.	.	.	.	.	.	.	40
1.50-1.74	.	.	.	22	.	.	.	.	.	.	22
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	935	1752	479	58	3	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.3 MEAN TP(SEC)= 2.9 NO. OF CASES= 3024.

STATION M50 43.[illegible] 86.48W 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	
0.00-0.24	889	179	16	5	.	.	.	.	.	.	1089
0.25-0.49	418	1165	56	20	.	.	.	.	.	.	1659
0.50-0.74	.	1516	8	6	1	.	.	.	.	.	1531
0.75-0.99	.	155	213	.	1	.	.	.	.	.	369
1.00-1.24	.	.	105	.	.	.	.	.	.	.	105
1.25-1.49	.	.	13	.	.	.	.	.	.	.	13
1.50-1.74	.	.	6	1	.	.	.	.	.	.	7
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1307	3015	417	32	2	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.8 NO. OF CASES= 4471.

STATION M50 43.38N 86.48W 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	
0.00-0.24	707	124	6	5	.	.	.	.	.	.	842
0.25-0.49	223	676	36	7	.	.	.	.	.	.	942
0.50-0.74	.	824	17	5	.	.	.	.	.	.	846
0.75-0.99	.	56	104	.	.	.	.	.	.	.	160
1.00-1.24	.	.	56	.	.	.	.	.	.	.	56
1.25-1.49	.	.	22	.	.	.	.	.	.	.	22
1.50-1.74	.	.	1	2	.	.	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	930	1680	242	19	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.8 NO. OF CASES= 2692.

STATION M50 43.38N 86.48W 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	
0.00-0.24	571	102	11	1	.	.	.	.	.	.	685
0.25-0.49	113	475	29	3	.	.	.	.	.	.	620
0.50-0.74	.	641	44	5	.	.	.	.	.	.	690
0.75-0.99	.	47	104	9	.	.	.	.	.	.	160
1.00-1.24	.	.	36	4	.	.	.	.	.	.	40
1.25-1.49	.	.	20	4	1	.	.	.	.	.	25
1.50-1.74	.	.	5	2	.	.	.	.	.	.	7
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	684	1265	249	29	1	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 2.8 NO. OF CASES= 2092.

STATION M50 43.38N 86.48W 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	
0.00-0.24	324	93	21	.	.	.	.	.	.	.	438
0.25-0.49	119	700	126	9	.	.	.	.	.	.	954
0.50-0.74	.	945	210	12	.	.	.	.	.	.	1167
0.75-0.99	.	106	630	139	1	.	.	.	.	.	876
1.00-1.24	.	.	91	244	6	.	.	.	.	.	341
1.25-1.49	.	.	21	73	10	.	.	.	.	.	104
1.50-1.74	.	.	4	40	9	.	.	.	.	.	53
1.75-1.99	.	.	.	.	4	1	.	.	.	.	5
2.00-2.24	.	.	.	.	5	.	.	.	.	.	5
2.25-2.49	.	.	.	.	.	1	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	443	1844	1103	517	35	2	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.5 NO. OF CASES= 3700.

STATION M50 43.38N 86.48W 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	
0.00-0.24	398	306	49	3	.	.	.	.	.	.	756
0.25-0.49	160	1026	542	80	3	.	.	.	.	.	1811
0.50-0.74	.	828	885	375	12	.	.	.	.	.	2100
0.75-0.99	.	62	606	347	34	2	.	.	.	.	1051
1.00-1.24	.	.	470	498	146	.	.	.	.	.	1114
1.25-1.49	.	.	71	317	148	3	.	.	.	.	539
1.50-1.74	.	.	8	254	185	35	.	.	.	.	482
1.75-1.99	.	.	.	41	128	27	.	.	.	.	196
2.00-2.24	.	.	.	8	124	80	.	.	.	.	212
2.25-2.49	.	.	.	.	47	35	2	.	.	.	84
2.50-2.74	.	.	.	.	16	70	10	.	.	.	96
2.75-2.99	.	.	.	.	2	26	4	.	.	.	32
3.00-3.24	.	.	.	.	.	27	17	1	.	.	45
3.25-3.49	.	.	.	.	.	3	12	.	.	.	15
3.50+	.	.	.	.	.	1	35	5	.	.	41
TOTAL	558	2222	2631	1923	845	309	80	6	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 8037.

STATION M50 43.38N 86.48W 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	
0.00-0.24	434	503	66	2	1	.	.	.	.	.	1006
0.25-0.49	147	1794	816	157	7	.	.	.	.	.	2921
0.50-0.74	.	804	1760	953	68	.	.	.	.	.	3585
0.75-0.99	.	37	548	896	97	1	.	.	.	.	1579
1.00-1.24	.	.	464	817	429	9	.	.	.	.	1719
1.25-1.49	.	.	54	420	432	8	.	.	.	.	914
1.50-1.74	.	.	3	375	490	68	1	.	.	.	937
1.75-1.99	.	.	.	58	308	134	.	.	.	.	500
2.00-2.24	.	.	.	11	319	259	11	.	.	.	600
2.25-2.49	.	.	.	1	128	154	23	.	.	.	306
2.50-2.74	.	.	.	.	35	252	34	.	.	.	321
2.75-2.99	.	.	.	.	4	121	25	.	.	.	150
3.00-3.24	.	.	.	.	1	152	71	2	.	.	226
3.25-3.49	.	.	.	.	.	19	91	.	.	.	110
3.50+	.	.	.	.	.	6	273	34	.	.	313
TOTAL	581	3138	3711	3690	2319	1183	529	36	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.7 NO. OF CASES= 14224.

STATION M50 43.38N 86.48W 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	
0.00-0.24	542	379	13	1	1	.	.	.	.	.	936
0.25-0.49	152	1717	270	37	1	.	.	.	.	.	2177
0.50-0.74	.	794	1403	313	23	.	.	.	.	.	2533
0.75-0.99	.	49	462	545	53	.	.	.	.	.	1109
1.00-1.24	.	.	346	629	247	7	.	.	.	.	1229
1.25-1.49	.	.	39	236	262	7	.	.	.	.	544
1.50-1.74	.	.	1	240	324	59	.	.	.	.	624
1.75-1.99	.	.	.	27	202	66	.	.	.	.	295
2.00-2.24	.	.	.	2	188	149	5	.	.	.	344
2.25-2.49	.	.	.	.	80	121	19	.	.	.	220
2.50-2.74	.	.	.	.	21	167	25	.	.	.	213
2.75-2.99	.	.	.	.	2	89	31	.	.	.	122
3.00-3.24	.	.	.	.	.	102	45	.	.	.	147
3.25-3.49	.	.	.	.	.	16	56	.	.	.	72
3.50+	.	.	.	.	.	3	181	29	5	3	221
TOTAL	694	2939	2534	2030	1404	786	362	29	5	3	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.4 NO. OF CASES= 10108.

STATION M50 43.38N 86.48W 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	
0.00-0.24	439	236	3	.	.	.	.	.	.	.	678
0.25-0.49	121	1226	114	7	.	.	.	.	.	.	1468
0.50-0.74	.	570	829	94	7	.	.	.	.	.	1500
0.75-0.99	.	20	308	312	12	1	.	.	.	.	653
1.00-1.24	.	.	216	409	90	1	.	.	.	.	716
1.25-1.49	.	.	18	209	228	1	.	.	.	.	456
1.50-1.74	.	.	2	172	297	13	.	.	.	.	484
1.75-1.99	.	.	.	23	220	32	.	.	.	.	275
2.00-2.24	.	.	.	3	234	78	2	.	.	.	317
2.25-2.49	.	.	.	.	94	77	5	.	.	.	176
2.50-2.74	.	.	.	.	17	150	4	.	.	.	171
2.75-2.99	.	.	.	.	.	82	3	.	.	.	85
3.00-3.24	.	.	.	.	.	85	10	.	.	.	95
3.25-3.49	.	.	.	.	.	18	19	.	.	.	37
3.50+	.	.	.	.	.	3	59	6	2	.	70
TOTAL	560	2052	1490	1229	1199	541	102	6	2	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.4 MEAN TP(SEC)= 4.4 NO. OF CASES= 6732.

STATION M50 43.38N 86.48W 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	
0.00-0.24	452	248	3	.	.	.	.	.	.	.	704
0.25-0.49	106	1174	144	4	.	.	.	.	.	.	1428
0.50-0.74	.	582	901	130	.	.	.	.	.	.	1613
0.75-0.99	.	31	371	346	2	.	.	.	.	.	750
1.00-1.24	.	.	231	526	62	1	.	.	.	.	820
1.25-1.49	.	.	47	219	208	1	.	.	.	.	475
1.50-1.74	.	.	3	209	296	3	.	.	.	.	511
1.75-1.99	.	.	.	19	260	8	.	.	.	.	287
2.00-2.24	.	.	.	1	340	35	.	.	.	.	376
2.25-2.49	.	.	.	.	170	48	.	.	.	.	218
2.50-2.74	.	.	.	.	23	158	.	.	.	.	181
2.75-2.99	.	.	.	.	2	74	1	.	.	.	77
3.00-3.24	.	.	.	.	1	71	2	.	.	.	74
3.25-3.49	.	.	.	.	.	27	9	.	.	.	36
3.50+	.	.	.	.	.	2	42	2	.	.	46
TOTAL	558	2036	1700	1454	1364	428	54	2	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 7117.

STATION M50 43.38N 86.48W 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	
0.00-0.24	320	243	8	.	.	.	.	.	.	.	571
0.25-0.49	113	1190	266	14	1	.	.	.	.	.	1584
0.50-0.74	.	655	1060	326	3	.	.	.	.	.	2044
0.75-0.99	.	34	418	411	19	1	.	.	.	.	883
1.00-1.24	.	.	298	502	136	.	.	.	.	.	936
1.25-1.49	.	.	36	239	239	1	.	.	.	.	515
1.50-1.74	.	.	.	183	321	5	1	.	.	.	510
1.75-1.99	.	.	1	19	309	13	1	.	.	.	343
2.00-2.24	.	.	.	5	293	81	1	.	.	.	380
2.25-2.49	.	.	.	1	164	72	1	.	.	.	238
2.50-2.74	.	.	.	.	20	243	1	.	.	.	264
2.75-2.99	.	.	.	.	1	124	2	.	.	.	127
3.00-3.24	.	.	.	.	.	91	9	.	.	.	100
3.25-3.49	.	.	.	.	1	24	29	.	.	.	54
3.50+	.	.	.	.	.	3	79	2	1	.	85
TOTAL	433	2122	2087	1700	1507	658	124	2	1	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.5 NO. OF CASES= 8094.

STATION M50 43.38N 86.48W 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	
0.00-0.24	274	84	6	1	.	.	.	.	.	.	365
0.25-0.49	113	732	285	40	3	.	.	.	.	.	1173
0.50-0.74	.	665	581	294	9	1	.	.	.	.	1550
0.75-0.99	.	41	356	243	27	.	.	.	.	.	667
1.00-1.24	.	.	234	301	110	2	.	.	.	.	647
1.25-1.49	.	.	28	168	172	5	.	.	.	.	373
1.50-1.74	.	.	7	170	217	3	.	.	.	.	397
1.75-1.99	.	.	.	22	186	10	.	.	.	.	218
2.00-2.24	.	.	.	3	211	75	3	.	.	.	292
2.25-2.49	.	.	.	.	71	83	4	.	.	.	158
2.50-2.74	.	.	.	.	12	209	2	.	.	.	223
2.75-2.99	.	.	.	.	1	63	7	.	.	.	71
3.00-3.24	.	.	.	.	.	38	45	.	.	.	83
3.25-3.49	.	.	.	.	.	9	34	.	.	.	43
3.50+	.	.	.	.	.	.	79	18	3	.	100
TOTAL	387	1522	1497	1242	1019	498	174	18	3	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.5 NO. OF CASES= 5968.

STATION M50 43.38N 86.48W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

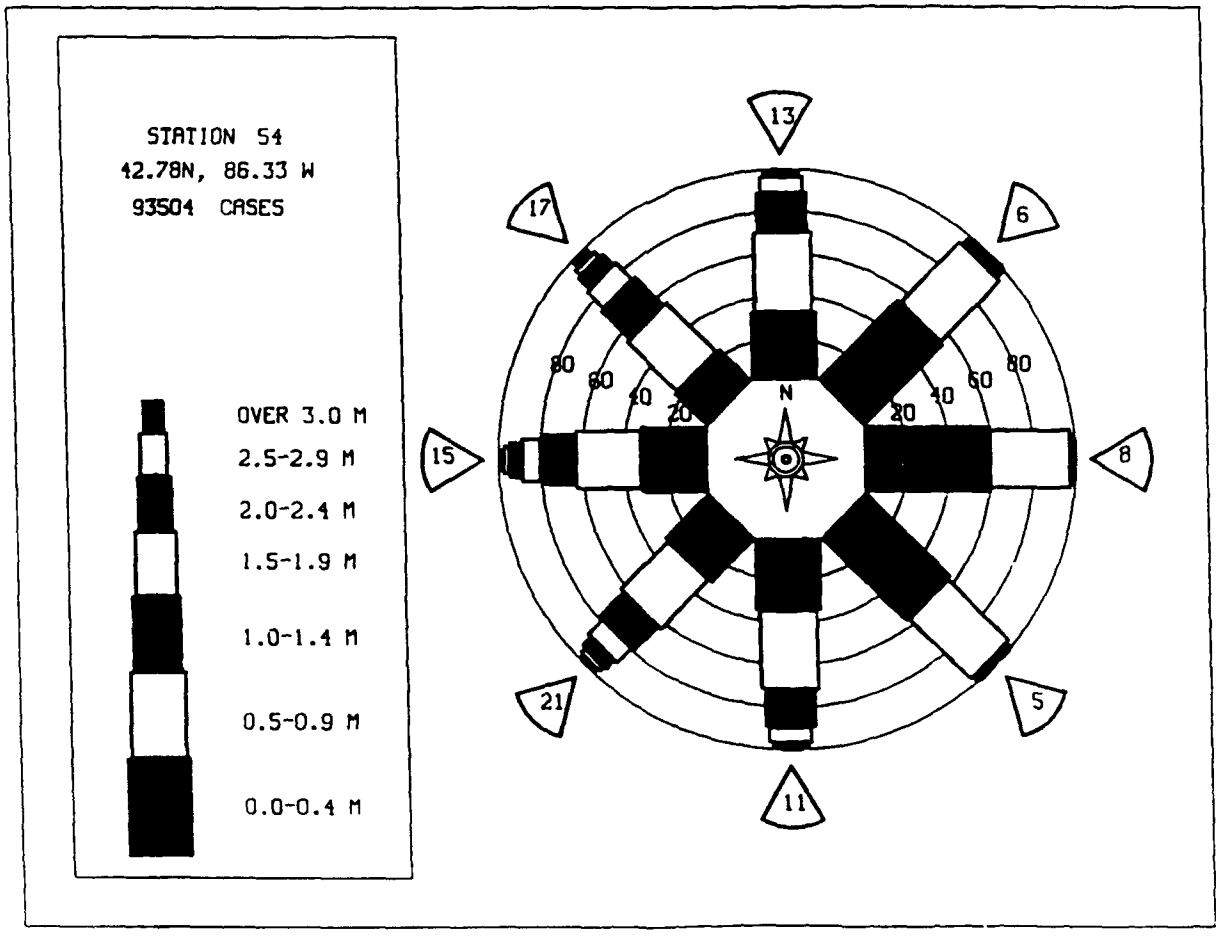
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	317	63	9	1	1	.	.	.	.	.	391
0.25-0.49	135	544	118	36	1	.	.	.	.	.	834
0.50-0.74	.	559	262	135	22	1	.	.	.	.	979
0.75-0.99	.	144	188	189	114	4	.	.	.	.	639
1.00-1.24	.	.	142	178	175	58	9	.	.	.	562
1.25-1.49	.	.	41	90	111	32	9	.	.	.	283
1.50-1.74	.	.	14	90	84	21	14	.	.	.	223
1.75-1.99	.	.	1	22	68	20	11	.	.	.	122
2.00-2.24	.	.	.	7	73	37	8	2	.	.	127
2.25-2.49	.	.	.	1	31	27	6	1	.	.	66
2.50-2.74	.	.	.	.	7	53	9	1	.	.	70
2.75-2.99	.	.	.	.	3	12	5	.	1	.	21
3.00-3.24	.	.	.	1	.	11	9	.	.	.	21
3.25-3.49	.	.	.	.	.	2	14	1	.	.	17
3.50+	.	.	.	.	.	2	35	6	.	.	43
TOTAL	452	1310	775	750	690	280	129	11	1	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.3 NO. OF CASES= 4139.

STATION M54 42.78N 86.33W 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	
0.00-0.24	864	430	32	9	.	.	.	.	.	.	1335
0.25-0.49	196	1579	288	51	6	.	.	.	.	.	2120
0.50-0.74	.	1168	1044	295	29	1	.	.	.	.	2537
0.75-0.99	.	52	495	406	42	5	.	.	.	.	1000
1.00-1.24	.	.	376	433	145	7	.	.	.	.	961
1.25-1.49	.	.	53	255	187	5	.	.	.	.	500
1.50-1.74	.	.	3	251	229	30	2	.	.	.	515
1.75-1.99	.	.	.	45	136	53	1	.	.	.	235
2.00-2.24	.	.	.	7	147	107	4	.	.	.	265
2.25-2.49	.	.	.	.	55	67	10	.	.	.	132
2.50-2.74	.	.	.	.	21	92	16	.	.	.	129
2.75-2.99	.	.	.	.	3	48	14	.	.	.	65
3.00-3.24	.	.	.	.	.	45	20	.	.	.	65
3.25-3.49	.	.	.	.	.	7	23	.	.	.	30
3.50+	.	.	.	.	.	2	66	9	2	.	79
TOTAL	1060	3229	2291	1752	1000	469	156	9	2	0	

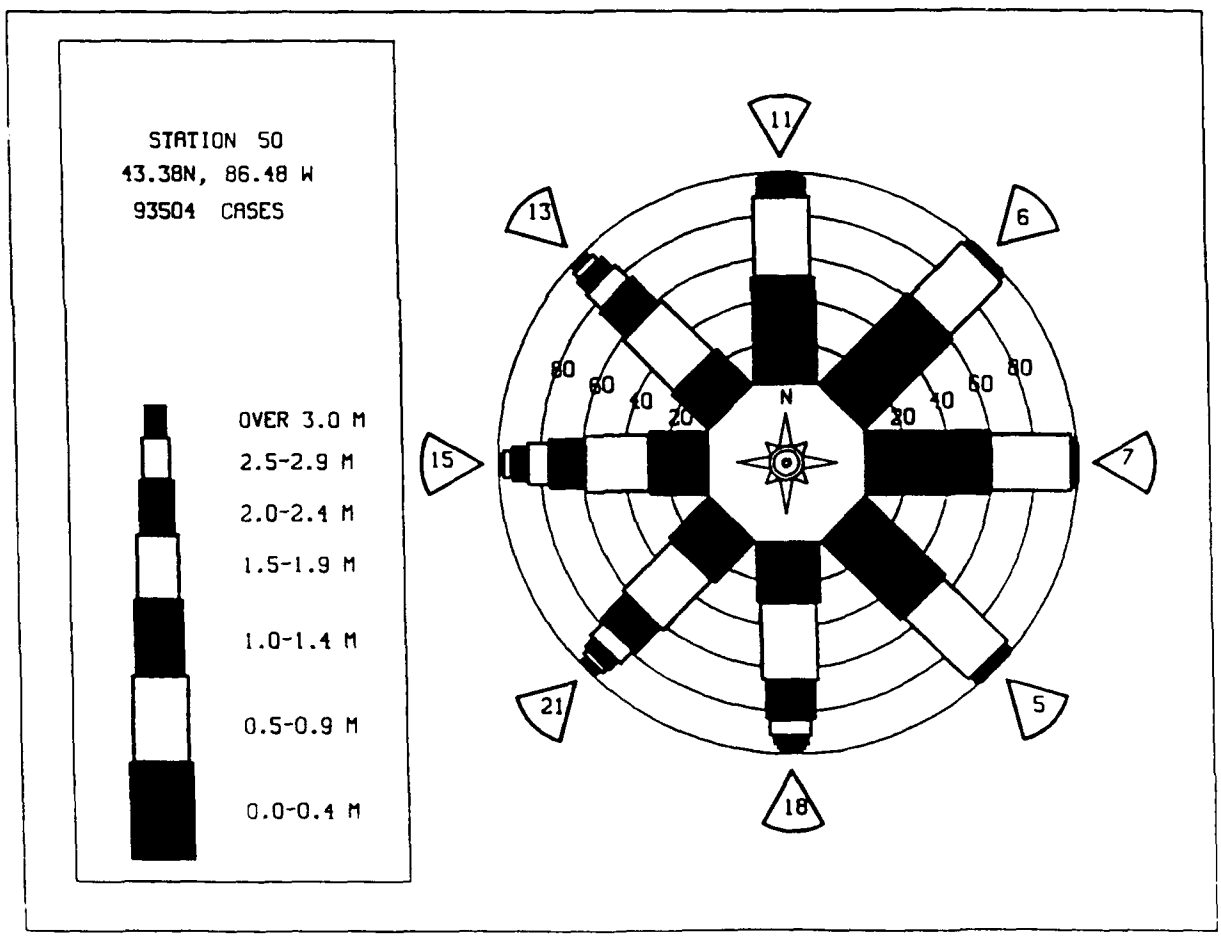
MEAN HS(M)= 0.8 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



STATION M50 43.38N 86.48W 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	
0.00-0.24	898	328	35	5	1	.	.	.	.	.	1267
0.25-0.49	295	1590	354	77	4	.	.	.	.	.	2320
0.50-0.74	.	1304	827	314	33	.	.	.	.	.	2478
0.75-0.99	.	139	482	363	66	8	.	.	.	.	1058
1.00-1.24	.	.	296	417	160	22	4	.	.	.	899
1.25-1.49	.	.	51	198	184	9	2	.	.	.	444
1.50-1.74	.	.	9	177	223	22	2	.	.	.	433
1.75-1.99	.	.	.	24	169	32	2	.	.	.	227
2.00-2.24	.	.	.	5	179	79	3	.	.	.	266
2.25-2.49	.	.	.	.	78	62	6	.	.	.	146
2.50-2.74	.	.	.	.	15	130	8	.	.	.	153
2.75-2.99	.	.	.	.	1	59	8	.	.	.	68
3.00-3.24	.	.	.	.	.	58	21	.	.	.	79
3.25-3.49	.	.	.	.	.	12	26	.	.	.	38
3.50+	.	.	.	.	.	2	78	10	1	.	91
TOTAL	1193	3361	2054	1580	1113	495	160	10	1	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 7.8 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M50 (43.38N 86.48W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
						MONTH							
1956	0.5	0.6	0.7	0.7	0.5	0.4	0.5	0.5	0.6	0.6	1.0	0.9	0.6
1957	1.0	0.7	0.7	0.6	0.5	0.4	0.4	0.3	0.5	0.5	1.0	1.2	0.6
1958	0.8	1.0	0.6	0.7	0.7	0.6	0.4	0.6	0.7	0.8	1.0	0.9	0.7
1959	0.8	0.8	0.7	0.6	0.5	0.4	0.4	0.5	0.7	0.6	1.0	0.8	0.6
1960	1.1	1.0	0.8	0.8	0.5	0.4	0.4	0.5	0.5	0.7	1.5	1.2	0.8
1961	1.0	0.8	0.9	0.6	0.6	0.5	0.4	0.5	0.8	0.9	0.9	1.1	0.8
1962	1.2	0.9	0.6	0.9	0.7	0.5	0.5	0.6	0.8	0.9	0.7	1.3	0.8
1963	1.2	1.1	1.0	0.8	0.6	0.5	0.5	0.7	0.7	0.9	1.5	1.2	0.9
1964	1.6	1.4	1.3	1.1	0.7	0.5	0.4	0.7	0.8	0.9	1.2	1.3	1.0
1965	1.5	1.8	1.0	0.8	0.8	0.5	0.4	0.4	0.7	1.1	1.3	1.3	1.0
1966	1.1	0.8	1.1	0.7	0.6	0.5	0.4	0.5	0.6	1.5	1.4	1.1	0.9
1967	1.6	1.5	0.9	0.9	0.7	0.5	0.5	0.6	0.6	1.1	1.3	1.2	0.9
1968	1.1	1.3	1.1	1.0	0.5	0.5	0.6	0.6	0.8	1.3	1.0	1.5	1.0
1969	1.2	0.9	0.9	0.7	0.5	0.6	0.4	0.7	0.7	1.1	1.1	1.1	0.8
1970	1.1	1.5	0.7	0.9	0.8	0.6	0.6	0.6	0.9	1.0	1.3	1.3	0.9
1971	1.7	1.5	1.1	0.9	0.7	0.5	0.6	0.7	0.8	0.8	1.3	1.2	1.0
1972	1.9	1.2	1.1	0.6	0.4	0.5	0.5	0.6	0.9	1.0	0.9	1.2	0.9
1973	1.7	1.0	1.0	0.8	0.7	0.6	0.6	0.8	0.8	0.9	1.3	1.2	0.9
1974	1.3	1.2	1.1	1.0	0.6	0.6	0.6	0.6	0.9	1.1	1.2	1.1	0.9
1975	1.8	1.2	0.9	0.7	0.5	0.6	0.5	0.6	0.8	1.0	1.1	1.1	0.9
1976	1.5	1.5	1.5	0.8	0.6	0.6	0.6	0.7	0.8	0.9	1.3	1.5	1.0
1977	1.6	1.4	1.1	0.8	0.5	0.6	0.8	1.0	1.0	1.1	1.4	1.4	1.1
1978	1.5	1.0	0.9	0.7	0.5	0.6	0.6	0.6	0.7	1.1	1.0	1.5	0.9
1979	1.2	0.9	0.9	0.7	0.6	0.6	0.5	0.6	0.7	1.0	1.2	1.3	0.9
1980	1.0	0.9	0.9	0.5	0.4	0.4	0.4	0.5	0.6	0.8	0.9	1.0	0.7
1981	0.9	1.0	0.8	0.9	0.5	0.5	0.4	0.5	0.7	0.9	0.8	1.0	0.7
1982	1.4	0.9	0.9	0.8	0.5	0.4	0.4	0.5	0.7	0.9	1.1	1.1	0.8
1983	0.8	0.5	0.5	0.5	0.4	0.3	0.5	0.5	0.8	0.7	1.0	1.3	0.7
1984	1.1	0.9	0.8	0.6	0.5	0.5	0.5	0.5	0.8	0.7	1.2	1.3	0.8
1985	1.3	1.1	1.1	0.8	0.6	0.5	0.5	0.5	0.9	0.8	0.8	1.4	0.9
1986	1.4	0.8	1.2	0.8	0.5	0.5	0.5	0.5	0.7	0.7	1.2	1.2	0.8
1987	1.0	0.8	0.7	0.5	0.5	0.4	0.5	0.6	0.5	0.8	0.9	1.0	0.7
MEAN	1.2	1.1	0.9	0.8	0.6	0.5	0.5	0.6	0.7	0.9	1.1	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M50 (43.38N 86.48W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
						MONTH						
1956	1.8	3.1	2.5	2.7	1.7	1.3	1.4	2.5	2.4	2.6	3.8	3.8
1957	3.4	2.7	4.5	2.5	2.6	1.6	1.5	1.9	2.1	1.6	4.0	3.2
1958	4.1	3.8	2.0	2.6	2.0	2.3	1.9	2.5	2.1	3.4	4.1	2.8
1959	2.8	3.2	4.5	2.3	1.7	1.5	1.7	2.0	1.9	3.3	3.4	4.1
1960	4.6	3.9	3.8	2.7	2.2	2.0	1.8	2.5	1.7	2.9	5.4	4.5
1961	3.9	3.6	3.9	2.4	2.2	1.4	1.5	2.0	3.1	3.8	3.9	3.8
1962	4.1	3.6	2.5	2.8	2.5	1.6	1.9	2.1	2.7	3.3	4.5	5.0
1963	3.9	4.6	4.5	3.9	3.1	1.9	2.2	3.3	2.3	3.2	4.2	3.7
1964	5.9	4.7	3.9	4.2	3.6	2.2	1.9	2.7	5.6	3.1	3.5	3.6
1965	4.2	4.4	4.9	2.6	2.5	2.0	1.8	1.7	3.2	3.4	5.0	3.7
1966	4.1	3.9	4.2	2.5	2.7	2.5	1.6	2.3	2.9	4.4	4.4	3.6
1967	5.9	4.3	3.8	2.6	3.4	1.7	1.7	2.1	3.6	3.6	4.4	3.4
1968	3.3	5.3	3.5	3.5	2.2	2.8	2.1	3.1	2.2	3.4	3.7	5.5
1969	4.0	3.3	2.9	2.6	1.8	2.7	1.2	2.5	2.4	3.0	3.4	3.7
1970	3.8	4.4	2.6	3.1	2.4	2.0	2.5	2.2	3.5	3.7	5.1	4.3
1971	6.3	7.0	4.7	3.3	2.5	1.6	2.5	2.7	3.9	3.8	5.0	3.8
1972	5.3	3.9	4.2	2.6	1.6	1.6	2.0	2.1	3.2	3.6	3.5	4.7
1973	4.3	3.5	5.7	3.3	2.6	3.5	1.8	3.1	2.2	3.2	3.7	3.8
1974	4.8	4.3	4.0	3.4	1.9	2.6	2.1	2.4	3.1	3.7	3.7	3.5
1975	7.8	4.7	2.8	2.8	2.2	2.3	1.7	2.8	2.3	3.3	5.0	4.5
1976	4.7	5.0	4.9	3.0	3.6	2.3	2.3	3.5	3.0	3.7	3.1	4.7
1977	4.2	4.2	4.5	3.2	1.7	1.9	2.7	4.1	3.3	4.7	4.5	4.8
1978	6.0	3.0	4.0	2.4	2.7	2.7	1.8	2.6	2.4	3.6	4.4	4.6
1979	3.8	3.0	3.6	4.2	2.6	2.1	1.9	1.8	2.2	3.5	3.9	4.5
1980	5.2	3.6	3.5	1.8	1.7	1.7	1.4	1.2	1.7	2.7	3.1	3.8
1981	3.4	2.4	2.2	3.7	2.0	2.0	1.3	2.0	3.6	3.8	3.3	3.6
1982	5.4	3.9	4.4	4.5	1.8	1.3	1.5	2.1	2.3	4.1	3.7	4.7
1983	3.3	1.6	2.3	3.4	1.6	1.2	1.8	1.6	2.6	3.0	3.8	3.8
1984	3.8	3.0	3.6	3.6	2.0	3.0	1.6	1.6	3.0	3.3	3.3	3.7
1985	4.1	4.0	4.4	2.8	2.4	2.0	1.8	2.2	3.8	3.5	3.4	4.4
1986	5.1	3.6	5.0	2.4	3.0	1.9	2.9	1.9	2.5	2.8	4.1	4.0
1987	3.0	5.1	3.2	3.2	1.6	1.6	1.7	2.0	1.7	4.2	2.7	3.6

32 YR. STATISTICS FOR WIS STATION M50

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	219.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011118

STATION M51 43.23N 86.50W 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	
0.00-0.24	1107	235	25	11	2	.	.	.	.	.	1380
0.25-0.49	73	1164	227	66	7	.	.	.	.	.	1537
0.50-0.74	.	1842	650	353	48	.	1	.	.	.	2894
0.75-0.99	.	2	639	295	150	6	.	.	.	.	1092
1.00-1.24	.	.	640	93	165	34	1	.	.	.	933
1.25-1.49	.	.	268	89	90	31	7	.	.	.	485
1.50-1.74	.	.	51	154	69	75	17	.	.	.	366
1.75-1.99	.	.	.	47	23	29	14	.	.	.	113
2.00-2.24	.	.	.	21	4	25	10	1	1	.	62
2.25-2.49	.	.	.	8	7	9	6	.	.	.	30
2.50-2.74	.	.	.	.	6	3	8	2	1	.	20
2.75-2.99	.	.	.	.	3	.	1	1	2	.	7
3.00-3.24	.	.	.	.	2	.	1	.	2	.	5
3.25-3.49	.	.	.	.	.	.	.	1	.	.	1
3.50+	.	.	.	.	1	1	.	1	1	1	5
TOTAL	1180	3243	2500	1137	577	213	66	6	7	1	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 8374.

STATION M51 43.23N 86.50W 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	
0.00-0.24	368	110	14	10	1	.	.	.	.	.	503
0.25-0.49	45	645	113	50	13	1	.	.	.	.	867
0.50-0.74	.	789	196	154	40	.	.	.	.	.	1179
0.75-0.99	.	9	177	57	55	3	.	.	.	.	301
1.00-1.24	.	.	112	10	18	13	.	.	.	.	153
1.25-1.49	.	.	37	4	3	2	2	.	.	.	48
1.50-1.74	.	.	2	10	1	1	.	1	.	.	15
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	1	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	1	.	.	.	1	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	413	1553	651	296	133	20	2	1	2	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.4 NO. OF CASES= 2886.

STATION M51 43.23N 86.50W 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	
0.00-0.24	547	183	26	.	.	1	.	.	.	.	769
0.25-0.49	58	750	155	.	8	1	.	.	.	.	1026
0.50-0.74	.	851	8	.	21	4	.	.	.	.	1023
0.75-0.99	.	19	13	.	21	6	.	.	.	.	192
1.00-1.24	.	.	6	.	4	.	.	.	.	.	74
1.25-1.49	.	.	20	.	1	1	.	.	.	.	22
1.50-1.74	.	.	.	3	.	.	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	605	1803	482	151	56	13	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 2919.

STATION M51 43.23N 86.50W 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	
0.00-0.24	617	154	28	3	.	.	.	.	.	.	802
0.25-0.49	174	797	77	20	5	1	.	.	.	.	1074
0.50-0.74	.	931	82	43	3	1	.	.	.	.	1060
0.75-0.99	.	56	203	7	2	.	.	.	.	.	268
1.00-1.24	.	.	103	.	2	.	.	.	.	.	105
1.25-1.49	.	.	42	.	.	.	.	.	.	.	42
1.50-1.74	.	.	1	22	.	.	.	.	.	.	23
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	791	1938	536	96	12	2	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 3164

STATION M51 43.23N 86.50W 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	
0.00-0.24	734	195	12	5	.	.	.	.	.	.	946
0.25-0.49	360	1247	70	17	2	.	.	.	.	.	1696
0.50-0.74	.	1362	36	32	2	.	.	.	.	.	1432
0.75-0.99	.	299	213	8	.	.	.	.	.	.	520
1.00-1.24	.	.	111	3	.	.	.	.	.	.	114
1.25-1.49	.	.	12	.	.	.	.	.	.	.	12
1.50-1.74	.	.	9	1	.	.	.	.	.	.	10
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1094	3103	463	66	4	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.9 NO. OF CASES= 4431.

STATION M51 43.23N 86.50W 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	
0.00-0.24	642	134	5	4	.	.	.	.	.	.	785
0.25-0.49	204	759	45	9	1	.	.	.	.	.	1018
0.50-0.74	.	704	131	18	1	.	.	.	.	.	854
0.75-0.99	.	126	111	4	.	.	.	.	.	.	241
1.00-1.24	.	.	125	1	.	.	.	.	.	.	126
1.25-1.49	.	.	21	21	.	.	.	.	.	.	42
1.50-1.74	.	.	3	27	.	.	.	.	.	.	30
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	846	1723	441	85	2	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 2.9 NO. OF CASES= 2904.

STATION M51 43.23N 86.50W 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	
0.00-0.24	519	118	5	2	.	.	.	.	.	.	644
0.25-0.49	94	536	56	4	1	.	.	.	.	.	691
0.50-0.74	.	490	240	9	1	.	.	.	.	.	740
0.75-0.99	.	72	206	19	.	.	.	.	.	.	297
1.00-1.24	.	.	284	23	.	.	.	.	.	.	307
1.25-1.49	.	.	12	90	1	.	.	.	.	.	103
1.50-1.74	.	.	.	43	1	.	.	.	.	.	44
1.75-1.99	.	.	.	9	.	.	.	.	.	.	9
2.00-2.24	.	.	.	.	3	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	613	1216	803	199	7	0	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.2 NO. OF CASES= 2665.

STATION M51 43.23N 86.50W 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	
0.00-0.24	286	99	6	.	.	.	.	.	.	.	391
0.25-0.49	113	662	99	5	.	.	.	.	.	.	879
0.50-0.74	.	524	564	23	.	.	.	.	.	.	1111
0.75-0.99	.	66	344	42	1	.	.	.	.	.	453
1.00-1.24	.	.	636	80	3	.	.	.	.	.	719
1.25-1.49	.	.	26	186	18	.	.	.	.	.	230
1.50-1.74	.	.	.	118	17	.	.	.	.	.	135
1.75-1.99	.	.	.	18	11	1	.	.	.	.	30
2.00-2.24	.	.	.	.	10	.	.	.	.	.	10
2.25-2.49	.	.	.	.	2	1	.	.	.	.	3
2.50-2.74	.	.	.	.	.	2	.	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	399	1351	1675	472	62	4	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.6 NO. OF CASES= 3715.

STATION M51 43.23N 86.50W 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	
0.00-0.24	365	281	28	1	.	.	.	.	.	.	675
0.25-0.49	146	1041	357	31	.	.	.	.	.	.	1575
0.50-0.74	.	626	953	255	4	.	.	.	.	.	1838
0.75-0.99	.	28	414	311	17	1	.	.	.	.	771
1.00-1.24	.	.	458	350	105	.	.	.	.	.	913
1.25-1.49	.	.	47	320	137	3	.	.	.	.	507
1.50-1.74	.	.	1	295	211	9	.	.	.	.	516
1.75-1.99	.	.	.	49	155	20	.	.	.	.	224
2.00-2.24	.	.	.	5	144	60	.	.	.	.	209
2.25-2.49	.	.	.	.	58	34	2	.	.	.	94
2.50-2.74	.	.	.	.	20	86	4	.	.	.	110
2.75-2.99	.	.	.	.	2	34	5	.	.	.	41
3.00-3.24	.	.	.	.	.	37	2	.	.	.	39
3.25-3.49	.	.	.	.	.	1	10	.	.	.	11
3.50+	.	.	.	.	.	1	29	2	.	.	32
TOTAL	511	1976	2258	1617	853	286	52	2	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 7085.

STATION M51 43.23N 86.50W 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	
0.00-0.24	395	423	31	1	1	.	.	.	.	.	851
0.25-0.49	111	1729	559	60	4	.	.	.	.	.	2463
0.50-0.74	.	725	1657	720	36	.	.	.	.	.	3138
0.75-0.99	.	22	522	809	62	.	.	.	.	.	1415
1.00-1.24	.	.	427	787	289	3	.	.	.	.	1506
1.25-1.49	.	.	39	409	387	3	.	.	.	.	838
1.50-1.74	.	.	2	375	466	45	.	.	.	.	888
1.75-1.99	.	.	.	52	333	113	.	.	.	.	498
2.00-2.24	.	.	.	5	347	228	3	.	.	.	583
2.25-2.49	.	.	.	.	141	162	13	.	.	.	316
2.50-2.74	.	.	.	.	32	268	19	.	.	.	319
2.75-2.99	.	.	.	.	1	128	16	.	.	.	145
3.00-3.24	.	.	.	.	.	194	40	.	.	.	234
3.25-3.49	.	.	.	.	.	25	86	.	.	.	111
3.50+	.	.	.	.	.	6	252	24	.	.	282
TOTAL	506	2899	3237	3218	2099	1175	429	24	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.7 NO. OF CASES= 12726.

STATION M51 43.23N 86.50W 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	
0.00-0.24	471	325	8	.	1	.	.	.	.	.	805
0.25-0.49	130	1665	182	20	.	.	.	.	.	.	1997
0.50-0.74	.	757	1357	282	6	.	.	.	.	.	2402
0.75-0.99	.	25	466	530	26	.	.	.	.	.	1047
1.00-1.24	.	.	344	623	186	3	.	.	.	.	1156
1.25-1.49	.	.	36	237	242	3	.	.	.	.	518
1.50-1.74	.	.	.	240	345	36	.	.	.	.	621
1.75-1.99	.	.	.	27	210	70	.	.	.	.	307
2.00-2.24	.	.	.	2	209	144	3	.	.	.	358
2.25-2.49	.	.	.	.	73	120	8	.	.	.	201
2.50-2.74	.	.	.	.	29	160	17	.	.	.	206
2.75-2.99	.	.	.	.	.	104	27	.	.	.	131
3.00-3.24	.	.	.	.	.	102	37	.	.	.	139
3.25-3.49	.	.	.	.	.	16	54	.	.	.	70
3.50+	.	.	.	.	.	.	189	24	4	2	219
TOTAL	601	2772	2393	1961	1327	758	335	24	4	2	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 9537.

STATION M51 43.23N 86.50W 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	
0.00-0.24	410	183	1	.	.	.	.	.	.	.	594
0.25-0.49	93	1133	65	1	.	.	.	.	.	.	1292
0.50-0.74	.	545	942	79	1	.	.	.	.	.	1567
0.75-0.99	.	5	357	334	10	.	.	.	.	.	706
1.00-1.24	.	.	191	467	86	.	.	.	.	.	744
1.25-1.49	.	.	16	193	210	1	.	.	.	.	420
1.50-1.74	.	.	.	170	267	7	.	.	.	.	444
1.75-1.99	.	.	.	21	193	35	.	.	.	.	249
2.00-2.24	.	.	.	.	202	84	1	.	.	.	287
2.25-2.49	.	.	.	.	81	70	1	.	.	.	152
2.50-2.74	.	.	.	.	14	140	3	.	.	.	157
2.75-2.99	.	.	.	.	.	79	5	.	.	.	84
3.00-3.24	.	.	.	.	.	68	16	.	.	.	84
3.25-3.49	.	.	.	.	.	19	19	.	.	.	38
3.50+	.	.	.	.	.	4	65	12	1	.	82
TOTAL	503	1866	1572	1265	1064	507	110	12	1	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 6467

STATION M51 43.23N 86.50W 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	
0.00-0.24	404	214	4	.	.	.	.	.	.	.	622
0.25-0.49	84	1178	88	3	.	.	.	.	.	.	1353
0.50-0.74	.	536	886	74	.	.	.	.	.	.	1496
0.75-0.99	.	7	350	302	3	.	.	.	.	.	662
1.00-1.24	.	.	242	487	40	.	.	.	.	.	769
1.25-1.49	.	.	25	204	187	.	.	.	.	.	416
1.50-1.74	.	.	.	204	272	.	.	.	.	.	476
1.75-1.99	.	.	.	16	249	12	.	.	.	.	277
2.00-2.24	.	.	.	1	294	28	.	.	.	.	323
2.25-2.49	.	.	.	.	125	42	1	.	.	.	168
2.50-2.74	.	.	.	.	21	134	1	.	.	.	156
2.75-2.99	.	.	.	.	2	68	.	.	.	.	70
3.00-3.24	.	.	.	.	.	50	1	.	.	.	51
3.25-3.49	.	.	.	.	.	24	9	.	.	.	33
3.50+	.	.	.	.	.	3	37	1	.	.	41
TOTAL	488	1935	1595	1291	1193	361	49	1	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 6482.

STATION M51 43.23N 86.50W 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	
0.00-0.24	306	207	4	1	.	.	.	.	.	.	518
0.25-0.49	89	1257	119	9	1	.	.	.	.	.	1475
0.50-0.74	.	622	1233	166	1	.	.	.	.	.	2022
0.75-0.99	.	16	432	471	2	.	.	.	.	.	921
1.00-1.24	.	.	294	613	110	.	.	.	.	.	1017
1.25-1.49	.	.	24	228	253	.	.	.	.	.	505
1.50-1.74	.	.	.	203	334	6	.	.	.	.	543
1.75-1.99	.	.	.	33	288	16	.	.	.	.	337
2.00-2.24	.	.	.	.	296	70	.	.	.	.	366
2.25-2.49	.	.	.	.	159	67	.	.	.	.	226
2.50-2.74	.	.	.	.	25	236	.	.	.	.	261
2.75-2.99	.	.	.	.	.	94	1	.	.	.	95
3.00-3.24	.	.	.	.	.	111	6	.	.	.	117
3.25-3.49	.	.	.	.	.	21	17	.	.	.	38
3.50+	.	.	.	.	.	3	82	4	.	.	89
TOTAL	395	2102	2106	1724	1469	624	106	4	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.5 NO. OF CASES= 7992.

STATION M51 43.23N 86.50W 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	
0.00-0.24	209	59	3	.	.	.	.	.	.	.	271
0.25-0.49	111	867	130	27	.	.	.	.	.	.	1135
0.50-0.74	.	561	1005	226	10	.	.	.	.	.	1802
0.75-0.99	.	13	424	405	9	1	.	.	.	.	852
1.00-1.24	.	.	363	475	128	1	.	.	.	.	967
1.25-1.49	.	.	48	238	211	1	.	.	.	.	498
1.50-1.74	.	.	3	219	340	11	.	.	.	.	573
1.75-1.99	.	.	.	22	274	24	.	.	.	.	320
2.00-2.24	.	.	.	2	276	124	.	.	.	.	402
2.25-2.49	.	.	.	1	100	103	2	.	.	.	206
2.50-2.74	.	.	.	1	13	284	1	.	.	.	299
2.75-2.99	.	.	.	.	1	113	6	.	.	.	120
3.00-3.24	.	.	.	.	1	110	9	.	.	.	120
3.25-3.49	.	.	.	.	.	26	42	.	.	.	68
3.50+	.	.	.	.	.	.	120	7	4	.	131
TOTAL	320	1500	1976	1616	1363	798	180	7	4	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 7282.

STATION M51 43.23N 86.50W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

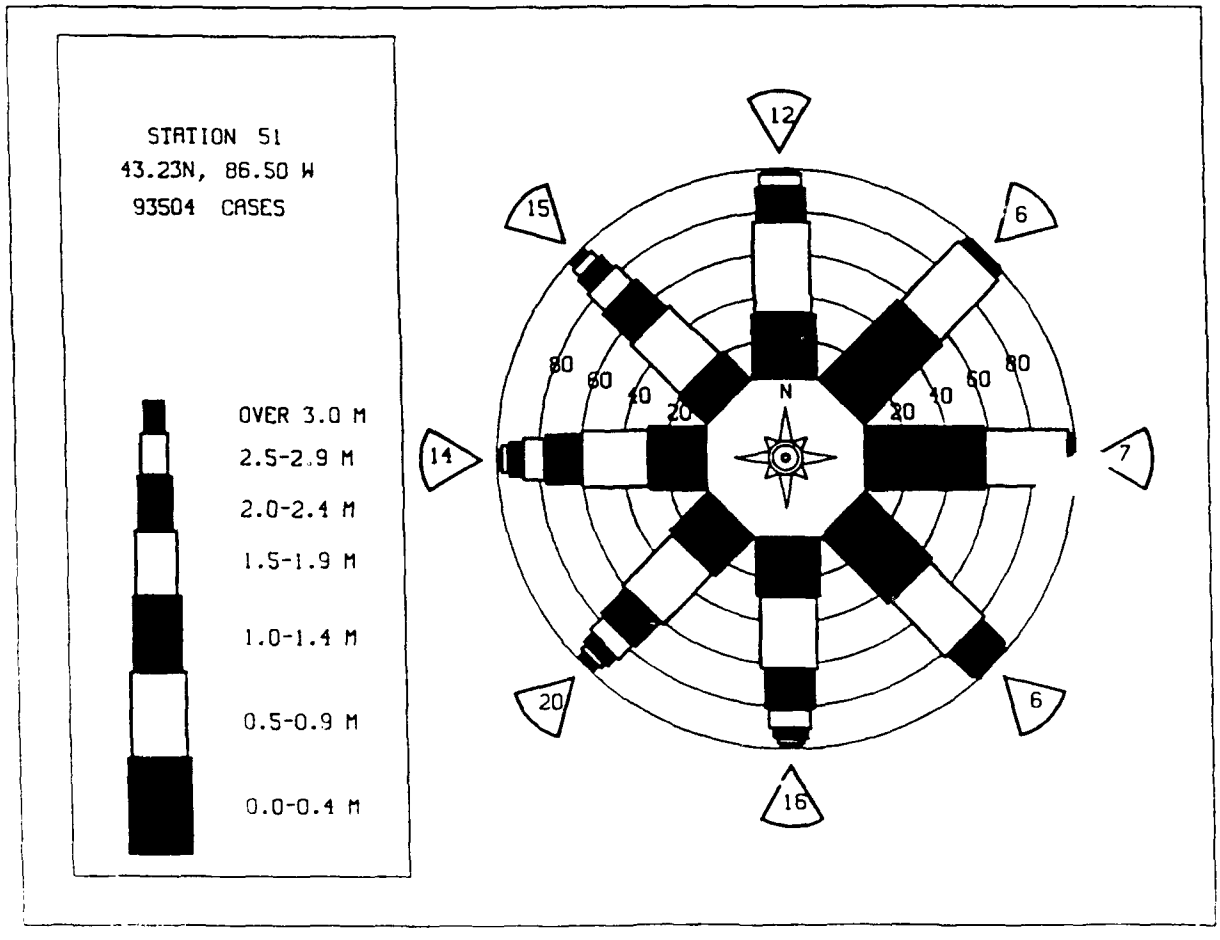
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	255	65	6	1	.	.	.	.	.	.	327
0.25-0.49	50	513	55	12	3	.	.	.	.	.	633
0.50-0.74	.	495	493	145	5	.	.	.	.	.	1138
0.75-0.99	.	4	286	222	28	1	.	.	.	.	541
1.00-1.24	.	.	332	244	155	3	.	.	.	.	734
1.25-1.49	.	.	114	122	176	11	.	.	.	.	423
1.50-1.74	.	.	20	176	226	49	2	.	.	.	473
1.75-1.99	.	.	.	33	127	51	14	.	.	.	225
2.00-2.24	.	.	.	14	114	84	19	.	.	.	231
2.25-2.49	.	.	.	1	45	52	23	1	.	.	122
2.50-2.74	.	.	.	.	13	105	21	.	.	.	139
2.75-2.99	.	.	.	.	3	38	7	1	.	.	49
3.00-3.24	.	.	.	.	.	35	9	1	.	.	45
3.25-3.49	.	.	.	.	.	11	18	1	.	.	30
3.50+	.	.	.	.	.	4	64	7	3	.	78
TOTAL	305	1077	1306	970	895	444	177	11	3	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.6 NO. OF CASES= 4875.

STATION M51 43.23N 86.50W 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	
0.00-0.24	764	299	21	5	.	.	.	.	.	.	1089
0.25-0.49	194	1595	240	39	4	.	.	.	.	.	2072
0.50-0.74	.	1236	1051	265	18	1	.	.	.	.	2570
0.75-0.99	.	77	528	383	39	1	.	.	.	.	1028
1.00-1.24	.	.	473	426	129	5	.	.	.	.	1033
1.25-1.49	.	.	79	234	192	5	.	.	.	.	510
1.50-1.74	.	.	9	226	255	24	1	.	.	.	515
1.75-1.99	.	.	.	33	186	37	2	.	.	.	258
2.00-2.24	.	.	.	5	190	85	3	.	.	.	283
2.25-2.49	.	.	.	1	79	66	5	.	.	.	151
2.50-2.74	.	.	.	.	17	142	7	.	.	.	166
2.75-2.99	.	.	.	.	1	66	7	.	.	.	74
3.00-3.24	.	.	.	.	.	71	12	.	.	.	83
3.25-3.49	.	.	.	.	.	14	25	.	.	.	39
3.50+	.	.	.	.	.	2	84	8	1	.	95
TOTAL	958	3207	2401	1617	1110	518	146	8	1	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 M51 (43.23N 86.50W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.8	0.8	0.8	0.6	0.5	0.5	0.6	0.7	0.7	1.1	1.0	0.7
1957	1.2	0.8	0.8	0.6	0.6	0.5	0.4	0.3	0.5	0.5	1.2	1.3	0.7
1958	1.0	1.2	0.7	0.8	0.7	0.6	0.5	0.7	0.7	0.9	1.2	1.0	0.8
1959	0.9	0.9	0.8	0.7	0.6	0.4	0.4	0.6	0.7	0.7	1.1	0.9	0.7
1960	1.1	1.1	0.8	0.8	0.5	0.5	0.4	0.5	0.5	0.7	1.5	1.2	0.8
1961	1.0	0.8	0.9	0.7	0.6	0.5	0.4	0.5	0.8	1.0	1.0	1.2	0.8
1962	1.2	1.0	0.7	0.9	0.7	0.5	0.5	0.6	0.8	0.9	0.8	1.4	0.8
1963	1.2	1.2	1.0	0.9	0.6	0.5	0.6	0.7	0.7	0.9	1.5	1.3	0.9
1964	1.7	1.5	1.3	1.2	0.7	0.5	0.4	0.8	0.8	1.0	1.2	1.4	1.0
1965	1.6	1.9	1.1	0.8	0.8	0.5	0.4	0.5	0.8	1.1	1.3	1.4	1.0
1966	1.2	0.9	1.1	0.7	0.7	0.6	0.4	0.5	0.6	1.5	1.5	1.2	0.9
1967	1.7	1.6	1.0	0.9	0.7	0.5	0.5	0.6	0.6	1.1	1.4	1.3	1.0
1968	1.2	1.4	1.1	1.0	0.6	0.5	0.7	0.8	0.8	1.3	1.1	1.6	1.0
1969	1.3	0.9	1.0	0.7	0.5	0.7	0.4	0.7	0.7	1.1	1.1	1.2	0.9
1970	1.2	1.5	0.8	1.0	0.8	0.6	0.6	0.6	0.9	1.0	1.3	1.3	1.0
1971	1.8	1.6	1.2	0.9	0.7	0.5	0.7	0.8	0.8	0.9	1.4	1.2	1.0
1972	1.9	1.3	1.1	0.7	0.5	0.6*	0.6	0.7	0.9	1.0	1.0	1.3	1.0
1973	1.7	1.1	1.0	0.8	0.7	0.6	0.6	0.8	0.8	0.9	1.3	1.3	1.0
1974	1.3	1.2	1.1	1.0	0.6	0.6	0.6	0.6	1.0	1.2	1.2	1.2	1.0
1975	1.7	1.2	1.0	0.8	0.5	0.7	0.6	0.6	0.8	1.0	1.2	1.2	0.9
1976	1.6	1.5	1.5	0.8	0.7	0.6	0.6	0.7	0.8	0.9	1.4	1.5	1.1
1977	1.6	1.5	1.2	0.8	0.5	0.7	0.9	1.0	1.0	1.2	1.4	1.4	1.1
1978	1.6	1.0	1.0	0.7	0.6	0.6	0.6	0.7	0.8	1.1	1.1	1.6	0.9
1979	1.3	1.0	1.0	0.7	0.7	0.7	0.5	0.6	0.7	1.0	1.2	1.4	0.9
1980	1.1	0.9	1.0	0.5	0.4	0.4	0.4	0.5	0.6	0.9	1.0	1.0	0.7
1981	0.9	1.1	0.8	0.9	0.5	0.6	0.4	0.5	0.8	0.9	0.8	1.1	0.8
1982	1.5	0.9	1.0	0.9	0.5	0.4	0.5	0.6	0.7	0.9	1.1	1.1	0.8
1983	0.8	0.5	0.6	0.6	0.4	0.4	0.5	0.5	0.8	0.8	1.1	1.3	0.7
1984	1.1	1.0	0.9	0.7	0.5	0.5	0.5	0.5	0.8	0.7	1.2	1.3	0.8
1985	1.4	1.2	1.1	0.8	0.6	0.5	0.5	0.5	0.9	0.8	0.9	1.4	0.9
1986	1.5	0.8	1.3	0.8	0.5	0.5	0.5	0.5	0.7	0.7	1.3	1.2	0.9
1987	1.0	0.9	0.7	0.6	0.5	0.5	0.5	0.6	0.5	0.9	1.0	1.1	0.8
MEAN	1.3	1.1	1.0	0.8	0.6	0.5	0.5	0.6	0.8	1.0	1.2	1.3	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M51 (43.23N 86.50W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.8	3.5	2.7	2.8	1.7	1.4	1.4	2.5	2.4	2.7	4.0	3.8
1957	3.2	3.1	4.8	2.7	2.6	1.6	1.7	1.9	2.1	1.8	4.0	3.3
1958	3.9	3.8	2.0	2.7	2.2	2.4	1.9	2.6	2.1	3.8	4.0	2.8
1959	2.9	3.4	4.6	2.4	1.7	1.5	1.8	2.1	2.1	3.3	3.3	4.0
1960	4.6	3.8	3.8	2.6	2.2	2.0	1.8	2.3	1.7	2.9	5.0	4.4
1961	3.9	3.6	3.8	2.4	2.2	1.4	1.5	2.0	3.1	3.7	3.7	3.6
1962	4.1	3.6	2.5	2.8	2.5	1.7	1.9	2.1	2.7	3.2	4.3	5.2
1963	3.9	4.7	4.3	3.9	3.1	1.9	2.2	3.2	2.3	3.1	4.2	3.6
1964	5.8	4.7	4.0	4.4	3.6	2.4	1.9	2.8	5.4	3.1	3.5	3.8
1965	4.3	4.6	5.0	2.6	2.5	2.0	1.8	1.7	3.2	3.5	5.0	3.7
1966	4.1	3.9	4.2	2.5	2.7	2.4	1.6	2.3	2.9	4.2	4.5	3.5
1967	5.8	4.1	3.5	2.7	3.3	1.7	1.7	2.1	3.3	3.5	4.4	3.2
1968	3.4	5.3	3.6	3.4	2.2	2.8	2.1	3.0	2.2	3.4	3.7	5.4
1969	4.0	3.5	3.0	2.6	1.8	2.5	1.2	2.6	2.4	3.0	3.4	3.8
1970	3.8	4.4	2.6	3.1	2.5	2.0	2.5	2.2	3.5	3.5	5.1	4.4
1971	5.5	6.8	4.7	3.2	2.4	1.6	2.5	2.7	3.7	3.7	4.9	3.8
1972	5.1	3.9	4.2	2.6	1.6	1.8	2.0	2.3	3.2	3.7	3.5	4.7
1973	4.3	3.4	6.3	3.2	2.7	3.4	1.8	2.9	2.2	3.2	3.8	3.7
1974	4.6	4.5	3.9	3.5	2.0	2.6	2.2	2.5	3.1	3.7	3.7	3.7
1975	7.7	4.6	2.8	2.9	2.2	2.5	1.7	2.7	2.3	3.2	5.0	4.4
1976	4.9	5.0	4.8	2.9	3.5	2.3	2.4	3.4	2.9	3.7	3.1	4.7
1977	4.3	4.2	4.4	3.2	1.7	1.9	2.7	4.0	3.2	4.7	4.6	4.8
1978	5.7	3.0	3.8	2.4	2.8	2.6	1.8	2.6	2.4	3.5	4.3	4.6
1979	3.8	3.1	3.6	4.2	2.7	2.3	1.9	1.9	2.1	3.3	3.7	4.3
1980	5.2	3.6	3.4	1.8	1.7	1.7	1.4	1.2	1.8	2.7	3.2	3.7
1981	3.2	2.4	2.4	3.5	2.0	1.9	1.3	2.1	3.7	3.9	3.4	3.6
1982	5.7	3.9	4.4	4.7	1.7	1.3	1.5	2.1	2.3	4.1	3.5	4.7
1983	4.1	1.6	2.4	3.7	1.6	1.2	1.8	1.6	2.5	2.9	3.7	3.7
1984	3.8	3.0	3.7	3.8	2.0	2.9	1.6	1.6	2.9	3.3	3.4	3.7
1985	4.1	4.0	4.4	3.1	2.3	1.9	1.8	2.3	4.0	3.5	3.5	4.6
1986	4.9	3.5	4.8	2.4	3.1	1.9	2.8	1.9	2.6	2.7	4.1	4.1
1987	3.1	5.1	3.2	3.2	1.5	1.5	1.8	1.8	2.0	4.0	3.3	3.6

32 YR. STATISTICS FOR WIS STATION M51

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.9
MEAN PEAK WAVE PERIOD	(SECONDS)	4.1
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	223.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		7811115

STATION M52 43.08N 86.32W 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	
0.00-0.24	1225	237	48	20	3	.	.	.	.	.	1533
0.25-0.49	524	1329	368	245	43	.	.	.	.	.	2509
0.50-0.74	.	1104	154	303	190	11	.	.	.	.	1762
0.75-0.99	.	598	103	297	202	56	5	.	.	.	1261
1.00-1.24	.	.	115	130	225	162	42	.	.	.	674
1.25-1.49	.	.	43	3	26	39	13	1	.	.	125
1.50-1.74	.	.	48	1	18	23	14	1	.	.	105
1.75-1.99	.	.	17	8	2	8	8	.	1	.	44
2.00-2.24	.	.	.	8	.	2	6	1	.	.	17
2.25-2.49	.	.	.	2	.	1	2	1	.	.	6
2.50-2.74	.	.	.	3	.	.	1	1	.	.	5
2.75-2.99	.	.	.	1	.	.	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	1	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1749	3268	896	1021	709	302	91	6	1	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 7542.

STATION M52 43.08N 86.32W 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	
0.00-0.24	424	119	31	10	2	.	.	.	.	.	586
0.25-0.49	145	601	170	126	31	1	.	.	.	.	1074
0.50-0.74	.	625	48	97	73	9	.	.	.	.	852
0.75-0.99	.	89	71	14	44	19	2	.	.	.	239
1.00-1.24	.	.	35	5	7	4	4	.	.	.	55
1.25-1.49	.	.	9	.	.	.	.	.	1	.	10
1.50-1.74	.	.	1	4	.	.	.	.	.	.	5
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	2	.	.	.	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	569	1434	365	259	157	33	6	0	1	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 2652.

STATION M52 43.08N 86.32W 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	
0.00-0.24	602	214	56	31	1	1	.	.	.	.	905
0.25-0.49	93	644	121	78	14	3	.	.	.	.	953
0.50-0.74	.	825	37	26	18	4	.	.	.	.	910
0.75-0.99	.	7	119	1	9	5	.	.	.	.	141
1.00-1.24	.	.	56	.	.	.	.	.	.	.	56
1.25-1.49	.	.	16	.	.	.	.	.	.	.	16
1.50-1.74	.	.	.	3	.	.	.	.	.	.	3
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	695	1690	405	140	42	13	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.1 NO. OF CASES= 2801.

STATION M52 43.08N 86.32W 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	
0.00-0.24	673	146	52	14	1	.	.	.	.	.	886
0.25-0.49	180	678	69	38	5	.	.	.	.	.	970
0.50-0.74	.	929	52	20	5	1	.	.	.	.	1007
0.75-0.99	.	43	195	.	2	.	.	.	.	.	240
1.00-1.24	.	.	99	.	.	.	.	.	.	.	99
1.25-1.49	.	.	41	.	.	.	.	.	.	.	41
1.50-1.74	.	.	.	22	.	.	.	.	.	.	22
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	853	1796	508	95	13	1	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 3063

STATION M52 43.08N 86.32W 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	
0.00-0.24	875	168	39	10	.	.	.	.	.	.	1092
0.25-0.49	413	1260	60	38	3	.	.	.	.	.	1774
0.50-0.74	.	1673	2	18	2	.	.	.	.	.	1695
0.75-0.99	.	141	220	.	.	.	.	.	.	.	361
1.00-1.24	.	.	111	.	.	.	.	.	.	.	111
1.25-1.49	.	.	12	.	.	.	.	.	.	.	12
1.50-1.74	.	.	7	1	.	.	.	.	.	.	8
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1288	3242	451	67	5	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.9 NO. OF CASES= 4734.

STATION M52 43.08N 86.32W 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	
0.00-0.24	734	130	18	3	1	.	.	.	.	.	886
0.25-0.49	255	772	33	18	3	.	.	.	.	.	1081
0.50-0.74	.	1261	42	5	.	.	.	.	.	.	1308
0.75-0.99	.	62	175	.	.	.	.	.	.	.	237
1.00-1.24	.	.	90	.	.	.	.	.	.	.	90
1.25-1.49	.	.	40	.	.	.	.	.	.	.	40
1.50-1.74	.	.	1	4	.	.	.	.	.	.	5
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	989	2225	399	30	4	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.9 NO. OF CASES= 3417.

STATION M52 43.08N 86.32W 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	
0.00-0.24	596	105	17	7	.	.	.	.	.	.	725
0.25-0.49	94	451	33	9	1	1	.	.	.	.	589
0.50-0.74	.	747	62	3	1	.	.	.	.	.	813
0.75-0.99	.	13	128	.	.	.	.	.	.	.	141
1.00-1.24	.	.	56	.	.	.	.	.	.	.	56
1.25-1.49	.	.	19	.	.	.	.	.	.	.	19
1.50-1.74	.	.	1	1	.	.	.	.	.	.	2
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	690	1316	316	20	2	1	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.9 NO. OF CASES= 2199.

STATION M52 43.08N 86.32W 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	
0.00-0.24	296	81	9	.	.	.	.	.	.	.	386
0.25-0.49	106	622	10	4	.	.	.	.	.	.	742
0.50-0.74	.	1025	71	2	.	.	.	.	.	.	1098
0.75-0.99	.	23	216	6	.	.	.	.	.	.	245
1.00-1.24	.	.	119	13	.	.	.	.	.	.	132
1.25-1.49	.	.	32	13	.	.	.	.	.	.	45
1.50-1.74	.	.	.	11	.	.	.	.	.	.	11
1.75-1.99	.	.	.	.	1	.	.	.	.	.	1
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	402	1751	457	49	2	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.1 NO. OF CASES= 2497

STATION M52 43.08N 86.32W 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	
0.00-0.24	395	158	6	.	.	.	.	.	.	.	559
0.25-0.49	148	859	86	7	1	.	.	.	.	.	1101
0.50-0.74	.	1068	503	35	2	.	.	.	.	.	1608
0.75-0.99	.	60	503	174	8	.	.	.	.	.	745
1.00-1.24	.	.	412	263	31	.	.	.	.	.	706
1.25-1.49	.	.	74	197	60	.	.	.	.	.	331
1.50-1.74	.	.	7	219	108	3	.	.	.	.	337
1.75-1.99	.	.	.	22	100	.	.	.	.	.	122
2.00-2.24	.	.	.	4	105	3	.	.	.	.	112
2.25-2.49	.	.	.	.	38	5	1	.	.	.	44
2.50-2.74	.	.	.	.	16	12	.	.	.	.	28
2.75-2.99	.	.	.	.	.	6	.	.	.	.	6
3.00-3.24	.	.	.	.	.	7	.	.	.	.	7
3.25-3.49	.	.	.	.	.	2	.	.	.	.	2
3.50+	.	.	.	.	.	3	4	.	.	.	7
TOTAL	543	2145	1591	921	469	41	5	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 5361.

STATION M52 43.08N 86.32W 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	
0.00-0.24	388	417	35	2	1	.	.	.	.	.	843
0.25-0.49	134	1538	598	64	2	1	.	.	.	.	2337
0.50-0.74	.	827	1393	636	9	.	.	.	.	.	2865
0.75-0.99	.	39	550	688	60	.	.	.	.	.	1337
1.00-1.24	.	.	534	749	248	.	.	.	.	.	1531
1.25-1.49	.	.	64	515	289	2	.	.	.	.	870
1.50-1.74	.	.	2	496	423	28	.	.	.	.	949
1.75-1.99	.	.	.	66	397	65	.	.	.	.	528
2.00-2.24	.	.	.	11	459	118	2	.	.	.	590
2.25-2.49	.	.	.	.	194	80	12	.	.	.	286
2.50-2.74	.	.	.	.	96	202	8	.	.	.	306
2.75-2.99	.	.	.	.	5	141	9	.	.	.	155
3.00-3.24	.	.	.	.	.	136	32	.	.	.	168
3.25-3.49	.	.	.	.	.	22	38	.	.	.	60
3.50+	.	.	.	.	.	16	131	6	.	.	153
TOTAL	522	2821	3176	3227	2183	811	232	6	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.6 NO. OF CASES= 12158.

STATION M52 43.08N 86.32W 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	
0.00-0.24	521	395	13	.	1	.	.	.	.	.	930
0.25-0.49	137	1803	329	35	.	.	.	.	.	.	2304
0.50-0.74	.	700	1670	416	5	.	.	.	.	.	2791
0.75-0.99	.	32	480	675	17	.	.	.	.	.	1204
1.00-1.24	.	.	372	662	235	.	.	.	.	.	1269
1.25-1.49	.	.	48	251	290	2	.	.	.	.	591
1.50-1.74	.	.	1	240	348	34	.	.	.	.	623
1.75-1.99	.	.	.	34	237	83	.	.	.	.	354
2.00-2.24	.	.	.	2	233	148	4	.	.	.	387
2.25-2.49	.	.	.	.	94	112	9	.	.	.	215
2.50-2.74	.	.	.	.	28	186	13	.	.	.	227
2.75-2.99	.	.	.	.	2	103	23	.	.	.	128
3.00-3.24	.	.	.	.	.	127	43	.	.	.	170
3.25-3.49	.	.	.	.	.	26	55	.	.	.	81
3.50+	.	.	.	.	.	1	211	16	6	.	234
TOTAL	658	2930	2913	2315	1490	822	358	16	6	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.4 NO. OF CASES= 10780.

STATION M52 43.08N 86.32W 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	
0.00-0.24	423	251	7	.	.	.	.	.	.	.	681
0.25-0.49	102	1375	174	3	1	.	.	.	.	.	1655
0.50-0.74	.	586	1126	178	.	.	.	.	.	.	1890
0.75-0.99	.	16	375	397	10	.	.	.	.	.	798
1.00-1.24	.	.	201	527	140	.	.	.	.	.	868
1.25-1.49	.	.	17	203	237	1	.	.	.	.	458
1.50-1.74	.	.	.	158	302	23	.	.	.	.	483
1.75-1.99	.	.	.	25	188	51	.	.	.	.	264
2.00-2.24	.	.	.	1	154	152	2	.	.	.	309
2.25-2.49	.	.	.	1	54	114	7	.	.	.	186
2.50-2.74	.	.	.	.	8	156	13	.	.	.	177
2.75-2.99	.	.	.	.	.	77	12	.	.	.	89
3.00-3.24	.	.	.	.	.	75	31	.	.	.	106
3.25-3.49	.	.	.	.	.	8	41	.	.	.	49
3.50+	.	.	.	.	.	2	120	21	2	.	145
TOTAL	525	2228	1900	1493	1104	659	226	21	2	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 7645.

STATION M52 43.08N 86.32W 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	
0.00-0.24	417	310	9	.	.	.	.	.	.	.	736
0.25-0.49	100	1458	226	8	1	.	.	.	.	.	1793
0.50-0.74	.	562	1124	208	3	.	.	.	.	.	1897
0.75-0.99	.	35	397	442	4	.	.	.	.	.	878
1.00-1.24	.	.	248	544	144	.	.	.	.	.	936
1.25-1.49	.	.	27	212	271	1	.	.	.	.	511
1.50-1.74	.	.	2	201	326	5	.	.	.	.	534
1.75-1.99	.	.	.	11	256	33	.	.	.	.	300
2.00-2.24	.	.	.	2	245	101	.	.	.	.	348
2.25-2.49	.	.	.	.	112	100	4	.	.	.	216
2.50-2.74	.	.	.	.	17	185	2	.	.	.	204
2.75-2.99	.	.	.	.	1	83	5	.	.	.	89
3.00-3.24	.	.	.	.	.	85	8	.	.	.	93
3.25-3.49	.	.	.	.	.	16	28	.	.	.	44
3.50+	.	.	.	.	.	2	74	6	.	.	82
TOTAL	517	2365	2033	1628	1380	611	121	6	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.4 NO. OF CASES= 8117.

STATION M52 43.08N 86.32W 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	
0.00-0.24	294	291	18	4	.	.	.	.	.	.	607
0.25-0.49	105	1444	575	48	1	.	.	.	.	.	2173
0.50-0.74	.	669	1320	604	19	.	1	.	.	.	2613
0.75-0.99	.	45	478	592	52	.	.	.	.	.	1167
1.00-1.24	.	.	317	519	278	1	.	.	.	.	1115
1.25-1.49	.	.	40	229	309	2	.	.	.	.	580
1.50-1.74	.	.	5	191	346	20	.	.	.	.	562
1.75-1.99	.	.	.	18	262	63	1	.	.	.	344
2.00-2.24	.	.	.	5	218	194	1	.	.	.	418
2.25-2.49	.	.	.	1	101	124	1	.	.	.	227
2.50-2.74	.	.	.	.	16	254	4	.	.	.	274
2.75-2.99	.	.	.	.	1	116	20	.	.	.	137
3.00-3.24	.	.	.	.	1	99	50	.	.	.	150
3.25-3.49	.	.	.	.	1	14	45	.	.	.	60
3.50+	.	.	.	.	.	3	145	13	2	.	163
TOTAL	399	2449	2753	2211	1605	890	268	13	2	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.0 MEAN TP(SEC)= 4.6 NO. OF CASES= 9922.

STATION M52 43.08N 86.32W 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	
0.00-0.24	222	72	17	2	.	.	.	.	.	.	313
0.25-0.49	131	705	390	136	9	.	.	.	.	.	1371
0.50-0.74	.	632	583	465	58	1	.	.	.	.	1739
0.75-0.99	.	58	385	229	97	4	.	.	.	.	773
1.00-1.24	.	.	241	335	176	9	1	.	.	.	762
1.25-1.49	.	.	44	165	179	14	1	.	.	.	403
1.50-1.74	.	.	12	162	207	17	1	.	.	.	399
1.75-1.99	.	.	.	21	146	47	.	.	.	.	214
2.00-2.24	.	.	.	6	142	199	2	.	.	.	349
2.25-2.49	.	.	.	.	40	105	3	.	.	.	148
2.50-2.74	.	.	.	.	11	177	8	.	.	.	196
2.75-2.99	.	.	.	.	1	90	25	.	.	.	116
3.00-3.24	.	.	.	.	.	57	82	1	.	.	140
3.25-3.49	.	.	.	.	.	5	41	.	.	.	46
3.50+	.	.	.	.	.	.	148	26	12	.	186
TOTAL	353	1467	1672	1521	1066	725	312	27	12	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.7 NO. OF CASES= 6718.

STATION M52 43.08N 86.32W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

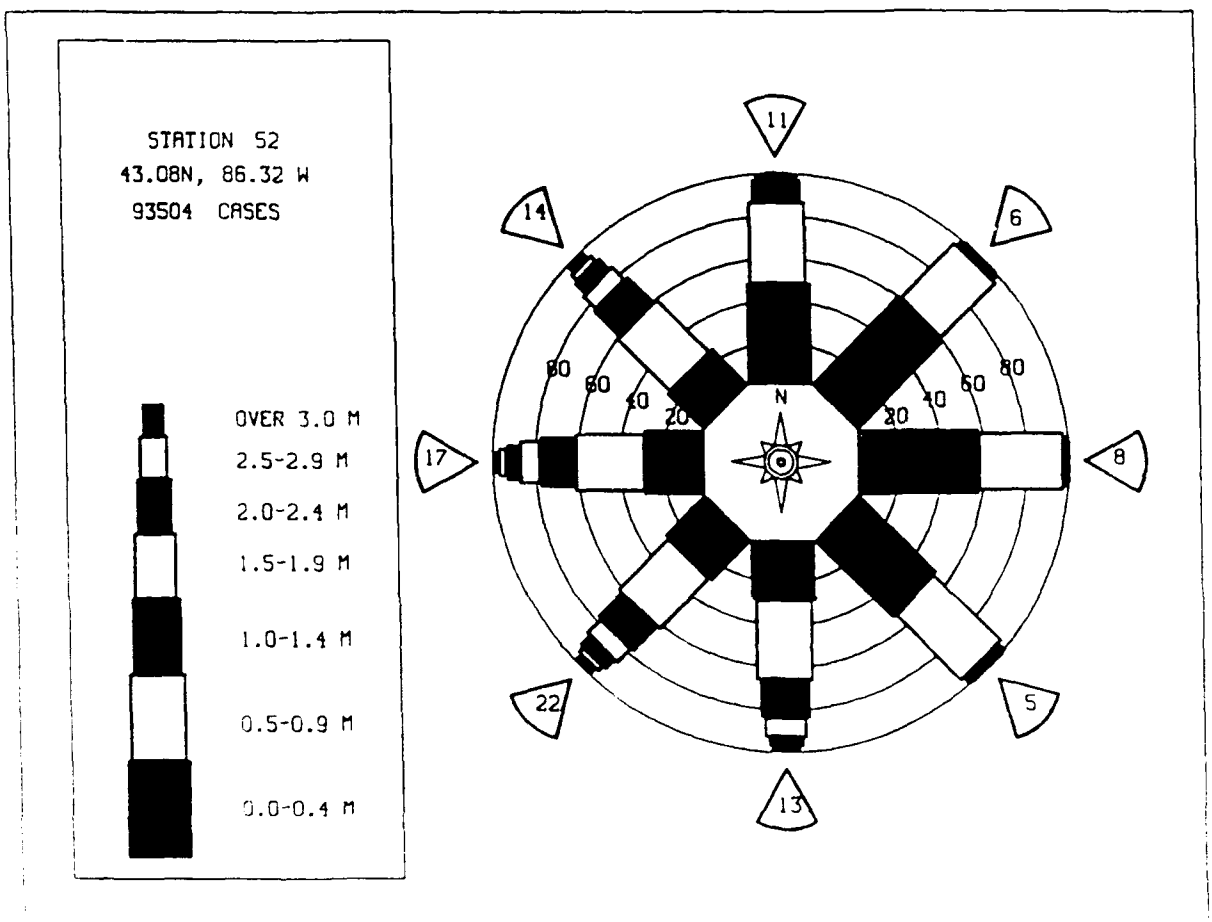
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	252	53	13	.	1	.	.	.	.	.	319
0.25-0.49	125	433	132	42	4	.	.	.	.	.	736
0.50-0.74	.	470	243	132	37	2	.	.	.	.	884
0.75-0.99	.	141	219	154	91	7	.	.	.	.	612
1.00-1.24	.	.	148	204	144	67	9	.	.	.	572
1.25-1.49	.	.	50	69	112	28	17	.	.	.	276
1.50-1.74	.	.	20	94	88	23	16	1	.	.	242
1.75-1.99	.	.	4	26	49	24	9	1	.	.	113
2.00-2.24	.	.	.	10	55	66	9	2	.	.	142
2.25-2.49	.	.	.	2	14	32	5	.	.	.	53
2.50-2.74	.	.	.	.	8	47	11	.	1	.	67
2.75-2.99	.	.	.	.	3	19	11	.	.	.	33
3.00-3.24	.	.	.	.	1	9	12	3	1	.	26
3.25-3.49	.	.	.	.	.	1	13	1	.	.	15
3.50+	.	.	.	.	.	2	33	17	.	.	52
TOTAL	377	1097	829	733	607	327	145	25	2	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.4 NO. OF CASES= 3898.

STATION M52 43.08N 86.32W 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	
0.00-0.24	834	315	39	10	1	.	.	.	.	.	1199
0.25-0.49	280	1598	338	90	12	.	.	.	.	.	2318
0.50-0.74	.	1371	843	315	42	2	.	.	.	.	2573
0.75-0.99	.	141	462	367	60	9	.	.	.	.	1039
1.00-1.24	.	.	316	395	163	24	5	.	.	.	903
1.25-1.49	.	.	58	186	177	9	3	.	.	.	433
1.50-1.74	.	.	11	181	216	17	3	.	.	.	428
1.75-1.99	.	.	2	23	164	37	1	.	.	.	227
2.00-2.24	.	.	.	5	161	98	2	.	.	.	266
2.25-2.49	.	.	.	.	66	67	4	.	.	.	137
2.50-2.74	.	.	.	.	20	122	6	.	.	.	148
2.75-2.99	.	.	.	.	1	63	10	.	.	.	74
3.00-3.24	.	.	.	.	.	59	26	.	.	.	85
3.25-3.49	.	.	.	.	.	9	26	.	.	.	35
3.50+	.	.	.	.	.	2	87	10	2	.	101
TOTAL	1114	3425	2069	1572	1083	518	173	10	2	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 7.4 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M52 (43.08N 86.32W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.7	0.7	0.7	0.6	0.5	0.5	0.6	0.6	0.6	1.0	0.9	0.6
1957	1.1	0.7	0.7	0.6	0.6	0.4	0.4	0.3	0.5	0.5	1.0	1.2	0.7
1958	0.8	1.0	0.6	0.7	0.7	0.6	0.5	0.6	0.7	0.8	1.1	0.9	0.7
1959	0.8	0.9	0.7	0.6	0.6	0.4	0.4	0.5	0.7	0.6	1.0	0.8	0.7
1960	1.1	1.1	0.8	0.8	0.5	0.5	0.4	0.5	0.5	0.7	1.5	1.2	0.8
1961	1.0	0.8	0.9	0.6	0.6	0.5	0.4	0.5	0.8	0.9	0.9	1.1	0.8
1962	1.2	0.9	0.6	0.9	0.7	0.5	0.5	0.6	0.8	0.9	0.7	1.3	0.8
1963	1.2	1.2	1.0	0.8	0.6	0.5	0.5	0.7	0.7	0.9	1.5	1.2	0.9
1964	1.6	1.4	1.3	1.1	0.7	0.5	0.4	0.7	0.8	0.9	1.2	1.3	1.0
1965	1.5	1.8	1.0	0.8	0.8	0.5	0.4	0.4	0.7	1.1	1.3	1.3	1.0
1966	1.1	0.8	1.1	0.7	0.6	0.6	0.4	0.5	0.6	1.5	1.4	1.1	0.9
1967	1.6	1.5	0.9	0.9	0.6	0.5	0.5	0.6	0.6	1.1	1.4	1.2	0.9
1968	1.1	1.4	1.1	1.0	0.5	0.5	0.6	0.8	0.8	1.3	1.0	1.5	1.0
1969	1.3	0.9	1.0	0.7	0.5	0.6	0.4	0.7	0.7	1.1	1.1	1.1	0.8
1970	1.1	1.5	0.7	0.9	0.8	0.6	0.6	0.6	0.8	0.9	1.3	1.3	0.9
1971	1.8	1.5	1.2	0.9	0.7	0.5	0.7	0.7	0.8	0.8	1.3	1.2	1.0
1972	1.9	1.2	1.1	0.7	0.4	0.5	0.5	0.6	0.8	1.0	0.9	1.2	0.9
1973	1.7	1.0	1.0	0.8	0.7	0.6	0.6	0.8	0.8	0.9	1.3	1.2	0.9
1974	1.3	1.2	1.1	1.0	0.6	0.6	0.6	0.6	0.9	1.1	1.2	1.1	0.9
1975	1.6	1.2	0.9	0.7	0.5	0.6	0.6	0.6	0.8	1.0	1.1	1.1	0.9
1976	1.5	1.5	1.5	0.8	0.6	0.6	0.6	0.7	0.8	0.9	1.4	1.5	1.0
1977	1.6	1.4	1.1	0.8	0.5	0.7	0.8	1.0	1.0	1.1	1.4	1.4	1.1
1978	1.6	1.0	0.9	0.7	0.5	0.6	0.6	0.6	0.7	1.1	1.1	1.5	0.9
1979	1.2	0.9	0.9	0.7	0.6	0.6	0.5	0.6	0.7	1.0	1.2	1.3	0.9
1980	1.0	0.9	0.9	0.5	0.4	0.4	0.4	0.5	0.6	0.8	1.0	1.0	0.7
1981	0.9	1.0	0.8	0.9	0.5	0.5	0.4	0.5	0.7	0.9	0.8	1.0	0.7
1982	1.4	0.9	0.9	0.8	0.4	0.4	0.4	0.5	0.7	0.9	1.1	1.0	0.8
1983	0.8	0.5	0.5	0.5	0.4	0.3	0.5	0.5	0.8	0.8	1.0	1.4	0.7
1984	1.1	0.9	0.8	0.6	0.5	0.5	0.5	0.5	0.8	0.7	1.2	1.3	0.8
1985	1.4	1.2	1.1	0.8	0.6	0.5	0.5	0.5	0.9	0.8	0.8	1.4	0.9
1986	1.4	0.8	1.2	0.8	0.5	0.5	0.5	0.5	0.7	0.7	1.2	1.2	0.8
1987	1.0	0.8	0.7	0.6	0.5	0.4	0.5	0.6	0.5	0.8	0.9	1.0	0.7
MEAN	1.2	1.1	0.9	0.8	0.6	0.5	0.5	0.6	0.7	0.9	1.1	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M52 (43.08N 86.32W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.8	3.4	2.5	2.8	1.7	1.3	1.4	2.5	2.4	2.6	3.8	4.0
1957	3.1	3.0	4.7	2.6	2.7	1.6	1.5	1.9	2.1	1.6	3.9	3.3
1958	3.8	3.9	2.0	2.6	1.9	2.3	1.9	2.6	2.0	3.8	4.1	2.9
1959	3.1	3.2	4.6	2.2	1.7	1.5	1.7	2.0	1.9	3.5	3.2	3.8
1960	4.5	3.7	3.8	2.6	2.1	2.1	1.9	2.0	1.7	3.0	4.8	4.2
1961	3.9	3.7	3.8	2.4	2.2	1.4	1.5	2.0	3.0	3.7	3.2	3.8
1962	4.0	3.9	2.6	2.7	2.2	1.7	2.0	2.0	2.9	3.0	4.2	3.3
1963	4.2	5.0	4.7	3.9	3.1	1.9	2.0	2.7	2.3	2.8	4.2	3.6
1964	5.7	4.7	3.8	4.0	3.6	2.4	1.9	2.7	5.3	2.7	3.9	3.7
1965	4.3	4.3	4.9	2.6	2.5	2.0	1.8	1.7	3.1	3.7	5.0	3.6
1966	4.1	3.4	4.2	2.5	2.7	2.2	1.6	2.5	3.1	4.2	4.4	3.8
1967	5.7	4.2	3.1	2.9	3.2	1.7	1.7	2.1	3.3	3.5	4.8	3.4
1968	3.6	5.7	3.6	3.4	2.2	2.9	2.0	3.0	2.2	3.6	4.0	5.9
1969	4.1	3.8	3.2	2.6	1.8	2.2	1.2	2.5	2.3	3.0	3.8	3.7
1970	3.8	4.4	2.8	3.0	2.4	2.0	2.4	2.2	3.5	3.8	5.6	4.5
1971	7.0	6.5	4.7	3.1	2.1	1.6	2.2	2.7	3.2	3.2	4.2	3.9
1972	5.5	4.3	4.5	2.6	1.6	1.7	2.0	2.5	3.0	4.0	3.5	4.7
1973	4.1	3.5	5.8	2.7	2.8	3.2	1.8	2.5	2.2	3.5	3.7	3.7
1974	4.5	4.4	3.7	3.3	1.8	2.6	2.2	2.5	2.9	3.4	4.0	3.6
1975	7.4	4.9	3.0	2.9	2.0	2.5	1.7	2.7	2.4	3.2	5.3	4.6
1976	5.5	5.2	4.1	2.5	3.2	2.3	2.2	2.9	2.8	3.7	3.2	4.8
1977	4.9	4.2	4.1	3.3	1.6	2.0	2.7	3.6	3.3	4.8	5.0	4.9
1978	6.2	3.0	3.3	2.5	2.7	2.4	1.8	2.6	2.4	3.8	4.5	4.6
1979	3.8	3.5	3.9	4.5	2.3	2.0	2.0	1.8	2.0	3.1	3.7	3.9
1980	4.9	3.6	3.1	1.8	1.7	1.7	1.4	1.2	1.8	2.7	3.5	4.0
1981	3.5	2.4	2.3	3.0	1.8	1.8	1.3	2.1	3.9	4.2	3.7	3.4
1982	5.4	3.8	4.5	4.7	1.7	1.3	1.5	2.1	2.4	4.1	3.7	4.7
1983	3.3	1.6	2.3	3.5	1.6	1.2	1.7	1.5	2.5	3.1	3.6	3.9
1984	3.8	2.9	4.0	3.4	2.0	2.5	1.5	1.6	2.5	3.4	3.5	4.0
1985	4.5	3.8	4.4	2.9	2.3	1.9	1.8	2.0	3.8	3.7	3.7	5.0
1986	4.7	3.2	4.7	2.2	3.1	1.9	2.4	1.9	2.8	2.9	4.0	4.4
1987	3.0	5.0	3.4	3.3	1.5	1.5	1.7	1.9	1.7	3.8	2.8	3.5

32 YR. STATISTICS FOR WIS STATION M52

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	226.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011118

STATION M53 42.93N 86.33W 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	
0.00-0.24	110	264	37	16	4	.	.	.	.	.	1425
0.25-0.49	48	1171	268	103	18	.	.	.	.	.	1608
0.50-0.74	.	1475	659	401	85	1	.	.	.	.	2621
0.75-0.99	.	.	592	297	196	14	1	.	.	.	1100
1.00-1.24	.	.	577	111	228	52	3	.	.	.	971
1.25-1.49	.	.	267	59	114	44	7	.	.	.	491
1.50-1.74	.	.	47	158	87	79	26	.	.	.	397
1.75-1.99	.	.	.	52	12	32	14	2	.	.	112
2.00-2.24	.	.	.	25	4	25	16	3	.	.	73
2.25-2.49	.	.	.	10	7	8	11	1	.	.	37
2.50-2.74	.	.	.	2	6	1	13	.	2	.	24
2.75-2.99	.	.	.	.	2	1	2	1	2	.	8
3.00-3.24	.	.	.	.	3	.	2	.	1	.	6
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	2	.	.	2	1	1	6
TOTAL	1152	2910	2447	1234	768	257	96	9	6	1	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 3.9 NO. OF CASES= 8327.

STATION M53 42.93N 86.33W 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	
0.00-0.24	330	119	22	17	.	1	.	.	.	.	489
0.25-0.49	55	553	142	90	18	.	.	.	.	.	858
0.50-0.74	.	712	178	170	73	4	.	.	.	.	1137
0.75-0.99	.	13	174	54	81	13	.	.	.	.	335
1.00-1.24	.	.	99	9	34	19	2	.	.	.	163
1.25-1.49	.	.	40	7	3	2	2	.	.	.	54
1.50-1.74	.	.	3	9	.	1	2	2	.	.	17
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	1	.	1
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	1	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	385	1397	658	356	210	40	6	2	1	1	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.6 NO. OF CASES= 2871.

STATION M53 42.93N 86.33W 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	
0.00-0.24	480	202	29	23	.	.	1	.	.	.	735
0.25-0.49	54	653	180	86	16	3	.	.	.	.	992
0.50-0.74	.	791	78	101	35	11	.	.	.	.	1016
0.75-0.99	.	27	131	21	22	7	1	.	.	.	209
1.00-1.24	.	.	73	.	11	8	.	.	.	.	92
1.25-1.49	.	.	20	.	.	2	.	.	.	.	22
1.50-1.74	.	.	.	3	.	1	.	.	.	.	4
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	534	1673	511	235	84	32	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 2883.

STATION M53 42.93N 86.33W 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	
0.00-0.24	568	163	43	8	.	.	.	.	.	.	782
0.25-0.49	172	781	97	42	6	.	.	.	.	.	1098
0.50-0.74	.	891	68	59	11	1	.	.	.	.	1030
0.75-0.99	.	68	193	4	7	3	.	.	.	.	275
1.00-1.24	.	.	104	.	1	1	.	.	.	.	106
1.25-1.49	.	.	44	.	.	.	.	.	.	.	44
1.50-1.74	.	.	1	11	.	.	.	.	.	.	12
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	740	1903	550	125	25	5	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.1 NO. OF CASES= 3143.

STATION M53 42.93N 86.33W 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	
0.00-0.24	832	183	36	11	.	.	.	.	.	.	1062
0.25-0.49	377	1210	105	34	3	.	.	.	.	.	1729
0.50-0.74	.	1546	28	36	8	.	.	.	.	.	1618
0.75-0.99	.	141	234	5	2	.	.	.	.	.	382
1.00-1.24	.	.	94	.	.	1	.	.	.	.	95
1.25-1.49	.	.	16	.	.	.	.	.	.	.	16
1.50-1.74	.	.	5	2	.	.	.	.	.	.	7
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1209	3080	518	88	13	1	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.9 NO. OF CASES= 4598.

STATION M53 42.93N 86.33W 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	
0.00-0.24	716	160	27	6	.	.	.	.	.	.	909
0.25-0.49	218	753	66	23	1	.	.	.	.	.	1061
0.50-0.74	.	1229	67	35	6	1	.	.	.	.	1338
0.75-0.99	.	60	177	2	.	.	.	.	.	.	239
1.00-1.24	.	.	78	.	1	.	.	.	.	.	79
1.25-1.49	.	.	35	.	.	.	.	.	.	.	35
1.50-1.74	.	.	1	3	.	.	.	.	.	.	4
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	934	2202	451	69	8	1	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.9 NO. OF CASES= 3435.

STATION M53 42.93N 86.33W 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	
0.00-0.24	628	148	16	6	.	.	.	.	.	.	798
0.25-0.49	91	475	77	20	.	1	.	.	.	.	664
0.50-0.74	.	733	66	19	.	.	.	.	.	.	818
0.75-0.99	.	9	122	2	1	.	.	.	.	.	134
1.00-1.24	.	.	58	.	.	.	.	.	.	.	58
1.25-1.49	.	.	13	.	.	.	.	.	.	.	13
1.50-1.74	.	.	.	1	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	719	1365	352	48	1	1	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.9 NO. OF CASES= 2333.

STATION M53 42.93N 86.33W 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	
0.00-0.24	352	102	6	1	.	.	.	.	.	.	461
0.25-0.49	96	626	43	4	.	.	.	.	.	.	769
0.50-0.74	.	943	87	10	1	.	.	.	.	.	1041
0.75-0.99	.	19	206	2	.	.	.	.	.	.	227
1.00-1.24	.	.	119	12	.	.	.	.	.	.	131
1.25-1.49	.	.	26	4	.	.	.	.	.	.	30
1.50-1.74	.	.	1	10	.	.	.	.	.	.	11
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	448	1690	488	43	1	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 2506.

STATION M53 42.93N 86.33W 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	
0.00-0.24	377	181	2	1	.	.	.	.	.	.	561
0.25-0.49	140	829	83	6	1	.	.	.	.	.	1059
0.50-0.74	.	1040	478	23	.	.	.	.	.	.	1541
0.75-0.99	.	45	526	124	5	.	.	.	.	.	700
1.00-1.24	.	.	408	243	20	.	.	.	.	.	671
1.25-1.49	.	.	65	242	14	.	.	.	.	.	321
1.50-1.74	.	.	6	243	28	.	.	.	.	.	277
1.75-1.99	.	.	.	27	73	.	.	.	.	.	100
2.00-2.24	.	.	.	4	68	2	.	.	.	.	74
2.25-2.49	.	.	.	.	28	1	.	.	.	.	29
2.50-2.74	.	.	.	.	8	2	1	.	.	.	11
2.75-2.99	.	.	.	.	1	2	.	.	.	.	3
3.00-3.24	.	.	.	.	.	4	.	.	.	.	4
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	1	.	.	.	.	1
TOTAL	517	2095	1568	913	246	13	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.7 NO. OF CASES= 5021.

STATION M53 42.93N 86.33W 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	
0.00-0.24	420	456	33	1	1	.	.	.	.	.	911
0.25-0.49	137	1499	497	42	.	.	.	.	.	.	2175
0.50-0.74	.	803	1304	545	1	.	.	.	.	.	2653
0.75-0.99	.	39	553	620	38	.	.	.	.	.	1250
1.00-1.24	.	.	552	702	186	.	.	.	.	.	1440
1.25-1.49	.	.	55	586	194	2	.	.	.	.	837
1.50-1.74	.	.	3	689	301	19	.	.	.	.	1012
1.75-1.99	.	.	.	89	375	43	.	.	.	.	507
2.00-2.24	.	.	.	7	433	81	1	.	.	.	522
2.25-2.49	.	.	.	.	176	79	4	.	.	.	259
2.50-2.74	.	.	.	.	116	150	1	.	.	.	267
2.75-2.99	.	.	.	.	7	109	7	.	.	.	123
3.00-3.24	.	.	.	.	1	99	21	.	.	.	121
3.25-3.49	.	.	.	.	.	22	28	.	.	.	50
3.50+	.	.	.	.	.	5	95	2	.	.	102
TOTAL	557	2797	2997	3281	1829	609	157	2	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.5 NO. OF CASES= 11455.

STATION M53 42.93N 86.33W 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	
0.00-0.24	539	410	9	1	1	.	.	.	.	.	960
0.25-0.49	145	1712	250	14	.	.	.	.	.	.	2121
0.50-0.74	.	685	1598	350	3	1	.	.	.	.	2637
0.75-0.99	.	18	449	642	10	.	.	.	.	.	1119
1.00-1.24	.	.	330	635	199	.	.	.	.	.	1164
1.25-1.49	.	.	35	268	281	.	.	.	.	.	584
1.50-1.74	.	.	1	244	356	25	.	.	.	.	626
1.75-1.99	.	.	.	22	263	68	.	.	.	.	353
2.00-2.24	.	.	.	3	243	146	.	.	.	.	392
2.25-2.49	.	.	.	.	106	119	4	.	.	.	229
2.50-2.74	.	.	.	.	25	170	10	.	.	.	205
2.75-2.99	.	.	.	.	2	120	22	.	.	.	144
3.00-3.24	.	.	.	.	.	131	29	.	.	.	160
3.25-3.49	.	.	.	.	.	21	52	.	.	.	73
3.50+	.	.	.	.	.	3	172	13	4	.	192
TOTAL	684	2825	2672	2179	1489	804	289	13	4	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.4 NO. OF CASES= 10269.

STATION M53 42.93N 86.33W 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	
0.00-0.24	478	254	3	1	.	.	.	.	.	.	736
0.25-0.49	97	1278	135	5	.	.	.	.	.	.	1515
0.50-0.74	.	539	1095	136	.	.	.	.	.	.	1770
0.75-0.99	.	16	313	422	6	1	.	.	.	.	758
1.00-1.24	.	.	210	490	114	.	.	.	.	.	814
1.25-1.49	.	.	18	209	224	1	.	.	.	.	452
1.50-1.74	.	.	.	160	278	16	.	.	.	.	454
1.75-1.99	.	.	.	16	164	42	.	.	.	.	222
2.00-2.24	.	.	.	1	151	135	3	.	.	.	290
2.25-2.49	.	.	.	.	62	96	4	.	.	.	162
2.50-2.74	.	.	.	.	10	131	10	.	.	.	151
2.75-2.99	.	.	.	.	1	69	10	.	.	.	80
3.00-3.24	.	.	.	.	.	82	19	.	.	.	101
3.25-3.49	.	.	.	.	.	4	40	.	.	.	44
3.50+	.	.	.	.	.	4	100	21	2	.	127
TOTAL	575	2087	1774	1440	1010	581	186	21	2	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.4 NO. OF CASES= 7195.

STATION M53 42.93N 86.33W 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	
0.00-0.24	433	263	8	.	.	.	.	.	.	.	704
0.25-0.49	98	1334	133	7	.	.	.	.	.	.	1572
0.50-0.74	.	533	1091	114	3	.	.	.	.	.	1741
0.75-0.99	.	9	344	437	9	.	.	.	.	.	799
1.00-1.24	.	.	206	507	84	.	.	.	.	.	797
1.25-1.49	.	.	29	196	226	1	.	.	.	.	452
1.50-1.74	.	.	.	177	299	5	.	.	.	.	481
1.75-1.99	.	.	.	14	201	34	.	.	.	.	249
2.00-2.24	.	.	.	1	208	96	.	.	.	.	305
2.25-2.49	.	.	.	.	93	85	2	.	.	.	180
2.50-2.74	.	.	.	.	13	147	5	.	.	.	165
2.75-2.99	.	.	.	.	2	65	2	.	.	.	69
3.00-3.24	.	.	.	.	1	79	4	.	.	.	84
3.25-3.49	.	.	.	.	.	10	25	.	.	.	35
3.50+	.	.	.	.	.	1	57	4	.	.	62
TOTAL	531	2139	1811	1453	1139	523	95	4	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 7215.

STATION M53 42.93N 86.33W 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	
0.00-0.24	340	260	8	1	.	.	.	.	.	.	609
0.25-0.49	99	1478	309	8	1	.	.	.	.	.	1895
0.50-0.74	.	618	1415	267	3	1	.	.	.	.	2304
0.75-0.99	.	10	434	633	10	.	1	.	.	.	1088
1.00-1.24	.	.	275	643	191	.	.	.	.	.	1109
1.25-1.49	.	.	26	235	335	.	.	.	.	.	596
1.50-1.74	.	.	1	196	368	21	1	.	.	.	587
1.75-1.99	.	.	.	24	259	63	.	.	.	.	346
2.00-2.24	.	.	.	2	219	148	.	.	.	.	369
2.25-2.49	.	.	.	.	105	111	7	.	.	.	223
2.50-2.74	.	.	.	.	19	233	9	.	.	.	261
2.75-2.99	.	.	.	.	1	95	12	.	.	.	108
3.00-3.24	.	.	.	.	.	84	33	.	.	.	117
3.25-3.49	.	.	.	.	.	20	31	.	.	.	51
3.50+	.	.	.	.	.	3	105	10	.	.	118
TOTAL	439	2366	2468	2009	1511	779	199	10	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 9166.

STATION M53 42.93N 86.33W 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	
0.00-0.24	239	85	7	2	.	.	.	.	.	.	333
0.25-0.49	101	961	269	41	1	.	.	.	.	.	1373
0.50-0.74	.	520	1136	433	23	.	.	.	.	.	2112
0.75-0.99	.	16	399	539	52	4	.	.	.	.	1010
1.00-1.24	.	.	358	463	243	3	.	.	.	.	1067
1.25-1.49	.	.	47	222	268	2	.	.	.	.	539
1.50-1.74	.	.	4	219	360	54	1	.	.	.	638
1.75-1.99	.	.	.	29	168	120	1	.	.	.	318
2.00-2.24	.	.	.	5	157	298	4	.	.	.	464
2.25-2.49	.	.	.	.	56	149	12	.	.	.	217
2.50-2.74	.	.	.	.	14	172	44	.	.	.	230
2.75-2.99	.	.	.	.	1	98	44	.	.	.	143
3.00-3.24	.	.	.	.	1	88	81	.	.	.	170
3.25-3.49	.	.	.	.	.	6	65	.	.	.	71
3.50+	.	.	.	.	.	1	201	33	11	.	246
TOTAL	340	1582	2220	1953	1344	995	453	33	11	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 8374.

STATION M53 42.93N 86.33W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

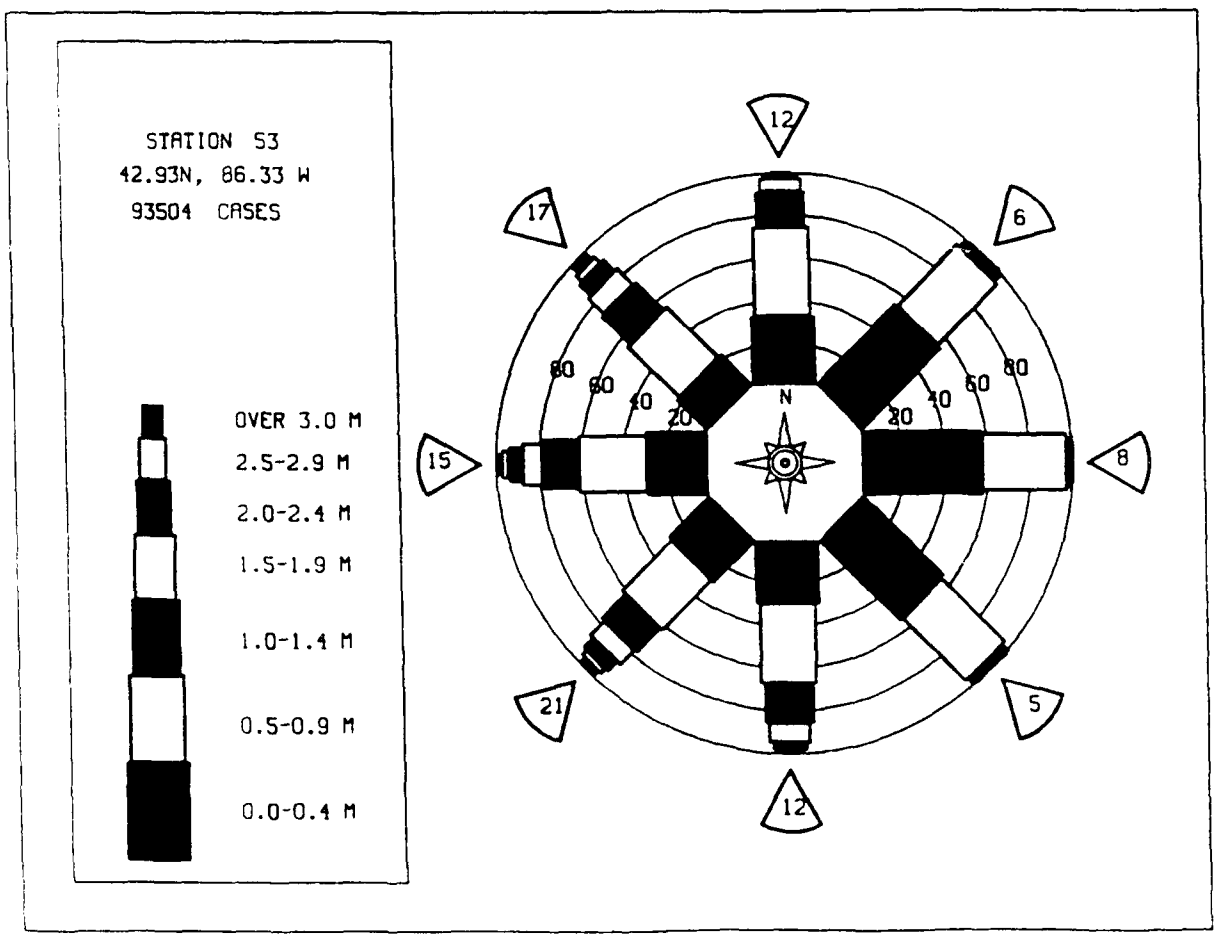
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	237	56	6	2	.	.	.	.	.	.	301
0.25-0.49	60	439	75	19	2	.	.	.	.	.	595
0.50-0.74	.	442	460	139	17	1	.	.	.	.	1059
0.75-0.99	.	3	268	238	37	2	.	.	.	.	548
1.00-1.24	.	.	296	207	181	6	.	.	.	.	690
1.25-1.49	.	.	130	128	165	14	1	.	.	.	438
1.50-1.74	.	.	20	183	199	80	5	.	.	.	487
1.75-1.99	.	.	.	37	80	96	13	.	.	.	226
2.00-2.24	.	.	.	14	66	119	27	.	.	.	226
2.25-2.49	.	.	.	4	24	55	27	.	.	.	110
2.50-2.74	.	.	.	2	14	38	32	2	.	.	108
2.75-2.99	.	.	.	.	1	23	15	1	1	.	42
3.00-3.24	.	.	.	.	.	23	29	2	.	.	54
3.25-3.49	.	.	.	.	.	4	18	.	.	.	22
3.50+	.	.	.	.	.	3	79	21	3	.	106
TOTAL	297	940	1255	973	786	484	247	26	4	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.7 NO. OF CASES= 4713.

STATION M53 42.93N 86.33W 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	
0.00-0.24	807	331	29	10	.	.	.	.	.	.	1177
0.25-0.49	199	1576	273	55	6	.	.	.	.	.	2109
0.50-0.74	.	1350	981	284	27	2	.	.	.	.	2644
0.75-0.99	.	50	512	404	48	4	.	.	.	.	1018
1.00-1.24	.	.	384	402	149	9	.	.	.	.	944
1.25-1.49	.	.	87	216	182	7	1	.	.	.	493
1.50-1.74	.	.	9	231	228	30	3	.	.	.	501
1.75-1.99	.	.	.	31	159	50	2	.	.	.	242
2.00-2.24	.	.	.	6	155	105	5	.	.	.	271
2.25-2.49	.	.	.	1	66	70	7	.	.	.	144
2.50-2.74	.	.	.	.	23	106	12	.	.	.	141
2.75-2.99	.	.	.	.	1	58	11	.	.	.	70
3.00-3.24	.	.	.	.	.	59	22	.	.	.	81
3.25-3.49	.	.	.	.	.	9	26	.	.	.	35
3.50+	.	.	.	.	.	2	81	10	2	.	95
TOTAL	1006	3307	2275	1640	1044	511	170	10	2	0	

MEAN HS(M)= 0.9 LARGEST HS(M)= 7.3 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M53 (42.93N 86.33W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.7	0.7	0.8	0.7	0.6	0.5	0.5	0.6	0.7	0.7	1.1	1.0	0.7
1957	1.2	0.8	0.8	0.6	0.6	0.4	0.4	0.3	0.5	0.5	1.1	1.3	0.7
1958	1.0	1.2	0.7	0.8	0.7	0.6	0.5	0.7	0.7	0.9	1.2	1.0	0.8
1959	0.9	0.9	0.8	0.7	0.6	0.4	0.4	0.5	0.7	0.7	1.1	0.9	0.7
1960	1.1	1.1	0.8	0.8	0.5	0.5	0.4	0.5	0.5	0.7	1.5	1.2	0.8
1961	1.0	0.8	0.9	0.7	0.6	0.5	0.4	0.5	0.8	0.9	0.9	1.2	0.8
1962	1.2	0.9	0.6	0.9	0.7	0.5	0.5	0.6	0.8	0.9	0.8	1.4	0.8
1963	1.2	1.2	1.0	0.8	0.6	0.5	0.5	0.7	0.7	0.9	1.5	1.3	0.9
1964	1.6	1.5	1.3	1.1	0.7	0.5	0.4	0.7	0.8	1.0	1.2	1.3	1.0
1965	1.5	1.9	1.1	0.8	0.7	0.5	0.4	0.5	0.7	1.1	1.3	1.3	1.0
1966	1.2	0.9	1.1	0.7	0.6	0.5	0.4	0.5	0.6	1.5	1.4	1.2	0.9
1967	1.6	1.6	0.9	0.9	0.7	0.5	0.5	0.6	0.6	1.1	1.4	1.2	1.0
1968	1.1	1.5	1.1	1.0	0.6	0.5	0.6	0.8	0.8	1.2	1.1	1.5	1.0
1969	1.3	0.9	1.0	0.7	0.5	0.6	0.4	0.6	0.7	1.1	1.1	1.2	0.8
1970	1.1	1.5	0.8	0.9	0.8	0.6	0.6	0.6	0.8	0.9	1.3	1.3	0.9
1971	1.8	1.5	1.2	0.9	0.7	0.5	0.6	0.7	0.8	0.8	1.3	1.2	1.0
1972	1.9	1.3	1.1	0.7	0.4	0.6	0.5	0.6	0.8	1.0	1.0	1.2	0.9
1973	1.7	1.0	1.0	0.8	0.7	0.6	0.6	0.7	0.8	0.9	1.3	1.2	1.0
1974	1.3	1.2	1.1	1.0	0.6	0.6	0.6	0.6	0.9	1.1	1.2	1.1	0.9
1975	1.6	1.2	1.0	0.8	0.5	0.6	0.5	0.6	0.8	1.0	1.1	1.1	0.9
1976	1.5	1.5	1.5	0.8	0.7	0.6	0.6	0.7	0.8	0.9	1.4	1.5	1.0
1977	1.6	1.5	1.1	0.8	0.5	0.7	0.8	1.0	1.0	1.2	1.4	1.4	1.1
1978	1.7	1.0	0.9	0.7	0.6	0.6	0.6	0.6	0.7	1.1	1.1	1.5	0.9
1979	1.3	0.9	0.9	0.7	0.7	0.6	0.5	0.6	0.7	1.0	1.2	1.3	0.9
1980	1.1	0.9	1.0	0.5	0.4	0.4	0.4	0.5	0.6	0.9	1.0	1.0	0.7
1981	0.9	1.0	0.8	0.9	0.5	0.5	0.4	0.5	0.7	0.9	0.8	1.0	0.8
1982	1.4	0.9	0.9	0.9	0.4	0.4	0.4	0.5	0.7	0.9	1.1	1.1	0.8
1983	0.8	0.5	0.6	0.6	0.4	0.3	0.4	0.5	0.8	0.8	1.1	1.3	0.7
1984	1.1	1.0	0.9	0.6	0.5	0.5	0.4	0.5	0.8	0.7	1.2	1.3	0.8
1985	1.4	1.2	1.1	0.8	0.6	0.4	0.5	0.5	0.9	0.8	0.9	1.4	0.9
1986	1.4	0.8	1.3	0.8	0.5	0.4	0.5	0.5	0.6	0.7	1.2	1.2	0.8
1987	1.0	0.9	0.7	0.6	0.5	0.4	0.5	0.6	0.5	0.9	1.0	1.1	0.7
MEAN	1.3	1.1	1.0	0.8	0.6	0.5	0.5	0.6	0.7	0.9	1.2	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M53 (42.93N 86.33W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.9	3.7	2.8	2.5	1.7	1.3	1.3	2.5	2.2	2.7	4.1	3.8
1957	2.9	3.2	4.5	2.9	2.5	1.6	1.6	1.8	2.2	1.7	3.7	3.4
1958	3.6	3.8	2.1	2.4	1.9	2.2	1.8	2.3	1.9	3.7	3.9	2.9
1959	3.1	3.3	4.5	2.3	1.7	1.5	1.6	2.0	2.1	3.6	3.1	3.7
1960	4.2	3.7	3.7	2.5	2.1	2.0	1.8	2.0	1.5	2.9	4.3	4.0
1961	3.8	3.7	3.7	2.4	2.2	1.4	1.5	2.0	2.7	3.7	3.2	3.8
1962	3.9	4.0	2.4	2.6	2.2	1.6	2.0	1.9	2.7	2.8	4.0	5.3
1963	4.1	5.3	4.8	3.8	3.0	1.8	1.9	2.7	2.3	2.6	4.3	3.7
1964	5.7	4.6	4.0	3.9	3.5	2.4	1.9	2.6	4.9	2.7	3.8	3.6
1965	4.3	4.4	4.8	2.6	2.5	1.9	1.8	1.7	2.7	4.0	5.0	3.7
1966	4.3	3.1	4.1	2.4	2.7	2.0	1.5	2.5	3.1	3.9	4.6	4.1
1967	5.3	4.1	2.9	2.8	3.2	1.7	1.6	2.0	3.1	3.3	4.8	3.4
1968	3.5	6.0	3.5	3.2	2.2	2.9	2.0	2.9	2.2	3.7	4.2	5.9
1969	4.1	3.8	3.4	2.6	1.7	1.9	1.2	2.4	2.2	2.8	3.9	3.6
1970	3.8	4.3	2.7	2.9	2.4	2.0	2.3	2.2	3.4	3.9	5.5	4.6
1971	6.9	6.3	4.6	3.0	2.0	1.6	2.0	2.7	2.8	3.1	4.3	4.0
1972	5.5	4.4	4.8	2.5	1.6	1.9	1.9	2.3	2.9	4.0	3.4	4.4
1973	4.0	3.8	6.1	2.5	2.9	3.0	1.8	2.2	2.2	3.5	3.6	3.6
1974	4.1	4.8	3.7	3.2	1.9	2.5	2.0	2.3	2.8	3.2	4.2	3.5
1975	7.3	4.9	3.0	3.1	1.8	2.3	1.6	2.5	2.4	3.1	5.2	4.6
1976	5.4	5.2	4.0	2.5	3.0	2.3	2.1	2.7	2.8	3.7	3.3	4.8
1977	4.8	4.1	4.0	3.3	1.6	2.0	2.7	3.2	3.3	4.7	5.2	4.8
1978	6.6	2.7	3.2	2.5	2.4	2.2	1.8	2.6	2.3	3.9	4.4	4.7
1979	3.8	3.5	3.9	4.7	2.1	1.9	1.9	1.8	2.0	3.2	3.6	4.0
1980	4.9	3.5	3.1	1.8	1.6	1.9	1.4	1.2	1.7	2.7	3.6	4.2
1981	3.7	2.5	2.2	2.8	1.7	1.7	1.1	2.0	3.9	4.4	3.7	3.5
1982	5.3	3.6	4.5	4.7	1.5	1.2	1.3	2.1	2.2	4.0	3.8	4.6
1983	4.1	1.6	2.4	3.3	1.5	1.2	1.6	1.5	2.4	3.1	3.6	3.9
1984	3.7	3.0	4.1	3.3	2.0	2.2	1.3	1.5	2.4	3.4	3.5	4.0
1985	4.8	3.7	4.4	2.9	2.2	1.8	1.7	1.8	3.6	3.7	3.6	4.9
1986	4.5	3.0	4.5	2.2	2.9	1.7	2.1	1.9	2.6	2.7	3.9	4.2
1987	3.1	5.0	3.4	3.3	1.4	1.3	1.5	1.7	1.8	3.3	3.4	3.5

32 YR. STATISTICS FOR WIS STATION M53

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.9
MEAN PEAK WAVE PERIOD	(SECONDS)	4.1
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
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)	227.0
DATE OF LARGEST HS OCCURRENCE IS (YR.MO DA.HR)		75011115

STATION M54 42.78N 86.33W 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	
0.00-0.24	957	327	40	12	1	.	.	.	.	.	1337
0.25-0.49	66	1366	243	93	10	.	.	.	.	.	1778
0.50-0.74	.	759	1122	434	89	1	.	.	.	.	2405
0.75-0.99	.	3	525	322	147	6	.	.	.	.	1003
1.00-1.24	.	.	587	238	211	32	3	.	.	.	1071
1.25-1.49	.	.	124	265	114	34	2	.	.	.	539
1.50-1.74	.	.	4	289	65	62	16	.	.	.	436
1.75-1.99	.	.	.	89	24	34	14	.	.	.	161
2.00-2.24	.	.	.	35	34	21	17	1	.	.	108
2.25-2.49	.	.	.	1	14	12	12	.	.	.	39
2.50-2.74	.	.	.	.	13	2	3	2	.	.	20
2.75-2.99	.	.	.	.	6	.	9	1	.	.	16
3.00-3.24	.	.	.	.	3	2	5	.	1	.	11
3.25-3.49	.	.	.	.	.	1	2	1	.	.	4
3.50+	.	.	.	.	.	2	.	1	1	3	7
TOTAL	1023	2455	2645	1778	731	209	83	6	2	3	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.0 NO. OF CASES= 8377.

STATION M54 42.78N 86.33W 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	
0.00-0.24	326	128	19	17	1	.	.	.	.	.	491
0.25-0.49	50	610	158	80	18	1	.	.	.	.	917
0.50-0.74	.	483	304	204	78	5	.	.	.	.	1074
0.75-0.99	.	6	147	63	67	17	.	.	.	.	300
1.00-1.24	.	.	120	10	49	17	.	.	.	.	196
1.25-1.49	.	.	21	18	6	8	2	.	.	.	55
1.50-1.74	.	.	2	23	2	2	1	1	.	.	31
1.75-1.99	.	.	.	1	.	1	.	1	.	.	3
2.00-2.24	.	.	.	.	.	.	.	1	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	1	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	376	1227	771	416	221	51	3	3	1	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.7 NO. OF CASES= 2880.

STATION M54 42.78N 86.33W 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	
0.00-0.24	465	235	34	18	1	.	.	.	.	.	753
0.25-0.49	52	687	197	87	11	2	1	.	.	.	1037
0.50-0.74	.	729	112	156	43	7	.	.	.	.	1047
0.75-0.99	.	34	136	35	39	24	3	.	.	.	271
1.00-1.24	.	.	84	8	20	10	.	.	.	.	122
1.25-1.49	.	.	17	6	2	.	.	.	.	.	25
1.50-1.74	.	.	2	2	.	1	1	.	.	.	6
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	517	1685	582	313	116	44	5	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 3062.

STATION M54 42.78N 86.33W 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	
0.00-0.24	510	160	39	11	1	.	.	.	.	.	721
0.25-0.49	137	731	116	47	10	1	.	.	.	.	1042
0.50-0.74	.	780	79	69	11	1	.	.	.	.	940
0.75-0.99	.	77	190	19	16	6	.	.	.	.	308
1.00-1.24	.	.	116	3	3	1	.	.	.	.	123
1.25-1.49	.	.	27	.	1	1	.	.	.	.	29
1.50-1.74	.	.	4	5	1	.	.	.	.	.	10
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	1	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	647	1748	571	154	43	11	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 2978.

STATION M54 42.78N 86.33W 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	
0.00-0.24	808	244	29	8	.	.	.	.	.	.	1089
0.25-0.49	357	1156	128	40	4	.	.	.	.	.	1685
0.50-0.74	.	1321	50	45	12	.	.	.	.	.	1428
0.75-0.99	.	151	179	8	9	.	.	.	.	.	347
1.00-1.24	.	.	70	.	3	.	.	.	.	.	73
1.25-1.49	.	.	16	.	.	.	.	.	.	.	16
1.50-1.74	.	.	3	.	.	1	.	.	.	.	4
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1165	2872	475	101	28	1	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.9 NO. OF CASES= 4351.

STATION M54 42.78N 86.33W 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	
0.00-0.24	703	192	35	8	.	.	.	.	.	.	938
0.25-0.49	219	713	79	14	3	.	2	.	.	.	1030
0.50-0.74	.	1105	74	42	4	1	.	.	.	.	1226
0.75-0.99	.	65	171	8	5	.	.	.	.	.	249
1.00-1.24	.	.	78	.	1	1	.	.	.	.	80
1.25-1.49	.	.	22	.	.	.	.	.	.	.	22
1.50-1.74	.	.	2	1	.	.	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	922	2075	461	73	13	2	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.9 NO. OF CASES= 3326.

STATION M54 42.78N 86.33W 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	
0.00-0.24	693	214	23	2	.	.	.	.	.	.	932
0.25-0.49	79	490	93	21	1	.	.	.	.	.	684
0.50-0.74	.	770	83	41	1	1	.	.	.	.	896
0.75-0.99	.	6	119	7	1	.	.	.	.	.	133
1.00-1.24	.	.	49	1	.	.	.	.	.	.	50
1.25-1.49	.	.	17	.	1	.	.	.	.	.	18
1.50-1.74	.	.	.	1	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	772	1480	384	73	4	1	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.9 NO. OF CASES= 2544.

STATION M54 42.78N 86.33W 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	
0.00-0.24	450	136	10	5	.	.	.	.	.	.	601
0.25-0.49	111	620	62	7	.	.	.	.	.	.	800
0.50-0.74	.	869	97	28	.	.	.	.	.	.	994
0.75-0.99	.	12	176	2	.	.	.	.	.	.	190
1.00-1.24	.	.	95	1	.	.	.	.	.	.	96
1.25-1.49	.	.	22	3	.	.	.	.	.	.	25
1.50-1.74	.	.	.	4	.	.	.	.	.	.	4
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	561	1637	462	50	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 3.0 NO. OF CASES= 2541.

STATION M54 42.78N 86.33W 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	
0.00-0.24	462	259	5	.	1	.	.	.	.	.	727
0.25-0.49	133	841	59	7	1	.	.	.	.	.	1041
0.50-0.74	.	1002	491	26	.	.	.	.	.	.	1519
0.75-0.99	.	36	587	43	3	.	.	.	.	.	669
1.00-1.24	.	.	422	180	8	.	.	.	.	.	610
1.25-1.49	.	.	43	226	5	.	.	.	.	.	274
1.50-1.74	.	.	4	216	4	.	.	.	.	.	224
1.75-1.99	.	.	.	23	24	.	.	.	.	.	47
2.00-2.24	.	.	.	5	34	1	.	.	.	.	40
2.25-2.49	.	.	.	.	9	.	.	.	.	.	9
2.50-2.74	.	.	.	.	5	.	.	.	.	.	5
2.75-2.99	.	.	.	.	3	.	.	.	.	.	3
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	595	2138	1611	726	97	1	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 4846.

STATION M54 42.78N 86.33W 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	
0.00-0.24	557	603	49	.	.	.	.	.	.	.	1209
0.25-0.49	136	1466	530	39	.	.	.	.	.	.	2173
0.50-0.74	.	820	1297	456	1	.	.	.	.	.	2574
0.75-0.99	.	45	586	515	18	.	.	.	.	.	1164
1.00-1.24	.	.	640	595	136	.	.	.	.	.	1371
1.25-1.49	.	.	62	703	154	.	.	.	.	.	919
1.50-1.74	.	.	.	774	197	5	.	.	.	.	976
1.75-1.99	.	.	.	161	222	26	.	.	.	.	409
2.00-2.24	.	.	.	7	357	69	.	.	.	.	433
2.25-2.49	.	.	.	.	119	70	.	.	.	.	189
2.50-2.74	.	.	.	.	79	108	.	.	.	.	187
2.75-2.99	.	.	.	.	10	63	4	.	.	.	77
3.00-3.24	.	.	.	.	.	59	10	.	.	.	69
3.25-3.49	.	.	.	.	.	9	21	.	.	.	30
3.50+	.	.	.	.	.	4	50	.	.	.	54
TOTAL	693	2936	3164	3250	1293	413	85	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 11083.

STATION M54 42.78N 86.33W 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	
0.00-0.24	640	510	9	.	1	.	.	.	.	.	1160
0.25-0.49	139	1626	266	7	1	.	.	.	.	.	2039
0.50-0.74	.	664	1527	353	1	1	.	.	.	.	2546
0.75-0.99	.	23	411	656	8	.	.	.	.	.	1098
1.00-1.24	.	.	325	669	178	.	.	.	.	.	1172
1.25-1.49	.	.	37	275	270	1	.	.	.	.	583
1.50-1.74	.	.	2	276	392	22	.	.	.	.	692
1.75-1.99	.	.	.	32	266	58	.	.	.	.	356
2.00-2.24	.	.	.	2	247	140	.	.	.	.	389
2.25-2.49	.	.	.	.	98	102	3	.	.	.	203
2.50-2.74	.	.	.	.	34	185	9	.	.	.	228
2.75-2.99	.	.	.	.	1	111	13	.	.	.	125
3.00-3.24	.	.	.	.	.	113	24	.	.	.	137
3.25-3.49	.	.	.	.	.	21	53	.	.	.	74
3.50+	.	.	.	.	.	4	135	7	3	.	149
TOTAL	779	2823	2577	2270	1497	758	237	7	3	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 7.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 10259.

STATION M54 42.78N 86.33W 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	
0.00-0.24	588	378	6	1	.	.	.	.	.	.	974
0.25-0.49	113	1264	164	3	.	.	.	.	.	.	1544
0.50-0.74	.	506	1065	142	1	.	.	.	.	.	1714
0.75-0.99	.	13	330	439	3	.	.	.	.	.	785
1.00-1.24	.	.	207	513	95	1	.	.	.	.	816
1.25-1.49	.	.	16	188	231	.	.	.	.	.	435
1.50-1.74	.	.	1	147	278	6	.	.	.	.	432
1.75-1.99	.	.	.	14	154	51	.	.	.	.	219
2.00-2.24	.	.	.	3	148	126	2	.	.	.	279
2.25-2.49	.	.	.	.	60	98	4	.	.	.	162
2.50-2.74	.	.	.	.	10	127	6	.	.	.	143
2.75-2.99	.	.	.	.	.	70	8	.	.	.	78
3.00-3.24	.	.	.	.	.	62	16	.	.	.	78
3.25-3.49	.	.	.	.	.	10	32	.	.	.	42
3.50+	.	.	.	.	.	3	87	17	1	.	108
TOTAL	702	2161	1789	1450	980	554	155	17	1	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 7318.

STATION M54 42.78N 86.33W 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	
0.00-0.24	571	308	4	.	.	.	.	.	.	.	883
0.25-0.49	105	1261	156	10	.	.	.	.	.	.	1532
0.50-0.74	.	399	1036	128	2	.	.	.	.	.	1565
0.75-0.99	.	17	308	390	8	.	.	.	.	.	723
1.00-1.24	.	.	177	509	93	.	.	.	.	.	779
1.25-1.49	.	.	14	164	232	1	.	.	.	.	411
1.50-1.74	.	.	.	149	318	7	.	.	.	.	474
1.75-1.99	.	.	.	11	175	33	.	.	.	.	219
2.00-2.24	.	.	.	1	188	98	.	.	.	.	287
2.25-2.49	.	.	.	.	70	78	2	.	.	.	150
2.50-2.74	.	.	.	.	11	119	4	.	.	.	134
2.75-2.99	.	.	.	.	.	57	2	.	.	.	59
3.00-3.24	.	.	.	.	.	67	9	.	.	.	76
3.25-3.49	.	.	.	.	.	5	18	.	.	.	23
3.50+	.	.	.	.	.	2	52	4	.	.	58
TOTAL	676	1985	1695	1362	1097	467	87	4	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.3 NO. OF CASES= 6911.

STATION M54 42.78N 86.33W 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	
0.00-0.24	353	380	7	5	.	.	.	.	.	.	745
0.25-0.49	119	1420	263	8	1	.	.	.	.	.	1811
0.50-0.74	.	576	1315	229	3	.	.	.	.	.	2123
0.75-0.99	.	12	413	629	12	1	.	.	.	.	1067
1.00-1.24	.	.	190	704	168	.	1	.	.	.	1063
1.25-1.49	.	.	12	223	322	.	.	.	.	.	557
1.50-1.74	.	.	1	168	390	18	.	.	.	.	577
1.75-1.99	.	.	.	16	249	64	.	.	.	.	329
2.00-2.24	.	.	.	.	233	143	.	.	.	.	376
2.25-2.49	.	.	.	.	87	110	8	.	.	.	205
2.50-2.74	.	.	.	.	21	171	9	.	.	.	201
2.75-2.99	.	.	.	.	1	77	16	.	.	.	94
3.00-3.24	.	.	.	.	.	67	20	.	.	.	87
3.25-3.49	.	.	.	.	.	19	33	.	.	.	52
3.50+	.	.	.	.	.	3	70	5	1	.	79
TOTAL	472	2388	2201	1982	1487	673	157	5	1	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 8778.

STATION M54 42.78N 86.33W 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	
0.00-0.24	309	124	7	4	1	.	.	.	.	.	445
0.25-0.49	91	1038	284	24	1	.	.	.	.	.	1439
0.50-0.74	.	549	1243	429	21	.	.	.	.	.	2242
0.75-0.99	.	10	397	636	43	.	.	.	.	.	1086
1.00-1.24	.	.	272	590	300	4	.	.	.	.	1166
1.25-1.49	.	.	25	245	324	2	.	.	.	.	596
1.50-1.74	.	.	2	185	411	84	1	.	.	.	683
1.75-1.99	.	.	.	27	158	172	1	.	.	.	358
2.00-2.24	.	.	.	.	155	335	5	.	.	.	495
2.25-2.49	.	.	.	.	57	159	32	.	.	.	248
2.50-2.74	.	.	.	.	10	159	77	.	.	.	246
2.75-2.99	.	.	.	.	3	89	63	.	.	.	155
3.00-3.24	.	.	.	.	1	54	91	.	.	.	146
3.25-3.49	.	.	.	.	.	5	60	.	.	.	65
3.50+	.	.	.	.	.	1	198	29	10	.	238
TOTAL	400	1722	2230	2140	1485	1064	528	29	10	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 9008.

STATION M54 42.78N 86.33W 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	
0.00-0.24	244	97	6	1	.	.	.	.	.	.	348
0.25-0.49	52	497	91	17	2	.	.	.	.	.	649
0.50-0.74	.	347	540	139	13	.	.	.	.	.	1065
0.75-0.99	.	5	271	284	35	2	.	.	.	.	597
1.00-1.24	.	.	321	313	186	4	.	.	.	.	824
1.25-1.49	.	.	50	235	207	10	.	.	.	.	502
1.50-1.74	.	.	2	273	233	95	1	.	.	.	604
1.75-1.99	.	.	.	77	86	89	2	.	.	.	254
2.00-2.24	.	.	.	20	75	134	18	.	.	.	247
2.25-2.49	.	.	.	3	33	47	38	.	.	.	121
2.50-2.74	.	.	.	.	23	50	55	1	.	.	129
2.75-2.99	.	.	.	.	2	26	22	6	.	.	56
3.00-3.24	.	.	.	.	1	29	26	6	.	.	62
3.25-3.49	.	.	.	.	.	3	13	.	1	.	17
3.50+	.	.	.	.	.	4	72	27	4	.	107
TOTAL	296	946	1271	1382	908	485	254	35	5	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.8 NO. OF CASES= 5242.

MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M54 (42.78N 86.33W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.7	0.7	0.8	0.7	0.6	0.5	0.5	0.5	0.7	0.6	1.1	1.0	0.7
1957	1.2	0.8	0.8	0.6	0.6	0.4	0.4	0.3	0.5	0.5	1.1	1.3	0.7
1958	1.0	1.2	0.7	0.7	0.7	0.6	0.4	0.6	0.7	0.8	1.1	1.0	0.8
1959	0.9	0.9	0.8	0.7	0.5	0.4	0.4	0.5	0.7	0.7	1.1	0.8	0.7
1960	1.0	1.1	0.8	0.8	0.5	0.4	0.4	0.5	0.5	0.6	1.4	1.2	0.8
1961	1.0	0.8	0.9	0.6	0.5	0.5	0.4	0.5	0.7	0.9	0.9	1.1	0.7
1962	1.2	0.9	0.6	0.9	0.6	0.4	0.4	0.5	0.7	0.9	0.7	1.3	0.8
1963	1.1	1.2	1.0	0.8	0.6	0.4	0.5	0.6	0.7	0.8	1.4	1.2	0.9
1964	1.6	1.4	1.3	1.1	0.7	0.5	0.4	0.7	0.7	0.9	1.2	1.3	1.0
1965	1.5	1.8	1.0	0.7	0.7	0.4	0.4	0.5	0.7	1.1	1.3	1.3	1.0
1966	1.1	0.8	1.0	0.7	0.6	0.5	0.4	0.5	0.6	1.4	1.4	1.2	0.9
1967	1.6	1.5	0.9	0.9	0.6	0.4	0.5	0.6	0.6	1.1	1.3	1.1	0.9
1968	1.1	1.4	1.1	1.0	0.5	0.5	0.6	0.7	0.7	1.2	1.1	1.4	1.0
1969	1.2	0.9	1.0	0.7	0.5	0.6	0.4	0.6	0.7	1.0	1.0	1.1	0.8
1970	1.1	1.5	0.8	0.9	0.7	0.6	0.6	0.6	0.8	0.9	1.3	1.3	0.9
1971	1.7	1.5	1.2	0.9	0.7	0.5	0.6	0.7	0.7	0.8	1.3	1.2	1.0
1972	1.8	1.3	1.1	0.6	0.4	0.5	0.5	0.6	0.8	1.0	0.9	1.2	0.9
1973	1.6	1.0	1.0	0.8	0.7	0.6	0.6	0.7	0.7	0.9	1.2	1.2	0.9
1974	1.2	1.2	1.1	0.9	0.6	0.6	0.5	0.6	0.9	1.1	1.2	1.1	0.9
1975	1.6	1.2	1.0	0.8	0.4	0.6	0.5	0.5	0.8	1.0	1.1	1.1	0.9
1976	1.5	1.5	1.4	0.8	0.7	0.6	0.6	0.7	0.8	0.9	1.4	1.5	1.0
1977	1.6	1.5	1.1	0.8	0.5	0.7	0.8	0.9	1.0	1.2	1.4	1.4	1.1
1978	1.6	1.0	0.9	0.7	0.6	0.6	0.6	0.6	0.7	1.1	1.1	1.5	0.9
1979	1.3	0.9	0.9	0.7	0.6	0.6	0.5	0.6	0.7	1.0	1.2	1.3	0.9
1980	1.1	0.9	1.0	0.5	0.4	0.4	0.4	0.4	0.6	0.9	1.0	1.0	0.7
1981	0.9	1.0	0.8	0.9	0.5	0.5	0.4	0.5	0.8	0.9	0.8	1.0	0.7
1982	1.4	0.9	1.0	0.9	0.4	0.4	0.4	0.5	0.7	0.9	1.1	1.0	0.8
1983	0.8	0.5	0.6	0.6	0.4	0.3	0.4	0.5	0.8	0.8	1.2	1.3	0.7
1984	1.0	1.0	0.9	0.6	0.5	0.4	0.4	0.5	0.8	0.7	1.1	1.3	0.8
1985	1.4	1.2	1.1	0.7	0.5	0.4	0.4	0.5	0.8	0.8	0.8	1.4	0.8
1986	1.4	0.8	1.3	0.8	0.5	0.4	0.4	0.5	0.5	0.6	1.2	1.1	0.8
1987	1.0	0.9	0.7	0.5	0.4	0.3	0.4	0.5	0.4	0.8	0.9	1.1	0.7
MEAN	1.3	1.1	1.0	0.8	0.6	0.5	0.5	0.6	0.7	0.9	1.1	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M54 (42.78N 86.33W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1.9	3.8	2.7	2.3	1.7	1.4	1.4	2.3	2.0	2.6	4.3	3.3
1957	2.7	3.2	4.3	3.0	2.2	1.4	1.5	1.6	2.0	1.7	3.7	3.5
1958	3.3	3.6	2.0	2.3	1.8	2.0	1.7	2.3	1.9	3.8	4.0	2.9
1959	3.0	2.8	4.1	2.1	1.6	1.4	1.5	1.8	2.0	3.5	3.0	3.4
1960	4.0	3.7	3.6	2.5	1.9	1.9	1.6	1.8	1.6	2.7	4.0	3.6
1961	3.6	3.6	3.8	2.2	2.0	1.4	1.4	1.9	2.6	3.4	3.2	3.7
1962	3.7	4.0	2.3	2.6	2.1	1.5	1.8	1.9	2.6	2.7	3.6	5.3
1963	4.0	5.1	4.9	4.0	2.9	1.8	1.7	2.6	2.1	2.4	4.4	3.4
1964	5.6	4.5	3.9	3.6	3.5	2.4	1.8	2.3	4.5	2.9	3.7	3.6
1965	4.2	5.0	4.6	2.5	2.3	1.7	1.8	1.6	2.5	3.8	4.8	3.6
1966	4.3	2.7	3.9	2.4	2.6	1.8	1.5	2.3	3.0	3.7	4.9	3.9
1967	4.9	3.8	2.7	2.7	3.0	1.7	1.6	2.0	3.1	3.2	4.6	3.3
1968	3.3	5.8	3.4	3.0	2.2	2.7	1.9	2.7	2.1	3.5	4.1	5.9
1969	4.0	3.7	3.2	2.6	1.7	1.7	1.1	2.3	2.0	2.7	3.7	3.4
1970	3.6	4.1	2.7	2.7	2.4	2.0	2.1	2.0	3.3	3.7	5.3	4.5
1971	6.9	6.0	4.4	2.9	2.0	1.6	1.9	2.6	2.5	2.9	4.2	4.0
1972	5.4	4.4	4.7	2.5	1.5	1.7	1.9	2.4	2.8	4.0	3.3	4.4
1973	3.8	3.6	6.2	2.4	2.6	2.8	1.8	2.0	2.1	3.5	3.3	3.5
1974	3.9	4.5	3.6	3.1	2.0	2.4	2.0	2.1	2.7	3.2	4.2	3.4
1975	7.2	4.8	3.0	3.1	1.6	2.3	1.5	2.1	2.3	2.9	5.2	4.5
1976	5.3	5.2	3.9	2.4	2.9	2.3	2.0	2.5	2.7	3.6	3.1	4.7
1977	4.6	4.0	3.9	3.3	1.6	1.9	2.5	2.9	3.2	4.7	5.2	4.8
1978	6.9	2.7	3.0	2.4	2.2	2.0	1.6	2.4	2.2	3.9	4.3	4.6
1979	3.6	3.4	3.9	4.7	1.9	1.9	1.8	1.8	2.0	3.2	3.6	3.6
1980	4.8	3.5	3.1	1.7	1.5	1.7	1.2	1.1	1.7	2.6	3.5	4.1
1981	3.5	2.5	2.2	2.6	1.6	1.6	1.2	2.0	3.7	4.3	3.6	3.2
1982	5.1	3.3	4.3	4.7	1.4	1.2	1.2	1.9	2.2	4.1	3.8	4.6
1983	4.0	1.7	2.2	3.2	1.4	1.2	1.5	1.6	2.1	3.2	3.6	3.9
1984	3.5	3.2	4.0	3.3	2.0	1.9	1.2	1.4	2.6	3.3	3.3	4.0
1985	4.8	3.7	4.4	2.9	2.0	1.6	1.4	1.6	3.3	3.5	3.6	4.8
1986	4.5	2.7	4.5	2.0	2.7	1.4	1.7	1.9	2.2	2.5	3.6	4.0
1987	3.0	5.6	3.2	3.2	1.1	1.1	1.3	1.5	1.7	2.9	3.2	3.3

32 YR. STATISTICS FOR WIS STATION M54

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	4.1
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	7.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	228.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011115

STATION M55 42.64N 86.35W 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	
0.00-0.24	540	347	34	7	1	.	.	.	.	.	929
0.25-0.49	43	950	236	80	10	.	.	.	.	.	1319
0.50-0.74	.	448	998	411	87	1	.	.	.	.	1945
0.75-0.99	.	2	397	393	134	7	.	.	.	.	933
1.00-1.24	.	.	225	334	252	38	2	.	.	.	851
1.25-1.49	.	.	28	223	98	43	4	.	.	.	396
1.50-1.74	.	.	.	242	39	47	11	.	.	.	339
1.75-1.99	.	.	.	57	19	19	8	.	.	.	103
2.00-2.24	.	.	.	21	42	7	6	1	.	.	77
2.25-2.49	.	.	.	.	23	1	8	1	.	.	33
2.50-2.74	.	.	.	.	7	3	4	1	.	.	15
2.75-2.99	.	.	.	.	1	.	1	1	.	.	3
3.00-3.24	.	.	.	.	3	2	4	2	1	.	12
3.25-3.49	.	.	.	.	.	2	.	.	.	.	2
3.50+	.	.	.	.	.	4	2	1	1	1	9
TOTAL	583	1747	1918	1768	716	174	50	7	2	1	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.2 NO. OF CASES= 6537.

STATION M55 42.64N 86.35W 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	
0.00-0.24	550	288	36	18	.	.	.	.	.	.	892
0.25-0.49	47	832	232	93	13	.	.	.	.	.	1217
0.50-0.74	.	475	373	235	89	4	.	.	.	.	1176
0.75-0.99	.	23	146	94	82	14	.	.	.	.	359
1.00-1.24	.	.	86	38	58	19	3	.	.	.	204
1.25-1.49	.	.	20	20	9	12	.	.	.	.	61
1.50-1.74	.	.	2	21	.	4	1	.	.	.	28
1.75-1.99	.	.	.	3	1	.	.	1	.	.	5
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	597	1618	895	522	253	53	4	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.6 NO. OF CASES= 3700.

STATION M55 42.64N 86.35W 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	
0.00-0.24	487	329	52	10	2	.	.	.	.	.	880
0.25-0.49	51	666	204	77	12	.	.	.	.	.	1010
0.50-0.74	.	656	172	187	39	8	.	.	.	.	1062
0.75-0.99	.	33	149	49	47	21	2	.	.	.	301
1.00-1.24	.	.	75	14	19	16	3	.	.	.	127
1.25-1.49	.	.	22	4	.	2	.	.	.	.	28
1.50-1.74	.	.	2	3	.	.	1	.	.	.	6
1.75-1.99	.	.	.	.	1	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	538	1684	676	344	120	47	6	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 3204.

STATION M55 42.64N 86.35W 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	
0.00-0.24	459	212	38	16	1	.	.	.	.	.	726
0.25-0.49	120	737	139	59	11	.	.	.	.	.	1066
0.50-0.74	.	685	84	86	17	.	.	.	.	.	872
0.75-0.99	.	88	168	16	19	5	.	.	.	.	296
1.00-1.24	.	.	80	8	4	.	.	.	.	.	92
1.25-1.49	.	.	20	4	.	1	.	.	.	.	25
1.50-1.74	.	.	3	7	1	1	.	.	.	.	12
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	579	1722	532	196	54	7	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.2 NO. OF CASES= 2901.

STATION M55 42.64N 86.35W 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	
0.00-0.24	789	314	26	18	1	.	.	.	.	.	1148
0.25-0.49	346	1042	128	67	7	.	1	.	.	.	1591
0.50-0.74	.	1094	63	39	13	1	.	.	.	.	1210
0.75-0.99	.	158	130	12	10	.	.	.	.	.	310
1.00-1.24	.	.	50	1	4	.	.	.	.	.	55
1.25-1.49	.	.	9	.	.	.	.	.	.	.	9
1.50-1.74	.	.	2	.	.	1	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1135	2608	408	137	35	2	1	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 2.9 NO. OF CASES= 4054.

STATION M55 42.64N 86.35W 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	
0.00-0.24	658	237	24	10	1	.	.	.	.	.	930
0.25-0.49	212	681	103	16	3	.	.	.	.	.	1015
0.50-0.74	.	986	79	47	3	.	.	.	.	.	1115
0.75-0.99	.	59	152	8	4	.	.	.	.	.	223
1.00-1.24	.	.	73	.	2	1	.	.	.	.	76
1.25-1.49	.	.	13	.	.	.	.	.	.	.	13
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	870	1963	444	81	13	1	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 2.9 NO. OF CASES= 3162.

STATION M55 42.64N 86.35W 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	
0.00-0.24	672	250	29	5	1	1	.	.	.	.	958
0.25-0.49	81	482	97	17	.	.	2	.	.	.	679
0.50-0.74	.	742	114	64	.	1	.	.	.	.	921
0.75-0.99	.	2	120	13	1	.	.	.	.	.	136
1.00-1.24	.	.	45	1	1	.	.	.	.	.	47
1.25-1.49	.	.	16	.	.	.	.	.	.	.	16
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	753	1476	421	100	3	2	2	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 3.0 NO. OF CASES= 2585.

STATION M55 42.64N 86.35W 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	
0.00-0.24	510	235	24	2	.	.	.	.	.	.	771
0.25-0.49	120	660	83	18	.	.	.	.	.	.	881
0.50-0.74	.	841	109	37	1	.	.	.	.	.	988
0.75-0.99	.	4	147	4	1	.	.	.	.	.	156
1.00-1.24	.	.	80	.	1	.	.	.	.	.	81
1.25-1.49	.	.	10	2	.	.	.	.	.	.	12
1.50-1.74	.	.	1	2	.	.	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	630	1740	454	65	3	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 3.0 NO. OF CASES= 2711.

STATION M55 42.64N 86.35W 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	
0.00-0.24	571	374	8	1	1	.	.	.	.	.	955
0.25-0.49	140	819	71	25	2	.	.	.	.	.	1057
0.50-0.74	.	1003	449	52	.	.	.	.	.	.	1504
0.75-0.99	.	27	518	9	3	.	.	.	.	.	557
1.00-1.24	.	.	484	17	4	.	.	.	.	.	505
1.25-1.49	.	.	43	152	2	.	.	.	.	.	197
1.50-1.74	.	.	1	103	1	.	.	.	.	.	105
1.75-1.99	.	.	.	13	3	1	.	.	.	.	17
2.00-2.24	.	.	.	2	7	.	.	.	.	.	9
2.25-2.49	.	.	.	.	2	.	.	.	.	.	2
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	711	2223	1574	374	25	1	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.3 NO. OF CASES= 4600.

STATION M55 42.64N 86.35W 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	
0.00-0.24	660	745	73	3	.	.	.	.	.	.	1481
0.25-0.49	144	1486	521	38	.	.	.	.	.	.	2189
0.50-0.74	.	834	1292	404	2	.	.	.	.	.	2532
0.75-0.99	.	37	702	295	14	.	.	.	.	.	1048
1.00-1.24	.	.	1064	334	81	.	.	.	.	.	1479
1.25-1.49	.	.	204	619	114	.	.	.	.	.	937
1.50-1.74	.	.	1	625	168	1	.	.	.	.	795
1.75-1.99	.	.	.	175	126	14	.	.	.	.	315
2.00-2.24	.	.	.	42	183	51	.	.	.	.	276
2.25-2.49	.	.	.	.	98	37	.	.	.	.	135
2.50-2.74	.	.	.	.	32	66	.	.	.	.	98
2.75-2.99	.	.	.	.	6	31	.	.	.	.	37
3.00-3.24	.	.	.	.	3	33	2	.	.	.	38
3.25-3.49	.	.	.	.	.	4	7	.	.	.	11
3.50+	.	.	.	.	.	1	20	.	.	.	21
TOTAL	804	3102	3857	2535	827	238	29	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 10670.

STATION M55 42.64N 86.35W 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	
0.00-0.24	746	746	22	1	1	.	.	.	.	.	1516
0.25-0.49	154	1658	424	11	.	.	.	.	.	.	2248
0.50-0.74	.	576	1640	442	.	.	.	.	.	.	2658
0.75-0.99	.	19	448	696	11	1	.	.	.	.	1176
1.00-1.24	.	.	350	727	202	.	.	.	.	.	1279
1.25-1.49	.	.	34	314	296	.	.	.	.	.	644
1.50-1.74	.	.	1	331	379	19	.	.	.	.	730
1.75-1.99	.	.	.	53	267	34	.	.	.	.	354
2.00-2.24	.	.	.	6	290	96	.	.	.	.	392
2.25-2.49	.	.	.	.	109	75	1	.	.	.	185
2.50-2.74	.	.	.	.	17	190	9	.	.	.	236
2.75-2.99	.	.	.	.	5	105	1	.	.	.	111
3.00-3.24	.	.	.	.	1	100	7	.	.	.	108
3.25-3.49	.	.	.	.	.	24	28	.	.	.	52
3.50+	.	.	.	.	.	3	54	3	2	.	62
TOTAL	900	3000	2920	2581	1598	647	100	3	2	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 11007.

STATION M55 42.64N 86.35W 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	
0.00-0.24	643	467	10	2	.	.	.	.	.	.	1122
0.25-0.49	109	1215	191	10	.	.	.	.	.	.	1525
0.50-0.74	.	412	1146	165	2	.	.	.	.	.	1725
0.75-0.99	.	6	322	444	13	.	.	.	.	.	785
1.00-1.24	.	.	158	515	101	.	.	.	.	.	774
1.25-1.49	.	.	17	171	247	.	.	.	.	.	435
1.50-1.74	.	.	1	145	259	12	.	.	.	.	417
1.75-1.99	.	.	.	17	163	45	.	.	.	.	225
2.00-2.24	.	.	.	2	167	110	1	.	.	.	280
2.25-2.49	.	.	.	.	42	80	1	.	.	.	123
2.50-2.74	.	.	.	.	9	137	4	.	.	.	150
2.75-2.99	.	.	.	.	1	59	3	.	.	.	63
3.00-3.24	.	.	.	.	.	59	22	.	.	.	81
3.25-3.49	.	.	.	.	.	10	24	.	.	.	34
3.50+	.	.	.	.	.	4	72	16	.	.	92
TOTAL	752	2100	1845	1471	1004	516	127	16	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.3 NO. OF CASES= 7345.

STATION M55 42.64N 86.35W 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	
0.00-0.24	586	495	10	1	.	.	.	.	.	.	1092
0.25-0.49	85	1160	191	11	.	.	.	.	.	.	1447
0.50-0.74	.	357	989	146	2	.	.	.	.	.	1494
0.75-0.99	.	7	296	425	17	.	.	.	.	.	745
1.00-1.24	.	.	147	551	99	1	.	.	.	.	798
1.25-1.49	.	.	11	146	276	1	1	.	.	.	435
1.50-1.74	.	.	2	118	304	6	.	.	.	.	430
1.75-1.99	.	.	.	6	188	24	.	.	.	.	218
2.00-2.24	.	.	.	.	148	104	1	.	.	.	253
2.25-2.49	.	.	.	.	54	83	2	.	.	.	139
2.50-2.74	.	.	.	.	4	99	.	.	.	.	103
2.75-2.99	.	.	.	.	.	51	3	.	.	.	54
3.00-3.24	.	.	.	.	.	56	6	.	.	.	62
3.25-3.49	.	.	.	.	.	10	19	.	.	.	29
3.50+	.	.	.	.	.	.	40	2	.	.	42
TOTAL	671	2019	1646	1404	1092	435	72	2	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 6883.

STATION M55 42.64N 86.35W 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	
0.00-0.24	349	458	12	4	.	.	1	.	.	.	823
0.25-0.49	80	1352	265	21	2	.	.	.	.	.	1721
0.50-0.74	.	428	1268	263	1	.	.	.	.	.	1960
0.75-0.99	.	18	373	604	21	.	.	.	.	.	1016
1.00-1.24	.	.	185	710	182	1	.	.	.	.	1078
1.25-1.49	.	.	19	221	331	2	.	.	.	.	573
1.50-1.74	.	.	.	139	397	37	.	.	.	.	573
1.75-1.99	.	.	.	10	220	74	.	.	.	.	304
2.00-2.24	.	.	.	1	196	151	6	.	.	.	354
2.25-2.49	.	.	.	.	71	84	10	.	.	.	165
2.50-2.74	.	.	.	.	11	157	12	.	.	.	180
2.75-2.99	.	.	.	.	1	57	11	.	.	.	69
3.00-3.24	.	.	.	.	.	67	19	.	.	.	86
3.25-3.49	.	.	.	.	.	8	25	.	.	.	33
3.50+	.	.	.	.	.	1	60	5	.	.	66
TOTAL	429	2256	2122	1973	1433	639	144	5	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.5 NO. OF CASES= 8438.

STATION M55 42.64N 86.35W 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	
0.00-0.24	359	276	18	8	1	.	.	.	.	.	662
0.25-0.49	88	1035	353	20	3	.	.	.	.	.	1499
0.50-0.74	.	473	1251	464	19	.	.	.	.	.	2207
0.75-0.99	.	13	326	628	44	1	.	.	.	.	1012
1.00-1.24	.	.	187	620	368	3	1	.	.	.	1179
1.25-1.49	.	.	20	208	350	4	.	.	.	.	582
1.50-1.74	.	.	1	146	442	99	.	.	.	.	688
1.75-1.99	.	.	.	24	158	219	.	.	.	.	401
2.00-2.24	.	.	.	1	135	342	18	.	.	.	496
2.25-2.49	.	.	.	1	54	128	58	.	.	.	241
2.50-2.74	.	.	.	.	19	147	106	.	.	.	272
2.75-2.99	.	.	.	.	2	58	56	.	.	.	116
3.00-3.24	.	.	.	.	.	33	64	1	.	.	98
3.25-3.49	.	.	.	.	.	11	58	1	.	.	70
3.50+	.	.	.	.	.	3	157	33	8	.	201
TOTAL	447	1797	2156	2120	1595	1048	518	35	8	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.9 MEAN TP(SEC)= 4.8 NO. OF CASES= 9116.

STATION M55 42.64N 86.35W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

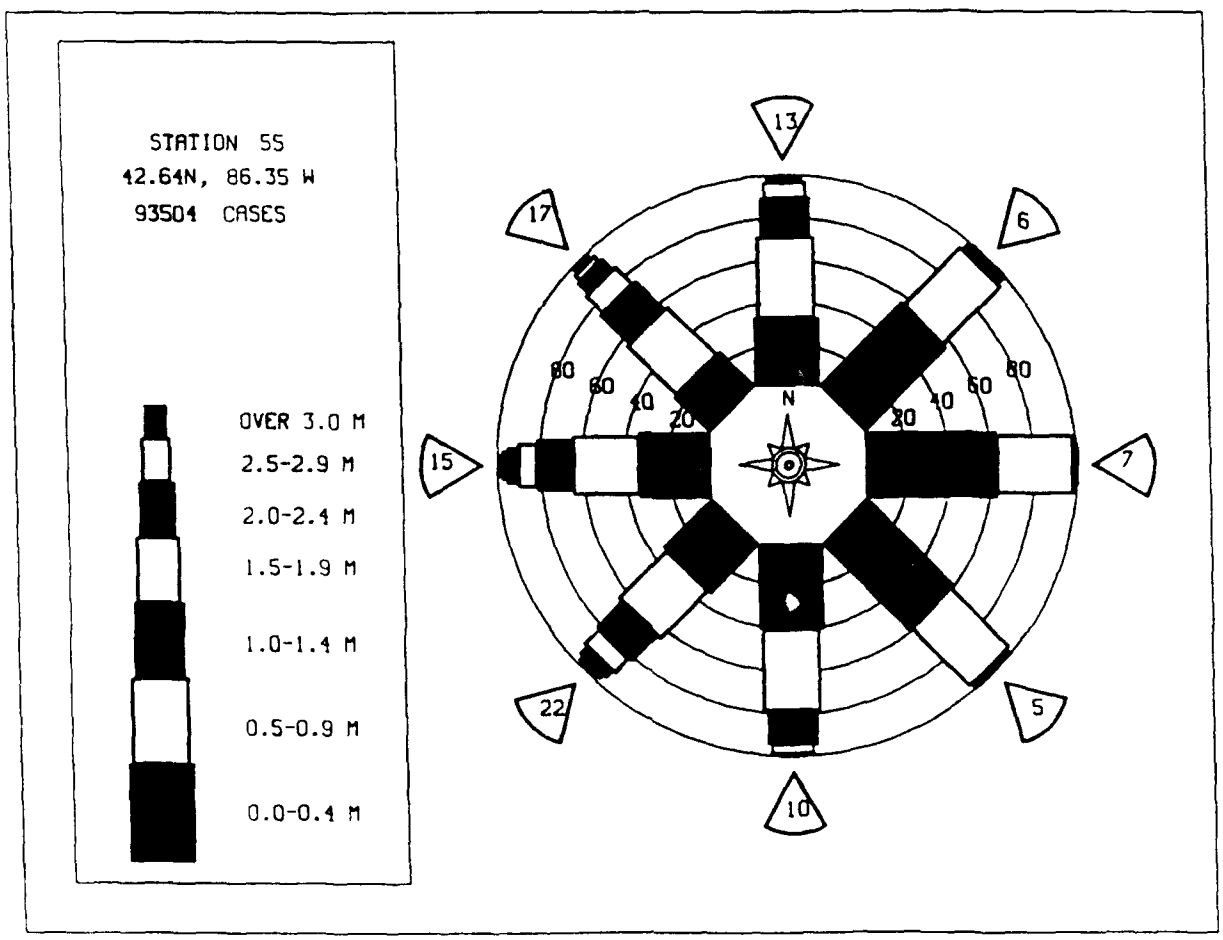
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	414	251	13	.	1	.	.	.	.	.	679
0.25-0.49	55	625	133	36	3	.	.	.	.	.	852
0.50-0.74	.	339	739	260	17	.	.	.	.	.	1355
0.75-0.99	.	8	324	428	58	2	.	.	.	.	820
1.00-1.24	.	.	217	575	224	5	1	.	.	.	1022
1.25-1.49	.	.	18	304	267	12	1	.	.	.	602
1.50-1.74	.	.	1	275	273	102	2	.	.	.	653
1.75-1.99	.	.	.	64	115	112	3	.	.	.	294
2.00-2.24	.	.	.	14	99	137	21	.	.	.	271
2.25-2.49	.	.	.	.	37	44	38	.	.	.	119
2.50-2.74	.	.	.	.	31	35	53	.	.	.	119
2.75-2.99	.	.	.	.	7	27	28	3	.	.	65
3.00-3.24	.	.	.	.	2	18	33	6	.	.	59
3.25-3.49	.	.	.	.	.	4	10	1	1	.	16
3.50+	.	.	.	.	.	2	65	27	2	.	96
TOTAL	469	1223	1445	1956	1134	500	255	37	3	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.7 NO. OF CASES= 6591.

STATION M55 42.64N 86.35W 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	
0.00-0.24	900	603	43	11	1	.	.	.	.	.	1558
0.25-0.49	188	1541	337	60	7	.	.	.	.	.	2133
0.50-0.74	.	1035	1077	330	29	1	.	.	.	.	2472
0.75-0.99	.	51	472	412	48	5	.	.	.	.	988
1.00-1.24	.	.	351	445	160	8	1	.	.	.	965
1.25-1.49	.	.	51	239	199	8	.	.	.	.	497
1.50-1.74	.	.	1	216	226	33	1	.	.	.	477
1.75-1.99	.	.	.	42	126	54	1	.	.	.	223
2.00-2.24	.	.	.	9	127	100	5	.	.	.	241
2.25-2.49	.	.	.	.	49	53	12	.	.	.	114
2.50-2.74	.	.	.	.	15	83	19	.	.	.	117
2.75-2.99	.	.	.	.	2	39	10	.	.	.	51
3.00-3.24	.	.	.	.	.	37	15	.	.	.	52
3.25-3.49	.	.	.	.	.	7	17	.	.	.	24
3.50+	.	.	.	.	.	1	47	8	1	.	57
TOTAL	1088	3230	2332	1764	989	429	128	8	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 M55 (42.64N 86.35W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
						MONTH							
1956	0.7	0.7	0.7	0.7	0.5	0.4	0.4	0.5	0.6	0.6	1.0	0.9	0.6
1957	1.1	0.8	0.7	0.5	0.5	0.4	0.3	0.3	0.4	0.5	1.0	1.2	0.6
1958	0.9	1.2	0.6	0.7	0.6	0.5	0.4	0.5	0.6	0.8	1.0	1.0	0.7
1959	0.9	0.9	0.8	0.6	0.5	0.3	0.3	0.5	0.6	0.6	1.0	0.8	0.7
1960	1.0	1.1	0.8	0.8	0.5	0.4	0.3	0.4	0.5	0.6	1.3	1.1	0.7
1961	1.0	0.8	0.9	0.6	0.5	0.5	0.4	0.4	0.7	0.9	0.9	1.1	0.7
1962	1.1	0.9	0.6	0.9	0.6	0.4	0.4	0.5	0.7	0.8	0.7	1.2	0.7
1963	1.0	1.1	1.0	0.8	0.5	0.4	0.4	0.6	0.6	0.7	1.3	1.1	0.8
1964	1.5	1.3	1.2	1.0	0.7	0.5	0.4	0.7	0.7	0.9	1.1	1.2	0.9
1965	1.4	1.7	1.0	0.7	0.7	0.4	0.4	0.4	0.7	1.1	1.3	1.3	0.9
1966	1.2	0.8	1.0	0.6	0.6	0.4	0.3	0.5	0.5	1.3	1.4	1.1	0.8
1967	1.5	1.5	0.8	0.8	0.6	0.4	0.4	0.5	0.6	1.0	1.2	1.1	0.9
1968	1.0	1.4	1.1	0.9	0.5	0.5	0.5	0.7	0.7	1.1	1.0	1.4	0.9
1969	1.2	0.9	1.0	0.6	0.5	0.6	0.3	0.5	0.6	0.9	1.0	1.1	0.8
1970	1.1	1.4	0.8	0.8	0.7	0.5	0.6	0.5	0.8	0.8	1.2	1.2	0.9
1971	1.6	1.5	1.2	0.8	0.6	0.4	0.6	0.6	0.7	0.7	1.3	1.1	0.9
1972	1.7	1.2	1.1	0.6	0.4	0.5	0.5	0.5	0.7	0.9	0.9	1.1	0.8
1973	1.5	1.0	1.0	0.7	0.6	0.5	0.6	0.6	0.7	0.8	1.2	1.1	0.9
1974	1.2	1.1	1.0	0.9	0.5	0.5	0.5	0.5	0.8	1.0	1.1	1.0	0.8
1975	1.5	1.2	1.0	0.7	0.4	0.5	0.4	0.5	0.7	0.9	1.1	1.1	0.8
1976	1.5	1.5	1.4	0.8	0.6	0.5	0.6	0.6	0.8	0.9	1.4	1.4	1.0
1977	1.6	1.4	1.1	0.8	0.5	0.6	0.8	0.9	0.9	1.1	1.3	1.3	1.0
1978	1.6	1.0	0.9	0.7	0.5	0.5	0.5	0.6	0.7	1.0	1.0	1.5	0.9
1979	1.2	0.9	0.9	0.7	0.6	0.6	0.4	0.6	0.7	0.9	1.1	1.3	0.8
1980	1.0	0.9	0.9	0.5	0.4	0.4	0.3	0.4	0.6	0.9	1.0	1.0	0.7
1981	0.9	1.0	0.8	0.8	0.4	0.5	0.3	0.5	0.8	1.0	0.8	0.9	0.7
1982	1.3	0.8	0.9	0.9	0.4	0.4	0.4	0.5	0.7	0.9	1.2	1.0	0.8
1983	0.8	0.5	0.6	0.6	0.4	0.3	0.4	0.5	0.8	0.8	1.2	1.3	0.7
1984	1.0	0.9	0.9	0.6	0.4	0.4	0.4	0.5	0.8	0.7	1.1	1.2	0.7
1985	1.3	1.2	1.0	0.7	0.5	0.4	0.4	0.4	0.7	0.7	0.8	1.3	0.8
1986	1.4	0.8	1.2	0.7	0.5	0.3	0.3	0.4	0.5	0.6	1.1	1.0	0.7
1987	1.0	0.8	0.7	0.5	0.3	0.3	0.3	0.5	0.4	0.7	0.9	1.0	0.6
MEAN	1.2	1.1	0.9	0.7	0.5	0.4	0.4	0.5	0.7	0.9	1.1	1.1	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M55 (42.64N 86.35W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
						MONTH						
1956	2.0	3.6	2.8	2.1	1.5	1.4	1.3	2.1	1.7	2.5	4.2	3.0
1957	2.4	3.0	4.2	3.0	2.0	1.2	1.3	1.3	1.8	1.9	3.2	3.5
1958	2.9	3.0	1.7	2.4	1.7	1.7	1.5	2.0	1.7	3.6	3.9	3.0
1959	2.8	2.7	3.5	1.9	1.5	1.3	1.3	1.6	1.7	3.3	3.0	3.1
1960	3.4	3.3	3.4	2.4	1.7	1.9	1.2	1.7	1.6	2.6	3.5	3.1
1961	3.4	3.4	3.6	2.1	1.7	1.3	1.2	1.6	2.4	3.0	3.0	3.6
1962	3.2	3.9	2.2	2.6	1.9	1.4	1.7	1.7	2.4	2.7	3.2	4.9
1963	3.5	4.7	4.9	4.0	2.6	1.6	1.4	2.3	2.0	2.2	4.2	3.1
1964	5.1	4.0	3.8	3.4	3.4	2.3	1.5	2.0	3.7	2.9	3.8	3.4
1965	4.1	5.3	4.4	2.4	2.1	1.7	1.6	1.6	2.3	3.7	4.6	3.4
1966	4.0	2.6	3.7	2.3	2.2	1.7	1.4	1.9	2.8	3.5	4.8	3.5
1967	4.3	3.5	2.5	2.6	2.8	1.5	1.5	1.9	2.8	3.1	4.1	3.2
1968	3.2	5.3	3.1	2.9	2.1	2.4	1.6	2.5	2.0	3.5	4.0	5.5
1969	3.9	3.4	3.1	2.4	1.6	1.6	1.1	2.1	1.8	2.6	3.6	3.2
1970	3.3	3.6	2.8	2.5	2.4	1.9	2.0	1.9	3.0	3.5	5.0	4.5
1971	6.6	5.5	4.2	2.8	1.8	1.5	1.8	2.4	2.2	2.6	4.1	3.8
1972	5.2	4.3	4.5	2.2	1.5	1.7	1.7	2.0	2.5	3.8	3.1	4.2
1973	3.6	3.4	6.0	2.3	2.3	2.5	1.9	1.9	1.9	3.3	3.2	3.2
1974	3.9	4.3	3.5	2.9	1.7	2.2	1.7	1.9	2.5	2.9	4.1	3.3
1975	6.5	4.7	3.1	3.2	1.4	2.2	1.4	1.9	2.3	2.5	5.0	4.5
1976	5.1	4.8	3.8	2.5	2.7	2.1	1.8	2.2	2.5	3.3	3.0	4.4
1977	4.6	4.0	3.8	3.3	1.6	1.9	2.5	2.8	3.0	4.4	5.2	4.5
1978	6.9	2.7	2.9	2.4	2.0	1.8	1.5	2.4	2.0	3.8	4.2	4.4
1979	3.4	3.4	3.9	4.6	1.8	1.8	1.7	1.8	2.1	3.0	3.3	3.6
1980	4.7	3.4	3.1	1.7	1.4	1.7	1.2	1.0	1.6	2.5	3.5	4.1
1981	3.5	2.6	2.1	2.5	1.4	1.4	1.4	2.0	3.6	4.3	3.5	3.1
1982	5.0	2.9	4.1	4.7	1.4	1.1	1.1	1.9	2.2	4.0	4.0	4.4
1983	3.9	1.7	2.2	3.0	1.3	1.0	1.4	1.9	2.2	3.2	3.5	3.9
1984	3.2	3.2	3.8	3.3	2.0	1.3	1.4	1.6	2.7	3.2	3.3	3.7
1985	4.6	3.6	4.3	2.8	1.7	1.4	1.2	1.3	2.9	3.2	3.5	4.6
1986	4.3	2.4	4.0	1.9	2.5	1.2	1.4	1.6	1.9	2.3	3.2	3.8
1987	3.0	5.1	3.1	2.8	1.0	1.0	1.1	1.6	1.6	2.7	2.7	3.4

32 YR. STATISTICS FOR WIS STATION M55

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	225.0
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)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	324.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		78012700

STATION M56 42.50N 86.36W 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	
0.00-0.24	417	373	29	12	1	1	.	.	.	.	833
0.25-0.49	55	735	256	1	12	.	.	.	.	.	1139
0.50-0.74	.	353	727	423	91	3	.	.	.	.	1597
0.75-0.99	.	8	298	363	122	8	1	.	.	.	800
1.00-1.24	.	.	164	296	272	29	1	.	.	.	762
1.25-1.49	.	.	20	162	90	47	4	.	.	.	323
1.50-1.74	.	.	.	191	56	60	10	.	.	.	317
1.75-1.99	.	.	.	31	42	13	14	.	.	.	100
2.00-2.24	.	.	.	3	37	9	7	1	.	.	87
2.25-2.49	.	.	.	.	17	.	3	.	.	.	20
2.50-2.74	.	.	.	.	22	4	4	3	.	.	33
2.75-2.99	.	.	.	.	3	.	1	.	.	.	4
3.00-3.24	.	.	.	.	1	3	2	.	.	.	6
3.25-3.49	.	.	.	.	.	3	1	3	1	.	8
3.50+	.	.	.	.	.	4	3	.	.	.	7
TOTAL	472	1469	1494	1562	796	184	51	7	1	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.7 MEAN TP(SEC)= 4.3 NO. OF CASES= 5669.

STATION M56 42.50N 86.36W 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	
0.00-0.24	439	314	36	13	.	.	.	.	.	.	822
0.25-0.49	50	702	251	97	16	1	.	.	.	.	1087
0.50-0.74	.	425	351	265	74	2	.	.	.	.	1117
0.75-0.99	.	13	121	119	86	19	.	.	.	.	358
1.00-1.24	.	.	65	51	66	28	2	.	.	.	212
1.25-1.49	.	.	20	14	6	13	.	.	.	.	53
1.50-1.74	.	.	5	16	4	4	2	.	.	.	31
1.75-1.99	.	.	.	1	8	1	.	.	.	.	10
2.00-2.24	.	.	.	.	1	.	.	1	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	489	1454	849	566	261	68	4	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.7 NO. OF CASES= 3468.

STATION M56 42.50N 86.36W 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	
0.00-0.24	588	387	53	18	2	.	.	.	.	.	1048
0.25-0.49	45	757	257	86	14	.	.	.	.	.	1159
0.50-0.74	.	635	188	204	51	7	.	.	.	.	1085
0.75-0.99	.	34	167	72	51	18	.	.	.	.	342
1.00-1.24	.	.	74	32	29	23	6	.	.	.	165
1.25-1.49	.	.	26	7	.	.	2	.	.	.	35
1.50-1.74	.	.	3	3	2	2	.	.	.	.	10
1.75-1.99	.	.	.	.	1	.	1	.	.	.	2
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	633	1813	768	423	150	50	9	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.4 NO. OF CASES= 3609.

STATION M56 42.50N 86.36W 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	
0.00-0.24	528	335	40	17	.	.	.	.	.	.	920
0.25-0.49	108	704	187	93	11	.	.	.	.	.	1103
0.50-0.74	.	664	98	102	23	3	.	.	.	.	890
0.75-0.99	.	90	121	26	17	3	.	.	.	.	257
1.00-1.24	.	.	78	6	5	4	.	.	.	.	93
1.25-1.49	.	.	19	1	2	2	.	.	.	.	24
1.50-1.74	.	.	1	7	.	1	.	.	.	.	9
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	636	1793	544	252	58	13	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 3.2 NO. OF CASES= 3892

STATION M56 42.50N 86.36W 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	
0.00-0.24	814	399	52	16	1	.	.	.	.	.	1282
0.25-0.49	300	1012	167	70	6	.	.	.	.	.	1555
0.50-0.74	.	1001	73	52	14	2	.	.	.	.	1142
0.75-0.99	.	155	117	19	11	3	.	.	.	.	305
1.00-1.24	.	.	37	4	3	1	.	.	.	.	45
1.25-1.49	.	.	5	1	.	.	.	.	.	.	6
1.50-1.74	.	.	.	.	1	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1114	2567	451	162	36	6	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 3.0 NO. OF CASES= 4065.

STATION M56 42.50N 86.36W 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	
0.00-0.24	704	293	29	7	1	.	.	.	.	.	1034
0.25-0.49	202	748	95	29	5	.	.	.	.	.	1079
0.50-0.74	.	965	93	57	7	2	.	.	.	.	1124
0.75-0.99	.	58	145	7	3	.	.	.	.	.	213
1.00-1.24	.	.	72	.	4	2	.	.	.	.	78
1.25-1.49	.	.	8	.	.	.	.	.	.	.	8
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	1	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	906	2064	442	100	20	5	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.0 NO. OF CASES= 3317.

STATION M56 42.50N 86.36W 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	
0.00-0.24	707	329	39	9	1	.	.	.	.	.	1085
0.25-0.49	90	514	111	28	1	.	1	.	.	.	745
0.50-0.74	.	758	115	44	3	1	.	.	.	.	921
0.75-0.99	.	2	124	10	5	.	.	.	.	.	141
1.00-1.24	.	.	52	1	1	.	.	.	.	.	54
1.25-1.49	.	.	20	.	.	.	.	.	.	.	20
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	797	1603	461	92	11	1	1	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 3.0 NO. OF CASES= 2782.

STATION M56 42.50N 86.36W 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	
0.00-0.24	552	263	20	2	2	.	.	.	.	.	839
0.25-0.49	122	675	68	13	3	1	.	.	.	.	882
0.50-0.74	.	866	116	37	2	.	.	.	.	.	1021
0.75-0.99	.	3	150	5	1	.	.	.	.	.	159
1.00-1.24	.	.	66	.	3	.	.	.	.	.	69
1.25-1.49	.	.	8	.	.	.	.	.	.	.	8
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	674	1807	428	57	11	1	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 3.0 NO. OF CASES= 2793.

STATION M56 42.50N 86.36W 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	
0.00-0.24	781	378	20	3	1	.	.	.	.	.	1183
0.25-0.49	125	743	85	19	.	.	1	.	.	.	977
0.50-0.74	.	1248	282	64	2	.	.	.	.	.	1596
0.75-0.99	.	14	300	16	1	.	.	.	.	.	331
1.00-1.24	.	.	243	1	3	1	.	.	.	.	248
1.25-1.49	.	.	66	20	.	.	.	.	.	.	86
1.50-1.74	.	.	.	31	1	.	.	.	.	.	32
1.75-1.99	.	.	.	5	.	.	.	.	.	.	5
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	906	2383	1000	159	9	1	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 4177.

STATION M56 42.50N 86.36W 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	
0.00-0.24	781	786	117	3	.	.	.	.	.	.	1687
0.25-0.49	179	1276	464	50	.	.	.	.	.	.	1969
0.50-0.74	.	1471	934	318	3	.	.	.	.	.	2726
0.75-0.99	.	16	820	370	13	.	.	.	.	.	1219
1.00-1.24	.	.	902	238	67	.	.	.	.	.	1207
1.25-1.49	.	.	340	199	95	.	1	.	.	.	635
1.50-1.74	.	.	39	297	146	3	.	.	.	.	485
1.75-1.99	.	.	.	77	102	5	.	.	.	.	184
2.00-2.24	.	.	.	41	84	16	.	.	.	.	141
2.25-2.49	.	.	.	3	39	28	.	.	.	.	70
2.50-2.74	.	.	.	.	5	36	.	.	.	.	41
2.75-2.99	.	.	.	.	.	14	.	.	.	.	14
3.00-3.24	.	.	.	.	.	22	.	.	.	.	22
3.25-3.49	.	.	.	.	.	3	3	.	.	.	6
3.50+	.	.	.	.	.	.	4	.	.	.	4
TOTAL	960	3549	3616	1596	554	127	8	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 9751.

STATION M56 42.50N 86.36W 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	
0.00-0.24	767	935	50	.	1	.	.	.	.	.	1753
0.25-0.49	126	1705	681	31	.	.	.	.	.	.	2543
0.50-0.74	.	650	1775	643	5	.	.	.	.	.	3073
0.75-0.99	.	13	614	729	14	.	.	.	.	.	1370
1.00-1.24	.	.	517	791	204	.	.	.	.	.	1512
1.25-1.49	.	.	84	371	329	.	.	.	.	.	784
1.50-1.74	.	.	8	418	392	8	.	.	.	.	826
1.75-1.99	.	.	.	74	252	20	.	.	.	.	346
2.00-2.24	.	.	.	10	252	94	.	.	.	.	356
2.25-2.49	.	.	.	1	84	88	.	.	.	.	173
2.50-2.74	.	.	.	.	34	175	4	.	.	.	213
2.75-2.99	.	.	.	.	5	85	1	.	.	.	91
3.00-3.24	.	.	.	.	3	67	7	.	.	.	77
3.25-3.49	.	.	.	.	.	12	24	.	.	.	36
3.50+	.	.	.	.	.	2	40	4	.	.	46
TOTAL	893	3303	3729	3068	1575	551	76	4	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 12362.

STATION M56 42.50N 86.36W 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	
0.00-0.24	566	571	11	3	1	.	.	.	.	.	1152
0.25-0.49	106	1197	280	12	.	.	.	.	.	.	1595
0.50-0.74	.	389	1129	228	1	.	.	.	.	.	1747
0.75-0.99	.	9	305	503	14	1	.	.	.	.	832
1.00-1.24	.	.	186	517	125	.	.	.	.	.	828
1.25-1.49	.	.	11	172	265	1	.	.	.	.	449
1.50-1.74	.	.	3	127	269	9	.	.	.	.	408
1.75-1.99	.	.	.	16	177	33	.	.	.	.	226
2.00-2.24	.	.	.	4	139	93	.	.	.	.	236
2.25-2.49	.	.	.	.	50	65	1	.	.	.	116
2.50-2.74	.	.	.	.	9	131	3	.	.	.	143
2.75-2.99	.	.	.	.	1	57	3	.	.	.	61
3.00-3.24	.	.	.	.	.	54	7	.	.	.	61
3.25-3.49	.	.	.	.	.	7	24	.	.	.	31
3.50+	.	.	.	.	.	3	69	10	.	.	82
TOTAL	672	2166	1925	1582	1051	454	107	10	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.3 NO. OF CASES= 7469.

STATION M56 42.50N 86.36W 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	
0.00-0.24	575	515	13	1	1	.	.	.	.	.	1105
0.25-0.49	87	1159	232	16	.	.	.	.	.	.	1494
0.50-0.74	.	364	1030	274	2	.	.	.	.	.	1670
0.75-0.99	.	8	234	468	37	.	.	.	.	.	747
1.00-1.24	.	1	148	551	152	3	.	.	.	.	855
1.25-1.49	.	.	16	154	294	6	.	.	.	.	470
1.50-1.74	.	.	2	119	315	12	1	.	.	.	449
1.75-1.99	.	.	.	8	172	42	.	.	.	.	222
2.00-2.24	.	.	.	.	164	96	1	.	.	.	261
2.25-2.49	.	.	.	.	56	64	1	.	.	.	121
2.50-2.74	.	.	.	.	10	97	1	.	.	.	108
2.75-2.99	.	.	.	.	.	53	2	.	.	.	55
3.00-3.24	.	.	.	.	.	48	9	.	.	.	57
3.25-3.49	.	.	.	.	.	7	16	.	.	.	23
3.50+	.	.	.	.	.	.	43	3	.	.	46
TOTAL	662	2047	1675	1591	1203	428	74	3	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 7203.

STATION M56 42.50N 86.36W 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	
0.00-0.24	404	565	20	1	.	.	.	.	.	.	990
0.25-0.49	90	1338	249	25	3	.	.	.	.	.	1705
0.50-0.74	.	403	1245	329	9	.	.	.	.	.	1986
0.75-0.99	.	25	327	656	45	.	.	.	.	.	1053
1.00-1.24	.	.	192	672	258	4	.	.	.	.	1126
1.25-1.49	.	.	20	196	333	12	1	.	.	.	562
1.50-1.74	.	.	2	113	389	60	1	.	.	.	565
1.75-1.99	.	.	.	21	192	93	1	.	.	.	307
2.00-2.24	.	.	.	1	190	145	7	.	.	.	343
2.25-2.49	.	.	.	.	71	93	8	.	.	.	172
2.50-2.74	.	.	.	.	5	130	14	.	.	.	149
2.75-2.99	.	.	.	.	.	54	7	.	.	.	61
3.00-3.24	.	.	.	.	.	63	20	.	.	.	83
3.25-3.49	.	.	.	.	.	8	21	.	.	.	29
3.50+	.	.	.	.	.	2	47	4	.	.	53
TOTAL	494	2331	2055	2014	1495	664	127	4	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.5 NO. OF CASES= 8610.

STATION M56 42.50N 86.36W 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	
0.00-0.24	340	330	37	1	1	.	.	.	.	.	709
0.25-0.49	84	960	396	29	4	.	1	.	.	.	1474
0.50-0.74	.	405	1209	484	24	.	.	.	.	.	2122
0.75-0.99	.	18	316	674	65	1	.	.	.	.	1074
1.00-1.24	.	.	193	668	403	3	1	.	.	.	1268
1.25-1.49	.	.	18	232	425	17	.	.	.	.	692
1.50-1.74	.	.	2	131	432	165	.	.	.	.	730
1.75-1.99	.	.	.	21	160	252	2	.	.	.	435
2.00-2.24	.	.	.	2	129	330	49	.	.	.	510
2.25-2.49	.	.	.	.	44	141	63	.	.	.	248
2.50-2.74	.	.	.	.	6	116	116	.	.	.	238
2.75-2.99	.	.	.	.	2	48	53	.	.	.	103
3.00-3.24	.	.	.	.	.	36	80	1	.	.	117
3.25-3.49	.	.	.	.	.	7	42	1	.	.	50
3.50+	.	.	.	.	.	1	139	28	5	.	173
TOTAL	424	1713	2171	2242	1695	1117	546	30	5	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.8 MEAN TP(SEC)= 4.9 NO. OF CASES= 9317.

STATION M56 42.50N 86.36W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

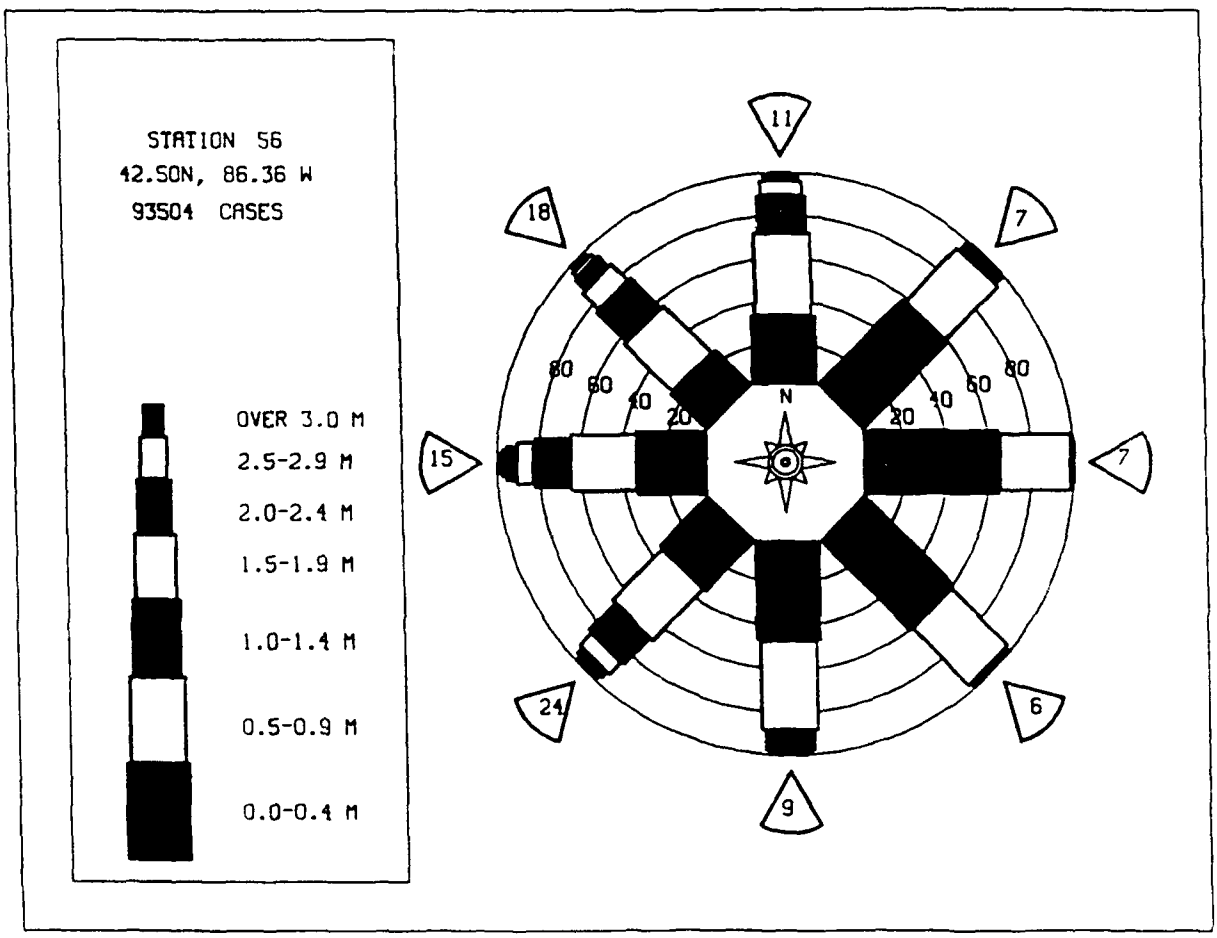
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	340	254	23	3	.	.	.	.	.	.	620
0.25-0.49	58	587	180	39	3	.	.	.	.	.	867
0.50-0.74	.	300	659	280	27	1	.	.	.	.	1267
0.75-0.99	.	4	254	424	74	2	.	.	.	.	758
1.00-1.24	.	.	167	448	262	5	1	.	.	.	883
1.25-1.49	.	.	18	189	247	22	.	.	.	.	476
1.50-1.74	.	.	1	160	253	88	4	.	.	.	506
1.75-1.99	.	.	.	29	103	84	5	.	.	.	221
2.00-2.24	.	.	.	7	105	86	33	.	.	.	231
2.25-2.49	.	.	.	.	31	20	22	.	.	.	73
2.50-2.74	.	.	.	.	23	31	40	1	.	.	95
2.75-2.99	.	.	.	.	9	21	22	3	.	.	55
3.00-3.24	.	.	.	.	1	23	22	3	.	.	49
3.25-3.49	.	.	.	.	.	11	8	2	.	.	21
3.50+	.	.	.	.	.	4	43	25	4	.	76
TOTAL	398	1145	1302	1579	1138	398	200	34	4	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.7 NO. OF CASES= 5820.

STATION M56 42.50N 86.36W 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	
0.00-0.24	931	705	59	11	1	.	.	.	.	.	1707
0.25-0.49	183	1480	396	71	8	.	.	.	.	.	2138
0.50-0.74	.	1090	1003	381	34	2	.	.	.	.	2510
0.75-0.99	.	47	442	446	56	5	.	.	.	.	996
1.00-1.24	.	.	316	428	186	10	1	.	.	.	941
1.25-1.49	.	.	70	172	208	12	.	.	.	.	462
1.50-1.74	.	.	6	161	226	41	1	.	.	.	435
1.75-1.99	.	.	.	28	121	54	2	.	.	.	205
2.00-2.24	.	.	.	7	113	87	9	.	.	.	216
2.25-2.49	.	.	.	.	39	50	9	.	.	.	98
2.50-2.74	.	.	.	.	11	72	18	.	.	.	101
2.75-2.99	.	.	.	.	2	33	9	.	.	.	44
3.00-3.24	.	.	.	.	.	31	14	.	.	.	45
3.25-3.49	.	.	.	.	.	6	14	.	.	.	20
3.50+	.	.	.	.	.	1	39	7	.	.	47
TOTAL	1114	3322	2292	1705	1005	404	116	7	0	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 M56 (42.50N 86.36W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M56 (42.50N 86.36W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.1	3.3	2.7	2.1	1.4	1.4	1.2	1.7	1.7	2.4	3.7	2.7
1957	2.1	2.8	3.8	2.6	1.6	1.2	1.3	1.1	1.9	2.1	3.1	3.7
1958	2.5	2.7	1.5	2.3	1.5	1.5	1.3	1.8	1.6	3.2	3.8	3.0
1959	2.5	2.4	3.5	1.9	1.4	1.4	1.1	1.4	1.8	2.9	2.7	2.8
1960	2.9	3.2	4.0	2.1	1.7	2.1	0.9	1.5	1.7	2.7	3.2	2.8
1961	3.3	3.3	3.4	2.3	1.6	1.2	1.2	1.4	2.2	2.5	2.8	3.7
1962	2.9	4.0	2.1	3.1	1.9	1.3	1.6	1.6	2.4	2.5	2.9	4.5
1963	3.2	4.2	4.7	4.2	2.4	1.8	1.3	2.2	2.1	1.9	4.1	3.0
1964	5.0	3.9	3.7	3.3	3.3	2.6	1.3	1.9	3.1	2.8	4.1	3.3
1965	3.7	5.3	4.3	2.5	2.3	1.7	1.5	1.6	2.1	3.5	4.3	3.1
1966	3.6	3.0	3.8	2.3	2.1	1.5	1.4	1.6	2.4	3.3	4.4	3.0
1967	4.0	3.2	2.4	2.6	2.7	1.5	1.2	1.9	2.7	3.2	3.8	3.1
1968	3.1	4.6	2.8	3.3	2.2	2.1	1.4	2.3	1.9	3.3	3.6	5.4
1969	3.8	3.1	3.2	2.3	1.4	1.6	1.1	2.1	1.7	2.5	2.9	3.0
1970	3.0	3.2	2.8	2.4	2.3	1.9	1.9	1.9	2.8	3.3	4.7	4.4
1971	6.4	5.2	4.2	2.9	1.9	1.8	2.1	2.4	1.8	2.5	4.1	4.0
1972	3.0	4.1	4.3	1.9	1.5	1.6	1.5	1.9	2.2	3.4	3.0	4.1
1973	3.5	3.3	5.7	2.3	2.1	2.1	1.9	1.9	1.9	3.1	2.9	3.1
1974	3.7	4.2	3.6	2.6	1.7	2.1	1.6	1.6	2.3	2.7	4.0	3.2
1975	6.1	4.9	3.2	3.5	1.3	2.2	1.3	1.7	2.1	2.3	4.9	4.5
1976	5.0	4.8	3.8	2.4	2.6	2.0	1.7	1.9	2.2	3.3	3.0	4.2
1977	4.5	3.9	3.7	3.3	1.5	1.9	2.4	2.4	2.9	4.4	5.0	4.4
1978	6.8	2.7	2.8	2.3	1.9	1.6	1.5	2.4	2.1	3.8	3.9	4.1
1979	3.4	3.2	3.9	4.7	1.8	1.8	1.6	1.8	2.1	2.9	3.2	3.5
1980	4.4	3.4	3.1	1.7	1.4	1.6	1.1	1.0	1.5	2.5	3.3	3.9
1981	3.2	2.8	2.4	2.8	1.2	1.7	1.5	1.7	3.4	4.2	3.3	2.9
1982	4.7	2.9	3.9	4.7	1.3	0.9	1.1	1.9	2.3	4.0	3.8	4.1
1983	3.8	1.6	2.2	2.9	1.4	0.8	1.2	2.1	2.2	3.3	3.4	3.9
1984	3.0	3.2	3.6	3.1	2.2	1.3	1.2	1.6	2.9	3.0	3.1	3.7
1985	4.3	3.9	4.1	2.8	1.9	1.2	1.0	1.1	2.5	2.7	3.2	4.3
1986	4.2	2.3	3.7	2.0	2.3	1.2	1.2	1.5	1.7	2.2	3.0	3.5
1987	3.0	4.8	2.8	2.4	0.8	0.9	0.8	1.8	1.6	2.7	2.5	3.1

32 YR. STATISTICS FOR WIS STATION M56

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	4.0
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)	1.4
LARGEST WAVE HS	(METERS)	6.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	324.0
DATE OF LARGEST HS OCCURRENCE IS (YR.MO.DA.HR)		78012700

STATION M57 42.35N 86.37W 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	
0.00-0.24	455	358	28	7	.	.	.	.	.	.	848
0.25-0.49	70	761	263	75	12	1	.	.	.	.	1182
0.50-0.74	.	381	717	393	81	5	.	.	.	.	1577
0.75-0.99	.	9	254	332	129	10	.	.	.	.	734
1.00-1.24	.	.	163	299	267	26	1	.	.	.	756
1.25-1.49	.	.	19	131	108	52	2	.	.	.	312
1.50-1.74	.	.	.	116	98	63	9	.	.	.	286
1.75-1.99	.	.	.	18	54	18	16	.	.	.	106
2.00-2.24	.	.	.	3	70	10	13	.	.	.	96
2.25-2.49	.	.	.	.	20	2	4	.	.	.	26
2.50-2.74	.	.	.	.	12	9	5	4	.	.	30
2.75-2.99	.	.	.	.	3	7	1	.	.	.	11
3.00-3.24	.	.	.	.	2	6	2	1	.	.	11
3.25-3.49	.	.	.	.	.	3	.	.	.	.	3
3.50+	.	.	.	.	.	4	5	.	.	.	9
TOTAL	525	1509	1444	1374	856	216	58	5	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 5621.

STATION M57 42.35N 86.37W 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	
0.00-0.24	352	306	29	6	.	.	.	.	.	.	693
0.25-0.49	48	524	257	86	11	.	.	.	.	.	926
0.50-0.74	.	381	319	280	54	2	.	.	.	.	1036
0.75-0.99	.	14	96	122	79	12	.	.	.	.	323
1.00-1.24	.	.	62	48	88	29	4	.	.	.	231
1.25-1.49	.	.	26	14	10	13	2	.	.	.	65
1.50-1.74	.	.	1	16	5	9	4	.	.	.	35
1.75-1.99	.	.	.	.	5	2	1	.	.	.	8
2.00-2.24	.	.	.	.	4	.	2	1	.	.	7
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	400	1225	790	572	256	67	13	1	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 3126.

STATION M57 42.35N 86.37W 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	
0.00-0.24	553	432	36	18	.	.	.	.	.	.	1039
0.25-0.49	60	668	242	102	20	.	.	.	.	.	1092
0.50-0.74	.	685	211	218	63	10	.	.	.	.	1187
0.75-0.99	.	39	136	91	81	26	.	.	.	.	373
1.00-1.24	.	.	95	24	42	24	10	.	.	.	195
1.25-1.49	.	.	43	3	6	2	2	.	.	.	56
1.50-1.74	.	.	2	8	3	2	4	.	.	.	19
1.75-1.99	.	.	.	.	.	.	1	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	613	1824	765	464	215	64	17	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 3720.

STATION M57 42.35N 86.37W 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	
0.00-0.24	619	350	40	6	2	.	.	.	.	.	1017
0.25-0.49	133	712	216	93	10	.	.	.	.	.	1164
0.50-0.74	.	645	121	125	35	4	.	.	.	.	930
0.75-0.99	.	91	120	39	27	4	.	.	.	.	281
1.00-1.24	.	.	69	5	10	7	.	.	.	.	91
1.25-1.49	.	.	19	1	.	2	.	.	.	.	22
1.50-1.74	.	.	2	5	1	1	.	.	.	.	9
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	752	1798	587	274	85	18	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 3.2 NO. OF CASES= 3298.

STATION M57 42.35N 86.37W 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	
0.00-0.24	940	456	59	14	.	.	.	.	.	.	1469
0.25-0.49	296	958	192	77	21	.	.	.	.	.	1544
0.50-0.74	.	1001	69	78	33	2	.	.	.	.	1183
0.75-0.99	.	173	99	23	22	3	.	.	.	.	320
1.00-1.24	.	.	37	6	7	.	.	.	.	.	50
1.25-1.49	.	.	5	1	2	.	.	.	.	.	8
1.50-1.74	.	.	.	.	1	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	1	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1236	2588	461	199	86	6	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.0 NO. OF CASES= 4287.

STATION M57 42.35N 86.37W 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	
0.00-0.24	797	322	37	4	1	.	.	.	.	.	1161
0.25-0.49	242	809	113	33	4	.	.	.	.	.	1201
0.50-0.74	.	1049	113	56	5	1	.	.	.	.	1224
0.75-0.99	.	67	171	7	3	.	.	.	.	.	248
1.00-1.24	.	.	73	1	3	.	.	.	.	.	77
1.25-1.49	.	.	12	.	.	.	.	.	.	.	12
1.50-1.74	.	.	.	.	1	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1039	2247	519	101	17	1	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 2.9 NO. OF CASES= 3678.

STATION M57 42.35N 86.37W 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	
0.00-0.24	779	367	51	8	.	.	.	.	.	.	1205
0.25-0.49	89	662	141	40	5	1	.	.	.	.	938
0.50-0.74	.	1010	125	45	7	1	.	.	.	.	1188
0.75-0.99	.	1	168	14	5	.	.	.	.	.	188
1.00-1.24	.	.	84	1	8	1	.	.	.	.	94
1.25-1.49	.	.	24	.	.	.	.	.	.	.	24
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	868	2040	593	108	25	3	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 3.0 NO. OF CASES= 3411.

STATION M57 42.35N 86.37W 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	
0.00-0.24	643	248	24	5	.	.	.	.	.	.	920
0.25-0.49	166	649	95	21	3	2	.	.	.	.	936
0.50-0.74	.	818	101	63	5	1	.	.	.	.	988
0.75-0.99	.	20	129	12	4	.	.	.	.	.	165
1.00-1.24	.	.	43	.	1	.	.	.	.	.	44
1.25-1.49	.	.	11	.	.	.	.	.	.	.	11
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	1	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	809	1735	403	101	13	4	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.0 NO. OF CASES= 2874.

STATION M57 42.35N 86.37W 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	
0.00-0.24	807	303	23	5	3	.	.	.	.	.	1141
0.25-0.49	302	837	111	31	4	.	1	.	.	.	1286
0.50-0.74	.	883	89	88	9	1	1	.	.	.	1071
0.75-0.99	.	49	75	20	8	.	.	.	.	.	152
1.00-1.24	.	.	23	5	5	.	.	.	.	.	33
1.25-1.49	.	.	7	.	3	1	.	.	.	.	11
1.50-1.74	.	.	3	1	1	.	.	.	.	.	5
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1109	2072	331	150	33	2	2	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 2.9 NO. OF CASES= 3469.

STATION M57 42.35N 86.37W 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	
0.00-0.24	795	476	109	8	1	1	.	.	.	.	1390
0.25-0.49	422	1403	455	70	.	1	1	.	.	.	2352
0.50-0.74	.	1449	259	210	8	.	.	.	.	.	1926
0.75-0.99	.	700	174	397	25	.	.	.	.	.	1296
1.00-1.24	.	.	154	196	59	3	.	.	.	.	412
1.25-1.49	.	.	51	54	51	1	.	.	.	.	157
1.50-1.74	.	.	37	37	48	4	.	.	.	.	126
1.75-1.99	.	.	.	5	35	1	.	.	.	.	41
2.00-2.24	.	.	.	3	43	2	.	.	.	.	48
2.25-2.49	.	.	.	.	12	3	.	.	.	.	15
2.50-2.74	.	.	.	.	3	10	.	.	.	.	13
2.75-2.99	.	.	.	.	.	6	.	.	.	.	6
3.00-3.24	.	.	.	.	.	3	.	.	.	.	3
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1217	4028	1239	980	285	35	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 7296.

STATION M57 42.35N 86.37W 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	
0.00-0.24	734	1053	112	4	2	.	.	.	.	.	1905
0.25-0.49	167	1450	1170	150	1	.	.	.	.	.	2938
0.50-0.74	.	1041	1378	910	21	1	.	.	.	.	3351
0.75-0.99	.	242	747	833	81	.	.	.	.	.	1903
1.00-1.24	.	.	540	880	236	8	1	.	.	.	1665
1.25-1.49	.	.	145	329	266	11	.	.	.	.	751
1.50-1.74	.	.	23	345	290	6	1	.	.	.	665
1.75-1.99	.	.	.	66	212	9	.	.	.	.	287
2.00-2.24	.	.	.	13	223	12	.	.	.	.	248
2.25-2.49	.	.	.	1	114	35	.	.	.	.	150
2.50-2.74	.	.	.	.	22	134	.	.	.	.	156
2.75-2.99	.	.	.	.	3	43	.	.	.	.	46
3.00-3.24	.	.	.	.	1	48	2	.	.	.	51
3.25-3.49	.	.	.	.	.	10	5	.	.	.	15
3.50+	.	.	.	.	.	1	9	1	.	.	11
TOTAL	901	3786	4115	3531	1472	318	18	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.1 NO. OF CASES= 13244.

STATION M57 42.35N 86.37W 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	
0.00-0.24	567	717	25	2	2	.	.	.	.	.	1313
0.25-0.49	113	1206	520	33	3	.	.	.	.	.	1875
0.50-0.74	.	481	1078	534	18	.	.	.	.	.	2111
0.75-0.99	.	20	360	464	50	.	.	.	.	.	894
1.00-1.24	.	.	219	465	227	4	.	.	.	.	915
1.25-1.49	.	.	36	201	259	14	.	.	.	.	510
1.50-1.74	.	.	1	154	267	16	.	.	.	.	438
1.75-1.99	.	.	.	25	187	6	.	.	.	.	218
2.00-2.24	.	.	.	6	179	55	.	.	.	.	240
2.25-2.49	.	.	.	.	65	47	1	.	.	.	113
2.50-2.74	.	.	.	.	16	127	.	.	.	.	143
2.75-2.99	.	.	.	.	1	63	.	.	.	.	64
3.00-3.24	.	.	.	.	2	40	7	.	.	.	49
3.25-3.49	.	.	.	.	.	9	12	.	.	.	21
3.50+	.	.	.	.	.	1	56	2	.	.	59
TOTAL	680	2424	2239	1884	1276	382	76	2	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 8398.

STATION M57 42.35N 86.37W 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	
0.00-0.24	572	577	18	3	1	.	1	.	.	.	1172
0.25-0.49	115	1143	333	18	2	1	.	.	.	.	1612
0.50-0.74	.	350	1061	329	7	.	.	.	.	.	1747
0.75-0.99	.	12	285	533	49	.	.	.	.	.	879
1.00-1.24	.	.	194	541	210	7	.	.	.	.	952
1.25-1.49	.	.	20	165	295	19	.	.	.	.	499
1.50-1.74	.	.	.	131	344	32	4	.	.	.	511
1.75-1.99	.	.	.	14	206	38	2	.	.	.	260
2.00-2.24	.	.	.	2	187	85	4	.	.	.	278
2.25-2.49	.	.	.	.	72	73	3	.	.	.	148
2.50-2.74	.	.	.	.	9	127	2	.	.	.	138
2.75-2.99	.	.	.	.	2	54	2	.	.	.	58
3.00-3.24	.	.	.	.	.	56	6	.	.	.	62
3.25-3.49	.	.	.	.	.	6	18	.	.	.	24
3.50+	.	.	.	.	.	1	56	5	.	.	62
TOTAL	687	2082	1911	1736	1384	499	98	5	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 7877.

STATION M57 42.35N 86.37W 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	
0.00-0.24	428	525	24	3	1	.	.	.	.	.	981
0.25-0.49	119	1283	327	35	3	.	1	.	.	.	1768
0.50-0.74	.	454	1143	346	12	.	.	.	.	.	1955
0.75-0.99	.	20	368	573	44	2	.	.	.	.	1007
1.00-1.24	.	.	201	564	240	6	1	.	.	.	1012
1.25-1.49	.	.	21	204	335	16	.	.	.	.	576
1.50-1.74	.	.	3	156	393	55	1	.	.	.	608
1.75-1.99	.	.	.	19	232	89	3	.	.	.	343
2.00-2.24	.	.	.	2	228	160	8	.	.	.	398
2.25-2.49	.	.	.	.	81	83	12	.	.	.	176
2.50-2.74	.	.	.	.	10	156	8	.	.	.	174
2.75-2.99	.	.	.	.	.	67	12	.	.	.	79
3.00-3.24	.	.	.	.	.	65	16	.	.	.	81
3.25-3.49	.	.	.	.	.	7	23	.	.	.	30
3.50+	.	.	.	.	.	1	60	2	.	.	63
TOTAL	547	2282	2087	1902	1579	707	145	2	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.5 NO. OF CASES= 8672.

STATION M57 42.35N 86.37W 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	
0.00-0.24	389	305	32	4	1	.	.	.	.	.	731
0.25-0.49	87	962	346	48	3	.	1	.	.	.	1447
0.50-0.74	.	428	1041	416	38	.	.	.	.	.	1923
0.75-0.99	.	28	315	591	78	1	.	.	.	.	1013
1.00-1.24	.	.	216	619	367	9	1	.	.	.	1212
1.25-1.49	.	.	26	217	366	31	.	.	.	.	640
1.50-1.74	.	.	2	154	401	150	.	.	.	.	707
1.75-1.99	.	.	.	12	175	189	7	.	.	.	383
2.00-2.24	.	.	.	1	158	285	55	.	.	.	499
2.25-2.49	.	.	.	.	53	113	50	.	.	.	216
2.50-2.74	.	.	.	.	17	148	98	.	.	.	263
2.75-2.99	.	.	.	.	.	63	48	.	.	.	111
3.00-3.24	.	.	.	.	.	33	79	3	.	.	115
3.25-3.49	.	.	.	.	.	4	56	2	.	.	62
3.50+	.	.	.	.	.	2	130	26	7	.	165
TOTAL	476	1723	1978	2062	1657	1028	525	31	7	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.9 NO. OF CASES= 8891.

STATION M57 42.35N 86.37W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

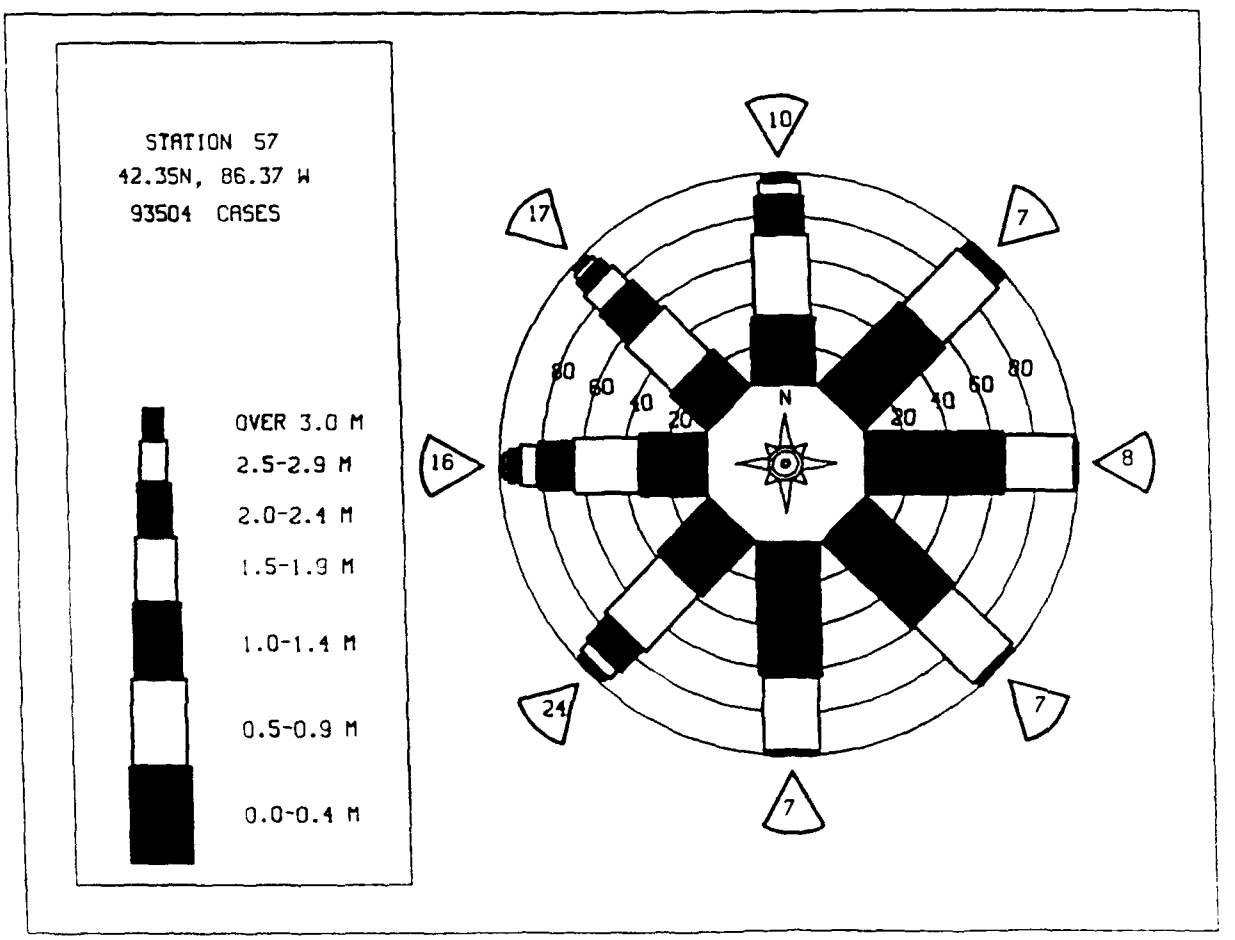
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	331	268	26	1	.	.	.	.	.	.	626
0.25-0.49	69	557	171	35	3	.	.	.	.	.	835
0.50-0.74	.	335	654	279	26	1	1	.	.	.	1296
0.75-0.99	.	11	259	394	69	4	.	1	.	.	738
1.00-1.24	.	.	167	428	303	4	.	.	.	.	902
1.25-1.49	.	.	17	161	216	29	1	.	.	.	424
1.50-1.74	.	.	4	139	205	82	6	.	.	.	436
1.75-1.99	.	.	.	20	105	64	9	.	.	.	198
2.00-2.24	.	.	.	1	96	86	29	.	.	.	212
2.25-2.49	.	.	.	.	35	17	18	.	.	.	70
2.50-2.74	.	.	.	.	20	33	37	1	.	.	91
2.75-2.99	.	.	.	.	2	22	17	2	.	.	43
3.00-3.24	.	.	.	.	.	26	19	4	1	.	50
3.25-3.49	.	.	.	.	.	6	9	2	.	.	17
3.50+	.	.	.	.	.	6	45	19	1	.	71
TOTAL	400	1171	1298	1458	1080	380	191	29	2	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 5642.

STATION M57 42.35N 86.37W 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	
0.00-0.24	977	707	68	10	1	.	.	.	.	.	1763
0.25-0.49	250	1458	495	95	11	.	.	.	.	.	2309
0.50-0.74	.	1139	848	437	42	3	.	.	.	.	2469
0.75-0.99	.	150	376	445	76	6	.	.	.	.	1053
1.00-1.24	.	.	234	408	208	13	1	.	.	.	864
1.25-1.49	.	.	48	148	192	19	.	.	.	.	407
1.50-1.74	.	.	8	126	206	42	3	.	.	.	385
1.75-1.99	.	.	.	18	121	42	4	.	.	.	185
2.00-2.24	.	.	.	3	119	69	11	.	.	.	202
2.25-2.49	.	.	.	.	45	37	8	.	.	.	90
2.50-2.74	.	.	.	.	11	74	15	.	.	.	100
2.75-2.99	.	.	.	.	1	32	8	.	.	.	41
3.00-3.24	.	.	.	.	.	28	13	.	.	.	41
3.25-3.49	.	.	.	.	.	4	12	.	.	.	16
3.50+	.	.	.	.	.	1	36	5	.	.	42
TOTAL	1227	3454	2077	1690	1033	370	111	5	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 6.7 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M57 (42.35N 86.37W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M57 (42.35N 86.37W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.5	3.1	3.2	2.4	1.5	1.4	1.3	1.7	1.9	2.1	3.3	2.6
1957	2.3	2.8	3.8	2.5	1.5	1.3	1.4	1.3	1.9	2.4	3.2	3.8
1958	2.5	3.1	1.8	2.2	1.4	1.3	1.2	2.0	1.6	3.1	3.6	3.1
1959	2.8	2.3	3.6	2.1	1.6	1.5	1.1	1.5	2.3	2.6	2.9	2.5
1960	2.7	3.0	4.6	2.0	1.7	2.1	1.1	1.4	1.7	2.8	2.7	2.5
1961	3.3	3.1	3.3	2.5	1.4	1.6	1.4	1.4	2.3	2.2	2.8	4.0
1962	2.9	4.1	2.0	3.4	2.1	1.1	1.5	1.6	2.3	2.4	3.0	4.2
1963	2.8	3.6	4.6	4.3	2.5	1.8	1.4	2.2	2.1	2.0	4.1	2.9
1964	4.8	3.2	3.6	3.1	3.3	2.8	1.2	1.8	3.3	2.7	4.2	3.3
1965	3.6	5.2	4.0	2.4	2.6	1.8	1.3	1.7	2.1	3.5	4.4	2.9
1966	3.7	3.1	3.7	2.7	2.3	1.4	1.4	1.7	2.1	3.3	4.3	2.9
1967	3.7	3.3	2.8	2.7	2.5	1.5	1.3	1.8	2.4	3.3	3.6	2.9
1968	2.8	4.1	2.6	3.4	2.1	1.9	1.5	2.2	2.0	3.3	3.3	5.2
1969	3.7	3.2	3.2	2.4	1.4	1.5	1.4	2.1	1.8	2.5	2.7	2.8
1970	2.9	3.1	2.9	2.6	2.1	1.7	1.8	1.9	2.5	3.1	4.3	4.2
1971	6.1	4.7	4.4	2.8	2.0	2.0	2.3	2.6	1.7	2.1	3.7	4.0
1972	5.0	4.0	4.3	2.0	1.7	1.4	1.5	2.0	2.0	3.4	2.9	4.1
1973	3.5	3.2	5.0	2.2	2.1	1.8	2.1	1.8	1.7	3.0	2.9	3.2
1974	3.6	4.2	3.6	2.8	2.0	2.0	1.5	1.5	2.3	2.5	4.1	3.1
1975	5.4	5.2	3.5	3.8	1.1	2.5	1.2	1.6	2.3	2.3	4.7	4.6
1976	5.1	4.7	3.7	2.1	2.5	1.8	1.7	1.8	2.2	3.1	3.0	4.2
1977	4.4	3.8	3.2	3.3	1.4	1.8	2.3	2.2	2.9	4.1	5.0	4.3
1978	6.7	2.7	2.9	2.4	1.9	1.6	1.4	2.4	1.9	3.7	3.6	4.1
1979	3.5	3.4	3.8	4.7	2.0	1.8	1.7	1.8	2.1	2.8	3.1	3.7
1980	4.1	3.1	3.1	1.7	1.3	1.7	1.1	1.0	1.5	2.5	3.5	3.9
1981	3.1	3.4	2.6	3.1	1.2	1.6	1.4	1.6	3.3	4.1	3.4	2.7
1982	4.6	2.7	3.8	4.7	1.3	1.1	1.1	1.7	2.2	4.0	3.7	4.0
1983	3.9	1.4	2.2	2.8	1.4	0.8	1.1	2.1	2.2	3.2	3.6	3.9
1984	2.6	3.2	3.6	3.1	2.2	1.5	1.2	1.6	2.9	2.8	3.3	3.4
1985	4.2	4.1	4.0	3.0	1.9	1.2	1.0	0.9	2.0	2.5	2.8	4.0
1986	4.2	2.3	3.6	1.8	2.5	1.1	1.1	1.4	1.6	2.0	3.1	3.2
1987	3.1	4.8	2.7	2.4	0.9	1.1	0.8	1.9	1.7	2.8	2.8	3.2

32 YR. STATISTICS FOR WIS STATION M57

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	4.0
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)	1.4
LARGEST WAVE HS	(METERS)	6.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	324.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		78012700

STATION M58 42.22N 86.58W 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	
0.00-0.24	485	329	35	3	.	.	.	.	.	.	852
0.25-0.49	59	750	274	80	4	.	.	.	.	.	1167
0.50-0.74	.	320	711	450	65	2	.	.	.	.	1548
0.75-0.99	.	7	232	373	113	8	.	.	.	.	733
1.00-1.24	.	.	152	349	267	23	1	.	.	.	792
1.25-1.49	.	.	5	118	185	33	2	.	.	.	343
1.50-1.74	.	.	.	98	149	74	4	.	.	.	325
1.75-1.99	.	.	.	10	69	50	9	.	.	.	138
2.00-2.24	.	.	.	2	51	50	23	.	.	.	126
2.25-2.49	.	.	.	.	23	18	10	1	.	.	52
2.50-2.74	.	.	.	.	6	18	11	1	.	.	36
2.75-2.99	.	.	.	.	2	5	3	2	.	.	12
3.00-3.24	.	.	.	.	.	10	4	3	.	.	17
3.25-3.49	.	.	.	.	.	5	6	.	1	.	12
3.50+	.	.	.	.	.	2	8	4	1	.	15
TOTAL	544	1406	1409	1483	934	298	81	11	2	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.4 NO. OF CASES= 5790.

STATION M58 42.22N 86.58W 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	
0.00-0.24	298	217	26	5	.	.	.	.	.	.	546
0.25-0.49	41	484	219	70	3	.	.	.	.	.	817
0.50-0.74	.	211	430	268	50	2	.	.	.	.	961
0.75-0.99	.	1	114	161	58	3	.	.	.	.	337
1.00-1.24	.	.	119	78	114	31	.	.	.	.	342
1.25-1.49	.	.	12	56	39	19	4	.	.	.	130
1.50-1.74	.	.	1	47	14	23	5	.	.	.	90
1.75-1.99	.	.	.	12	10	3	3	.	.	.	28
2.00-2.24	.	.	.	2	10	3	6	.	.	.	21
2.25-2.49	.	.	.	.	.	1	.	1	.	.	2
2.50-2.74	.	.	.	.	.	1	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	339	913	921	699	298	86	18	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 3079.

STATION M58 42.22N 86.58W 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	
0.00-0.24	506	345	32	8	.	.	.	.	.	.	891
0.25-0.49	53	648	296	84	8	.	.	.	.	.	1089
0.50-0.74	.	293	462	271	63	2	.	.	.	.	1091
0.75-0.99	.	4	161	95	70	13	2	.	.	.	345
1.00-1.24	.	.	319	9	39	19	1	.	.	.	387
1.25-1.49	.	.	45	82	10	7	5	.	.	.	149
1.50-1.74	.	.	.	96	1	8	8	.	.	.	113
1.75-1.99	.	.	.	28	.	1	4	.	.	.	33
2.00-2.24	.	.	.	.	4	.	1	.	.	.	5
2.25-2.49	.	.	.	.	4	.	.	.	.	.	4
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	559	1290	1315	673	199	50	21	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 3855.

STATION M58 42.22N 86.58W 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	
0.00-0.24	526	262	43	9	.	.	.	.	.	.	840
0.25-0.49	117	660	234	81	10	.	.	.	.	.	1102
0.50-0.74	.	405	237	141	27	2	.	.	.	.	812
0.75-0.99	.	72	147	50	25	4	.	.	.	.	298
1.00-1.24	.	.	143	14	13	2	1	.	.	.	173
1.25-1.49	.	.	14	32	3	.	1	.	.	.	50
1.50-1.74	.	.	.	37	1	1	.	.	.	.	39
1.75-1.99	.	.	.	5	.	.	.	.	.	.	5
2.00-2.24	.	.	.	.	3	.	.	.	.	.	3
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	643	1399	818	369	83	9	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.4 NO. OF CASES= 3120.

STATION M58 42.22N 86.58W 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	
0.00-0.24	822	386	73	9	.	.	.	.	.	.	1290
0.25-0.49	305	920	2[illegible]	83	12	.	.	.	.	.	1573
0.50-0.74	.	843	110	124	37	2	.	.	.	.	1116
0.75-0.99	.	265	125	53	12	2	.	.	.	.	457
1.00-1.24	.	.	55	18	26	4	.	.	.	.	103
1.25-1.49	.	.	6	1	3	1	.	.	.	.	11
1.50-1.74	.	.	1	.	2	2	.	.	.	.	5
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1127	2414	623	288	92	11	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 4270.

STATION M58 42.22N 86.58W 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	
0.00-0.24	698	273	38	5	.	.	.	.	.	.	1014
0.25-0.49	235	834	157	39	4	.	.	.	.	.	1269
0.50-0.74	.	1103	127	55	16	.	.	.	.	.	1301
0.75-0.99	.	117	183	29	12	.	.	.	.	.	341
1.00-1.24	.	.	80	1	10	1	.	.	.	.	92
1.25-1.49	.	.	18	.	1	.	.	.	.	.	19
1.50-1.74	.	.	.	.	.	1	.	.	.	.	1
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	933	2327	603	130	43	2	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.0 NO. OF CASES= 3785.

STATION M58 42.22N 86.58W 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	
0.00-0.24	582	221	32	2	.	.	.	.	.	.	837
0.25-0.49	110	653	135	32	4	.	.	.	.	.	934
0.50-0.74	.	973	159	49	11	1	.	.	.	.	1193
0.75-0.99	.	3	163	22	8	1	.	.	.	.	197
1.00-1.24	.	.	95	1	6	.	.	.	.	.	102
1.25-1.49	.	.	24	.	1	1	.	.	.	.	26
1.50-1.74	.	.	.	1	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	692	1850	608	107	30	3	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 3084.

STATION M58 42.22N 86.58W 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	
0.00-0.24	493	188	32	3	.	.	.	.	.	.	716
0.25-0.49	105	864	88	35	4	.	.	.	.	.	1097
0.50-0.74	.	1118	179	62	7	.	.	.	.	.	1366
0.75-0.99	.	4	187	14	4	.	.	.	.	.	209
1.00-1.24	.	.	95	2	2	.	.	.	.	.	99
1.25-1.49	.	.	18	1	1	2	.	.	.	.	22
1.50-1.74	.	.	.	5	.	.	.	.	.	.	5
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	598	2174	599	122	19	2	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 3293.

STATION M58 42.22N 86.58W 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	
0.00-0.24	748	254	20	4	.	.	.	.	.	.	1026
0.25-0.49	142	963	121	31	1	.	.	.	.	.	1258
0.50-0.74	.	1373	424	97	17	.	.	.	.	.	1911
0.75-0.99	.	7	413	38	16	1	.	.	.	.	475
1.00-1.24	.	.	432	9	10	.	.	.	.	.	451
1.25-1.49	.	.	77	50	2	.	.	.	.	.	129
1.50-1.74	.	.	.	37	2	1	.	.	.	.	40
1.75-1.99	.	.	.	8	.	.	.	.	.	.	8
2.00-2.24	.	.	.	2	2	2	.	.	.	.	6
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	890	2597	1487	276	51	4	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.3 NO. OF CASES= 4970.

STATION M58 42.22N 86.58W 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	
0.00-0.24	748	430	25	4	.	.	.	.	.	.	1207
0.25-0.49	156	1576	260	37	3	1	.	.	.	.	2033
0.50-0.74	.	1587	1386	190	19	1	.	.	.	.	3183
0.75-0.99	.	6	1084	244	22	.	.	.	.	.	1356
1.00-1.24	.	.	1110	314	37	4	.	.	.	.	1465
1.25-1.49	.	.	280	315	47	3	.	.	.	.	645
1.50-1.74	.	.	7	376	105	2	.	.	.	.	490
1.75-1.99	.	.	.	51	77	1	.	.	.	.	129
2.00-2.24	.	.	.	21	98	.	.	.	.	.	119
2.25-2.49	.	.	.	.	26	.	.	.	.	.	26
2.50-2.74	.	.	.	.	8	8	.	.	.	.	16
2.75-2.99	.	.	.	.	.	5	.	.	.	.	5
3.00-3.24	.	.	.	.	.	7	.	.	.	.	7
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	904	3599	4152	1552	442	33	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 10003.

STATION M58 42.22N 86.58W 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	
0.00-0.24	727	539	32	.	.	.	.	.	.	.	1298
0.25-0.49	132	1900	403	42	3	.	.	.	.	.	2480
0.50-0.74	.	844	1983	389	54	2	.	.	.	.	3272
0.75-0.99	.	5	763	648	39	4	.	.	.	.	1459
1.00-1.24	.	.	606	980	83	9	1	.	.	.	1679
1.25-1.49	.	.	57	593	124	2	1	.	.	.	777
1.50-1.74	.	.	2	535	328	2	.	.	.	.	867
1.75-1.99	.	.	.	40	326	3	.	.	.	.	369
2.00-2.24	.	.	.	5	375	3	.	.	.	.	383
2.25-2.49	.	.	.	.	156	3	.	.	.	.	159
2.50-2.74	.	.	.	.	62	68	.	.	.	.	130
2.75-2.99	.	.	.	.	.	55	1	.	.	.	56
3.00-3.24	.	.	.	.	.	33	.	.	.	.	33
3.25-3.49	.	.	.	.	.	7	.	.	.	.	7
3.50+	.	.	.	.	.	3	11	.	.	.	14
TOTAL	859	3288	3846	3232	1550	194	14	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 12156.

STATION M58 42.22N 86.58W 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	
0.00-0.24	509	385	27	6	.	.	1	.	.	.	928
0.25-0.49	98	1319	193	44	2	.	.	.	.	.	1656
0.50-0.74	.	480	1128	253	31	1	.	.	.	.	1893
0.75-0.99	.	9	347	466	67	5	.	.	.	.	894
1.00-1.24	.	.	206	625	108	23	.	.	.	.	962
1.25-1.49	.	.	16	304	140	18	1	.	.	.	479
1.50-1.74	.	.	.	197	325	10	3	.	.	.	535
1.75-1.99	.	.	.	17	220	4	2	.	.	.	243
2.00-2.24	.	.	.	1	262	8	1	.	.	.	272
2.25-2.49	.	.	.	.	124	17	1	.	.	.	142
2.50-2.74	.	.	.	.	35	80	.	.	.	.	115
2.75-2.99	.	.	.	.	2	41	.	.	.	.	43
3.00-3.24	.	.	.	.	.	42	1	.	.	.	43
3.25-3.49	.	.	.	.	.	28	5	.	.	.	33
3.50+	.	.	.	.	.	5	37	.	.	.	42
TOTAL	607	2193	1917	1913	1316	282	52	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.3 NO. OF CASES= 7759.

STATION M58 42.22N 86.58W 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	
0.00-0.24	503	356	29	2	.	.	.	.	.	.	890
0.25-0.49	75	1047	148	41	.	.	.	.	.	.	1311
0.50-0.74	.	380	955	241	17	.	.	.	.	.	1593
0.75-0.99	.	6	333	419	59	4	.	.	.	.	821
1.00-1.24	.	.	159	548	136	19	.	.	.	.	862
1.25-1.49	.	.	14	211	197	17	2	.	.	.	441
1.50-1.74	.	.	.	170	324	18	2	.	.	.	514
1.75-1.99	.	.	.	13	255	21	2	.	.	.	291
2.00-2.24	.	.	.	2	275	34	2	.	.	.	313
2.25-2.49	.	.	.	.	113	35	2	.	.	.	150
2.50-2.74	.	.	.	.	24	108	2	.	.	.	134
2.75-2.99	.	.	.	.	1	40	1	.	.	.	42
3.00-3.24	.	.	.	.	.	63	3	.	.	.	66
3.25-3.49	.	.	.	.	.	9	8	.	.	.	17
3.50+	.	.	.	.	.	1	39	1	.	.	41
TOTAL	578	1789	1638	1647	1401	369	63	1	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.4 NO. OF CASES= 7020.

STATION M58 42.22N 86.58W 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	
0.00-0.24	379	289	14	6	.	.	1	.	.	.	689
0.25-0.49	91	1188	214	33	.	.	.	.	.	.	1526
0.50-0.74	.	498	1003	238	22	.	.	.	.	.	1761
0.75-0.99	.	8	374	480	37	4	.	.	.	.	903
1.00-1.24	.	.	193	548	185	17	.	.	.	.	943
1.25-1.49	.	.	14	208	233	29	.	.	.	.	484
1.50-1.74	.	.	.	189	345	32	4	.	.	.	570
1.75-1.99	.	.	.	25	285	44	5	.	.	.	359
2.00-2.24	.	.	.	1	299	68	10	.	.	.	378
2.25-2.49	.	.	.	1	113	37	9	.	.	.	160
2.50-2.74	.	.	.	.	17	160	5	.	.	.	182
2.75-2.99	.	.	.	.	.	58	4	1	.	.	63
3.00-3.24	.	.	.	.	.	66	10	.	.	.	76
3.25-3.49	.	.	.	.	.	11	12	.	.	.	23
3.50+	.	.	.	.	.	2	44	1	.	.	47
TOTAL	470	1983	1812	1729	1536	528	104	2	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.5 NO. OF CASES= 7657.

STATION M58 42.22N 86.58W 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	
0.00-0.24	386	228	27	1	.	.	.	.	.	.	642
0.25-0.49	78	859	235	49	2	.	.	.	.	.	1223
0.50-0.74	.	458	919	341	41	.	.	.	.	.	1759
0.75-0.99	.	12	325	452	77	4	.	.	.	.	870
1.00-1.24	.	.	210	585	310	24	.	.	.	.	1129
1.25-1.49	.	.	35	210	279	33	.	.	.	.	557
1.50-1.74	.	.	1	175	366	126	6	.	.	.	674
1.75-1.99	.	.	.	22	203	121	11	.	.	.	357
2.00-2.24	.	.	.	1	201	229	28	.	.	.	459
2.25-2.49	.	.	.	.	88	134	34	.	.	.	256
2.50-2.74	.	.	.	.	18	191	44	.	.	.	253
2.75-2.99	.	.	.	.	3	88	29	1	.	.	121
3.00-3.24	.	.	.	.	.	74	51	3	.	.	128
3.25-3.49	.	.	.	.	.	9	51	3	.	.	63
3.50+	.	.	.	.	.	2	116	12	4	.	134
TOTAL	464	1557	1752	1836	1588	1035	370	19	4	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.8 NO. OF CASES= 8089.

STATION M58 42.22N 86.58W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

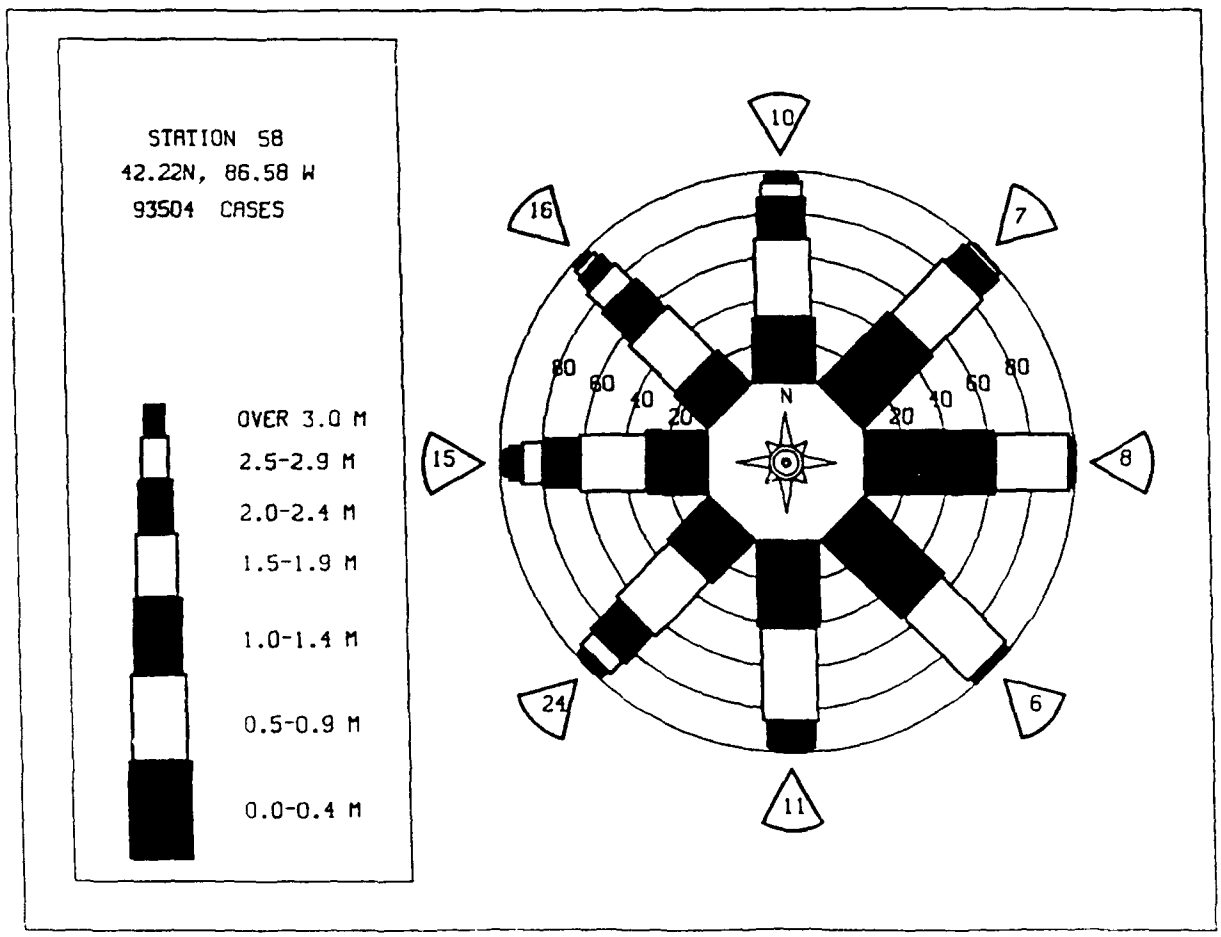
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	302	186	9	2	.	.	.	.	.	.	499
0.25-0.49	69	573	174	4	1	.	.	.	.	.	861
0.50-0.74	.	359	647	8	34	.	.	.	.	.	1348
0.75-0.99	.	6	253	379	80	5	.	.	.	.	723
1.00-1.24	.	.	174	434	269	10	.	.	.	.	887
1.25-1.49	.	.	16	177	208	29	.	.	.	.	430
1.50-1.74	.	.	3	114	219	85	4	.	.	.	425
1.75-1.99	.	.	.	18	91	65	9	.	.	.	183
2.00-2.24	.	.	.	.	99	83	24	.	.	.	206
2.25-2.49	.	.	.	.	28	32	26	3	.	.	89
2.50-2.74	.	.	.	.	12	60	29	.	.	.	101
2.75-2.99	.	.	.	.	.	24	17	1	.	.	42
3.00-3.24	.	.	.	.	1	25	24	4	1	.	55
3.25-3.49	.	.	.	.	.	4	18	3	.	.	25
3.50+	.	.	.	.	.	2	43	11	6	.	62
TOTAL	371	1124	1276	1476	1042	424	194	22	7	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.7 NO. OF CASES= 5574.

STATION M58 42.22N 86.58W 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	
0.00-0.24	871	489	50	7	.	.	.	.	.	.	1417
0.25-0.49	187	1524	341	83	6	.	.	.	.	.	2141
0.50-0.74	.	1125	1086	348	51	1	.	.	.	.	2611
0.75-0.99	.	53	521	393	70	6	.	.	.	.	1043
1.00-1.24	.	.	415	452	162	19	.	.	.	.	1048
1.25-1.49	.	.	65	236	147	19	1	.	.	.	468
1.50-1.74	.	.	1	208	218	38	3	.	.	.	468
1.75-1.99	.	.	.	25	154	31	4	.	.	.	214
2.00-2.24	.	.	.	3	168	48	9	.	.	.	228
2.25-2.49	.	.	.	.	68	27	8	.	.	.	103
2.50-2.74	.	.	.	.	18	69	9	.	.	.	96
2.75-2.99	.	.	.	.	.	32	5	.	.	.	37
3.00-3.24	.	.	.	.	.	32	9	1	.	.	42
3.25-3.49	.	.	.	.	.	7	10	.	.	.	17
3.50+	.	.	.	.	.	1	30	3	1	.	35
TOTAL	1058	3191	2479	1755	1062	330	88	4	1	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M58 (42.22N 86.58W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M58 (42.22N 86.58W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.8	3.1	3.4	2.3	1.8	1.5	1.4	1.9	2.1	2.3	3.2	2.8
1957	2.6	3.3	3.4	2.7	1.7	1.4	1.5	1.5	2.1	2.8	3.5	3.7
1958	2.7	3.0	1.9	2.2	1.4	1.5	1.4	1.9	1.9	3.1	3.3	3.1
1959	3.4	2.4	4.0	2.5	1.8	1.7	1.2	1.7	2.7	3.0	3.0	2.6
1960	2.5	3.3	4.7	2.1	1.6	2.0	1.2	1.5	1.8	2.7	2.6	2.4
1961	3.3	2.8	3.9	2.4	1.5	1.6	1.5	1.4	2.5	2.4	2.9	4.0
1962	3.1	3.9	2.0	3.6	1.9	1.2	1.4	1.7	2.3	2.4	2.8	4.4
1963	2.7	3.4	4.4	4.0	2.3	2.1	1.4	2.0	2.3	2.1	3.7	3.1
1964	4.1	2.9	3.6	2.9	3.2	2.6	1.2	1.9	3.3	2.5	3.8	3.1
1965	3.4	4.8	3.7	2.3	2.6	1.7	1.4	1.9	2.3	3.2	4.4	3.4
1966	3.6	3.1	3.4	2.8	2.4	1.5	1.5	1.5	2.1	3.1	5.7	2.5
1967	3.5	3.6	2.9	2.9	2.5	1.5	1.5	1.6	2.2	3.3	3.1	2.7
1968	2.7	3.7	2.8	3.3	2.2	1.8	1.5	2.2	2.0	3.2	3.1	4.5
1969	3.6	3.1	3.1	2.5	1.6	1.6	1.6	1.9	1.9	2.4	2.4	2.6
1970	2.9	2.9	3.0	2.8	2.3	1.8	1.8	2.1	2.6	2.9	4.0	4.0
1971	5.6	4.3	4.1	2.5	2.1	2.1	2.2	2.4	1.7	2.2	3.4	4.0
1972	4.9	3.9	4.0	2.1	1.9	1.6	1.6	2.0	1.8	3.2	2.7	4.1
1973	3.8	3.2	4.5	2.5	2.3	1.6	2.1	1.7	1.8	2.8	3.0	2.9
1974	3.3	4.2	3.8	3.3	2.1	1.9	1.6	1.5	2.2	2.6	3.9	3.2
1975	4.8	5.1	3.5	3.8	1.3	2.3	1.3	1.7	2.3	2.4	4.6	4.2
1976	4.9	5.3	3.9	2.0	2.5	1.9	1.7	1.7	2.2	3.0	3.0	3.9
1977	4.4	3.6	3.1	3.3	1.4	1.9	2.1	2.2	2.5	3.8	4.5	3.9
1978	6.1	2.7	2.9	2.3	1.8	1.6	1.5	2.4	1.9	3.5	3.5	3.8
1979	3.9	3.1	3.6	4.4	2.0	1.7	1.7	1.8	2.1	3.0	2.9	3.5
1980	4.0	2.9	3.0	1.7	1.5	1.7	1.1	1.0	1.6	2.3	3.2	3.8
1981	3.0	3.4	2.6	3.1	1.8	1.9	1.6	1.3	2.9	3.6	3.2	2.6
1982	4.3	2.5	3.4	4.3	1.4	1.3	1.2	1.7	2.2	3.6	3.8	3.6
1983	4.0	1.4	2.3	2.8	1.5	0.8	1.1	2.2	2.1	2.9	4.0	4.0
1984	2.5	3.7	3.6	3.0	2.4	1.7	1.2	1.6	2.8	2.6	3.1	3.1
1985	3.9	5.1	3.8	2.8	2.1	1.2	1.2	1.0	2.0	2.4	2.7	3.6
1986	4.0	2.4	3.4	1.8	2.4	1.1	1.4	1.4	1.5	1.8	3.1	3.0
1987	3.3	5.2	2.8	2.4	0.9	1.2	1.1	2.1	1.7	2.7	3.0	3.5

32 YR. STATISTICS FOR WIS STATION M58

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	4.0
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)	6.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	320.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		78012700

STATION M59 42.08N 86.58W 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	
0.00-0.24	484	245	32	5	1	.	.	.	.	.	767
0.25-0.49	54	741	264	69	7	.	.	.	.	.	1135
0.50-0.74	.	381	697	418	68	1	.	.	.	.	1565
0.75-0.99	.	9	218	373	93	12	.	.	.	.	705
1.00-1.24	.	.	148	286	275	38	1	.	.	.	748
1.25-1.49	.	.	12	120	154	36	1	.	.	.	323
1.50-1.74	.	.	1	84	133	86	6	.	.	.	310
1.75-1.99	.	.	.	16	54	59	6	.	.	.	135
2.00-2.24	.	.	.	1	40	47	26	.	.	.	114
2.25-2.49	.	.	.	.	16	19	13	1	.	.	49
2.50-2.74	.	.	.	.	11	19	11	1	.	.	42
2.75-2.99	.	.	.	.	1	5	7	3	.	.	16
3.00-3.24	.	.	.	.	.	6	7	1	.	.	14
3.25-3.49	.	.	.	.	.	4	4	2	1	.	11
3.50+	.	.	.	.	.	2	8	2	1	.	13
TOTAL	538	1376	1372	1372	853	334	90	10	2	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.6 MEAN TP(SEC)= 4.4 NO. OF CASES= 5584.

STATION M59 42.08N 86.58W 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	
0.00-0.24	325	149	27	4	.	.	.	.	.	.	505
0.25-0.49	45	502	222	84	3	.	.	.	.	.	856
0.50-0.74	.	291	301	273	51	4	.	.	.	.	920
0.75-0.99	.	11	133	143	57	4	.	.	.	.	348
1.00-1.24	.	.	62	94	109	23	3	.	.	.	291
1.25-1.49	.	.	3	25	38	25	3	.	.	.	94
1.50-1.74	.	.	2	23	19	18	6	.	.	.	68
1.75-1.99	.	.	.	5	9	3	4	.	.	.	21
2.00-2.24	.	.	.	1	6	5	5	.	.	.	17
2.25-2.49	.	.	.	.	2	.	1	.	.	.	3
2.50-2.74	.	.	.	.	.	1	1	1	.	.	3
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	370	953	750	652	294	83	23	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 4.0 NO. OF CASES= 2940.

STATION M59 42.08N 86.58W 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	
0.00-0.24	512	284	39	6	.	.	.	.	.	.	841
0.25-0.49	50	573	295	117	11	.	.	.	.	.	1046
0.50-0.74	.	436	268	298	60	4	.	.	.	.	1066
0.75-0.99	.	28	225	120	71	12	1	.	.	.	457
1.00-1.24	.	.	84	124	82	27	8	.	.	.	325
1.25-1.49	.	.	19	41	17	12	7	.	.	.	96
1.50-1.74	.	.	11	29	11	10	13	.	.	.	74
1.75-1.99	.	.	.	2	9	1	5	.	.	.	17
2.00-2.24	.	.	.	2	4	1	1	.	.	.	8
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	562	1321	941	739	265	67	35	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 3694.

STATION M59 42.08N 86.58W 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	
0.00-0.24	550	225	53	8	.	.	.	.	.	.	836
0.25-0.49	148	702	269	95	10	.	.	.	.	.	1224
0.50-0.74	.	634	162	159	54	2	.	.	.	.	1011
0.75-0.99	.	79	209	93	40	8	.	.	.	.	429
1.00-1.24	.	.	64	67	35	12	2	.	.	.	180
1.25-1.49	.	.	26	16	8	7	4	.	.	.	58
1.50-1.74	.	.	7	8	9	1	2	.	.	.	27
1.75-1.99	.	.	.	.	1	.	.	.	.	.	1
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	698	1640	790	446	155	30	8	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.4 NO. OF CASES= 3536.

STATION M59 42.08N 86.58W 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	
0.00-0.24	906	293	57	7	2	.	.	.	.	.	1265
0.25-0.49	317	963	283	101	21	.	.	.	.	.	1685
0.50-0.74	.	1043	132	157	43	4	.	.	.	.	1379
0.75-0.99	.	221	133	56	26	8	.	.	.	.	444
1.00-1.24	.	.	42	12	23	9	.	.	.	.	86
1.25-1.49	.	.	5	2	3	1	1	.	.	.	12
1.50-1.74	.	.	2	.	1	2	.	.	.	.	5
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1223	2520	654	335	119	24	1	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 3.1 NO. OF CASES= 4573.

STATION M59 42.08N 86.58W 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	
0.00-0.24	741	203	42	6	.	.	.	.	.	.	992
0.25-0.49	247	854	179	58	7	.	.	.	.	.	1345
0.50-0.74	.	1329	128	68	12	.	.	.	.	.	1537
0.75-0.99	.	100	210	24	22	1	.	.	.	.	357
1.00-1.24	.	.	98	3	11	3	.	.	.	.	115
1.25-1.49	.	.	21	.	1	.	.	.	.	.	22
1.50-1.74	.	.	.	3	1	1	.	.	.	.	5
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	988	2486	678	163	54	5	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.0 NO. OF CASES= 4100.

STATION M59 42.08N 86.58W 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	
0.00-0.24	687	185	38	3	1	.	.	.	.	.	914
0.25-0.49	127	741	164	43	6	.	.	.	.	.	1081
0.50-0.74	.	1236	177	59	17	2	.	.	.	.	1491
0.75-0.99	.	3	221	17	9	1	.	.	.	.	251
1.00-1.24	.	.	132	1	3	2	.	.	.	.	138
1.25-1.49	.	.	25	.	2	2	.	.	.	.	29
1.50-1.74	.	.	.	4	.	.	.	.	.	.	4
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	814	2165	757	127	38	7	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 3663.

STATION M59 42.08N 86.58W 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	
0.00-0.24	500	109	31	6	1	.	.	.	.	.	647
0.25-0.49	189	819	127	43	5	.	.	.	.	.	1183
0.50-0.74	.	1039	121	64	12	1	.	.	.	.	1237
0.75-0.99	.	35	158	12	5	.	.	.	.	.	210
1.00-1.24	.	.	64	4	2	1	.	.	.	.	71
1.25-1.49	.	.	13	.	1	2	.	.	.	.	16
1.50-1.74	.	.	.	2	.	.	.	.	.	.	2
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	689	2002	514	131	26	4	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 3.1 NO. OF CASES= 3156.

STATION M59 42.08N 86.58W 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	
0.00-0.24	775	166	26	10	.	.	.	.	.	.	977
0.25-0.49	379	1038	156	77	7	.	.	.	.	.	1657
0.50-0.74	.	1162	56	141	28	2	.	.	.	.	1389
0.75-0.99	.	119	109	47	17	2	.	.	.	.	294
1.00-1.24	.	.	51	9	16	.	.	.	.	.	76
1.25-1.49	.	.	10	.	3	.	.	.	.	.	13
1.50-1.74	.	.	6	3	.	3	.	.	.	.	12
1.75-1.99	.	.	.	1	.	1	.	.	.	.	2
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1154	2485	414	288	71	8	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.0 NO. OF CASES= 4143.

STATION M59 42.08N 86.58W 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	
0.00-0.24	670	279	32	5	.	.	.	.	.	.	986
0.25-0.49	408	1735	284	64	8	.	.	.	.	.	2499
0.50-0.74	.	1841	317	190	50	1	.	.	.	.	2399
0.75-0.99	.	828	454	144	21	2	.	.	.	.	1449
1.00-1.24	.	.	283	160	28	7	.	.	.	.	478
1.25-1.49	.	.	85	103	8	.	.	.	.	.	196
1.50-1.74	.	.	34	104	6	4	.	.	.	.	148
1.75-1.99	.	.	.	17	35	1	.	.	.	.	53
2.00-2.24	.	.	.	1	22	2	.	.	.	.	25
2.25-2.49	.	.	.	.	5	.	.	.	.	.	5
2.50-2.74	.	.	.	.	2	.	1	.	.	.	3
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1078	4683	1489	788	185	18	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 7721.

STATION M59 42.08N 86.58W 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	
0.00-0.24	654	459	35	3	1	.	1	.	.	.	1153
0.25-0.49	174	1679	660	70	4	.	.	.	.	.	2587
0.50-0.74	.	1327	1412	434	74	4	.	.	.	.	3251
0.75-0.99	.	303	966	482	59	5	.	.	.	.	1815
1.00-1.24	.	.	722	780	73	18	1	.	.	.	1594
1.25-1.49	.	.	134	556	19	7	1	.	.	.	717
1.50-1.74	.	.	18	829	29	6	2	.	.	.	884
1.75-1.99	.	.	.	62	190	5	.	.	.	.	257
2.00-2.24	.	.	.	10	199	1	.	.	.	.	210
2.25-2.49	.	.	.	.	64	1	.	.	.	.	65
2.50-2.74	.	.	.	.	58	3	.	.	.	.	61
2.75-2.99	.	.	.	.	1	12	.	.	.	.	13
3.00-3.24	.	.	.	.	1	13	.	.	.	.	14
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	2	1	.	.	.	3
TOTAL	828	3768	3947	3226	772	77	6	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.2 MEAN TP(SEC)= 4.0 NO. OF CASES= 11825.

STATION M59 42.08N 86.58W 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	
0.00-0.24	555	367	22	6	.	.	.	.	.	.	950
0.25-0.49	101	1335	357	55	3	.	.	.	.	.	1851
0.50-0.74	.	571	1208	365	47	1	.	.	.	.	2192
0.75-0.99	.	23	493	366	77	10	.	.	.	.	969
1.00-1.24	.	.	298	630	71	21	1	.	.	.	1021
1.25-1.49	.	.	39	493	29	19	2	.	.	.	582
1.50-1.74	.	.	2	654	82	4	2	.	.	.	744
1.75-1.99	.	.	.	43	236	1	3	.	.	.	283
2.00-2.24	.	.	.	7	253	4	.	.	.	.	264
2.25-2.49	.	.	.	.	91	5	1	.	.	.	97
2.50-2.74	.	.	.	.	43	21	.	.	.	.	64
2.75-2.99	.	.	.	.	2	38	.	.	.	.	40
3.00-3.24	.	.	.	.	1	35	.	.	.	.	36
3.25-3.49	.	.	.	.	.	16	.	.	.	.	16
3.50+	.	.	.	.	.	10	9	.	.	.	19
TOTAL	656	2296	2419	2619	935	185	18	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 8555.

STATION M59 42.08N 86.58W 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	
0.00-0.24	486	319	32	1	.	.	1	.	.	.	839
0.25-0.49	104	1121	226	42	2	.	.	.	.	.	1495
0.50-0.74	.	462	960	260	33	.	.	.	.	.	1715
0.75-0.99	.	12	396	407	64	4	.	.	.	.	883
1.00-1.24	.	.	262	533	108	26	.	.	.	.	929
1.25-1.49	.	.	31	328	132	20	3	.	.	.	514
1.50-1.74	.	.	3	363	253	12	1	.	.	.	632
1.75-1.99	.	.	.	26	305	3	3	.	.	.	337
2.00-2.24	.	.	.	2	339	6	3	.	.	.	350
2.25-2.49	.	.	.	.	132	10	1	.	.	.	143
2.50-2.74	.	.	.	.	32	70	1	.	.	.	103
2.75-2.99	.	.	.	.	1	59	.	.	.	.	60
3.00-3.24	.	.	.	.	.	47	.	.	.	.	47
3.25-3.49	.	.	.	.	.	13	1	.	.	.	14
3.50+	.	.	.	.	.	3	24	.	.	.	27
TOTAL	590	1914	1910	1962	1401	273	38	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.3 NO. OF CASES= 7583.

STATION M59 42.08N 86.58W 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	
0.00-0.24	376	255	14	3	.	.	.	.	.	.	648
0.25-0.49	130	1230	211	39	1	.	.	.	.	.	1611
0.50-0.74	.	581	1045	266	32	.	.	.	.	.	1924
0.75-0.99	.	20	394	443	55	6	.	.	.	.	918
1.00-1.24	.	.	272	509	171	28	1	.	.	.	981
1.25-1.49	.	.	25	284	179	29	.	.	.	.	517
1.50-1.74	.	.	3	281	304	26	6	.	.	.	620
1.75-1.99	.	.	.	40	331	31	3	.	.	.	405
2.00-2.24	.	.	.	1	382	47	11	.	.	.	441
2.25-2.49	.	.	.	.	137	26	7	.	.	.	170
2.50-2.74	.	.	.	.	60	116	2	.	.	.	178
2.75-2.99	.	.	.	.	2	75	3	1	.	.	81
3.00-3.24	.	.	.	.	1	55	4	.	.	.	60
3.25-3.49	.	.	.	.	.	17	8	1	.	.	26
3.50+	.	.	.	.	.	8	34	.	.	.	42
TOTAL	506	2086	1964	1866	1655	464	79	2	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.4 NO. OF CASES= 8088.

STATION M59 42.08N 86.58W 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	
0.00-0.24	341	172	18	1	.	.	.	.	.	.	532
0.25-0.49	87	933	260	43	2	.	.	.	.	.	1325
0.50-0.74	.	585	884	361	40	2	.	.	.	.	1872
0.75-0.99	.	27	393	424	80	3	.	.	.	.	927
1.00-1.24	.	.	308	563	302	33	1	.	.	.	1207
1.25-1.49	.	.	38	256	308	33	1	.	.	.	636
1.50-1.74	.	.	2	217	331	109	13	.	.	.	672
1.75-1.99	.	.	.	33	229	97	16	.	.	.	375
2.00-2.24	.	.	.	4	283	199	27	.	.	.	513
2.25-2.49	.	.	.	.	104	133	19	.	.	.	256
2.50-2.74	.	.	.	1	21	228	44	1	.	.	295
2.75-2.99	.	.	.	.	2	113	20	1	.	.	136
3.00-3.24	.	.	.	.	.	106	41	3	.	.	150
3.25-3.49	.	.	.	.	.	7	56	6	.	.	69
3.50+	.	.	.	.	.	2	121	10	4	.	137
TOTAL	428	1717	1903	1903	1702	1065	359	21	4	0	

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.8 NO. OF CASES= 8536.

STATION M59 42.08N 86.58W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

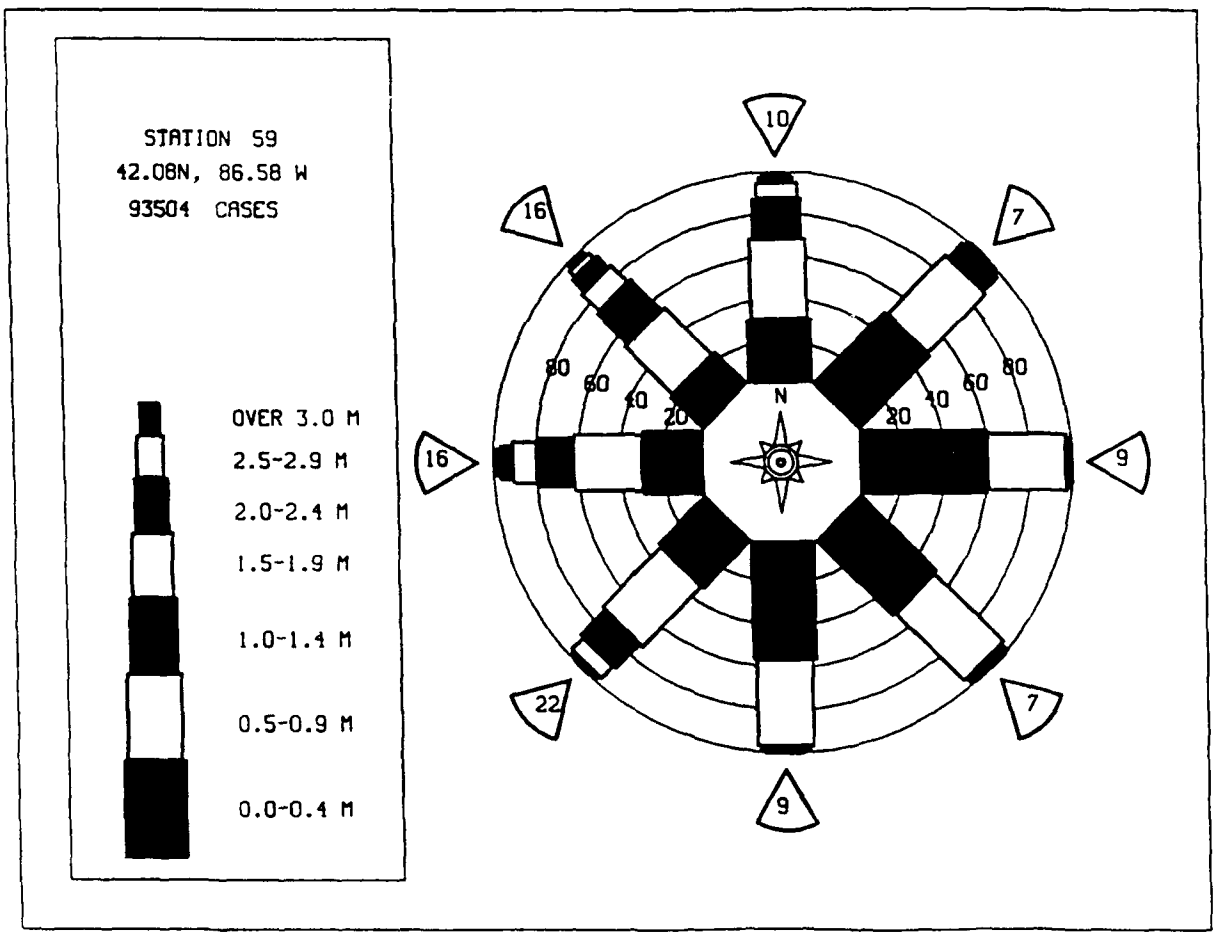
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	304	140	13	3	.	.	.	.	.	.	460
0.25-0.49	58	593	163	50	1	.	.	.	.	.	865
0.50-0.74	.	378	709	300	44	.	.	.	.	.	1431
0.75-0.99	.	6	290	362	96	4	.	.	.	.	758
1.00-1.24	.	.	227	436	265	20	.	.	.	.	948
1.25-1.49	.	.	25	191	206	33	.	1	.	.	456
1.50-1.74	.	.	3	159	202	82	10	.	.	.	456
1.75-1.99	.	.	.	14	114	67	8	.	.	.	203
2.00-2.24	.	.	.	2	97	65	34	.	.	.	198
2.25-2.49	.	.	.	.	39	41	31	1	.	.	112
2.50-2.74	.	.	.	.	12	67	21	2	.	.	102
2.75-2.99	.	.	.	.	.	27	16	2	.	.	45
3.00-3.24	.	.	.	.	.	27	26	.	1	.	54
3.25-3.49	.	.	.	.	.	4	17	2	.	.	23
3.50+	.	.	.	.	.	2	52	14	5	1	74
TOTAL	362	1117	1430	1517	1076	439	215	22	6	1	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.7 NO. OF CASES= 5807.

STATION M59 42.08N 86.58W 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	
0.00-0.24	887	385	51	8	.	.	.	.	.	.	1331
0.25-0.49	262	1556	412	105	10	.	.	.	.	.	2345
0.50-0.74	.	1330	858	382	67	2	.	.	.	.	2639
0.75-0.99	.	183	501	352	79	8	.	.	.	.	1123
1.00-1.24	.	.	312	421	158	27	1	.	.	.	919
1.25-1.49	.	.	51	242	111	23	2	.	.	.	429
1.50-1.74	.	.	9	276	138	36	6	.	.	.	465
1.75-1.99	.	.	.	26	151	27	5	.	.	.	209
2.00-2.24	.	.	.	3	163	37	11	.	.	.	214
2.25-2.49	.	.	.	.	59	23	7	.	.	.	89
2.50-2.74	.	.	.	.	24	52	8	.	.	.	84
2.75-2.99	.	.	.	.	.	33	4	.	.	.	37
3.00-3.24	.	.	.	.	.	29	8	.	.	.	37
3.25-3.49	.	.	.	.	.	6	8	1	.	.	15
3.50+	.	.	.	.	.	3	25	2	1	.	31
TOTAL	1149	3454	2194	1815	960	306	85	3	1	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 3.9 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M59 (42.08N 86.58W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M59 (42.08N 86.58W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.1	3.3	3.3	2.3	1.9	1.7	1.4	1.7	2.3	2.2	3.1	2.7
1957	2.8	3.5	3.1	2.6	1.7	1.2	1.5	1.8	2.2	3.0	3.4	4.0
1958	2.7	3.1	2.1	2.3	1.4	1.5	1.5	2.0	1.9	2.8	3.1	3.0
1959	3.6	2.5	3.9	2.5	1.9	1.9	1.3	1.5	2.7	3.0	3.0	2.8
1960	2.6	3.4	4.8	2.1	1.5	2.1	1.3	1.4	1.8	2.6	2.6	2.4
1961	3.5	3.1	4.2	2.3	1.7	1.7	1.6	1.4	2.5	2.5	3.2	3.9
1962	3.2	4.0	2.2	3.4	1.8	1.1	1.3	1.8	2.2	2.5	2.9	4.4
1963	2.7	3.4	4.5	4.1	2.1	2.1	1.5	2.1	2.4	1.9	4.0	3.2
1964	3.5	2.9	3.6	2.6	3.1	2.1	1.4	1.9	3.1	2.6	3.4	3.1
1965	3.5	4.6	3.7	2.4	2.6	1.6	1.5	2.3	2.3	3.1	4.6	3.5
1966	3.6	3.2	3.4	2.8	2.3	1.5	1.5	1.6	2.3	3.2	5.9	2.3
1967	3.6	4.0	3.0	2.7	2.4	1.5	1.3	1.6	2.0	3.2	2.8	2.5
1968	2.7	3.6	2.9	3.2	2.0	1.7	1.3	2.4	2.0	3.2	3.0	4.3
1969	3.4	3.1	3.0	2.5	1.6	1.7	1.6	1.7	2.0	2.3	2.3	2.8
1970	2.9	2.7	3.1	2.8	2.1	1.8	1.7	2.1	2.6	2.8	3.6	3.9
1971	5.4	4.1	3.9	2.4	2.1	2.4	2.1	2.3	1.6	2.1	3.1	3.6
1972	4.6	3.6	4.0	2.0	1.9	1.9	1.5	2.0	1.7	3.0	2.6	4.0
1973	3.8	3.2	4.5	2.4	2.2	1.5	2.1	1.7	1.9	2.8	3.1	2.8
1974	3.1	4.2	3.6	3.1	2.3	1.8	1.5	1.5	2.2	2.4	3.9	3.1
1975	4.2	4.9	3.3	3.7	1.4	2.3	1.4	1.6	2.2	2.3	4.3	4.1
1976	5.1	5.4	3.8	1.8	2.1	1.7	1.9	1.5	2.3	3.0	3.2	3.9
1977	4.2	3.5	2.6	3.3	1.4	1.9	2.2	2.3	2.7	3.5	4.6	3.8
1978	6.3	2.9	2.9	2.2	1.8	1.7	1.5	2.4	1.7	3.5	3.4	3.7
1979	4.0	3.1	3.5	4.3	2.0	1.9	1.8	1.8	2.2	3.1	2.7	3.6
1980	3.8	2.9	3.0	1.8	1.5	1.7	1.1	1.1	1.7	2.3	3.1	4.0
1981	2.9	3.4	2.6	3.0	1.7	1.7	1.6	1.4	2.8	3.5	3.3	2.6
1982	4.2	2.4	3.3	4.1	1.3	1.4	1.4	1.5	2.1	3.4	3.3	3.2
1983	3.9	1.4	2.3	2.2	1.5	1.0	1.2	2.1	2.0	2.8	4.1	3.8
1984	2.3	3.8	3.7	2.8	2.4	1.8	1.2	1.7	2.6	2.3	3.1	2.9
1985	4.0	5.5	3.9	2.8	2.3	1.4	1.1	1.1	1.7	2.2	2.5	3.6
1986	4.1	2.5	3.3	1.9	2.6	1.2	1.5	1.6	1.6	1.8	3.1	2.9
1987	3.5	5.3	2.9	2.4	1.2	1.2	1.3	1.8	1.8	2.7	3.1	3.8

32 YR. STATISTICS FOR WIS STATION M59

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)	6.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	320.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		78012700

STATION M60 41.93N 86.78W 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	
0.00-0.24	398	217	40	13	.	.	.	.	.	.	668
0.25-0.49	48	621	362	106	1	1	.	.	.	.	1139
0.50-0.74	.	310	637	545	119	.	.	.	.	.	1611
0.75-0.99	.	5	199	337	157	11	.	.	.	.	709
1.00-1.24	.	.	140	329	317	68	.	.	.	.	854
1.25-1.49	.	.	11	122	186	65	5	.	.	.	389
1.50-1.74	.	.	1	86	133	104	19	.	.	.	343
1.75-1.99	.	.	.	6	49	68	9	.	.	.	132
2.00-2.24	.	.	.	3	48	64	41	.	.	.	156
2.25-2.49	.	.	.	.	13	18	29	1	.	.	61
2.50-2.74	.	.	.	.	6	20	21	4	.	.	51
2.75-2.99	.	.	.	.	2	11	5	1	.	.	19
3.00-3.24	.	.	.	.	.	4	7	5	1	.	17
3.25-3.49	.	.	.	.	.	2	3	3	1	.	9
3.50+	.	.	.	.	.	1	14	5	6	7	33
TOTAL	446	1153	1380	1547	1031	437	153	19	8	7	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.6 NO. OF CASES= 5815.

STATION M60 41.93N 86.78W 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	
0.00-0.24	252	137	60	9	1	.	.	.	.	.	459
0.25-0.49	44	366	269	96	8	1	.	.	.	.	784
0.50-0.74	.	210	308	386	80	4	.	.	.	.	988
0.75-0.99	.	6	101	145	129	9	.	.	.	.	390
1.00-1.24	.	.	103	70	144	33	1	.	.	.	351
1.25-1.49	.	.	21	34	47	41	3	.	.	.	146
1.50-1.74	.	.	.	45	27	36	7	.	.	.	115
1.75-1.99	.	.	.	2	14	12	10	.	.	.	38
2.00-2.24	.	.	.	1	18	10	8	2	.	.	39
2.25-2.49	.	.	.	.	4	2	5	1	.	.	12
2.50-2.74	.	.	.	.	1	1	2	.	.	.	4
2.75-2.99	.	.	.	.	.	1	.	1	.	.	2
3.00-3.24	.	.	.	.	.	.	1	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	296	719	862	788	473	150	37	4	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 3133.

STATION M60 41.93N 86.78W 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	
0.00-0.24	398	228	106	18	1	.	.	.	.	.	751
0.25-0.49	59	435	365	143	13	.	.	.	.	.	1015
0.50-0.74	.	268	318	423	120	5	.	.	.	.	1134
0.75-0.99	.	4	125	91	142	18	.	.	.	.	380
1.00-1.24	.	.	249	26	108	51	7	.	.	.	441
1.25-1.49	.	.	62	75	27	18	8	.	.	.	190
1.50-1.74	.	.	3	93	24	31	12	.	.	.	163
1.75-1.99	.	.	.	24	13	6	7	.	.	.	50
2.00-2.24	.	.	.	13	21	4	6	1	.	.	45
2.25-2.49	.	.	.	.	3	.	.	.	.	.	3
2.50-2.74	.	.	.	.	3	2	1	.	.	.	6
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	457	935	1228	906	475	135	41	1	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 3927.

STATION M60 41.93N 86.78W 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	
0.00-0.24	392	185	79	14	.	.	.	.	.	.	670
0.25-0.49	102	505	332	161	12	1	.	.	.	.	1113
0.50-0.74	.	392	196	302	100	4	.	.	.	.	994
0.75-0.99	.	81	126	77	70	7	.	.	.	.	361
1.00-1.24	.	.	130	33	44	14	.	.	.	.	221
1.25-1.49	.	.	32	28	7	6	1	.	.	.	74
1.50-1.74	.	.	4	43	8	5	1	.	.	.	61
1.75-1.99	.	.	.	12	5	.	1	.	.	.	18
2.00-2.24	.	.	.	3	4	1	.	.	.	.	8
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	494	1163	899	673	252	38	3	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 3310.

STATION M60 41.93N 86.78W 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	
0.00-0.24	693	252	115	34	1	.	.	.	.	.	1095
0.25-0.49	253	712	407	245	26	.	.	.	.	.	1643
0.50-0.74	.	737	81	342	120	5	.	.	.	.	1285
0.75-0.99	.	280	82	148	110	12	.	.	.	.	632
1.00-1.24	.	.	51	52	55	21	.	.	.	.	179
1.25-1.49	.	.	6	1	4	3	2	.	.	.	16
1.50-1.74	.	.	4	.	4	6	1	.	.	.	15
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	946	1981	746	822	320	47	3	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 4561.

STATION M60 41.93N 86.78W 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	
0.00-0.24	608	180	89	26	1	.	.	.	.	.	904
0.25-0.49	206	682	266	155	18	.	.	.	.	.	1327
0.50-0.74	.	1110	79	179	75	1	.	.	.	.	1444
0.75-0.99	.	178	183	81	49	6	.	.	.	.	497
1.00-1.24	.	.	102	3	27	13	.	.	.	.	145
1.25-1.49	.	.	22	.	2	2	2	.	.	.	28
1.50-1.74	.	.	1	3	.	1	1	.	.	.	6
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	814	2150	742	448	172	23	3	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.3 NO. OF CASES= 4081.

STATION M60 41.93N 86.78W 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	
0.00-0.24	594	181	104	20	2	.	.	.	.	.	901
0.25-0.49	104	612	229	152	23	.	.	.	.	.	1120
0.50-0.74	.	1193	133	166	78	1	.	.	.	.	1571
0.75-0.99	.	11	234	47	60	6	.	.	.	.	358
1.00-1.24	.	.	127	2	20	9	.	.	.	.	158
1.25-1.49	.	.	33	.	1	6	.	.	.	.	40
1.50-1.74	.	.	1	4	.	2	.	.	.	.	7
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	698	1997	861	391	184	24	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 3.4 NO. OF CASES= 3898.

STATION M60 41.93N 86.78W 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	
0.00-0.24	473	126	66	5	1	.	.	.	.	.	671
0.25-0.49	167	697	205	130	9	.	.	.	.	.	1206
0.50-0.74	.	1057	85	172	70	2	.	.	.	.	1386
0.75-0.99	.	66	152	36	41	3	.	.	.	.	298
1.00-1.24	.	.	57	2	9	9	.	.	.	.	77
1.25-1.49	.	.	13	.	1	5	.	.	.	.	19
1.50-1.74	.	.	.	2	.	1	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	640	1946	578	347	131	20	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 3436.

STATION M60 41.93N 86.78W 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	
0.00-0.24	757	163	77	19	1	.	.	.	.	.	1017
0.25-0.49	374	990	220	192	22	.	.	.	.	.	1798
0.50-0.74	.	1202	23	274	140	4	.	.	.	.	1643
0.75-0.99	.	190	111	39	81	4	1	.	.	.	426
1.00-1.24	.	.	57	2	52	7	.	.	.	.	118
1.25-1.49	.	.	12	.	3	1	.	.	.	.	16
1.50-1.74	.	.	5	3	.	5	.	.	.	.	13
1.75-1.99	.	.	.	1	.	2	.	.	.	.	3
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	1131	2545	505	530	298	23	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.3 NO. OF CASES= 4717.

STATION M60 41.93N 86.78W 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	
0.00-0.24	649	266	39	10	1	.	.	.	.	.	965
0.25-0.49	316	1817	275	149	31	1	.	.	.	.	2589
0.50-0.74	.	1895	313	249	122	9	.	.	.	.	2588
0.75-0.99	.	670	507	63	90	10	.	.	.	.	1340
1.00-1.24	.	.	439	35	51	25	.	.	.	.	550
1.25-1.49	.	.	83	99	11	10	1	.	.	.	204
1.50-1.74	.	.	23	77	3	5	1	.	.	.	109
1.75-1.99	.	.	1	16	1	2	.	.	.	.	20
2.00-2.24	.	.	.	.	6	1	.	.	.	.	7
2.25-2.49	.	.	.	.	4	.	.	.	.	.	4
2.50-2.74	.	.	.	.	1	.	1	.	.	.	2
2.75-2.99	.	.	.	.	.	.	1	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	965	4648	1680	698	321	63	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.4 NO. OF CASES= 7850.

STATION M60 41.93N 86.78W 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	
0.00-0.24	611	361	83	14	1	.	.	.	.	.	1070
0.25-0.49	157	1620	463	135	29	.	.	.	.	.	2404
0.50-0.74	.	1290	1279	297	195	19	1	.	.	.	3081
0.75-0.99	.	185	1032	125	133	24	2	.	.	.	1501
1.00-1.24	.	.	1529	142	70	51	1	.	.	.	1793
1.25-1.49	.	.	134	606	8	23	3	.	.	.	774
1.50-1.74	.	.	14	478	5	18	4	.	.	.	519
1.75-1.99	.	.	.	133	3	2	1	.	.	.	139
2.00-2.24	.	.	.	10	67	1	2	.	.	.	80
2.25-2.49	.	.	.	.	24	.	.	.	.	.	24
2.50-2.74	.	.	.	.	12	.	1	.	.	.	13
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	3	.	.	.	.	3
3.50+											0
TOTAL	768	3456	4534	1940	548	142	15	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 10680.

STATION M60 41.93N 86.78W 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	
0.00-0.24	487	334	51	7	.	.	.	.	.	.	879
0.25-0.49	97	1255	287	133	12	.	.	.	.	.	1784
0.50-0.74	.	666	998	293	132	11	.	.	.	.	2100
0.75-0.99	.	35	623	94	149	24	.	.	.	.	925
1.00-1.24	.	.	998	167	90	69	1	.	.	.	1325
1.25-1.49	.	.	113	524	12	28	4	.	.	.	681
1.50-1.74	.	.	2	444	17	19	11	.	.	.	493
1.75-1.99	.	.	.	109	45	9	1	.	.	.	164
2.00-2.24	.	.	.	17	97	1	6	1	.	.	122
2.25-2.49	.	.	.	.	36	1	2	.	.	.	39
2.50-2.74	.	.	.	.	43	3	2	.	.	.	48
2.75-2.99	.	.	.	.	6	3	.	.	.	.	9
3.00-3.24	.	.	.	.	3	17	2	.	.	.	22
3.25-3.49	.	.	.	.	.	5	2	.	.	.	7
3.50+						1		1			2
TOTAL	584	2290	3072	1788	642	191	31	2	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 8064.

STATION M60 41.93N 86.78W 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	
0.00-0.24	479	281	36	3	1	.	.	.	.	.	800
0.25-0.49	114	1122	218	83	8	.	.	.	.	.	1545
0.50-0.74	.	484	861	264	100	11	.	.	.	.	1720
0.75-0.99	.	21	500	236	131	20	.	.	.	.	908
1.00-1.24	.	.	425	442	95	57	2	.	.	.	1021
1.25-1.49	.	.	75	457	39	36	7	.	.	.	614
1.50-1.74	.	.	3	599	96	23	7	.	.	.	728
1.75-1.99	.	.	.	62	233	7	4	.	.	.	306
2.00-2.24	.	.	.	13	242	3	12	.	.	.	270
2.25-2.49	.	.	.	.	80	1	5	.	.	.	86
2.50-2.74	.	.	.	.	55	23	4	.	.	.	82
2.75-2.99	.	.	.	.	3	27	4	.	.	.	34
3.00-3.24	.	.	.	.	.	22	1	.	1	.	24
3.25-3.49	.	.	.	.	.	11	.	.	.	.	11
3.50+	.	.	.	.	.	6	4	.	1	.	11
TOTAL	593	1908	2118	2159	1083	247	50	0	2	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.3 NO. OF CASES= 7654.

STATION M60 41.93N 86.78W 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	
0.00-0.24	358	257	26	3	.	.	.	.	.	.	644
0.25-0.49	145	1032	239	69	4	.	.	.	.	.	1489
0.50-0.74	.	594	962	275	71	2	.	.	.	.	1904
0.75-0.99	.	28	458	343	135	18	.	.	.	.	982
1.00-1.24	.	.	350	442	177	81	2	.	.	.	1052
1.25-1.49	.	.	58	405	90	59	1	.	.	.	613
1.50-1.74	.	.	2	521	158	55	8	.	.	.	744
1.75-1.99	.	.	.	97	297	25	9	.	.	.	428
2.00-2.24	.	.	.	6	308	24	13	.	.	.	351
2.25-2.49	.	.	.	.	131	9	7	1	.	.	148
2.50-2.74	.	.	.	.	62	59	3	1	.	.	125
2.75-2.99	.	.	.	.	2	45	4	.	.	.	51
3.00-3.24	.	.	.	.	.	41	5	.	.	.	46
3.25-3.49	.	.	.	.	.	11	4	.	.	.	15
3.50+	.	.	.	.	.	4	12	3	.	.	19
TOTAL	503	1911	2095	2161	1435	433	68	5	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.4 NO. OF CASES= 8079.

STATION M60 41.93N 86.78W 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	
0.00-0.24	311	167	36	2	.	.	.	.	.	.	516
0.25-0.49	85	752	272	83	6	.	.	.	.	.	1198
0.50-0.74	.	540	797	391	68	4	.	.	.	.	1800
0.75-0.99	.	26	402	334	143	8	.	.	.	.	913
1.00-1.24	.	.	345	524	272	56	1	.	.	.	1198
1.25-1.49	.	.	52	319	228	89	9	.	.	.	697
1.50-1.74	.	.	2	293	321	114	14	.	.	.	744
1.75-1.99	.	.	.	56	320	78	16	.	.	.	470
2.00-2.24	.	.	.	4	372	100	31	1	.	.	508
2.25-2.49	.	.	.	.	141	95	25	.	.	.	261
2.50-2.74	.	.	.	.	38	226	14	1	.	.	279
2.75-2.99	.	.	.	.	3	109	14	.	.	.	126
3.00-3.24	.	.	.	.	1	93	32	3	.	.	129
3.25-3.49	.	.	.	.	.	24	19	2	.	.	45
3.50+	.	.	.	.	.	3	70	10	8	4	95
TOTAL	396	1485	1906	2006	1913	999	245	17	8	4	

MEAN HS(M) = 1.2 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.9 NO. OF CASES= 8422.

STATION M60 41.93N 86.78W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

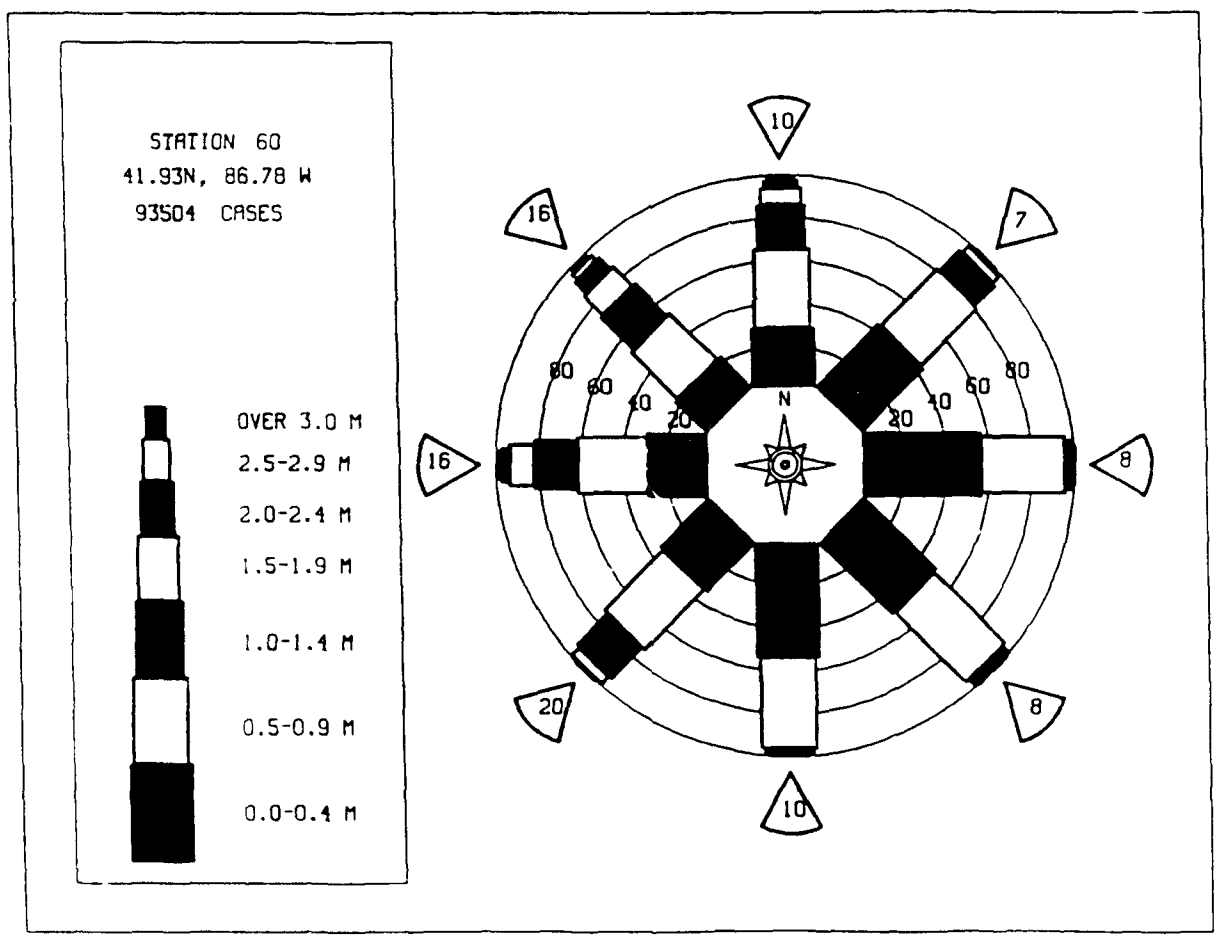
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	256	131	31	3	.	.	.	.	.	.	421
0.25-0.49	64	489	227	96	5	.	.	.	.	.	881
0.50-0.74	.	331	619	396	69	2	.	.	.	.	1417
0.75-0.99	.	8	264	330	143	9	.	.	.	.	754
1.00-1.24	.	.	228	398	289	56	.	.	.	.	971
1.25-1.49	.	.	21	193	203	62	3	.	.	.	482
1.50-1.74	.	.	5	151	210	98	13	.	.	.	477
1.75-1.99	.	.	.	12	106	81	12	.	.	.	211
2.00-2.24	.	.	.	1	110	63	43	.	.	.	217
2.25-2.49	.	.	.	.	53	34	26	1	.	.	114
2.50-2.74	.	.	.	.	16	53	25	8	1	.	103
2.75-2.99	.	.	.	.	.	34	14	5	.	.	53
3.00-3.24	.	.	.	.	.	36	31	7	.	.	74
3.25-3.49	.	.	.	.	.	7	11	3	.	.	21
3.50+	.	.	.	.	.	.	34	11	13	2	60
TOTAL	320	959	1395	1580	1204	535	212	35	14	2	

MEAN HS(M) = 1.0 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.8 NO. OF CASES= 5877.

STATION M60 41.93N 86.78W 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	
0.00-0.24	772	347	104	20	1	.	.	.	.	.	1244
0.25-0.49	234	1371	464	213	23	.	.	.	.	.	2305
0.50-0.74	.	1228	769	496	166	8	.	.	.	.	2667
0.75-0.99	.	180	510	253	177	19	.	.	.	.	1139
1.00-1.24	.	.	533	267	182	62	1	.	.	.	1045
1.25-1.49	.	.	75	286	87	46	5	.	.	.	499
1.50-1.74	.	.	7	284	101	52	10	.	.	.	454
1.75-1.99	.	.	.	53	109	29	7	.	.	.	198
2.00-2.24	.	.	.	7	129	27	16	.	.	.	179
2.25-2.49	.	.	.	.	48	16	10	.	.	.	75
2.50-2.74	.	.	.	.	24	39	7	1	.	.	71
2.75-2.99	.	.	.	.	1	23	4	.	.	.	28
3.00-3.24	.	.	.	.	.	24	6	1	.	.	30
3.25-3.49	.	.	.	.	.	6	4	.	.	.	10
3.50+	.	.	.	.	.	1	13	3	2	1	20
TOTAL	1006	3126	2462	1879	1049	349	85	5	2	1	

MEAN HS(M)= 0.8 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M60 (41.93N 86.78W)

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M60 (41.93N 86.78W)

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

32 YR. STATISTICS FOR WIS STATION M60

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	4.0
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)	1.4
LARGEST WAVE HS	(METERS)	6.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	325.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		78012700

STATION M61 41.80N 86.98W 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	
0.00-0.24	479	304	57	17	.	.	.	.	.	.	857
0.25-0.49	65	652	402	117	7	.	.	.	.	.	1243
0.50-0.74	.	316	727	535	113	2	.	.	.	.	1693
0.75-0.99	.	13	220	361	170	8	.	.	.	.	772
1.00-1.24	.	.	127	352	353	59	2	.	.	.	893
1.25-1.49	.	.	9	109	175	59	8	.	.	.	360
1.50-1.74	.	.	.	64	141	93	17	.	.	.	315
1.75-1.99	.	.	.	8	58	63	7	1	.	.	137
2.00-2.24	.	.	.	2	45	49	31	1	.	.	128
2.25-2.49	.	.	.	.	13	18	22	2	.	.	55
2.50-2.74	.	.	.	.	12	17	29	1	1	.	60
2.75-2.99	.	.	.	.	.	10	3	1	.	.	14
3.00-3.24	.	.	.	.	.	7	9	2	.	.	18
3.25-3.49	.	.	.	.	.	1	4	4	1	.	10
3.50+	.	.	.	.	.	2	10	8	7	4	31
TOTAL	544	1285	1542	1565	1087	388	142	20	9	4	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.5 NO. OF CASES= 6183.

STATION M61 41.80N 86.98W 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	
0.00-0.24	408	274	66	14	2	.	.	.	.	.	764
0.25-0.49	47	520	367	106	17	.	.	.	.	.	1057
0.50-0.74	.	194	407	442	109	4	.	.	.	.	1156
0.75-0.99	.	4	102	189	133	7	.	.	.	.	435
1.00-1.24	.	.	82	129	122	27	2	.	.	.	362
1.25-1.49	.	.	5	52	48	19	6	.	.	.	130
1.50-1.74	.	.	.	49	29	29	11	.	.	.	118
1.75-1.99	.	.	.	10	21	12	8	.	.	.	51
2.00-2.24	.	.	.	1	31	9	9	.	.	.	50
2.25-2.49	.	.	.	.	9	5	4	.	.	.	18
2.50-2.74	.	.	.	.	5	3	2	2	.	.	12
2.75-2.99	.	.	.	.	2	.	.	.	.	.	2
3.00-3.24	.	.	.	.	.	1	1	.	.	.	2
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	455	992	1029	992	528	116	44	2	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 3910.

STATION M61 41.80N 86.98W 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	
0.00-0.24	474	348	78	25	3	.	.	.	.	.	929
0.25-0.49	81	504	392	165	21	.	.	.	.	.	1163
0.50-0.74	.	284	324	389	106	2	.	.	.	.	1105
0.75-0.99	.	4	152	98	114	12	.	.	.	.	380
1.00-1.24	.	.	114	143	83	28	4	.	.	.	372
1.25-1.49	.	.	13	127	16	7	4	.	.	.	167
1.50-1.74	.	.	.	140	9	6	7	.	.	.	162
1.75-1.99	.	.	.	31	38	1	2	.	.	.	72
2.00-2.24	.	.	.	6	52	4	2	2	.	.	66
2.25-2.49	.	.	.	.	18	2	1	.	.	.	21
2.50-2.74	.	.	.	.	9	3	.	.	.	.	12
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	5	.	.	.	.	5
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	555	1141	1073	1124	469	72	20	2	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 4.0 NO. OF CASES= 4185.

STATION M61 41.80N 86.98W 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	
0.00-0.24	481	266	77	24	4	.	.	.	.	.	852
0.25-0.49	124	521	308	170	31	2	.	.	.	.	1156
0.50-0.74	.	361	165	226	85	4	.	.	.	.	841
0.75-0.99	.	57	94	58	84	8	.	.	.	.	301
1.00-1.24	.	.	50	60	49	10	.	.	.	.	169
1.25-1.49	.	.	9	27	9	4	.	.	.	.	49
1.50-1.74	.	.	3	32	9	5	.	.	.	.	49
1.75-1.99	.	.	.	6	7	1	.	.	.	.	14
2.00-2.24	.	.	.	.	9	2	.	.	.	.	11
2.25-2.49	.	.	.	.	2	1	.	.	.	.	3
2.50-2.74	.	.	.	.	2	1	.	.	.	.	3
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	605	1205	706	603	291	39	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.7 NO. OF CASES= 3240.

STATION M61 41.80N 86.98W 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	
0.00-0.24	711	361	125	43	2	.	.	.	.	.	1242
0.25-0.49	221	658	348	232	24	2	.	.	.	.	1485
0.50-0.74	.	597	49	211	119	4	.	.	.	.	980
0.75-0.99	.	258	37	97	103	10	.	.	.	.	505
1.00-1.24	.	.	24	25	88	13	.	.	.	.	150
1.25-1.49	.	.	5	3	9	2	.	.	.	.	19
1.50-1.74	.	.	1	.	1	2	.	.	.	.	4
1.75-1.99	.	.	.	.	1	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	932	1874	589	611	347	33	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.5 NO. OF CASES= 4115.

STATION M61 41.80N 86.98W 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	
0.00-0.24	689	251	125	47	4	.	.	.	.	.	1116
0.25-0.49	187	541	253	159	24	.	.	.	.	.	1164
0.50-0.74	.	829	60	128	59	2	.	.	.	.	1078
0.75-0.99	.	104	117	63	58	4	.	.	.	.	346
1.00-1.24	.	.	44	11	36	4	.	.	.	.	95
1.25-1.49	.	.	12	.	2	1	1	.	.	.	16
1.50-1.74	.	.	.	.	1	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	876	1725	611	408	184	11	1	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 3.3 NO. OF CASES= 3580.

STATION M61 41.80N 86.98W 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	
0.00-0.24	872	296	156	40	5	.	.	.	.	.	1369
0.25-0.49	86	601	249	141	18	1	.	.	.	.	1096
0.50-0.74	.	1053	103	136	68	2	.	.	.	.	1362
0.75-0.99	.	5	176	23	48	5	.	.	.	.	257
1.00-1.24	.	.	91	.	17	6	.	.	.	.	114
1.25-1.49	.	.	26	.	.	.	.	.	.	.	26
1.50-1.74	.	.	.	.	.	1	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	958	1955	801	340	156	15	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 3960.

STATION M61 41.80N 86.98W 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	
0.00-0.24	749	250	79	29	.	.	.	.	.	.	1107
0.25-0.49	232	737	161	159	26	1	.	.	.	.	1316
0.50-0.74	.	1147	64	140	73	2	.	.	.	.	1426
0.75-0.99	.	77	117	13	48	2	.	.	.	.	257
1.00-1.24	.	.	58	2	7	5	.	.	.	.	72
1.25-1.49	.	.	9	.	1	1	1	.	.	.	12
1.50-1.74	.	.	.	.	.	.	.	.	.	.	0
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	981	2211	488	343	155	11	1	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 3928.

STATION M61 41.80N 86.98W 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	
0.00-0.24	1096	287	104	28	.	.	.	.	.	.	1515
0.25-0.49	483	1365	196	197	29	1	.	.	.	.	2271
0.50-0.74	.	1929	11	198	100	4	.	.	.	.	2251
0.75-0.99	.	195	206	23	80	6	.	.	.	.	510
1.00-1.24	.	.	75	.	22	5	1	.	.	.	103
1.25-1.49	.	.	29	.	1	2	.	.	.	.	32
1.50-1.74	.	.	2	2	.	1	.	.	.	.	5
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	1579	3776	623	449	241	19	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.1 NO. OF CASES= 6267.

STATION M61 41.80N 86.98W 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	
0.00-0.24	1005	268	72	25	1	1	.	.	.	.	1372
0.25-0.49	362	1626	193	158	53	.	.	.	.	.	2392
0.50-0.74	.	2716	112	167	110	14	.	.	.	.	3119
0.75-0.99	.	243	496	32	109	11	1	.	.	.	892
1.00-1.24	.	.	284	3	45	18	2	.	.	.	352
1.25-1.49	.	.	114	.	3	2	.	.	.	.	119
1.50-1.74	.	.	9	27	.	1	.	.	.	.	37
1.75-1.99	.	.	.	5	.	.	.	.	.	.	5
2.00-2.24	.	.	.	1	.	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	1367	4853	1280	418	321	47	3	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.2 NO. OF CASES= 7764.

STATION M61 41.80N 86.98W 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	
0.00-0.24	1001	470	98	33	3	.	.	.	.	.	1605
0.25-0.49	192	1555	305	183	78	2	.	.	.	.	2315
0.50-0.74	.	3008	344	241	195	16	.	.	.	.	3804
0.75-0.99	.	72	887	51	186	27	2	.	.	.	1225
1.00-1.24	.	.	468	6	64	42	.	.	.	.	580
1.25-1.49	.	.	237	1	10	6	1	.	.	.	255
1.50-1.74	.	.	10	91	3	2	2	.	.	.	108
1.75-1.99	.	.	.	14	.	.	.	.	.	.	14
2.00-2.24	.	.	.	3	.	1	.	.	.	.	4
2.25-2.49	.	.	.	.	2	.	.	.	.	.	2
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	1193	5105	2349	623	542	96	5	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 9284.

STATION M61 41.80N 86.98W 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	
0.00-0.24	725	444	57	17	4	.	.	.	.	.	1247
0.25-0.49	120	1218	253	150	43	1	.	.	.	.	1785
0.50-0.74	.	1864	297	244	232	17	.	.	.	.	2654
0.75-0.99	.	33	612	44	173	37	1	.	.	.	900
1.00-1.24	.	.	422	12	79	68	5	.	.	.	586
1.25-1.49	.	.	187	41	13	21	3	.	.	.	265
1.50-1.74	.	.	18	126	3	13	9	.	.	.	169
1.75-1.99	.	.	.	36	1	.	1	.	.	.	38
2.00-2.24	.	.	.	12	12	.	2	.	.	.	26
2.25-2.49	.	.	.	1	8	.	.	.	.	.	9
2.50-2.74	.	.	.	.	5	.	.	.	.	.	5
2.75-2.99	.	.	.	.	2	.	.	.	.	.	2
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	845	3559	1846	683	575	157	21	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.6 NO. OF CASES= 7205.

STATION M61 41.80N 86.98W 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	
0.00-0.24	711	437	60	19	.	.	.	.	.	.	1227
0.25-0.49	112	1094	249	118	18	.	.	.	.	.	1591
0.50-0.74	.	1015	623	310	182	12	.	.	.	.	2142
0.75-0.99	.	17	656	58	151	29	.	.	.	.	911
1.00-1.24	.	.	710	64	72	66	2	.	.	.	914
1.25-1.49	.	.	91	372	16	34	2	.	.	.	515
1.50-1.74	.	.	13	344	6	35	6	.	.	.	404
1.75-1.99	.	.	.	95	17	8	6	.	.	.	126
2.00-2.24	.	.	.	16	70	3	7	1	.	.	97
2.25-2.49	.	.	.	2	24	.	1	1	.	.	28
2.50-2.74	.	.	.	.	23	.	.	.	.	.	23
2.75-2.99	.	.	.	.	4	1	.	.	.	.	5
3.00-3.24	.	.	.	.	.	5	.	.	.	.	5
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	823	2563	2402	1398	583	194	24	2	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 7489.

STATION M61 41.80N 86.98W 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	
0.00-0.24	505	389	52	9	4	.	.	.	.	.	959
0.25-0.49	120	1044	220	90	11	.	.	.	.	.	1485
0.50-0.74	.	805	839	270	99	8	.	.	.	.	2021
0.75-0.99	.	31	686	137	157	19	.	.	.	.	1030
1.00-1.24	.	.	895	156	145	73	1	.	.	.	1270
1.25-1.49	.	.	131	522	50	52	2	.	.	.	757
1.50-1.74	.	.	9	549	47	42	11	.	.	.	658
1.75-1.99	.	.	.	118	48	24	7	.	.	.	197
2.00-2.24	.	.	.	14	127	10	9	.	.	.	160
2.25-2.49	.	.	.	1	45	9	4	.	.	.	59
2.50-2.74	.	.	.	.	42	24	2	.	.	.	68
2.75-2.99	.	.	.	.	3	10	4	.	.	.	17
3.00-3.24	.	.	.	.	4	5	1	.	.	.	10
3.25-3.49	.	.	.	.	.	1	.	1	.	.	2
3.50+	.	.	.	.	.	.	1	1	.	.	2
TOTAL	625	2269	2832	1866	782	277	42	2	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 8156.

STATION M61 41.80N 86.98W 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	
0.00-0.24	409	288	67	12	.	.	.	.	.	.	776
0.25-0.49	85	789	287	88	3	.	.	.	.	.	1252
0.50-0.74	.	525	824	386	90	1	.	.	.	.	1826
0.75-0.99	.	28	479	305	135	14	.	.	.	.	961
1.00-1.24	.	.	529	530	226	66	3	.	.	.	1354
1.25-1.49	.	.	90	416	175	78	1	.	.	.	760
1.50-1.74	.	.	2	493	304	83	18	.	.	.	900
1.75-1.99	.	.	.	72	296	48	8	1	.	.	425
2.00-2.24	.	.	.	10	324	37	21	2	.	.	394
2.25-2.49	.	.	.	.	158	33	10	.	.	.	201
2.50-2.74	.	.	.	.	45	122	10	1	.	.	178
2.75-2.99	.	.	.	.	3	57	6	1	1	.	68
3.00-3.24	.	.	.	.	2	51	4	4	.	.	61
3.25-3.49	.	.	.	.	.	8	5	2	1	.	16
3.50+	.	.	.	.	.	1	21	2	5	3	32
TOTAL	494	1630	2278	2312	1761	599	107	13	7	3	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.6 NO. OF CASES= 8632.

STATION M61 41.80N 86.98W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

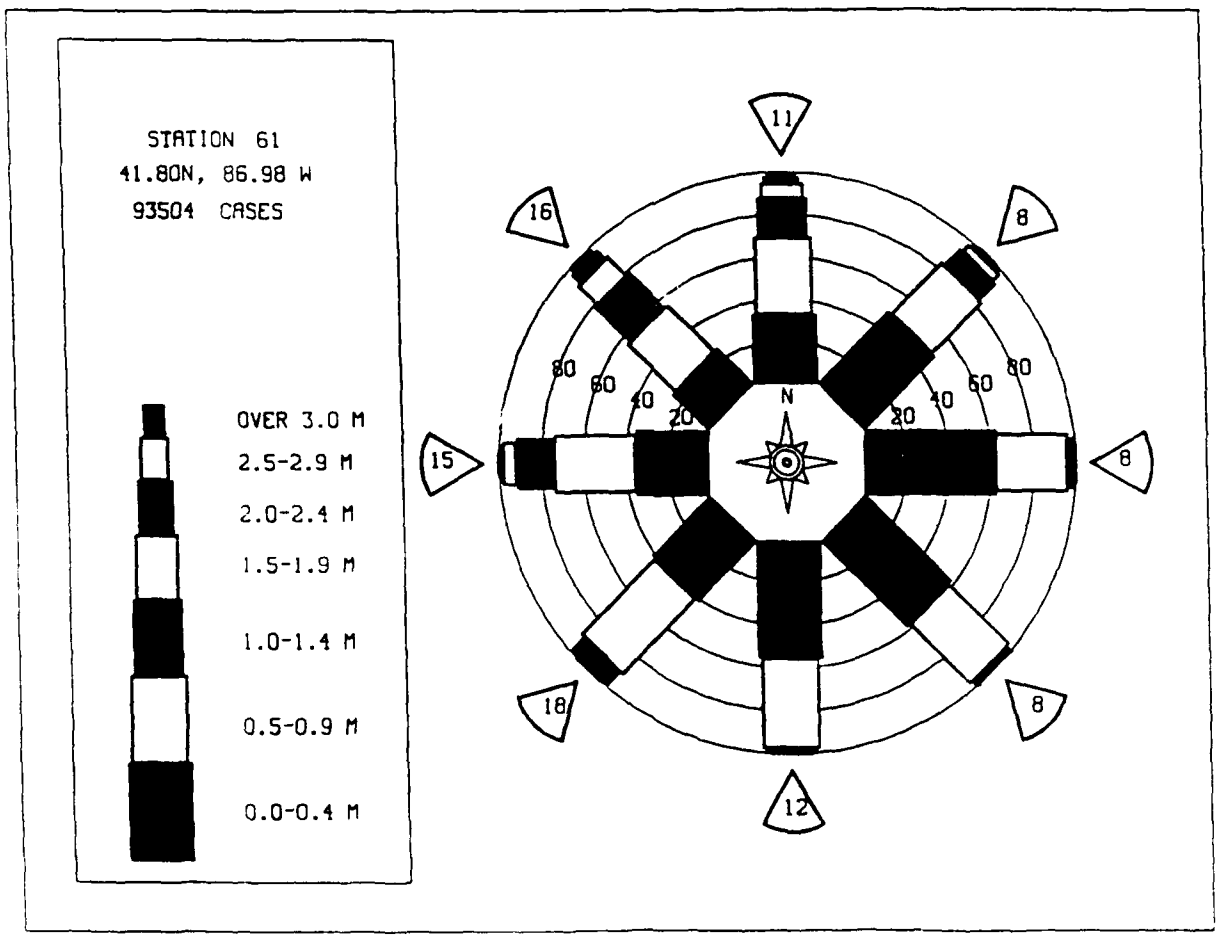
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	314	227	42	11	1	.	.	.	.	.	595
0.25-0.49	78	479	273	80	5	1	.	.	.	.	916
0.50-0.74	.	273	527	406	80	1	.	.	.	.	1287
0.75-0.99	.	7	206	321	140	10	.	.	.	.	684
1.00-1.24	.	.	158	370	309	49	1	.	.	.	887
1.25-1.49	.	.	21	173	182	54	1	.	.	.	431
1.50-1.74	.	.	1	117	194	91	10	.	.	.	413
1.75-1.99	.	.	.	8	90	62	25	.	.	.	185
2.00-2.24	.	.	.	3	95	77	38	.	.	.	213
2.25-2.49	.	.	.	.	44	23	25	3	.	.	95
2.50-2.74	.	.	.	.	10	56	34	4	.	.	104
2.75-2.99	.	.	.	.	1	28	12	6	.	.	47
3.00-3.24	.	.	.	.	.	29	13	6	1	.	49
3.25-3.49	.	.	.	.	.	3	9	1	1	.	14
3.50+	.	.	.	.	.	1	19	7	16	4	47
TOTAL	392	986	1228	1489	1151	485	187	27	18	4	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.8 NO. OF CASES= 5606.

STATION M61 41.80N 86.98W 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	
0.00-0.24	1063	516	132	40	3	.	.	.	.	.	1754
0.25-0.49	260	1391	446	232	41	1	.	.	.	.	2371
0.50-0.74	.	1692	548	443	183	9	.	.	.	.	2875
0.75-0.99	.	115	525	188	189	21	.	.	.	.	1038
1.00-1.24	.	.	413	186	172	54	2	.	.	.	827
1.25-1.49	.	.	99	184	71	34	3	.	.	.	391
1.50-1.74	.	.	7	203	75	40	9	.	.	.	334
1.75-1.99	.	.	.	40	58	22	6	.	.	.	126
2.00-2.24	.	.	.	7	76	19	12	.	.	.	114
2.25-2.49	.	.	.	.	32	9	6	.	.	.	47
2.50-2.74	.	.	.	.	15	22	7	.	.	.	44
2.75-2.99	.	.	.	.	1	11	2	.	.	.	14
3.00-3.24	.	.	.	.	.	10	2	1	.	.	13
3.25-3.49	.	.	.	.	.	1	2	.	.	.	3
3.50+	.	.	.	.	.	.	5	1	2	1	9
TOTAL	1323	3714	2170	1523	916	253	56	2	2	1	

MEAN HS(M)= 0.7 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M61 (41.80N 86.98W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.8	0.7	0.8	0.6	0.5	0.3	0.4	0.4	0.5	0.5	0.8	0.8	0.6
1957	0.9	0.7	0.8	0.5	0.5	0.3	0.3	0.3	0.4	0.6	0.8	0.9	0.6
1958	0.8	1.1	0.6	0.6	0.5	0.4	0.3	0.4	0.6	0.7	0.8	0.8	0.6
1959	1.0	0.9	0.8	0.7	0.5	0.4	0.3	0.4	0.6	0.7	0.9	0.8	0.7
1960	0.8	1.1	0.8	0.6	0.5	0.4	0.3	0.4	0.5	0.5	0.8	1.0	0.6
1961	0.9	0.8	0.9	0.7	0.5	0.4	0.3	0.4	0.5	0.7	0.7	0.9	0.6
1962	0.9	1.0	0.7	0.8	0.5	0.3	0.3	0.4	0.6	0.6	0.6	0.9	0.6
1963	0.8	0.9	0.9	0.6	0.5	0.3	0.4	0.4	0.5	0.5	0.9	0.8	0.6
1964	1.1	1.0	1.0	0.8	0.6	0.4	0.4	0.5	0.6	0.7	0.7	0.9	0.7
1965	1.2	1.3	0.9	0.7	0.5	0.4	0.4	0.4	0.5	0.8	0.9	1.0	0.7
1966	0.9	0.7	0.8	0.6	0.6	0.3	0.3	0.4	0.5	0.7	1.1	0.9	0.7
1967	1.0	1.1	0.7	0.6	0.5	0.3	0.3	0.5	0.5	0.8	0.8	0.7	0.7
1968	0.8	1.1	0.9	0.7	0.4	0.4	0.3	0.5	0.5	0.7	0.9	1.1	0.7
1969	0.9	0.9	0.9	0.6	0.4	0.5	0.3	0.3	0.5	0.6	0.7	0.9	0.6
1970	0.8	1.0	0.8	0.6	0.5	0.4	0.4	0.4	0.5	0.6	0.9	1.0	0.7
1971	1.1	1.2	1.0	0.7	0.5	0.4	0.4	0.5	0.5	0.5	0.9	0.9	0.7
1972	1.1	1.0	1.1	0.6	0.4	0.5	0.4	0.4	0.5	0.7	0.8	0.9	0.7
1973	1.0	0.9	0.8	0.7	0.5	0.4	0.4	0.5	0.5	0.6	0.9	0.9	0.7
1974	0.8	1.0	0.8	0.8	0.5	0.4	0.4	0.4	0.6	0.7	0.9	0.9	0.7
1975	1.0	1.0	0.9	0.7	0.4	0.4	0.3	0.4	0.6	0.7	0.8	1.0	0.7
1976	1.2	1.1	1.1	0.7	0.5	0.4	0.4	0.5	0.7	0.8	1.0	1.1	0.8
1977	1.2	1.0	0.8	0.7	0.4	0.5	0.5	0.6	0.7	0.9	1.0	1.0	0.8
1978	1.3	0.9	0.9	0.7	0.5	0.4	0.4	0.4	0.5	0.8	0.8	1.0	0.7
1979	1.0	0.9	0.7	0.6	0.5	0.5	0.4	0.5	0.6	0.8	0.8	1.0	0.7
1980	0.8	0.8	0.9	0.6	0.3	0.3	0.3	0.3	0.5	0.8	0.9	0.9	0.6
1981	0.8	0.9	0.8	0.7	0.5	0.4	0.4	0.4	0.7	0.8	0.7	0.7	0.6
1982	1.0	0.7	0.8	0.7	0.3	0.4	0.3	0.4	0.7	0.6	0.8	0.8	0.6
1983	0.8	0.5	0.7	0.6	0.4	0.2	0.3	0.4	0.6	0.7	1.0	1.0	0.6
1984	0.8	0.8	0.8	0.6	0.4	0.3	0.3	0.4	0.6	0.5	0.8	0.9	0.6
1985	1.2	1.0	0.8	0.6	0.4	0.4	0.3	0.3	0.5	0.5	0.7	0.9	0.6
1986	1.0	0.8	0.9	0.6	0.4	0.4	0.3	0.4	0.4	0.5	0.7	0.7	0.6
1987	0.8	0.8	0.7	0.6	0.3	0.3	0.3	0.4	0.4	0.7	0.8	0.9	0.6
MEAN	1.0	0.9	0.8	0.6	0.5	0.4	0.4	0.4	0.5	0.7	0.8	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M61 (41.80N 86.98W)

MONTH

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

32 YR. STATISTICS FOR WIS STATION M61

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.8
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)	1.3
LARGEST WAVE HS	(METERS)	5.8
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)		85021300

STATION M62 41.80N 87.18W 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	
0.00-0.24	429	264	60	22	3	.	.	.	.	.	778
0.25-0.49	56	633	267	111	7	.	.	.	.	.	1074
0.50-0.74	.	290	590	381	67	5	.	.	.	.	1333
0.75-0.99	.	9	211	312	126	4	.	.	.	.	662
1.00-1.24	.	.	131	311	258	21	.	.	.	.	721
1.25-1.49	.	.	13	109	163	35	1	.	.	.	321
1.50-1.74	.	.	1	90	148	60	5	.	.	.	304
1.75-1.99	.	.	.	7	45	44	13	.	.	.	109
2.00-2.24	.	.	.	1	53	62	26	.	.	.	142
2.25-2.49	.	.	.	.	9	25	12	.	.	.	46
2.50-2.74	.	.	.	.	2	33	22	1	.	.	58
2.75-2.99	.	.	.	.	.	13	13	1	1	.	28
3.00-3.24	.	.	.	.	.	7	11	.	.	.	18
3.25-3.49	.	.	.	.	.	3	8	4	.	.	15
3.50+	.	.	.	.	.	.	21	13	14	.	48
TOTAL	485	1196	1273	1344	881	312	132	19	15	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.5 NO. OF CASES= 5318.

STATION M62 41.80N 87.18W 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	
0.00-0.24	514	324	87	11	3	.	.	.	.	.	939
0.25-0.49	114	833	341	141	16	.	.	.	.	.	1445
0.50-0.74	.	407	688	434	62	.	.	.	.	.	1591
0.75-0.99	.	10	212	286	90	6	.	.	.	.	604
1.00-1.24	.	.	127	216	156	10	.	.	.	.	509
1.25-1.49	.	.	11	102	81	18	.	.	.	.	212
1.50-1.74	.	.	1	66	78	32	4	.	.	.	181
1.75-1.99	.	.	.	9	38	18	2	.	.	.	67
2.00-2.24	.	.	.	.	50	13	6	.	.	.	69
2.25-2.49	.	.	.	.	17	10	4	.	.	.	31
2.50-2.74	.	.	.	.	7	28	2	1	.	.	38
2.75-2.99	.	.	.	.	.	12	1	.	.	.	13
3.00-3.24	.	.	.	.	.	12	.	1	.	.	13
3.25-3.49	.	.	.	.	.	4	2	.	.	.	6
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	628	1574	1467	1265	598	163	21	2	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 4.0 NO. OF CASES= 5365.

STATION M62 41.80N 87.18W 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	
0.00-0.24	665	443	79	31	4	.	.	.	.	.	1222
0.25-0.49	95	833	388	140	19	.	.	.	.	.	1475
0.50-0.74	.	403	499	359	94	1	.	.	.	.	1356
0.75-0.99	.	3	224	137	77	3	.	.	.	.	444
1.00-1.24	.	.	136	197	97	7	1	.	.	.	438
1.25-1.49	.	.	9	128	68	16	.	.	.	.	221
1.50-1.74	.	.	.	89	90	7	2	.	.	.	188
1.75-1.99	.	.	.	9	50	5	1	.	.	.	65
2.00-2.24	.	.	.	.	72	7	1	.	.	.	80
2.25-2.49	.	.	.	.	37	3	2	.	.	.	42
2.50-2.74	.	.	.	.	5	39	1	.	.	.	45
2.75-2.99	.	.	.	.	.	16	.	.	.	.	16
3.00-3.24	.	.	.	.	.	12	.	.	.	.	12
3.25-3.49	.	.	.	.	.	2	.	.	.	.	2
3.50+	.	.	.	.	.	.	7	.	.	.	7
TOTAL	760	1682	1335	1090	613	118	15	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 5265.

STATION M62 41.80N 87.18W 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	
0.00-0.24	517	273	69	11	.	.	.	.	.	.	870
0.25-0.49	90	606	219	119	16	.	.	.	.	.	1050
0.50-0.74	.	471	325	174	49	2	.	.	.	.	1021
0.75-0.99	.	3	205	38	51	2	.	.	.	.	299
1.00-1.24	.	.	139	57	34	10	.	.	.	.	240
1.25-1.49	.	.	50	55	17	2	1	.	.	.	125
1.50-1.74	.	.	2	49	26	2	.	.	.	.	79
1.75-1.99	.	.	.	9	17	4	.	.	.	.	30
2.00-2.24	.	.	.	.	13	1	1	.	.	.	15
2.25-2.49	.	.	.	.	7	1	.	.	.	.	8
2.50-2.74	.	.	.	.	1	3	.	.	.	.	4
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	1	1	.	.	.	2
TOTAL	607	1353	1009	512	231	31	3	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.6 NO. OF CASES= 3517.

STATION M62 41.80N 87.18W 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	
0.00-0.24	542	298	68	13	.	.	.	.	.	.	921
0.25-0.49	79	589	209	105	10	.	.	.	.	.	992
0.50-0.74	.	608	275	146	44	1	.	.	.	.	1074
0.75-0.99	.	2	251	20	43	3	.	.	.	.	319
1.00-1.24	.	.	233	9	21	3	.	.	.	.	266
1.25-1.49	.	.	55	9	14	2	.	.	.	.	80
1.50-1.74	.	.	5	24	3	6	1	.	.	.	39
1.75-1.99	.	.	.	2	3	.	.	.	.	.	5
2.00-2.24	.	.	.	.	.	1	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	621	1497	1096	328	138	16	1	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.0 MEAN TP(SEC)= 3.4 NO. OF CASES= 3471.

STATION M62 41.80N 87.18W 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	
0.00-0.24	549	237	58	13	5	.	.	.	.	.	862
0.25-0.49	83	484	171	77	5	2	.	.	.	.	822
0.50-0.74	.	608	136	80	37	.	.	.	.	.	861
0.75-0.99	.	12	182	6	16	3	.	.	.	.	219
1.00-1.24	.	.	144	.	17	4	.	.	.	.	165
1.25-1.49	.	.	32	6	8	2	.	.	.	.	48
1.50-1.74	.	.	2	13	2	3	.	.	.	.	20
1.75-1.99	.	.	.	4	.	.	.	.	.	.	4
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	632	1341	725	199	90	14	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.3 NO. OF CASES= 2818.

STATION M62 41.80N 87.18W 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	
0.00-0.24	856	325	114	24	3	.	.	.	.	.	1322
0.25-0.49	85	691	241	105	7	.	.	.	.	.	1129
0.50-0.74	.	1116	78	88	32	.	.	.	.	.	1314
0.75-0.99	.	16	182	7	23	3	.	.	.	.	231
1.00-1.24	.	.	91	3	10	4	.	.	.	.	108
1.25-1.49	.	.	16	.	1	1	.	.	.	.	18
1.50-1.74	.	.	1	1	.	1	.	.	.	.	3
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	941	2148	723	228	76	9	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 3.1 NO. OF CASES= 3868.

STATION M62 41.80N 87.18W 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	
0.00-0.24	885	291	104	23	1	.	.	.	.	.	1304
0.25-0.49	244	1013	191	126	14	.	.	.	.	.	1588
0.50-0.74	.	1147	45	125	42	3	.	.	.	.	1362
0.75-0.99	.	85	122	13	25	3	.	.	.	.	248
1.00-1.24	.	.	41	.	1	4	.	.	.	.	46
1.25-1.49	.	.	12	.	2	2	.	.	.	.	16
1.50-1.74	.	.	1	2	.	1	.	.	.	.	4
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1129	2536	516	289	85	13	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 4285.

STATION M62 41.80N 87.18W 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	
0.00-0.24	1421	345	102	47	2	.	.	.	.	.	1917
0.25-0.49	522	1578	206	216	28	.	.	.	.	.	2550
0.50-0.74	.	2142	17	157	65	6	.	.	.	.	2387
0.75-0.99	.	238	213	24	34	3	.	.	.	.	512
1.00-1.24	.	.	129	1	16	2	1	.	.	.	149
1.25-1.49	.	.	28	.	.	.	1	.	.	.	29
1.50-1.74	.	.	10	.	.	.	1	.	.	.	11
1.75-1.99	.	.	.	2	.	.	.	.	.	.	2
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1943	4303	705	447	145	11	3	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.0 NO. OF CASES= 7076.

STATION M62 41.80N 87.18W 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	
0.00-0.24	1278	333	90	36	1	.	.	.	.	.	1738
0.25-0.49	358	1537	182	181	36	.	.	.	.	.	2294
0.50-0.74	.	2842	120	145	109	3	1	.	.	.	3220
0.75-0.99	.	234	551	29	71	9	.	.	.	.	894
1.00-1.24	.	.	333	2	31	10	.	.	.	.	376
1.25-1.49	.	.	145	.	.	1	1	.	.	.	147
1.50-1.74	.	.	17	23	1	.	.	.	.	.	41
1.75-1.99	.	.	.	7	.	.	.	.	.	.	7
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1636	4946	1438	423	250	23	2	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.2 NO. OF CASES= 8165.

STATION M62 41.80N 87.18W 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	
0.00-0.24	1209	447	119	52	6	.	.	.	.	.	1833
0.25-0.49	186	1461	202	208	63	2	.	.	.	.	2122
0.50-0.74	.	2903	282	198	179	10	.	.	.	.	3572
0.75-0.99	.	53	749	67	122	13	1	.	.	.	1005
1.00-1.24	.	.	451	8	33	23	4	.	.	.	519
1.25-1.49	.	.	189	1	.	3	1	.	.	.	194
1.50-1.74	.	.	8	75	3	1	1	.	.	.	88
1.75-1.99	.	.	.	13	.	.	.	.	.	.	13
2.00-2.24	.	.	.	6	.	.	.	.	.	.	6
2.25-2.49	.	.	.	1	.	.	.	.	.	.	1
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1395	4864	2000	629	407	52	7	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.4 NO. OF CASES= 8762.

STATION M62 41.80N 87.18W 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	
0.00-0.24	1021	398	81	34	5	1	.	.	.	.	1540
0.25-0.49	111	1172	186	178	68	1	.	.	.	.	1716
0.50-0.74	.	1901	252	196	259	13	.	.	.	.	2621
0.75-0.99	.	24	529	36	156	24	3	.	.	.	772
1.00-1.24	.	.	403	6	53	28	2	.	.	.	492
1.25-1.49	.	.	165	31	8	4	1	.	.	.	209
1.50-1.74	.	.	14	118	3	1	5	.	.	.	141
1.75-1.99	.	.	.	40	.	.	.	.	.	.	40
2.00-2.24	.	.	.	20	3	.	1	.	.	.	24
2.25-2.49	.	.	.	2	3	.	.	.	.	.	5
2.50-2.74	.	.	.	.	4	.	.	.	.	.	4
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1132	3495	1630	661	562	72	12	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.5 NO. OF CASES= 7089.

STATION M62 41.80N 87.18W 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	
0.00-0.24	942	394	83	36	3	.	.	.	.	.	1458
0.25-0.49	105	976	240	232	58	.	.	.	.	.	1611
0.50-0.74	.	1407	423	390	259	10	.	.	.	.	2489
0.75-0.99	.	14	577	59	244	23	2	.	.	.	919
1.00-1.24	.	.	684	4	139	56	3	.	.	.	886
1.25-1.49	.	.	204	129	26	36	7	.	.	.	402
1.50-1.74	.	.	12	193	7	18	7	.	.	.	237
1.75-1.99	.	.	.	54	4	5	6	.	.	.	69
2.00-2.24	.	.	.	22	11	1	.	.	.	.	34
2.25-2.49	.	.	.	.	10	.	.	.	.	.	10
2.50-2.74	.	.	.	.	6	.	.	.	.	.	6
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1047	2791	2223	1119	768	149	25	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 7615.

STATION M62 41.80N 87.18W 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	
0.00-0.24	664	287	57	24	2	.	.	.	.	.	1034
0.25-0.49	114	1017	220	148	24	.	.	.	.	.	1523
0.50-0.74	.	1287	722	320	194	3	1	.	.	.	2527
0.75-0.99	.	21	747	108	234	14	.	.	.	.	1124
1.00-1.24	.	.	849	52	183	62	1	.	.	.	1147
1.25-1.49	.	.	280	174	54	36	3	.	.	.	547
1.50-1.74	.	.	18	257	36	47	5	.	.	.	363
1.75-1.99	.	.	.	62	25	12	4	.	.	.	103
2.00-2.24	.	.	.	37	52	9	5	.	.	.	103
2.25-2.49	.	.	.	.	23	4	6	.	.	.	33
2.50-2.74	.	.	.	.	8	5	1	.	.	.	14
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	.	1	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	2	.	2
TOTAL	778	2612	2893	1182	835	194	27	0	2	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 7989.

STATION M62 41.80N 87.18W 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	
0.00-0.24	371	229	51	14	1	.	.	.	.	.	666
0.25-0.49	64	685	189	104	8	.	.	.	.	.	1050
0.50-0.74	.	665	795	397	112	.	.	.	.	.	1969
0.75-0.99	.	16	639	286	177	11	.	.	.	.	1129
1.00-1.24	.	.	573	466	269	58	1	.	.	.	1367
1.25-1.49	.	.	118	417	128	65	4	.	.	.	732
1.50-1.74	.	.	5	352	229	90	12	.	.	.	688
1.75-1.99	.	.	.	48	210	31	12	1	.	.	302
2.00-2.24	.	.	.	14	258	14	21	2	.	.	309
2.25-2.49	.	.	.	.	108	2	6	.	.	.	116
2.50-2.74	.	.	.	.	27	38	13	3	.	.	81
2.75-2.99	.	.	.	.	1	21	2	.	.	.	24
3.00-3.24	.	.	.	.	1	14	2	2	.	.	19
3.25-3.49	.	.	.	.	.	1	1	3	.	.	5
3.50+	.	.	.	.	.	3	4	3	5	.	15
TOTAL	435	1595	2370	2098	1529	348	78	14	5	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 7948.

STATION M62 41.80N 87.18W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

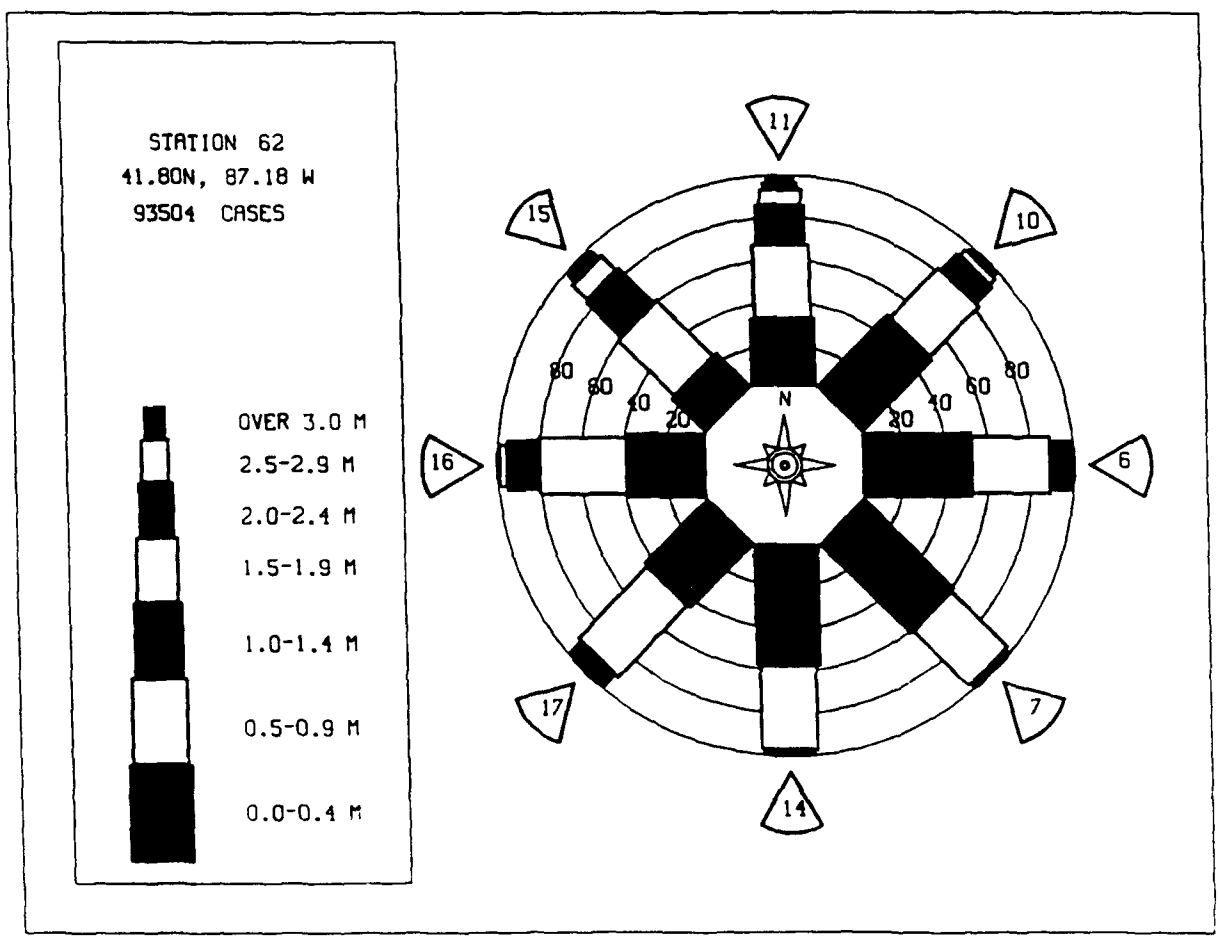
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	302	160	31	17	1	.	.	.	.	.	511
0.25-0.49	37	406	151	73	4	.	.	.	.	.	671
0.50-0.74	.	244	440	286	50	.	.	.	.	.	1020
0.75-0.99	.	9	217	258	116	5	.	.	.	.	605
1.00-1.24	.	.	173	339	290	22	.	.	.	.	824
1.25-1.49	.	.	20	164	190	58	1	.	.	.	433
1.50-1.74	.	.	.	127	192	86	11	.	.	.	416
1.75-1.99	.	.	.	20	120	60	19	.	.	.	219
2.00-2.24	.	.	.	4	103	68	39	1	.	.	215
2.25-2.49	.	.	.	.	50	26	24	.	.	.	100
2.50-2.74	.	.	.	.	12	44	42	6	.	.	104
2.75-2.99	.	.	.	.	2	27	8	3	.	.	40
3.00-3.24	.	.	.	.	.	28	17	9	2	.	56
3.25-3.49	.	.	.	.	.	5	6	4	3	.	1
3.50+	.	.	.	.	.	1	16	9	9	.	3
TOTAL	339	819	1032	1288	1130	430	183	32	14	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 4.8 NO. OF CASES= 4953.

STATION M62 41.80N 87.18W 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	
0.00-0.24	1217	505	126	41	4	.	.	.	.	.	1893
0.25-0.49	235	1452	360	227	39	.	.	.	.	.	2313
0.50-0.74	.	1844	569	388	166	6	.	.	.	.	2973
0.75-0.99	.	75	582	169	161	13	.	.	.	.	1000
1.00-1.24	.	.	464	167	161	33	1	.	.	.	826
1.25-1.49	.	.	135	132	76	28	2	.	.	.	373
1.50-1.74	.	.	10	148	82	35	5	.	.	.	280
1.75-1.99	.	.	.	29	51	18	5	.	.	.	103
2.00-2.24	.	.	.	10	62	17	10	.	.	.	99
2.25-2.49	.	.	.	.	26	7	5	.	.	.	38
2.50-2.74	.	.	.	.	7	19	8	1	.	.	35
2.75-2.99	.	.	.	.	.	9	2	.	.	.	11
3.00-3.24	.	.	.	.	.	7	3	1	.	.	11
3.25-3.49	.	.	.	.	.	1	1	1	.	.	3
3.50+	.	.	.	.	.	.	5	2	3	.	10
TOTAL	1452	3876	2246	1311	835	193	47	5	3	0	

MEAN HS(M)= 0.6 LARGEST HS(M)= 5.8 MEAN TP(SEC)= 3.7 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M62 (41.80N 87.18W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.8	0.7	0.7	0.6	0.4	0.3	0.3	0.3	0.5	0.5	0.7	0.7	0.5
1957	0.8	0.7	0.7	0.5	0.4	0.3	0.3	0.3	0.4	0.5	0.7	0.8	0.5
1958	0.8	1.0	0.6	0.6	0.5	0.3	0.3	0.4	0.5	0.6	0.8	0.8	0.6
1959	1.0	0.9	0.8	0.7	0.5	0.4	0.3	0.4	0.6	0.7	0.9	0.8	0.7
1960	0.8	1.1	0.8	0.6	0.5	0.4	0.3	0.4	0.5	0.5	0.8	1.0	0.7
1961	0.9	0.9	0.9	0.7	0.5	0.4	0.3	0.4	0.5	0.7	0.7	0.9	0.6
1962	0.9	1.1	0.8	0.8	0.5	0.3	0.3	0.4	0.6	0.6	0.7	0.9	0.7
1963	0.9	0.9	0.8	0.6	0.5	0.3	0.3	0.4	0.5	0.5	0.8	0.7	0.6
1964	1.1	0.9	1.0	0.8	0.5	0.4	0.4	0.5	0.6	0.7	0.7	0.9	0.7
1965	1.1	1.2	0.9	0.7	0.5	0.4	0.3	0.4	0.5	0.7	0.8	0.9	0.7
1966	0.8	0.7	0.7	0.6	0.5	0.3	0.3	0.4	0.5	0.6	1.0	0.8	0.6
1967	0.9	1.0	0.7	0.6	0.5	0.3	0.3	0.4	0.5	0.7	0.8	0.8	0.6
1968	0.9	1.0	0.9	0.6	0.4	0.3	0.3	0.4	0.4	0.6	0.8	1.0	0.6
1969	0.8	0.8	0.9	0.6	0.4	0.4	0.3	0.3	0.5	0.6	0.6	0.8	0.6
1970	0.7	0.9	0.7	0.6	0.4	0.4	0.4	0.4	0.5	0.6	0.9	0.9	0.6
1971	1.0	1.1	1.0	0.7	0.5	0.4	0.4	0.5	0.5	0.6	0.9	0.9	0.7
1972	1.1	1.0	1.1	0.7	0.4	0.5	0.4	0.4	0.5	0.7	7	0.8	0.7
1973	0.9	1.0	0.8	0.7	0.5	0.4	0.4	0.5	0.5	0.6	0.8	0.9	0.7
1974	0.7	1.0	0.8	0.7	0.5	0.4	0.3	0.4	0.7	0.8	0.8	0.9	0.7
1975	1.0	1.0	0.9	0.7	0.4	0.3	0.3	0.4	0.6	0.7	0.8	1.0	0.7
1976	1.1	1.1	1.0	0.7	0.5	0.4	0.4	0.5	0.7	0.7	0.9	1.0	0.8
1977	1.1	0.9	0.8	0.7	0.4	0.5	0.5	0.5	0.6	0.8	1.0	1.0	0.7
1978	1.2	0.8	0.8	0.7	0.6	0.4	0.4	0.4	0.5	0.7	0.8	0.9	0.7
1979	1.0	1.0	0.7	0.6	0.6	0.5	0.4	0.5	0.5	0.7	0.7	0.9	0.7
1980	0.8	0.8	0.9	0.6	0.3	0.3	0.3	0.3	0.4	0.7	0.8	0.8	0.6
1981	0.8	0.9	0.8	0.7	0.6	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.6
1982	1.0	0.7	0.8	0.7	0.3	0.4	0.4	0.4	0.7	0.6	0.8	0.8	0.6
1983	0.8	0.6	0.8	0.6	0.5	0.3	0.3	0.4	0.6	0.8	1.0	0.9	0.6
1984	0.8	0.8	0.8	0.6	0.4	0.3	0.3	0.4	0.6	0.5	0.8	0.8	0.6
1985	1.1	1.0	0.8	0.5	0.4	0.4	0.3	0.3	0.5	0.5	0.7	0.8	0.6
1986	0.9	0.8	0.9	0.6	0.5	0.4	0.4	0.4	0.5	0.6	0.7	0.8	0.6
1987	0.8	0.9	0.8	0.6	0.4	0.3	0.3	0.4	0.4	0.7	0.8	0.9	0.6
MEAN	0.9	0.9	0.8	0.6	0.5	0.4	0.3	0.4	0.5	0.6	0.8	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M62 (41.80N 87.18W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.5	2.6	2.4	1.7	1.4	1.1	1.0	1.1	1.7	1.7	2.2	1.9
1957	2.8	2.9	2.8	1.5	1.2	0.9	0.9	0.9	1.4	2.6	2.1	3.8
1958	2.5	2.5	1.6	2.0	1.4	1.0	0.8	1.4	1.6	1.9	2.4	2.3
1959	4.1	2.6	3.7	2.4	2.0	1.2	1.4	1.6	2.2	3.0	2.8	2.4
1960	3.3	3.4	3.2	2.2	1.4	1.5	1.5	1.1	2.3	1.9	2.8	3.0
1961	3.2	3.5	4.0	1.9	1.4	1.5	1.3	1.3	2.1	1.9	3.1	2.9
1962	3.5	3.3	2.9	3.1	1.5	1.6	1.1	1.2	1.8	2.0	2.2	2.7
1963	3.0	2.7	3.2	2.3	1.8	1.4	1.4	1.5	1.8	1.3	2.3	2.1
1964	4.1	2.2	3.9	2.5	1.7	1.4	2.0	1.6	2.0	2.1	2.5	3.3
1965	3.2	5.8	2.5	1.5	1.3	0.9	0.9	1.2	1.4	2.4	2.7	4.3
1966	2.4	2.2	2.0	2.1	1.8	1.0	1.1	1.4	1.6	2.0	4.6	2.2
1967	4.2	2.9	2.2	1.6	1.7	1.0	1.1	1.5	1.9	2.7	2.3	2.3
1968	2.8	2.7	3.3	1.8	1.3	1.2	0.9	1.5	1.2	2.3	2.4	3.7
1969	2.3	2.1	3.2	2.4	1.0	1.0	0.9	0.7	1.4	1.5	1.7	2.6
1970	1.9	2.7	2.6	2.4	1.2	1.4	1.6	1.2	1.7	1.8	2.9	2.5
1971	3.6	3.0	2.9	1.9	1.4	1.3	1.3	1.5	1.5	1.7	3.5	3.1
1972	3.1	3.1	3.1	2.3	1.5	1.6	0.9	1.2	1.4	1.6	3.8	2.8
1973	4.3	3.7	3.9	2.0	1.3	0.9	1.2	1.4	1.3	2.3	3.0	3.3
1974	2.2	4.4	2.7	2.1	1.6	1.5	1.2	0.9	2.0	2.1	2.4	3.4
1975	2.5	2.8	3.0	2.7	1.2	1.4	1.1	1.2	2.6	3.1	4.0	3.0
1976	3.1	4.7	2.9	2.9	1.8	1.3	1.3	1.5	1.8	2.3	2.3	3.6
1977	3.3	2.5	2.5	2.3	1.4	2.0	1.7	1.3	1.4	2.6	2.4	2.7
1978	4.7	3.4	2.7	2.2	2.0	1.3	1.0	1.3	1.4	2.0	2.4	2.2
1979	4.1	4.2	2.6	2.5	2.3	1.3	1.4	1.7	1.6	2.0	2.0	4.7
1980	2.1	3.7	2.8	2.1	1.1	1.1	1.1	0.7	1.2	1.8	2.1	3.9
1981	2.4	2.5	2.7	2.0	2.7	0.9	1.6	1.1	1.8	2.5	3.7	2.1
1982	2.9	2.8	2.7	2.5	1.6	1.1	0.9	1.4	2.1	2.1	2.5	1.9
1983	3.4	1.8	2.6	1.6	2.2	0.8	1.1	2.4	1.5	2.1	4.6	3.0
1984	2.7	5.0	3.9	2.1	1.7	0.9	0.8	1.6	2.1	1.4	2.9	2.4
1985	3.2	5.2	2.4	2.0	1.9	1.1	0.8	1.1	1.3	1.7	2.2	2.4
1986	3.2	3.4	2.5	1.5	2.0	1.7	1.3	1.2	1.6	1.7	2.2	2.2
1987	2.8	5.4	3.1	2.7	1.0	1.0	0.7	1.7	1.7	2.5	2.1	2.6

32 YR. STATISTICS FOR WIS STATION M62

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.6
MEAN PEAK WAVE PERIOD	(SECONDS)	3.7
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	225.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	5.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	337.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		65022518

STATION M63 42.28N 87.16W 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	
0.00-0.24	404	322	78	20	.	.	.	.	.	.	784
0.25-0.49	58	745	267	72	4	.	.	.	.	.	1146
0.50-0.74	.	294	714	448	21	1	1	.	.	.	1479
0.75-0.99	.	7	188	389	104	2	.	.	.	.	690
1.00-1.24	.	.	124	341	276	18	.	.	.	.	759
1.25-1.49	.	.	13	108	204	21	1	.	.	.	347
1.50-1.74	.	.	.	73	151	77	3	.	.	.	304
1.75-1.99	.	.	.	6	58	68	7	.	.	.	139
2.00-2.24	.	.	.	1	43	86	21	.	.	.	151
2.25-2.49	.	.	.	.	18	24	20	.	.	.	62
2.50-2.74	.	.	.	.	4	31	24	2	.	.	61
2.75-2.99	.	.	.	.	1	20	7	1	.	.	29
3.00-3.24	.	.	.	.	.	7	13	4	.	.	24
3.25-3.49	.	.	.	.	.	1	11	2	1	.	15
3.50+	.	.	.	.	.	1	14	19	17	.	51
TOTAL	462	1368	1344	1458	884	357	122	28	18	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.5 NO. OF CASES= 5671.

STATION M63 42.28N 87.16W 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	
0.00-0.24	479	315	36	7	.	.	.	.	.	.	837
0.25-0.49	73	840	334	87	5	.	.	.	.	.	1339
0.50-0.74	.	359	716	394	45	.	.	.	.	.	1514
0.75-0.99	.	9	180	284	75	4	.	.	.	.	552
1.00-1.24	.	.	99	252	154	12	.	.	.	.	517
1.25-1.49	.	.	14	77	83	19	.	.	.	.	193
1.50-1.74	.	.	3	43	84	24	5	.	.	.	159
1.75-1.99	.	.	.	4	39	23	5	.	.	.	71
2.00-2.24	.	.	.	.	28	14	4	.	.	.	46
2.25-2.49	.	.	.	.	25	14	5	.	.	.	44
2.50-2.74	.	.	.	.	4	32	3	.	.	.	39
2.75-2.99	.	.	.	.	.	12	2	.	.	.	14
3.00-3.24	.	.	.	.	.	11	4	1	.	.	16
3.25-3.49	.	.	.	.	.	2	.	.	.	.	2
3.50+	.	.	.	.	.	.	5	.	.	.	5
TOTAL	552	1523	1382	1148	542	167	33	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 5024.

STATION M63 42.28N 87.16W 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	
0.00-0.24	612	383	45	10	.	.	.	.	.	.	1050
0.25-0.49	80	881	294	95	6	.	.	.	.	.	1356
0.50-0.74	.	287	530	324	55	1	.	.	.	.	1197
0.75-0.99	.	7	161	190	65	2	.	.	.	.	425
1.00-1.24	.	.	64	245	80	9	.	.	.	.	398
1.25-1.49	.	.	5	86	80	4	.	.	.	.	175
1.50-1.74	.	.	.	67	90	11	2	.	.	.	170
1.75-1.99	.	.	.	2	67	6	1	.	.	.	76
2.00-2.24	.	.	.	.	77	3	1	.	.	.	81
2.25-2.49	.	.	.	.	37	6	.	.	.	.	43
2.50-2.74	.	.	.	.	4	35	1	.	.	.	40
2.75-2.99	.	.	.	.	.	23	.	.	.	.	23
3.00-3.24	.	.	.	.	.	8	2	.	.	.	10
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	2	4	.	.	.	6
TOTAL	692	1558	1099	1019	561	110	11	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 4739.

STATION M63 42.28N 87.16W 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	
0.00-0.24	455	287	39	11	1	.	.	.	.	.	793
0.25-0.49	49	648	134	59	6	.	.	.	.	.	955
0.50-0.74	.	276	449	154	36	.	.	.	.	.	915
0.75-0.99	.	2	191	81	23	5	.	.	.	.	302
1.00-1.24	.	.	72	208	25	3	.	.	.	.	308
1.25-1.49	.	.	1	86	24	1	.	.	.	.	113
1.50-1.74	.	.	.	100	40	2	.	.	.	.	142
1.75-1.99	.	.	.	12	40	3	.	.	.	.	55
2.00-2.24	.	.	.	.	44	2	.	.	.	.	46
2.25-2.49	.	.	.	.	8	4	.	.	.	.	12
2.50-2.74	.	.	.	.	2	8	.	.	.	.	10
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	2	1	.	.	.	3
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	504	1213	946	711	248	33	3	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 3437.

STATION M63 42.28N 87.16W 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	
0.00-0.24	482	334	42	10	.	.	.	.	.	.	868
0.25-0.49	56	655	163	60	2	.	.	.	.	.	936
0.50-0.74	.	297	442	133	29	1	.	.	.	.	902
0.75-0.99	.	.	[illegible]	89	13	1	.	.	.	.	317
1.00-1.24	.	.	[illegible]	192	12	2	.	.	.	.	292
1.25-1.49	.	.	1	129	4	1	.	.	.	.	135
1.50-1.74	.	.	.	146	1	2	.	.	.	.	149
1.75-1.99	.	.	.	16	25	1	1	.	.	.	43
2.00-2.24	.	.	.	.	14	.	.	.	.	.	14
2.25-2.49	.	.	.	.	2	.	.	.	.	.	2
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	538	1286	948	775	102	8	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.6 NO. OF CASES= 3436.

STATION M63 42.28N 87.16W 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	
0.00-0.24	479	258	48	7	.	.	.	.	.	.	792
0.25-0.49	47	497	121	48	1	.	.	.	.	.	714
0.50-0.74	.	252	332	73	9	.	.	.	.	.	666
0.75-0.99	.	.	198	67	7	1	.	.	.	.	273
1.00-1.24	.	.	63	178	5	2	.	.	.	.	248
1.25-1.49	.	.	.	114	1	1	.	.	.	.	116
1.50-1.74	.	.	.	118	10	.	.	.	.	.	128
1.75-1.99	.	.	.	13	22	1	.	.	.	.	36
2.00-2.24	.	.	.	.	19	.	.	.	.	.	19
2.25-2.49	.	.	.	.	2	.	.	.	.	.	2
2.50-2.74	.	.	.	.	1	1	.	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	526	1007	762	618	77	6	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 2813.

STATION M63 42.28N 87.16W 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	
0.00-0.24	598	322	78	12	1	.	.	.	.	.	1011
0.25-0.49	84	763	160	69	5	.	.	.	.	.	1081
0.50-0.74	.	391	476	74	10	.	.	.	.	.	951
0.75-0.99	.	.	252	78	5	.	.	.	.	.	335
1.00-1.24	.	.	95	173	3	3	.	.	.	.	274
1.25-1.49	.	.	2	101	1	2	.	.	.	.	106
1.50-1.74	.	.	.	101	7	.	.	.	.	.	108
1.75-1.99	.	.	.	1	36	.	.	.	.	.	37
2.00-2.24	.	.	.	.	8	.	.	.	.	.	8
2.25-2.49	.	.	.	.	2	1	.	.	.	.	3
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	682	1476	1063	609	78	6	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 3672.

STATION M63 42.28N 87.16W 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	
0.00-0.24	674	342	55	14	.	.	.	.	.	.	1085
0.25-0.49	105	1036	161	88	2	.	.	.	.	.	1392
0.50-0.74	.	486	735	104	21	1	.	.	.	.	1347
0.75-0.99	.	7	302	87	12	2	.	.	.	.	410
1.00-1.24	.	.	126	199	4	1	.	.	.	.	330
1.25-1.49	.	.	1	159	1	2	.	.	.	.	163
1.50-1.74	.	.	.	146	2	1	.	.	.	.	149
1.75-1.99	.	.	.	4	31	.	.	.	.	.	35
2.00-2.24	.	.	.	.	14	.	.	.	.	.	14
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+											0
TOTAL	779	1871	1380	801	88	7	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 4620.

STATION M63 42.28N 87.16W 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	
0.00-0.24	989	484	52	11	.	.	.	.	.	.	1536
0.25-0.49	140	1640	191	110	9	.	.	.	.	.	2090
0.50-0.74	.	782	1352	142	26	.	.	.	.	.	2302
0.75-0.99	.	5	673	212	18	.	.	.	.	.	908
1.00-1.24	.	.	293	539	5	4	.	.	.	.	841
1.25-1.49	.	.	8	481	.	.	.	.	.	.	489
1.50-1.74	.	.	.	436	7	.	.	.	.	.	443
1.75-1.99	.	.	.	22	98	.	.	.	.	.	120
2.00-2.24	.	.	.	.	86	.	1	.	.	.	87
2.25-2.49	.	.	.	.	31	.	.	.	.	.	31
2.50-2.74	.	.	.	.	18	1	.	.	.	.	19
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1129	2911	2569	1953	298	8	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.7 NO. OF CASES= 8305.

STATION M63 42.28N 87.16W 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	
0.00-0.24	924	497	50	10	.	.	.	.	.	.	1481
0.25-0.49	147	1830	178	98	8	.	.	.	.	.	2261
0.50-0.74	.	868	1786	139	44	2	.	.	.	.	2839
0.75-0.99	.	8	916	385	24	3	.	.	.	.	1336
1.00-1.24	.	.	426	979	6	2	.	.	.	.	1413
1.25-1.49	.	.	5	743	3	.	1	.	.	.	752
1.50-1.74	.	.	.	901	48	.	.	.	.	.	949
1.75-1.99	.	.	.	39	313	.	.	.	.	.	352
2.00-2.24	.	.	.	.	272	.	.	.	.	.	272
2.25-2.49	.	.	.	.	71	.	.	.	.	.	71
2.50-2.74	.	.	.	.	43	6	.	.	.	.	49
2.75-2.99	.	.	.	.	1	17	.	.	.	.	18
3.00-3.24	.	.	.	.	.	10	.	.	.	.	10
3.25-3.49	.	.	.	.	.	4	.	.	.	.	4
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1071	3203	3361	3294	833	44	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 4.0 NO. OF CASES= 11055.

STATION M63 42.28N 87.16W 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	
0.00-0.24	972	517	51	10	.	.	.	.	.	.	1550
0.25-0.49	112	1681	199	134	18	.	.	.	.	.	2144
0.50-0.74	.	730	1122	224	112	3	.	.	.	.	2191
0.75-0.99	.	9	614	224	51	5	.	.	.	.	903
1.00-1.24	.	.	302	563	11	11	.	.	.	.	887
1.25-1.49	.	.	8	444	3	2	2	.	.	.	459
1.50-1.74	.	.	.	514	23	.	.	.	.	.	537
1.75-1.99	.	.	.	28	198	.	.	.	.	.	226
2.00-2.24	.	.	.	.	173	.	.	.	.	.	173
2.25-2.49	.	.	.	.	47	.	.	.	.	.	47
2.50-2.74	.	.	.	.	41	9	.	.	.	.	50
2.75-2.99	.	.	.	.	.	14	.	.	.	.	14
3.00-3.24	.	.	.	.	.	13	.	.	.	.	13
3.25-3.49	.	.	.	.	.	5	.	.	.	.	5
3.50+	.	.	.	.	.	5	4	.	.	.	9
TOTAL	1084	2937	2296	2141	677	67	6	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 8630.

STATION M63 42.28N 87.16W 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	
0.00-0.24	679	382	34	10	1	.	.	.	.	.	1106
0.25-0.49	87	1085	152	127	7	1	.	.	.	.	1459
0.50-0.74	.	528	703	259	167	3	.	.	.	.	1660
0.75-0.99	.	3	359	114	81	4	.	.	.	.	561
1.00-1.24	.	.	214	320	18	20	.	.	.	.	572
1.25-1.49	.	.	5	293	2	5	1	.	.	.	306
1.50-1.74	.	.	.	356	11	1	.	.	.	.	368
1.75-1.99	.	.	.	20	111	.	.	.	.	.	131
2.00-2.24	.	.	.	.	146	.	.	.	.	.	146
2.25-2.49	.	.	.	.	48	.	.	.	.	.	48
2.50-2.74	.	.	.	.	33	2	1	.	.	.	36
2.75-2.99	.	.	.	.	1	16	.	.	.	.	17
3.00-3.24	.	.	.	.	.	12	.	.	.	.	12
3.25-3.49	.	.	.	.	.	5	.	.	.	.	5
3.50+	.	.	.	.	.	5	.	.	.	.	5
TOTAL	766	1998	1467	1499	626	74	2	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 6030.

STATION M63 42.28N 87.16W 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	
0.00-0.24	573	351	42	17	.	.	.	.	.	.	983
0.25-0.49	53	1075	182	96	13	.	.	.	.	.	1419
0.50-0.74	.	454	869	351	157	1	.	.	.	.	1832
0.75-0.99	.	3	429	168	142	10	.	.	.	.	752
1.00-1.24	.	.	212	404	64	18	1	.	.	.	699
1.25-1.49	.	.	11	378	6	13	4	.	.	.	412
1.50-1.74	.	.	.	494	17	6	2	.	.	.	519
1.75-1.99	.	.	.	43	152	1	3	.	.	.	199
2.00-2.24	.	.	.	.	132	.	2	.	.	.	134
2.25-2.49	.	.	.	.	42	.	.	.	.	.	42
2.50-2.74	.	.	.	.	39	1	1	.	.	.	41
2.75-2.99	.	.	.	.	1	13	.	.	.	.	14
3.00-3.24	.	.	.	.	.	12	.	.	.	.	12
3.25-3.49	.	.	.	.	.	2	.	.	.	.	2
3.50+	.	.	.	.	.	4	.	.	.	.	4
TOTAL	626	1883	1745	1951	765	81	13	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 6626.

STATION M63 42.28N 87.16W 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	
0.00-0.24	346	350	22	3	.	.	.	.	.	.	721
0.25-0.49	72	966	170	78	6	.	.	.	.	.	1292
0.50-0.74	.	445	949	313	110	.	.	.	.	.	1817
0.75-0.99	.	6	443	282	146	9	.	.	.	.	886
1.00-1.24	.	.	270	536	177	27	.	.	.	.	1010
1.25-1.49	.	.	17	429	70	20	1	.	.	.	537
1.50-1.74	.	.	.	543	90	20	4	.	.	.	657
1.75-1.99	.	.	.	42	183	8	2	.	.	.	235
2.00-2.24	.	.	.	1	173	8	2	.	.	.	184
2.25-2.49	.	.	.	.	68	2	.	.	.	.	70
2.50-2.74	.	.	.	.	39	14	1	.	.	.	54
2.75-2.99	.	.	.	.	.	14	.	.	.	.	14
3.00-3.24	.	.	.	.	.	10	.	.	.	.	10
3.25-3.49	.	.	.	.	.	5	.	.	.	.	5
3.50+	.	.	.	.	.	.	.	1	.	.	1
TOTAL	418	1767	1871	2227	1062	137	10	1	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 4.3 NO. OF CASES= 7028.

STATION M63 42.28N 87.16W AZIMUTH(DEGREES) =315.0
PERCENT OCCUPRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	300	227	32	9	.	.	.	.	.	.	568
0.25-0.49	43	674	172	63	2	.	.	.	.	.	954
0.50-0.74	.	346	875	349	62	2	.	.	.	.	1634
0.75-0.99	.	10	372	459	137	3	.	.	.	.	981
1.00-1.24	.	.	245	764	300	22	2	.	.	.	1333
1.25-1.49	.	.	13	380	222	33	1	.	.	.	649
1.50-1.74	.	.	.	321	394	73	6	.	.	.	794
1.75-1.99	.	.	.	22	316	19	10	.	.	.	367
2.00-2.24	.	.	.	3	319	19	16	1	.	.	358
2.25-2.49	.	.	.	.	165	12	6	.	.	.	183
2.50-2.74	.	.	.	.	38	104	10	2	.	.	154
2.75-2.99	.	.	.	.	4	44	5	.	.	.	53
3.00-3.24	.	.	.	.	1	28	4	2	.	.	35
3.25-3.49	.	.	.	.	.	5	1	.	.	.	6
3.50+	.	.	.	.	.	3	12	4	2	.	21
TOTAL	343	1257	1709	2370	1960	367	73	9	2	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.7 NO. OF CASES= 7592.

STATION M63 42.28N 87.16W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

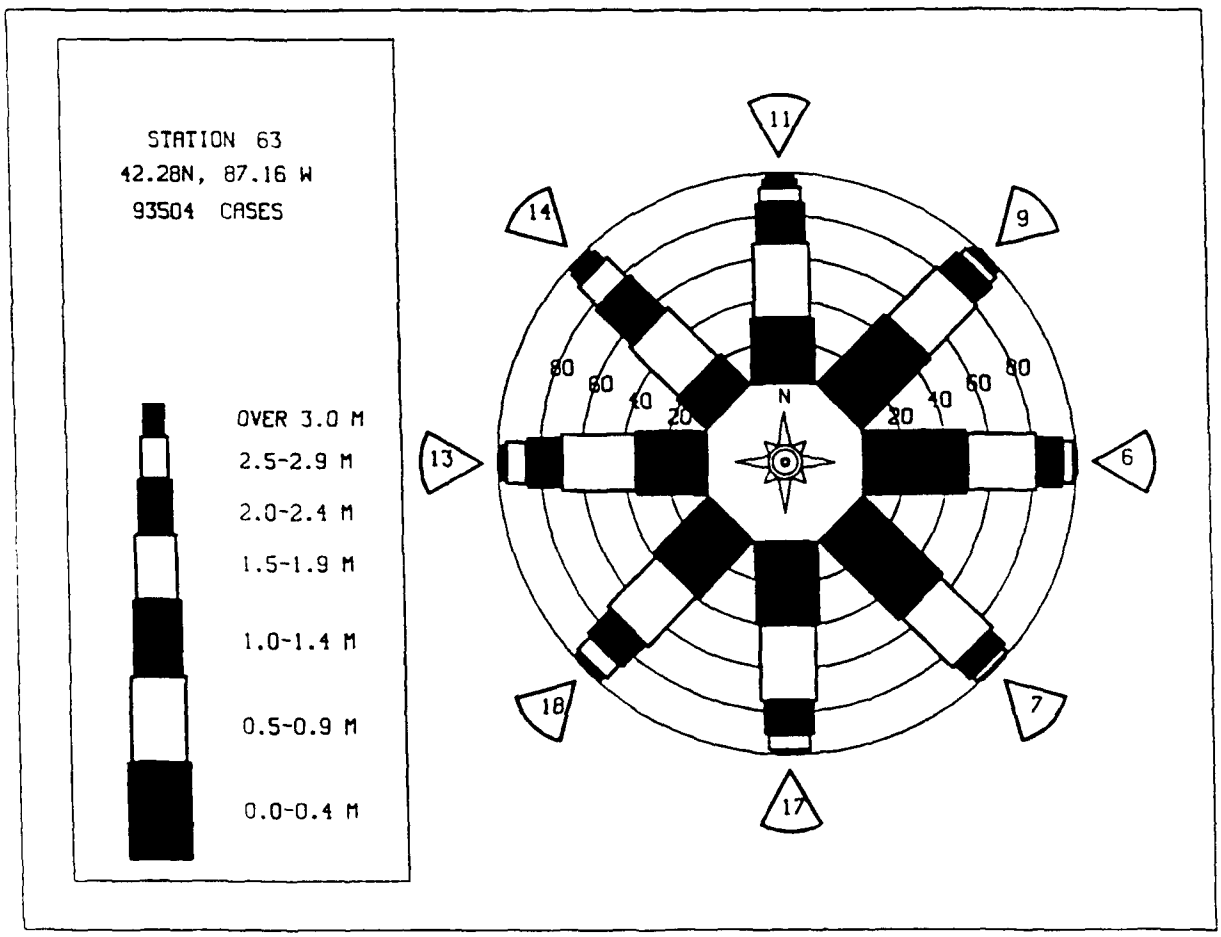
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	241	183	12	2	.	.	.	.	.	.	438
0.25-0.49	37	395	160	44	2	.	.	.	.	.	638
0.50-0.74	.	170	525	272	37	.	.	.	.	.	1004
0.75-0.99	.	9	188	342	106	.	.	.	.	.	645
1.00-1.24	.	.	131	376	266	22	.	.	.	.	795
1.25-1.49	.	.	18	131	243	33	1	.	.	.	426
1.50-1.74	.	.	2	102	226	89	4	.	.	.	423
1.75-1.99	.	.	.	10	121	60	13	.	.	.	204
2.00-2.24	.	.	.	2	108	81	29	.	.	.	220
2.25-2.49	.	.	.	.	42	26	26	.	.	.	94
2.50-2.74	.	.	.	.	13	54	36	2	.	.	105
2.75-2.99	.	.	.	.	.	27	23	3	.	.	53
3.00-3.24	.	.	.	.	.	12	18	5	.	.	35
3.25-3.49	.	.	.	.	.	1	7	2	1	.	11
3.50+	.	.	.	.	.	.	16	12	13	.	41
TOTAL	278	757	1036	1281	1164	405	173	24	14	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.9 NO. OF CASES= 4826.

STATION M63 42.28N 87.16W 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	
0.00-0.24	921	556	68	17	.	.	.	.	.	.	1562
0.25-0.49	125	1541	310	133	10	.	.	.	.	.	2119
0.50-0.74	.	697	1258	376	94	1	.	.	.	.	2426
0.75-0.99	.	9	568	345	101	5	.	.	.	.	1028
1.00-1.24	.	.	282	627	141	18	.	.	.	.	1068
1.25-1.49	.	.	12	414	95	16	1	.	.	.	538
1.50-1.74	.	.	.	446	120	31	2	.	.	.	599
1.75-1.99	.	.	.	29	181	19	4	.	.	.	233
2.00-2.24	.	.	.	.	166	21	7	.	.	.	194
2.25-2.49	.	.	.	.	61	9	5	.	.	.	75
2.50-2.74	.	.	.	.	28	30	7	.	.	.	65
2.75-2.99	.	.	.	.	.	21	3	.	.	.	24
3.00-3.24	.	.	.	.	.	13	4	1	.	.	18
3.25-3.49	.	.	.	.	.	3	2	.	.	.	5
3.50+	.	.	.	.	.	2	5	3	3	.	13
TOTAL	1046	2803	2498	2387	997	189	40	4	3	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M63 (42.28N 87.16W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STA.ION M63 (42.28N 87.16W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.3	2.9	2.9	2.0	1.8	1.3	1.1	1.7	1.9	2.3	2.5	2.6
1957	2.7	3.1	2.9	2.0	1.5	1.2	1.3	1.0	2.0	2.8	2.9	4.1
1958	2.8	2.4	1.6	2.1	1.4	1.3	1.1	1.5	1.7	2.5	2.6	2.6
1959	4.0	2.5	4.1	2.3	2.0	1.6	1.6	1.6	2.0	2.8	2.7	2.3
1960	2.8	3.6	3.3	2.5	1.7	1.9	1.3	1.7	2.1	2.3	3.1	2.7
1961	2.9	3.4	4.1	1.9	1.6	1.6	1.3	1.3	1.9	2.3	2.8	2.9
1962	3.3	3.2	2.5	3.1	1.7	1.4	1.2	1.3	1.9	2.3	2.4	3.0
1963	3.0	2.6	3.4	3.0	2.0	1.4	1.4	1.7	2.1	1.6	2.5	2.1
1964	3.7	3.3	4.0	2.9	2.6	2.1	1.8	1.7	2.7	2.5	3.4	2.9
1965	2.8	5.5	3.1	2.1	1.9	1.2	1.3	1.4	1.8	2.4	3.2	4.0
1966	2.6	2.3	2.6	2.0	1.9	1.2	1.3	1.5	1.8	2.4	4.8	2.1
1967	4.2	3.2	2.2	2.2	2.1	1.2	1.1	1.4	1.8	2.9	2.3	2.3
1968	3.0	2.9	2.8	2.5	1.9	1.4	1.5	1.7	1.5	2.4	2.5	3.4
1969	2.6	2.2	3.2	2.4	1.5	1.6	1.2	1.4	1.5	1.8	1.7	2.7
1970	2.3	3.0	2.9	2.5	2.0	1.8	1.9	1.6	1.9	2.4	3.2	3.6
1971	4.1	3.7	2.9	2.3	1.8	1.7	1.7	2.3	2.6	2.9	3.3	3.3
1972	3.7	3.0	3.1	2.3	1.7	1.6	1.5	1.5	1.8	2.3	3.7	3.1
1973	4.2	3.7	4.5	2.2	1.9	1.6	1.7	1.7	1.7	2.5	2.9	3.5
1974	2.6	4.5	3.3	2.3	1.9	1.6	1.5	1.5	2.2	2.3	2.6	3.4
1975	4.4	3.7	2.8	2.9	1.5	1.9	1.3	1.4	2.5	2.9	3.9	3.0
1976	3.0	4.5	3.3	2.8	2.3	1.7	1.4	2.0	2.3	2.4	2.4	3.0
1977	4.2	2.9	3.1	2.5	1.8	1.9	1.7	2.1	1.9	2.9	2.8	2.8
1978	4.5	2.9	2.7	2.0	2.3	1.7	1.5	2.0	1.6	2.2	2.9	2.8
1979	3.7	3.8	2.5	3.3	2.1	1.7	1.4	1.5	1.6	2.4	2.1	4.6
1980	2.9	3.3	2.7	2.0	1.4	1.3	1.1	1.1	1.4	2.0	2.1	4.0
1981	2.5	2.8	2.8	2.2	2.9	1.4	1.9	1.5	2.4	3.0	3.8	2.1
1982	3.3	2.5	2.9	3.4	1.8	1.3	1.2	1.8	2.4	2.8	2.9	3.0
1983	3.0	1.7	3.3	2.2	2.0	1.0	1.5	2.7	2.3	2.5	5.1	3.0
1984	2.5	5.0	3.8	2.7	1.9	1.5	1.1	1.9	2.6	2.5	2.9	2.7
1985	3.3	5.2	2.9	2.3	2.3	1.5	1.6	1.2	1.8	2.2	2.2	2.6
1986	3.1	3.0	3.1	1.7	2.3	1.6	1.3	1.3	1.4	1.8	2.4	2.3
1987	2.6	5.6	2.9	2.6	1.0	0.9	0.9	2.7	1.7	3.0	2.1	2.8

32 YR. STATISTICS FOR WIS STATION M63

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	5.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	356.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		87020821

STATION M64 42.67N 87.13W 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	
0.00-0.24	360	257	19	6	.	.	.	.	.	.	642
0.25-0.49	62	762	243	54	1	.	.	.	.	.	1122
0.50-0.74	.	335	802	351	11	.	.	.	.	.	1499
0.75-0.99	.	7	265	440	54	1	.	.	.	.	767
1.00-1.24	.	.	155	424	235	3	.	.	.	.	817
1.25-1.49	.	.	7	154	198	17	.	.	.	.	376
1.50-1.74	.	.	1	113	221	50	1	.	.	.	386
1.75-1.99	.	.	.	9	90	54	3	.	.	.	156
2.00-2.24	.	.	.	.	93	87	13	.	.	.	193
2.25-2.49	.	.	.	.	24	34	16	.	.	.	74
2.50-2.74	.	.	.	.	5	55	25	.	.	.	85
2.75-2.99	.	.	.	.	1	20	10	1	.	.	32
3.00-3.24	.	.	.	.	.	17	14	1	.	.	32
3.25-3.49	.	.	.	.	.	3	9	3	1	.	16
3.50+	.	.	.	.	.	1	29	29	9	.	68
TOTAL	422	1361	1492	1551	933	342	120	34	10	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.5 NO. OF CASES= 5881.

STATION M64 42.67N 87.13W 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	
0.00-0.24	454	298	25	2	.	.	.	.	.	.	779
0.25-0.49	52	861	283	55	.	.	.	.	.	.	1251
0.50-0.74	.	386	727	336	13	.	.	.	.	.	1462
0.75-0.99	.	9	260	273	51	.	.	.	.	.	593
1.00-1.24	.	.	116	278	109	9	.	.	.	.	512
1.25-1.49	.	.	9	126	66	7	.	.	.	.	208
1.50-1.74	.	.	.	96	81	19	2	.	.	.	198
1.75-1.99	.	.	.	6	53	9	1	.	.	.	69
2.00-2.24	.	.	.	.	49	23	1	.	.	.	73
2.25-2.49	.	.	.	.	24	13	2	.	.	.	39
2.50-2.74	.	.	.	.	12	21	.	.	.	.	33
2.75-2.99	.	.	.	.	.	9	1	.	.	.	10
3.00-3.24	.	.	.	.	.	12	2	1	.	.	15
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	2	.	.	.	2
TOTAL	506	1554	1420	1172	458	122	12	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 4923.

STATION M64 42.67N 87.13W 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	
0.00-0.24	597	419	29	6	.	.	.	.	.	.	1051
0.25-0.49	56	842	227	55	.	.	.	.	.	.	1180
0.50-0.74	.	270	617	234	23	.	.	.	.	.	1144
0.75-0.99	.	4	213	156	32	4	.	.	.	.	409
1.00-1.24	.	.	101	234	36	6	.	.	.	.	377
1.25-1.49	.	.	6	148	24	3	.	.	.	.	181
1.50-1.74	.	.	.	135	51	1	1	.	.	.	188
1.75-1.99	.	.	.	7	83	2	1	.	.	.	93
2.00-2.24	.	.	.	.	96	3	.	.	.	.	99
2.25-2.49	.	.	.	.	37	1	.	.	.	.	38
2.50-2.74	.	.	.	.	17	16	.	.	.	.	33
2.75-2.99	.	.	.	.	1	5	.	.	.	.	6
3.00-3.24	.	.	.	.	.	4	.	.	.	.	4
3.25-3.49	.	.	.	.	.	3	.	.	.	.	3
3.50+	.	.	.	.	.	1	1	.	.	.	2
TOTAL	653	1535	1193	975	400	49	3	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 4511.

STATION M64 42.67N 87.13W 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	
0.00-0.24	376	265	20	6	.	.	.	.	.	.	667
0.25-0.49	55	558	143	39	.	.	.	.	.	.	795
0.50-0.74	.	223	500	97	10	.	.	.	.	.	830
0.75-0.99	.	2	180	116	10	.	.	.	.	.	308
1.00-1.24	.	.	65	198	12	2	.	.	.	.	277
1.25-1.49	.	.	1	98	21	3	.	.	.	.	123
1.50-1.74	.	.	.	98	60	.	.	.	.	.	158
1.75-1.99	.	.	.	3	75	.	.	.	.	.	78
2.00-2.24	.	.	.	.	60	1	.	.	.	.	61
2.25-2.49	.	.	.	.	26	.	.	.	.	.	26
2.50-2.74	.	.	.	.	7	6	.	.	.	.	13
2.75-2.99	.	.	.	.	.	7	.	.	.	.	7
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	431	1048	909	655	281	21	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 3143.

STATION M64 42.67N 87.13W 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	
0.00-0.24	372	280	17	5	.	.	.	.	.	.	674
0.25-0.49	43	505	139	34	.	.	.	.	.	.	721
0.50-0.74	.	234	412	93	14	.	.	.	.	.	753
0.75-0.99	.	1	150	122	10	.	.	.	.	.	283
1.00-1.24	.	.	63	233	4	.	.	.	.	.	300
1.25-1.49	.	.	1	106	6	.	.	.	.	.	113
1.50-1.74	.	.	.	102	47	2	1	.	.	.	152
1.75-1.99	.	.	.	1	71	.	.	.	.	.	72
2.00-2.24	.	.	.	.	55	.	.	.	.	.	55
2.25-2.49	.	.	.	.	14	.	.	.	.	.	14
2.50-2.74	.	.	.	.	5	.	.	.	.	.	5
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	415	1020	782	696	226	5	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 2953.

STATION M64 42.67N 87.13W 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	
0.00-0.24	370	252	23	2	1	.	.	.	.	.	648
0.25-0.49	54	456	104	19	.	.	.	.	.	.	633
0.50-0.74	.	259	335	38	6	.	.	.	.	.	638
0.75-0.99	.	.	167	100	2	.	.	.	.	.	269
1.00-1.24	.	.	78	197	1	3	.	.	.	.	279
1.25-1.49	.	.	2	90	11	.	.	.	.	.	103
1.50-1.74	.	.	.	63	38	.	.	.	.	.	101
1.75-1.99	.	.	.	.	48	.	.	.	.	.	48
2.00-2.24	.	.	.	.	54	.	.	.	.	.	54
2.25-2.49	.	.	.	.	12	.	.	.	.	.	12
2.50-2.74	.	.	.	.	3	2	.	.	.	.	5
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	424	967	709	509	176	5	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.7 NO. OF CASES= 2621.

STATION M64 42.67N 87.13W 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	
0.00-0.24	668	416	40	9	.	.	.	.	.	.	1133
0.25-0.49	97	610	140	36	1	.	.	.	.	.	884
0.50-0.74	.	345	476	59	3	.	.	.	.	.	883
0.75-0.99	.	3	189	109	2	.	.	.	.	.	303
1.00-1.24	.	.	103	227	7	1	.	.	.	.	338
1.25-1.49	.	.	7	90	21	.	.	.	.	.	118
1.50-1.74	.	.	.	66	41	1	1	.	.	.	109
1.75-1.99	.	.	.	2	32	.	.	.	.	.	34
2.00-2.24	.	.	.	.	53	.	.	.	.	.	53
2.25-2.49	.	.	.	.	14	.	.	.	.	.	14
2.50-2.74	.	.	.	.	4	1	.	.	.	.	5
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	765	1374	955	598	178	3	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.5 NO. OF CASES= 3635.

STATION M64 42.67N 87.13W 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	
0.00-0.24	768	531	44	5	.	.	.	.	.	.	1348
0.25-0.49	106	1177	199	53	3	.	.	.	.	.	1538
0.50-0.74	.	437	740	97	6	.	.	.	.	.	1280
0.75-0.99	.	7	218	226	5	.	.	.	.	.	456
1.00-1.24	.	.	132	325	17	1	.	.	.	.	475
1.25-1.49	.	.	3	95	60	.	2	.	.	.	160
1.50-1.74	.	.	.	86	89	.	.	.	.	.	175
1.75-1.99	.	.	.	2	72	1	.	.	.	.	75
2.00-2.24	.	.	.	.	52	1	.	.	.	.	53
2.25-2.49	.	.	.	.	12	1	.	.	.	.	13
2.50-2.74	.	.	.	.	3	7	.	.	.	.	10
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	874	2152	1336	889	319	12	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 5236.

STATION M64 42.67N 87.13W 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	
0.00-0.24	955	716	59	12	.	.	.	.	.	.	1742
0.25-0.49	139	1877	382	79	2	.	.	.	.	.	2479
0.50-0.74	.	626	1821	362	14	.	.	.	.	.	2823
0.75-0.99	.	12	443	590	8	.	.	.	.	.	1053
1.00-1.24	.	.	239	591	74	.	.	.	.	.	904
1.25-1.49	.	.	10	239	193	1	.	.	.	.	443
1.50-1.74	.	.	.	146	212	1	.	.	.	.	359
1.75-1.99	.	.	.	4	143	6	.	.	.	.	153
2.00-2.24	.	.	.	.	145	10	.	.	.	.	155
2.25-2.49	.	.	.	.	57	8	.	.	.	.	65
2.50-2.74	.	.	.	.	9	72	.	.	.	.	81
2.75-2.99	.	.	.	.	.	22	.	.	.	.	22
3.00-3.24	.	.	.	.	.	20	3	.	.	.	23
3.25-3.49	.	.	.	.	.	3	.	.	.	.	3
3.50+	.	.	.	.	.	.	4	.	.	.	4
TOTAL	1094	3231	2954	2023	857	143	7	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 9659.

STATION M64 42.67N 87.13W 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	
0.00-0.24	664	604	27	3	.	.	.	.	.	.	1298
0.25-0.49	120	1681	296	75	2	.	.	.	.	.	2174
0.50-0.74	.	634	1489	362	16	.	.	.	.	.	2501
0.75-0.99	.	12	515	624	13	1	.	.	.	.	1165
1.00-1.24	.	.	265	921	110	2	.	.	.	.	1298
1.25-1.49	.	.	20	377	240	1	1	.	.	.	639
1.50-1.74	.	.	.	377	424	4	.	.	.	.	805
1.75-1.99	.	.	.	14	364	9	.	.	.	.	387
2.00-2.24	.	.	.	.	428	11	.	.	.	.	439
2.25-2.49	.	.	.	.	162	36	.	.	.	.	198
2.50-2.74	.	.	.	.	34	106	.	.	.	.	140
2.75-2.99	.	.	.	.	.	65	.	.	.	.	65
3.00-3.24	.	.	.	.	.	44	1	.	.	.	45
3.25-3.49	.	.	.	.	.	19	2	.	.	.	21
3.50+	.	.	.	.	.	2	25	1	.	.	28
TOTAL	784	2931	2612	2753	1793	300	29	1	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 4.3 NO. OF CASES= 10495.

STATION M64 42.67N 87.13W 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	
0.00-0.24	673	521	23	4	.	.	.	.	.	.	1221
0.25-0.49	102	1353	183	87	3	.	.	.	.	.	1728
0.50-0.74	.	573	1138	241	36	1	.	.	.	.	1989
0.75-0.99	.	14	475	405	29	1	.	.	.	.	924
1.00-1.24	.	.	273	733	40	1	.	.	.	.	1047
1.25-1.49	.	.	20	392	86	.	1	.	.	.	499
1.50-1.74	.	.	2	324	242	.	.	.	.	.	568
1.75-1.99	.	.	.	13	235	.	.	.	.	.	248
2.00-2.24	.	.	.	.	220	.	.	.	.	.	220
2.25-2.49	.	.	.	.	125	2	.	.	.	.	127
2.50-2.74	.	.	.	.	41	65	.	.	.	.	106
2.75-2.99	.	.	.	.	.	39	.	.	.	.	39
3.00-3.24	.	.	.	.	.	28	.	.	.	.	28
3.25-3.49	.	.	.	.	.	13	.	.	.	.	13
3.50+	.	.	.	.	.	6	23	2	.	.	31
TOTAL	775	2461	2114	2199	1107	156	24	2	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 8285.

STATION M64 42.67N 87.13W 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	
0.00-0.24	440	326	11	.	.	.	.	.	.	.	777
0.25-0.49	66	1013	127	51	4	.	.	.	.	.	1261
0.50-0.74	.	491	847	196	37	.	.	.	.	.	1571
0.75-0.99	.	10	436	250	42	1	.	.	.	.	739
1.00-1.24	.	.	227	519	17	6	.	.	.	.	769
1.25-1.49	.	.	10	337	8	3	.	.	.	.	358
1.50-1.74	.	.	.	416	88	1	1	.	.	.	506
1.75-1.99	.	.	.	21	216	.	.	.	.	.	237
2.00-2.24	.	.	.	.	210	1	.	.	.	.	211
2.25-2.49	.	.	.	.	97	1	.	.	.	.	88
2.50-2.74	.	.	.	.	56	21	.	.	.	.	77
2.75-2.99	.	.	.	.	2	29	.	.	.	.	31
3.00-3.24	.	.	.	.	.	17	.	.	.	.	17
3.25-3.49	.	.	.	.	.	9	.	.	.	.	9
3.50+	.	.	.	.	.	5	17	.	.	.	22
TOTAL	506	1840	1658	1790	767	94	18	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.1 NO. OF CASES= 6257.

STATION M64 42.67N 87.13W 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	
0.00-0.24	385	345	12	1	.	.	.	.	.	.	743
0.25-0.49	41	932	139	82	3	.	.	.	.	.	1197
0.50-0.74	.	495	910	266	69	.	.	.	.	.	1740
0.75-0.99	.	8	454	203	89	.	.	.	.	.	754
1.00-1.24	.	.	179	402	41	12	.	.	.	.	634
1.25-1.49	.	.	10	343	4	7	.	.	.	.	364
1.50-1.74	.	.	.	468	32	2	1	.	.	.	503
1.75-1.99	.	.	.	23	179	.	2	.	.	.	204
2.00-2.24	.	.	.	.	144	.	.	.	.	.	144
2.25-2.49	.	.	.	.	53	.	.	.	.	.	53
2.50-2.74	.	.	.	.	38	3	.	.	.	.	41
2.75-2.99	.	.	.	.	1	11	.	.	.	.	12
3.00-3.24	.	.	.	.	.	13	.	.	.	.	13
3.25-3.49	.	.	.	.	.	2	.	.	.	.	2
3.50+	.	.	.	.	.	4	.	.	.	.	4
TOTAL	426	1780	1704	1788	653	54	3	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.1 NO. OF CASES= 6007.

STATION M64 42.67N 87.13W 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	
0.00-0.24	236	286	10	1	.	.	.	.	.	.	533
0.25-0.49	45	996	140	52	1	.	.	.	.	.	1234
0.50-0.74	.	490	1030	282	54	.	.	.	.	.	1856
0.75-0.99	.	12	534	350	102	3	.	.	.	.	1001
1.00-1.24	.	.	273	648	139	24	.	.	.	.	1084
1.25-1.49	.	.	10	435	64	7	1	.	.	.	517
1.50-1.74	.	.	.	522	93	5	2	.	.	.	622
1.75-1.99	.	.	.	25	210	5	1	.	.	.	241
2.00-2.24	.	.	.	1	194	2	.	.	.	.	197
2.25-2.49	.	.	.	.	73	.	1	.	.	.	74
2.50-2.74	.	.	.	.	35	23	1	.	.	.	59
2.75-2.99	.	.	.	.	2	9	.	.	.	.	11
3.00-3.24	.	.	.	.	.	19	.	.	.	.	19
3.25-3.49	.	.	.	.	.	4	.	.	.	.	4
3.50+	.	.	.	.	.	2	2	.	.	.	4
TOTAL	281	1784	1997	2316	967	103	8	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 6981.

STATION M64 42.67N 87.13W 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	
0.00-0.24	226	172	19	5	.	.	.	.	.	.	422
0.25-0.49	20	628	185	36	3	.	.	.	.	.	872
0.50-0.74	.	329	1034	328	42	.	.	.	.	.	1733
0.75-0.99	.	7	450	535	104	.	.	.	.	.	1096
1.00-1.24	.	.	203	1006	243	13	.	.	.	.	1465
1.25-1.49	.	.	14	419	263	29	1	.	.	.	726
1.50-1.74	.	.	.	340	499	36	.	.	.	.	875
1.75-1.99	.	.	.	20	383	17	7	.	.	.	427
2.00-2.24	.	.	.	.	486	11	7	.	.	.	504
2.25-2.49	.	.	.	.	185	17	8	.	.	.	210
2.50-2.74	.	.	.	.	59	163	4	.	.	.	226
2.75-2.99	.	.	.	.	.	71	7	.	.	.	78
3.00-3.24	.	.	.	.	1	38	7	.	.	.	46
3.25-3.49	.	.	.	.	.	12	4	.	.	.	16
3.50+	.	.	.	.	.	1	21	3	2	.	27
TOTAL	246	1136	1905	2689	2268	408	66	3	2	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 4.8 NO. OF CASES= 8178.

STATION M64 42.67N 87.13W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

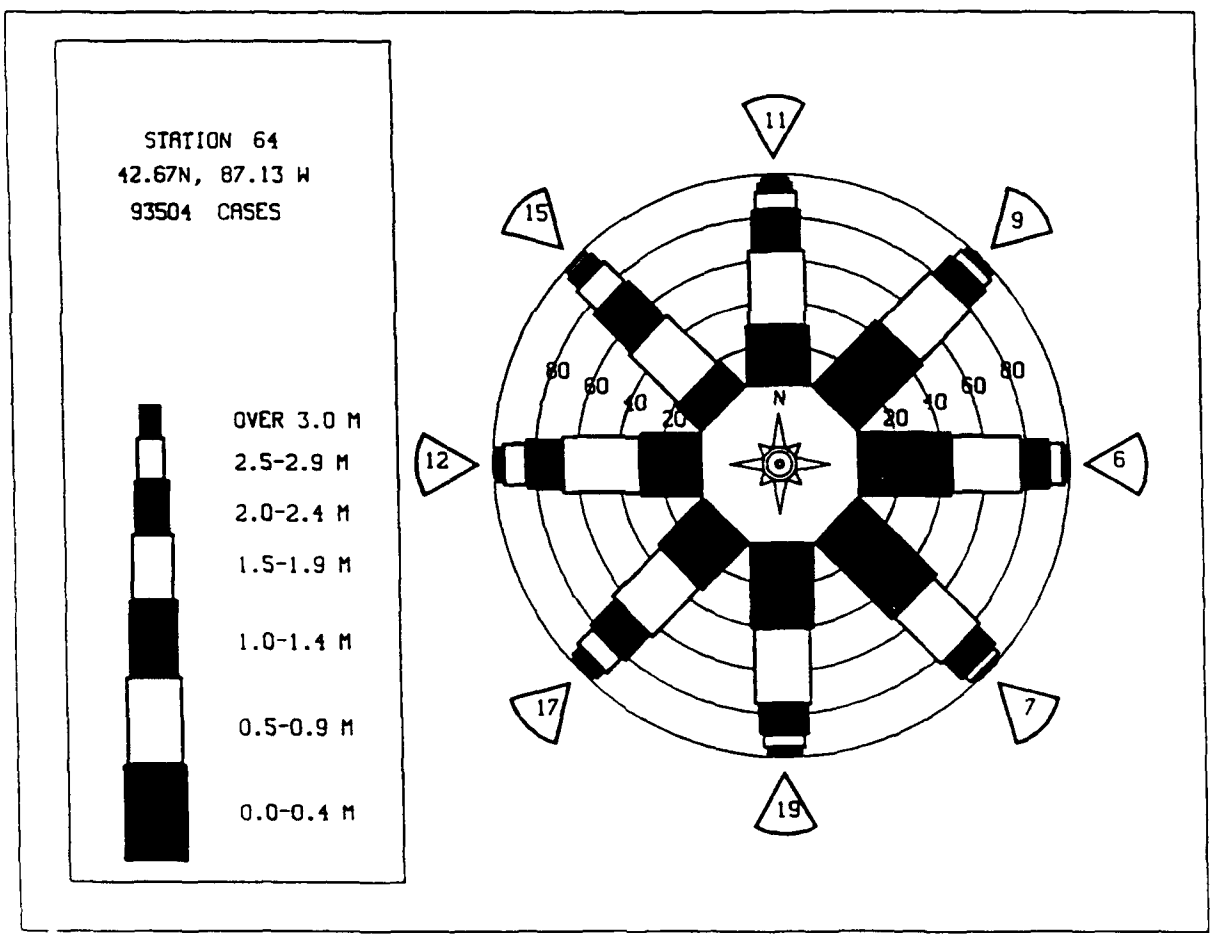
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	201	154	13	5	.	.	.	.	.	.	373
0.25-0.49	21	372	122	22	2	.	.	.	.	.	539
0.50-0.74	.	162	532	229	20	.	.	.	.	.	943
0.75-0.99	.	7	201	345	65	1	.	.	.	.	619
1.00-1.24	.	.	112	459	210	4	.	.	.	.	785
1.25-1.49	.	.	10	156	273	10	1	.	.	.	450
1.50-1.74	.	.	.	118	295	60	3	.	.	.	476
1.75-1.99	.	.	.	8	131	64	2	.	.	.	205
2.00-2.24	.	.	.	.	144	102	18	.	.	.	264
2.25-2.49	.	.	.	.	53	40	23	.	.	.	116
2.50-2.74	.	.	.	.	16	55	28	1	.	.	100
2.75-2.99	.	.	.	.	.	31	20	1	.	.	52
3.00-3.24	.	.	.	.	.	24	22	5	.	.	51
3.25-3.49	.	.	.	.	.	2	14	2	.	.	18
3.50+	.	.	.	.	.	4	24	11	3	.	42
TOTAL	222	695	990	1342	1209	397	155	20	3	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.5 MEAN TP(SEC)= 4.9 NO. OF CASES= 4729.

STATION M64 42.67N 87.13W 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	
0.00-0.24	775	584	40	7	.	.	.	.	.	.	1406
0.25-0.49	108	1463	305	83	2	.	.	.	.	.	1961
0.50-0.74	.	629	1341	357	38	.	.	.	.	.	2365
0.75-0.99	.	12	515	485	62	1	.	.	.	.	1075
1.00-1.24	.	.	259	740	130	9	.	.	.	.	1138
1.25-1.49	.	.	14	361	154	9	.	.	.	.	538
1.50-1.74	.	.	.	347	252	18	1	.	.	.	618
1.75-1.99	.	.	.	16	239	17	1	.	.	.	273
2.00-2.24	.	.	.	.	254	25	4	.	.	.	283
2.25-2.49	.	.	.	.	96	15	5	.	.	.	116
2.50-2.74	.	.	.	.	35	62	5	.	.	.	102
2.75-2.99	.	.	.	.	.	32	3	.	.	.	35
3.00-3.24	.	.	.	.	.	24	5	.	.	.	29
3.25-3.49	.	.	.	.	.	7	3	.	.	.	10
3.50+	.	.	.	.	.	2	15	4	1	.	22
TOTAL	883	2688	2474	2396	1262	221	42	4	1	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M64 (42.67N 87.13W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.8	0.8	0.8	0.7	0.5	0.4	0.4	0.4	0.6	0.7	0.9	0.9	0.7
1957	1.0	0.8	0.8	0.6	0.6	0.4	0.3	0.3	0.5	0.6	1.0	1.1	0.7
1958	1.0	1.2	0.7	0.7	0.6	0.4	0.3	0.5	0.7	0.8	1.0	1.0	0.7
1959	1.0	1.0	0.9	0.7	0.6	0.3	0.3	0.5	0.7	0.8	1.1	1.0	0.7
1960	1.0	1.4	1.0	0.9	0.6	0.4	0.4	0.5	0.5	0.6	1.2	1.3	0.8
1961	1.1	0.9	1.1	0.7	0.6	0.5	0.3	0.5	0.7	1.0	0.9	1.1	0.8
1962	1.1	1.1	0.8	0.9	0.7	0.4	0.4	0.5	0.7	0.8	0.8	1.2	0.8
1963	1.1	1.1	1.0	0.8	0.6	0.3	0.4	0.5	0.6	0.7	1.1	1.0	0.8
1964	1.4	1.2	1.2	1.0	0.7	0.4	0.4	0.6	0.7	0.8	1.0	1.1	0.9
1965	1.3	1.5	1.0	0.7	0.6	0.4	0.4	0.4	0.7	1.0	1.1	1.2	0.9
1966	1.1	0.8	0.9	0.7	0.6	0.4	0.3	0.5	0.6	1.1	1.3	1.0	0.8
1967	1.4	1.3	0.9	0.7	0.6	0.4	0.4	0.5	0.6	1.0	1.0	1.1	0.9
1968	1.2	1.3	1.1	0.9	0.5	0.4	0.5	0.6	0.7	1.0	1.0	1.4	0.9
1969	1.1	1.0	1.0	0.7	0.5	0.5	0.4	0.4	0.7	0.9	0.9	1.2	0.8
1970	1.1	1.4	0.9	0.9	0.7	0.6	0.5	0.5	0.8	0.9	1.3	1.3	0.9
1971	1.4	1.5	1.2	0.8	0.6	0.4	0.5	0.6	0.7	0.8	1.3	1.1	0.9
1972	1.6	1.2	1.2	0.7	0.4	0.6	0.5	0.5	0.8	1.0	1.0	1.1	0.9
1973	1.4	1.2	1.1	0.9	0.7	0.5	0.6	0.7	0.7	0.8	1.1	1.3	0.9
1974	1.1	1.3	1.0	0.9	0.5	0.6	0.5	0.5	0.8	1.0	1.1	1.1	0.9
1975	1.4	1.2	1.1	0.8	0.4	0.5	0.4	0.5	0.7	1.0	1.2	1.2	0.9
1976	1.5	1.4	1.4	0.8	0.6	0.5	0.5	0.6	0.8	0.9	1.2	1.2	1.0
1977	1.4	1.3	1.1	0.8	0.5	0.6	0.7	0.7	0.8	1.1	1.3	1.3	0.9
1978	1.4	0.9	0.9	0.8	0.6	0.5	0.5	0.5	0.7	1.0	1.1	1.4	0.9
1979	1.1	1.1	0.9	0.7	0.7	0.6	0.4	0.6	0.7	1.0	1.0	1.2	0.8
1980	1.0	1.0	1.0	0.7	0.3	0.4	0.3	0.4	0.6	0.9	1.0	1.0	0.7
1981	0.9	1.1	0.9	0.8	0.6	0.5	0.5	0.6	1.1	1.2	1.1	0.9	0.8
1982	1.3	0.9	1.1	1.1	0.5	0.5	0.5	0.7	1.1	1.2	1.4	1.0	0.9
1983	0.9	0.7	0.9	0.8	0.5	0.4	0.4	0.6	1.0	1.2	1.6	1.1	0.8
1984	1.0	1.0	1.0	0.9	0.5	0.4	0.4	0.7	1.1	1.0	1.1	1.2	0.9
1985	1.3	1.2	1.1	0.7	0.5	0.4	0.5	0.4	0.8	0.7	0.9	1.1	0.8
1986	1.3	0.9	1.2	0.8	0.5	0.4	0.3	0.5	0.5	0.7	1.0	1.0	0.8
1987	0.9	1.0	0.9	0.6	0.3	0.3	0.3	0.5	0.4	0.8	0.9	1.1	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 M64 (42.67N 87.13W)

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

32 YR. STATISTICS FOR WIS STATION M64

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	4.1
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	6.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	358.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		87020821

STATION M65 43.10N 87.10W 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	
0.00-0.24	551	432	18	2	.	.	.	.	.	.	1003
0.25-0.49	49	1027	275	24	.	.	.	.	.	.	1375
0.50-0.74	.	334	938	340	7	.	.	.	.	.	1619
0.75-0.99	.	7	302	437	53	.	.	.	.	.	799
1.00-1.24	.	.	155	500	187	4	.	.	.	.	846
1.25-1.49	.	.	16	179	210	2	.	.	.	.	407
1.50-1.74	.	.	.	110	209	27	1	.	.	.	347
1.75-1.99	.	.	.	10	81	45	1	.	.	.	137
2.00-2.24	.	.	.	2	79	80	6	.	.	.	167
2.25-2.49	.	.	.	.	20	25	11	.	.	.	56
2.50-2.74	.	.	.	.	4	35	16	.	.	.	55
2.75-2.99	.	.	.	.	1	13	13	.	.	.	27
3.00-3.24	.	.	.	.	.	9	18	1	.	.	28
3.25-3.49	.	.	.	.	.	3	8	1	.	.	12
3.50+	.	.	.	.	.	1	25	14	9	.	49
TOTAL	600	1800	1704	1604	851	244	99	16	9	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.2 NO. OF CASES= 6499.

STATION M65 43.10N 87.10W 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	
0.00-0.24	434	339	14	3	.	.	.	.	.	.	790
0.25-0.49	66	897	177	39	1	.	.	.	.	.	1180
0.50-0.74	.	394	726	266	13	.	.	.	.	.	1399
0.75-0.99	.	5	313	203	19	.	.	.	.	.	540
1.00-1.24	.	.	151	234	63	4	.	.	.	.	452
1.25-1.49	.	.	12	119	45	5	.	.	.	.	181
1.50-1.74	.	.	.	79	43	7	1	.	.	.	130
1.75-1.99	.	.	.	21	34	7	.	.	.	.	62
2.00-2.24	.	.	.	2	50	12	.	.	.	.	64
2.25-2.49	.	.	.	.	10	3	.	.	.	.	13
2.50-2.74	.	.	.	.	7	8	.	.	.	.	15
2.75-2.99	.	.	.	.	1	4	.	.	.	.	5
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	1	.	.	.	1
TOTAL	500	1635	1393	966	286	52	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.8 NO. OF CASES= 4536.

STATION M65 43.10N 87.10W 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	
0.00-0.24	471	297	19	2	.	.	.	.	.	.	789
0.25-0.49	55	805	186	37	.	.	.	.	.	.	1083
0.50-0.74	.	337	559	155	8	.	.	.	.	.	1059
0.75-0.99	.	6	242	105	14	.	.	.	.	.	367
1.00-1.24	.	.	152	171	13	2	.	.	.	.	338
1.25-1.49	.	.	4	182	9	1	.	.	.	.	196
1.50-1.74	.	.	.	165	10	4	.	.	.	.	179
1.75-1.99	.	.	.	27	40	2	1	.	.	.	70
2.00-2.24	.	.	.	2	48	.	2	.	.	.	52
2.25-2.49	.	.	.	.	16	1	.	.	.	.	17
2.50-2.74	.	.	.	.	5	1	.	.	.	.	6
2.75-2.99	.	.	.	.	1	1	.	.	.	.	2
3.00-3.24	.	.	.	.	.	2	1	.	.	.	3
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	526	1445	1162	846	164	15	4	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.7 NO. OF CASES= 3907.

STATION M65 43.10N 87.10W 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	
0.00-0.24	328	229	14	1	.	.	.	.	.	.	572
0.25-0.49	49	577	106	22	.	.	.	.	.	.	754
0.50-0.74	.	250	535	72	9	.	.	.	.	.	866
0.75-0.99	.	.	212	149	5	1	.	.	.	.	367
1.00-1.24	.	.	83	193	4	3	.	.	.	.	283
1.25-1.49	.	.	3	128	12	2	.	.	.	.	145
1.50-1.74	.	.	.	139	36	2	.	.	.	.	177
1.75-1.99	.	.	.	3	54	.	.	.	.	.	57
2.00-2.24	.	.	.	.	71	.	.	.	.	.	71
2.25-2.49	.	.	.	.	19	.	.	.	.	.	19
2.50-2.74	.	.	.	.	9	2	.	.	.	.	11
2.75-2.99	.	.	.	.	.	3	.	.	.	.	3
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	377	1056	953	707	219	13	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 3123.

STATION M65 43.10N 87.10W 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	
0.00-0.24	339	227	8	1	.	.	.	.	.	.	575
0.25-0.49	49	539	106	22	.	.	.	.	.	.	716
0.50-0.74	.	298	460	53	3	.	.	.	.	.	814
0.75-0.99	.	1	203	121	7	.	.	.	.	.	332
1.00-1.24	.	.	64	311	7	.	.	.	.	.	382
1.25-1.49	.	.	2	118	26	1	.	.	.	.	147
1.50-1.74	.	.	.	110	57	1	1	.	.	.	169
1.75-1.99	.	.	.	4	75	.	.	.	.	.	79
2.00-2.24	.	.	.	.	65	.	.	.	.	.	65
2.25-2.49	.	.	.	.	19	.	.	.	.	.	19
2.50-2.74	.	.	.	.	4	3	.	.	.	.	7
2.75-2.99	.	.	.	.	.	4	.	.	.	.	4
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	388	1065	843	740	263	11	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 3108.

STATION M65 43.10N 87.10W 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	
0.00-0.24	285	185	14	1	.	.	.	.	.	.	485
0.25-0.49	45	422	65	8	1	.	.	.	.	.	541
0.50-0.74	.	251	347	33	4	.	.	.	.	.	635
0.75-0.99	.	1	188	113	.	.	.	.	.	.	302
1.00-1.24	.	.	70	225	9	2	.	.	.	.	306
1.25-1.49	.	.	5	77	48	1	.	.	.	.	131
1.50-1.74	.	.	.	55	63	.	1	.	.	.	119
1.75-1.99	.	.	.	3	54	2	.	.	.	.	59
2.00-2.24	.	.	.	.	60	1	.	.	.	.	61
2.25-2.49	.	.	.	.	12	2	.	.	.	.	14
2.50-2.74	.	.	.	.	1	11	.	.	.	.	12
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	330	859	689	515	252	19	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.8 NO. OF CASES= 2504.

STATION M65 43.10N 87.10W 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	
0.00-0.24	452	262	13	1	.	.	.	.	.	.	728
0.25-0.49	73	548	119	19	.	.	.	.	.	.	759
0.50-0.74	.	309	491	59	1	.	.	.	.	.	860
0.75-0.99	.	1	190	155	4	.	.	.	.	.	350
1.00-1.24	.	.	112	245	17	.	.	.	.	.	374
1.25-1.49	.	.	8	80	60	1	1	.	.	.	150
1.50-1.74	.	.	.	51	68	.	1	.	.	.	120
1.75-1.99	.	.	.	.	35	.	.	.	.	.	35
2.00-2.24	.	.	.	.	29	4	.	.	.	.	33
2.25-2.49	.	.	.	.	11	4	.	.	.	.	15
2.50-2.74	.	.	.	.	.	17	.	.	.	.	17
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	525	1120	933	610	225	27	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 3231.

STATION M65 43.10N 87.10W 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	
0.00-0.24	545	403	21	2	.	.	.	.	.	.	971
0.25-0.49	101	1010	188	34	.	.	.	.	.	.	1333
0.50-0.74	.	398	784	106	2	.	.	.	.	.	1290
0.75-0.99	.	13	256	293	4	.	.	.	.	.	566
1.00-1.24	.	.	119	337	41	1	.	.	.	.	498
1.25-1.49	.	.	9	91	103	.	.	.	.	.	203
1.50-1.74	.	.	.	57	127	2	.	.	.	.	186
1.75-1.99	.	.	.	5	64	9	.	.	.	.	78
2.00-2.24	.	.	.	.	37	18	.	.	.	.	55
2.25-2.49	.	.	.	.	8	5	.	.	.	.	13
2.50-2.74	.	.	.	.	1	16	.	.	.	.	17
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	646	1824	1377	925	387	53	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.8 NO. OF CASES= 4889.

STATION M65 43.10N 87.10W 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	
0.00-0.24	843	850	77	7	.	.	.	.	.	.	1777
0.25-0.49	105	1814	675	113	.	.	.	.	.	.	2707
0.50-0.74	.	618	1661	727	14	.	.	.	.	.	3020
0.75-0.99	.	17	429	695	40	.	.	.	.	.	1181
1.00-1.24	.	.	254	534	205	1	1	.	.	.	995
1.25-1.49	.	.	26	229	251	2	.	.	.	.	508
1.50-1.74	.	.	.	142	253	14	.	.	.	.	409
1.75-1.99	.	.	.	9	106	43	.	.	.	.	158
2.00-2.24	.	.	.	1	113	86	1	.	.	.	201
2.25-2.49	.	.	.	.	22	51	6	.	.	.	79
2.50-2.74	.	.	.	.	6	79	3	.	.	.	88
2.75-2.99	.	.	.	.	.	39	7	.	.	.	46
3.00-3.24	.	.	.	.	.	26	12	.	.	.	38
3.25-3.49	.	.	.	.	.	2	10	.	.	.	12
3.50+							29				29
TOTAL	948	3299	3122	2457	1010	343	69	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.1 NO. OF CASES= 10540.

STATION M65 43.10N 87.10W 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	
0.00-0.24	711	782	81	3	.	.	.	.	.	.	1577
0.25-0.49	122	1595	396	109	4	.	.	.	.	.	2226
0.50-0.74	.	634	1259	561	43	.	.	.	.	.	2497
0.75-0.99	.	28	483	644	66	.	.	.	.	.	1221
1.00-1.24	.	.	302	792	256	1	.	.	.	.	1351
1.25-1.49	.	.	27	380	304	3	.	.	.	.	714
1.50-1.74	.	.	1	349	469	23	.	.	.	.	842
1.75-1.99	.	.	.	33	373	34	.	.	.	.	440
2.00-2.24	.	.	.	.	372	115	.	.	.	.	487
2.25-2.49	.	.	.	.	180	47	3	.	.	.	230
2.50-2.74	.	.	.	.	64	161	6	.	.	.	231
2.75-2.99	.	.	.	.	.	68	6	.	.	.	74
3.00-3.24	.	.	.	.	.	65	10	.	.	.	75
3.25-3.49	.	.	.	.	.	14	18	.	.	.	32
3.50+						3	60	1			64
TOTAL	833	3039	2549	2871	2131	534	103	1	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.4 NO. OF CASES= 11299.

STATION M65 43.10N 87.10W 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	
0.00-0.24	566	562	22	2	.	.	.	.	.	.	1152
0.25-0.49	108	1369	207	33	.	.	.	.	.	.	1717
0.50-0.74	.	613	1241	196	9	.	.	.	.	.	2059
0.75-0.99	.	14	582	398	21	.	.	.	.	.	1015
1.00-1.24	.	.	341	788	90	.	.	.	.	.	1219
1.25-1.49	.	.	26	390	156	2	1	.	.	.	575
1.50-1.74	.	.	.	328	303	2	1	.	.	.	634
1.75-1.99	.	.	.	22	276	4	.	.	.	.	302
2.00-2.24	.	.	.	.	324	9	.	.	.	.	333
2.25-2.49	.	.	.	.	128	13	.	.	.	.	141
2.50-2.74	.	.	.	.	42	89	1	.	.	.	132
2.75-2.99	.	.	.	.	.	70	2	.	.	.	74
3.00-3.24	.	.	.	.	.	57	1	.	.	.	58
3.25-3.49	.	.	.	.	.	14	.	.	.	.	14
3.50+						3	38	6			47
TOTAL	674	2558	2419	2157	1351	263	44	6	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.2 NO. OF CASES= 8878.

STATION M65 43.10N 87.10W 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	
0.00-0.24	396	328	12	2	.	.	.	.	.	.	738
0.25-0.49	52	958	147	31	.	.	.	.	.	.	1188
0.50-0.74	.	472	850	118	11	.	.	.	.	.	1452
0.75-0.99	.	9	485	213	12	.	.	.	.	.	719
1.00-1.24	.	.	250	514	18	3	.	.	.	.	785
1.25-1.49	.	.	7	378	14	.	.	.	.	.	399
1.50-1.74	.	.	1	438	75	.	.	.	.	.	514
1.75-1.99	.	.	1	28	197	1	.	.	.	.	227
2.00-2.24	.	.	.	1	209	3	.	.	.	.	213
2.25-2.49	.	.	.	.	67	2	.	.	.	.	69
2.50-2.74	.	.	.	.	40	13	.	.	.	.	53
2.75-2.99	.	.	.	.	3	14	.	.	.	.	17
3.00-3.24	.	.	.	.	.	20	.	.	.	.	20
3.25-3.49	.	.	.	.	.	4	.	.	.	.	4
3.50+						5	11	2			18
TOTAL	448	1767	1753	1724	646	65	11	2	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 8019.

STATION M65 43.10N 87.10W 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	
0.00-0.24	365	321	16	1	.	.	.	.	.	.	703
0.25-0.49	47	902	137	29	1	.	.	.	.	.	1116
0.50-0.74	.	460	818	161	18	1	.	.	.	.	1458
0.75-0.99	.	9	453	162	17	2	.	.	.	.	643
1.00-1.24	.	.	239	365	13	1	.	.	.	.	618
1.25-1.49	.	.	8	378	3	.	.	.	.	.	389
1.50-1.74	.	.	.	441	23	.	1	.	.	.	465
1.75-1.99	.	.	.	28	158	.	.	.	.	.	186
2.00-2.24	.	.	.	1	135	.	.	.	.	.	136
2.25-2.49	.	.	.	.	56	.	.	.	.	.	56
2.50-2.74	.	.	.	.	34	7	.	.	.	.	41
2.75-2.99	.	.	.	.	.	10	.	.	.	.	10
3.00-3.24	.	.	.	.	.	12	.	.	.	.	12
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	2	.	.	.	.	2
TOTAL	412	1692	1671	1566	458	35	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.0 NO. OF CASES= 5473.

STATION M65 43.10N 87.10W 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	
0.00-0.24	228	254	13	2	.	.	.	.	.	.	497
0.25-0.49	41	840	131	29	.	.	.	.	.	.	1041
0.50-0.74	.	443	1030	196	10	.	.	.	.	.	1679
0.75-0.99	.	10	520	347	31	.	.	.	.	.	908
1.00-1.24	.	.	286	595	55	3	.	.	.	.	939
1.25-1.49	.	.	9	525	41	3	.	.	.	.	578
1.50-1.74	.	.	2	490	93	3	.	.	.	.	588
1.75-1.99	.	.	.	39	190	1	1	.	.	.	231
2.00-2.24	.	.	.	1	216	.	.	.	.	.	217
2.25-2.49	.	.	.	1	69	.	.	.	.	.	70
2.50-2.74	.	.	.	.	36	31	2	.	.	.	69
2.75-2.99	.	.	.	.	.	14	.	.	.	.	14
3.00-3.24	.	.	.	.	.	13	.	.	.	.	13
3.25-3.49	.	.	.	.	.	6	.	.	.	.	6
3.50+	.	.	.	.	.	3	.	.	.	.	3
TOTAL	269	1547	1991	2225	741	77	3	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 4.3 NO. OF CASES= 6427.

STATION M65 43.10N 87.10W 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	
0.00-0.24	267	263	20	1	.	.	.	.	.	.	551
0.25-0.49	19	630	233	37	1	.	.	.	.	.	920
0.50-0.74	.	275	1001	333	20	.	.	.	.	.	1629
0.75-0.99	.	5	401	505	67	.	.	.	.	.	978
1.00-1.24	.	.	183	951	159	6	.	.	.	.	1299
1.25-1.49	.	.	14	457	181	9	.	.	.	.	661
1.50-1.74	.	.	.	363	413	20	.	.	.	.	796
1.75-1.99	.	.	.	17	361	11	.	.	.	.	389
2.00-2.24	.	.	.	2	470	8	2	.	.	.	482
2.25-2.49	.	.	.	.	189	10	.	.	.	.	199
2.50-2.74	.	.	.	.	70	100	3	.	.	.	173
2.75-2.99	.	.	.	.	.	66	5	.	.	.	71
3.00-3.24	.	.	.	.	.	39	3	.	.	.	42
3.25-3.49	.	.	.	.	.	13	6	.	.	.	19
3.50+	.	.	.	.	.	4	14	1	1	.	20
TOTAL	286	1173	1852	2666	1931	286	33	1	1	0	

MEAN HS(M) = 1.1 LARGEST HS(M)= 5.2 MEAN TP(SEC)= 4.7 NO. OF CASES= 7716.

STATION M65 43.10N 87.10W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

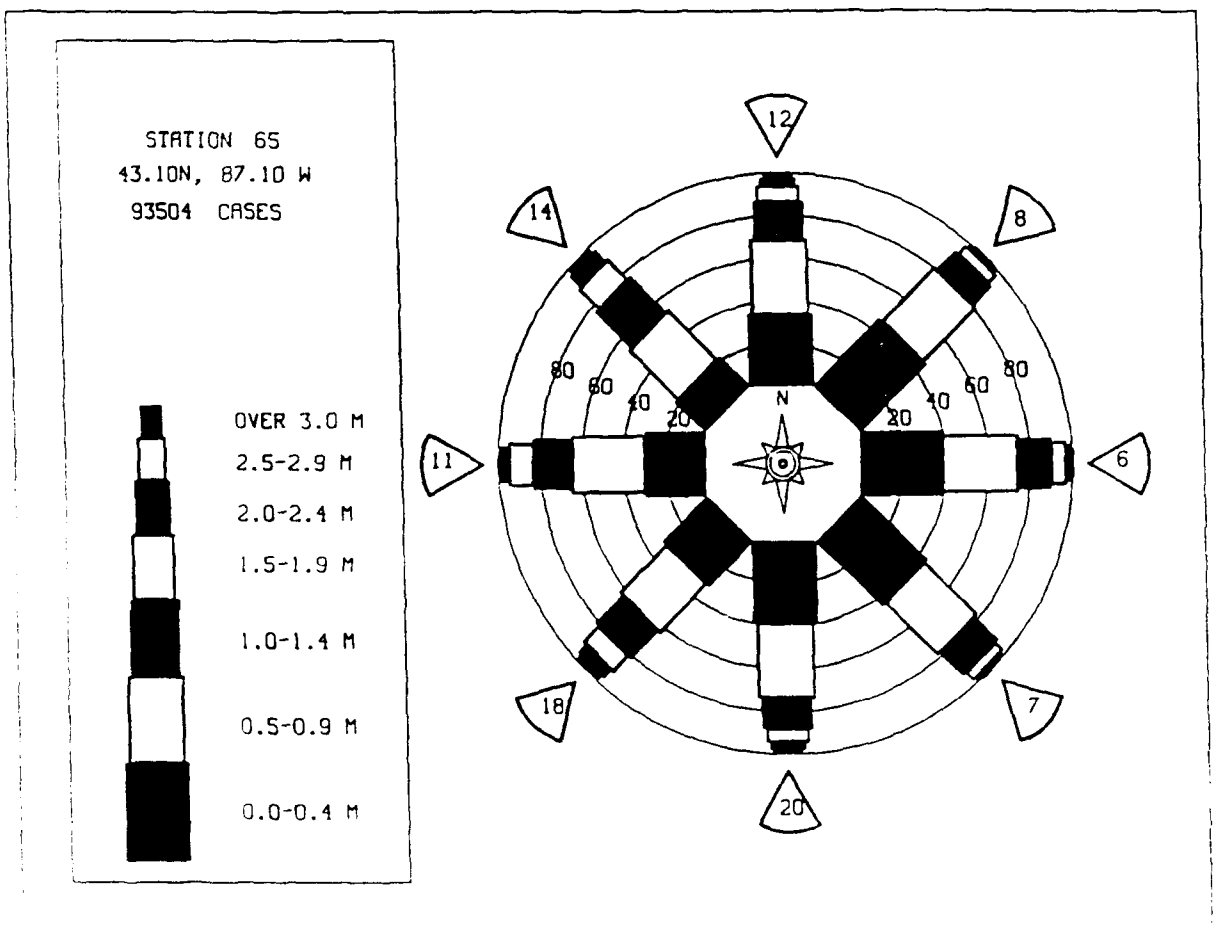
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	297	287	14	2	.	.	.	.	.	.	600
0.25-0.49	25	550	206	35	1	.	.	.	.	.	817
0.50-0.74	.	191	632	293	9	1	.	.	.	.	1126
0.75-0.99	.	4	210	396	44	2	.	.	.	.	656
1.00-1.24	.	.	109	530	180	6	.	.	.	.	825
1.25-1.49	.	.	11	176	199	6	.	.	.	.	392
1.50-1.74	.	.	2	134	289	37	1	.	.	.	463
1.75-1.99	.	.	.	8	172	56	2	.	.	.	238
2.00-2.24	.	.	.	.	158	65	6	.	.	.	229
2.25-2.49	.	.	.	.	71	19	14	.	.	.	104
2.50-2.74	.	.	.	.	25	56	28	.	.	.	109
2.75-2.99	.	.	.	.	.	31	8	1	.	.	40
3.00-3.24	.	.	.	.	.	28	22	.	.	.	50
3.25-3.49	.	.	.	.	.	2	13	1	.	.	16
3.50+	.	.	.	.	.	2	20	12	2	.	36
TOTAL	322	1032	1184	1574	1148	311	114	14	2	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.6 NO. OF CASES= 5355.

STATION M65 43.10N 87.10W 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	
0.00-0.24	708	602	38	3	.	.	.	.	.	.	1351
0.25-0.49	101	1449	336	62	.	.	.	.	.	.	1948
0.50-0.74	.	628	1334	367	18	.	.	.	.	.	2347
0.75-0.99	.	13	547	494	41	.	.	.	.	.	1095
1.00-1.24	.	.	287	729	132	3	.	.	.	.	1151
1.25-1.49	.	.	19	389	167	4	.	.	.	.	579
1.50-1.74	.	.	.	345	253	14	.	.	.	.	612
1.75-1.99	.	.	.	26	227	22	.	.	.	.	275
2.00-2.24	.	.	.	1	244	40	1	.	.	.	286
2.25-2.49	.	.	.	.	90	18	3	.	.	.	111
2.50-2.74	.	.	.	.	35	63	6	.	.	.	104
2.75-2.99	.	.	.	.	.	34	4	.	.	.	38
3.00-3.24	.	.	.	.	.	28	6	.	.	.	34
3.25-3.49	.	.	.	.	.	6	5	.	.	.	11
3.50+	.	.	.	.	.	2	20	3	1	.	26
TOTAL	809	2692	2561	2416	1207	234	45	3	1	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 6.2 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M65 (43.10N 87.10W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.8	0.7	0.8	0.7	0.5	0.4	0.4	0.4	0.6	0.7	1.0	0.9	0.7
1957	1.0	0.8	0.7	0.6	0.6	0.4	0.3	0.3	0.5	0.6	1.0	1.2	0.7
1958	0.9	1.2	0.7	0.7	0.6	0.4	0.3	0.5	0.7	0.8	1.0	1.0	0.7
1959	1.0	1.0	0.8	0.7	0.6	0.3	0.3	0.5	0.7	0.7	1.1	1.0	0.7
1960	1.0	1.3	1.0	0.9	0.6	0.4	0.4	0.5	0.5	0.6	1.3	1.3	0.8
1961	1.1	0.9	1.1	0.6	0.6	0.5	0.4	0.5	0.7	1.0	1.0	1.1	0.8
1962	1.1	1.1	0.8	0.9	0.7	0.5	0.4	0.5	0.7	0.9	0.8	1.2	0.8
1963	1.1	1.1	1.0	0.8	0.6	0.4	0.5	0.6	0.7	0.8	1.2	1.0	0.8
1964	1.4	1.3	1.3	1.1	0.7	0.5	0.4	0.6	0.7	0.9	1.0	1.2	0.9
1965	1.3	1.6	1.1	0.8	0.7	0.4	0.4	0.4	0.7	1.0	1.2	1.2	0.9
1966	1.1	0.9	1.0	0.7	0.6	0.4	0.3	0.5	0.6	1.2	1.4	1.1	0.8
1967	1.4	1.4	0.9	0.8	0.6	0.4	0.4	0.5	0.6	1.1	1.1	1.1	0.9
1968	1.2	1.3	1.1	0.9	0.5	0.5	0.5	0.6	0.7	1.1	1.0	1.5	0.9
1969	1.1	1.0	1.0	0.7	0.5	0.6	0.4	0.5	0.7	1.0	1.0	1.2	0.8
1970	1.1	1.5	0.9	1.0	0.7	0.6	0.6	0.5	0.8	1.0	1.3	1.3	0.9
1971	1.5	1.6	1.2	0.8	0.6	0.5	0.6	0.6	0.8	0.9	1.3	1.1	0.9
1972	1.7	1.2	1.2	0.7	0.4	0.6	0.5	0.6	0.9	1.0	1.0	1.2	0.9
1973	1.5	1.2	1.1	0.9	0.7	0.6	0.6	0.7	0.8	0.8	1.2	1.3	0.9
1974	1.2	1.3	1.0	0.9	0.6	0.6	0.5	0.5	0.8	1.0	1.1	1.2	0.9
1975	1.5	1.2	1.1	0.8	0.4	0.5	0.5	0.6	0.7	1.0	1.2	1.2	0.9
1976	1.5	1.4	1.4	0.8	0.6	0.5	0.5	0.6	0.8	0.9	1.2	1.3	1.0
1977	1.4	1.3	1.1	0.7	0.5	0.6	0.7	0.7	0.8	1.1	1.3	1.3	1.0
1978	1.4	0.9	0.9	0.8	0.6	0.5	0.5	0.5	0.7	1.0	1.1	1.4	0.9
1979	1.2	1.1	0.9	0.7	0.7	0.6	0.4	0.6	0.7	1.0	1.1	1.2	0.8
1980	1.1	1.0	1.0	0.6	0.4	0.5	0.4	0.5	0.6	0.9	1.0	1.0	0.7
1981	0.9	1.1	0.8	0.9	0.6	0.5	0.4	0.5	0.9	1.0	0.9	0.9	0.8
1982	1.3	0.9	1.0	0.9	0.5	0.4	0.4	0.5	0.9	1.1	1.2	1.0	0.9
1983	0.9	0.7	0.8	0.7	0.5	0.3	0.4	0.5	0.8	1.0	1.4	1.2	0.8
1984	1.0	1.0	0.9	0.8	0.5	0.4	0.4	0.6	0.9	0.9	1.2	1.2	0.8
1985	1.3	1.2	1.1	0.7	0.5	0.4	0.4	0.4	0.8	0.8	1.0	1.2	0.8
1986	1.3	0.9	1.2	0.8	0.5	0.4	0.4	0.5	0.5	0.7	1.1	1.0	0.8
1987	0.9	1.0	0.9	0.6	0.4	0.3	0.4	0.5	0.4	0.8	0.9	1.1	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	1.2	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M65 (43.10N 87.10W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.4	3.4	2.7	2.0	1.8	1.6	1.2	2.2	1.8	2.4	3.1	2.7
1957	2.8	3.0	3.8	2.2	1.8	1.3	1.4	1.5	2.2	2.6	3.0	3.1
1958	2.9	2.6	1.8	2.5	1.8	1.4	1.3	2.0	2.6	3.0	3.4	2.5
1959	2.6	2.9	3.5	2.2	1.8	1.6	1.7	1.7	2.1	2.4	2.6	2.9
1960	3.2	3.4	3.6	3.2	1.8	2.0	1.3	1.8	1.9	2.2	4.0	3.3
1961	3.0	2.7	3.4	2.0	1.7	1.4	1.2	1.7	2.3	3.2	3.7	3.5
1962	3.2	3.0	2.3	2.6	2.4	1.5	1.4	1.6	2.5	2.5	3.8	3.3
1963	2.7	2.9	3.3	4.0	2.0	1.5	1.7	2.5	2.3	2.6	3.6	2.8
1964	4.2	3.5	3.7	4.4	2.9	2.1	1.5	2.1	4.3	3.1	3.3	2.7
1965	3.3	5.6	3.9	2.4	1.8	1.8	1.5	1.6	2.4	2.8	4.0	3.9
1966	3.1	2.7	3.1	2.4	1.9	1.5	1.4	1.5	2.3	3.3	5.6	3.1
1967	4.4	3.4	2.7	2.2	2.2	1.5	1.5	2.0	2.6	2.9	2.8	2.6
1968	3.4	3.6	2.9	3.1	2.0	1.9	1.5	2.3	1.9	2.5	2.8	4.5
1969	2.8	2.7	3.4	2.1	1.6	1.9	1.4	2.2	2.0	2.3	3.0	3.0
1970	3.0	3.7	3.2	2.8	2.9	2.0	2.1	2.1	2.7	2.8	3.8	4.3
1971	4.6	5.9	3.7	2.9	2.0	1.6	1.8	2.3	3.3	4.0	4.6	3.3
1972	4.6	3.2	3.2	2.3	1.5	1.6	1.8	1.8	2.5	3.1	3.1	3.5
1973	4.6	3.7	5.5	3.1	2.1	2.6	2.0	2.3	2.1	2.7	3.2	3.2
1974	3.8	4.6	3.3	3.2	1.8	2.3	1.7	1.8	2.4	3.2	2.9	3.6
1975	6.2	3.1	2.7	2.8	1.8	2.3	1.7	1.7	2.0	3.0	4.1	3.9
1976	3.7	4.5	3.8	2.7	2.4	2.0	1.8	2.6	3.0	2.9	2.5	3.5
1977	3.6	3.3	4.2	2.7	2.2	2.0	2.0	3.0	2.7	3.7	3.8	4.0
1978	5.2	2.7	3.2	2.3	2.5	2.8	1.4	2.1	1.9	3.0	3.4	3.4
1979	3.7	2.6	2.9	3.3	2.4	1.9	1.3	1.7	2.0	2.6	2.7	3.9
1980	4.7	2.9	2.5	1.7	1.7	1.6	1.2	1.1	1.8	2.7	2.6	3.7
1981	2.6	2.6	2.6	2.8	2.0	1.8	1.5	2.0	2.6	3.0	3.2	2.7
1982	4.4	2.7	3.5	3.8	1.4	1.1	1.2	1.9	2.0	3.4	3.2	3.1
1983	3.2	1.9	2.6	2.8	1.7	1.1	1.8	2.3	2.2	2.4	4.2	3.4
1984	2.4	4.0	3.4	3.0	1.9	2.1	1.3	1.7	3.4	3.7	2.8	4.3
1985	3.7	4.7	3.3	2.4	2.1	1.9	1.4	1.6	3.1	2.8	2.8	3.1
1986	3.9	2.4	4.1	2.2	2.5	1.6	1.5	1.5	1.5	2.0	3.2	2.8
1987	2.4	6.1	2.2	2.4	1.1	1.0	1.3	1.5	1.7	2.8	2.4	3.1

32 YR. STATISTICS FOR WIS STATION M65

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	4.1
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	6.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	221.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011118

STATION M66 43.53N 87.08W 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	
0.00-0.24	660	485	27	1	.	.	.	.	.	.	1173
0.25-0.49	60	960	265	41	1	.	.	.	.	.	1327
0.50-0.74	.	341	901	351	31	.	.	.	.	.	1624
0.75-0.99	.	5	303	390	38	3	.	.	.	.	739
1.00-1.24	.	.	125	456	158	5	.	.	.	.	744
1.25-1.49	.	.	4	128	180	3	.	.	.	.	315
1.50-1.74	.	.	.	75	159	33	.	.	.	.	267
1.75-1.99	.	.	.	3	82	33	.	.	.	.	118
2.00-2.24	.	.	.	1	44	72	2	.	.	.	119
2.25-2.49	.	.	.	.	6	34	10	.	.	.	50
2.50-2.74	.	.	.	.	8	29	20	.	.	.	57
2.75-2.99	.	.	.	.	.	19	11	.	.	.	30
3.00-3.24	.	.	.	.	.	11	11	1	.	.	23
3.25-3.49	.	.	.	.	.	.	9	.	.	.	9
3.50+	.	.	.	.	.	.	22	11	2	.	35
TOTAL	720	1791	1625	1446	707	242	85	12	2	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.7 MEAN TP(SEC)= 4.1 NO. OF CASES= 6221.

STATION M66 43.53N 87.08W 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	
0.00-0.24	507	348	22	3	.	.	.	.	.	.	880
0.25-0.49	62	808	209	50	2	.	.	.	.	.	1131
0.50-0.74	.	305	716	248	26	.	.	.	.	.	1295
0.75-0.99	.	2	256	187	26	3	.	.	.	.	474
1.00-1.24	.	.	111	235	45	12	.	.	.	.	403
1.25-1.49	.	.	3	100	53	4	1	.	.	.	161
1.50-1.74	.	.	.	77	43	5	1	.	.	.	126
1.75-1.99	.	.	.	13	29	5	1	.	.	.	48
2.00-2.24	.	.	.	.	34	17	1	.	.	.	52
2.25-2.49	.	.	.	.	9	4	1	.	.	.	14
2.50-2.74	.	.	.	.	3	3	1	.	.	.	7
2.75-2.99	.	.	.	.	1	2	.	.	.	.	3
3.00-3.24	.	.	.	.	.	.	1	.	.	.	1
3.25-3.49	.	.	.	.	.	1	1	.	.	.	2
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	569	1463	1317	913	271	56	8	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 4315.

STATION M66 43.53N 87.08W 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	
0.00-0.24	504	392	29	5	.	.	.	.	.	.	930
0.25-0.49	67	764	211	51	.	.	.	.	.	.	1093
0.50-0.74	.	254	481	145	12	.	.	.	.	.	892
0.75-0.99	.	2	197	80	16	1	.	.	.	.	296
1.00-1.24	.	.	97	189	18	3	1	.	.	.	308
1.25-1.49	.	.	1	156	7	3	.	.	.	.	167
1.50-1.74	.	.	.	163	12	1	.	.	.	.	176
1.75-1.99	.	.	.	27	25	.	2	.	.	.	54
2.00-2.24	.	.	.	2	54	3	3	.	.	.	62
2.25-2.49	.	.	.	.	6	.	.	.	.	.	6
2.50-2.74	.	.	.	.	3	1	.	.	.	.	4
2.75-2.99	.	.	.	.	1	2	.	.	.	.	3
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	571	1412	1016	818	154	16	6	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.3 MEAN TP(SEC)= 3.7 NO. OF CASES= 3748.

STATION M66 43.53N 87.08W 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	
0.00-0.24	361	263	17	1	.	.	.	.	.	.	642
0.25-0.49	62	597	131	26	.	.	.	.	.	.	816
0.50-0.74	.	316	438	97	19	.	.	.	.	.	870
0.75-0.99	.	2	233	33	8	1	.	.	.	.	277
1.00-1.24	.	.	172	77	8	.	.	.	.	.	257
1.25-1.49	.	.	10	142	3	.	.	.	.	.	155
1.50-1.74	.	.	.	131	.	3	.	.	.	.	134
1.75-1.99	.	.	.	17	22	3	1	.	.	.	43
2.00-2.24	.	.	.	2	22	4	.	.	.	.	28
2.25-2.49	.	.	.	.	8	.	.	.	.	.	8
2.50-2.74	.	.	.	.	2	.	.	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	423	1178	1001	526	92	11	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.6 NO. OF CASES= 3032.

STATION M66 43.53N 87.08W 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	
0.00-0.24	438	240	18	1	.	.	.	.	.	.	697
0.25-0.49	65	681	117	27	.	.	.	.	.	.	890
0.50-0.74	.	331	456	56	4	.	.	.	.	.	847
0.75-0.99	.	2	283	24	8	2	.	.	.	.	319
1.00-1.24	.	.	288	56	9	3	.	.	.	.	356
1.25-1.49	.	.	7	148	2	1	.	.	.	.	158
1.50-1.74	.	.	.	117	1	.	1	.	.	.	119
1.75-1.99	.	.	.	23	2	.	1	.	.	.	26
2.00-2.24	.	.	.	1	9	.	.	.	.	.	10
2.25-2.49	.	.	.	.	3	.	.	.	.	.	3
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	503	1254	1169	453	38	6	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.4 MEAN TP(SEC)= 3.5 NO. OF CASES= 3215.

STATION M66 43.53N 87.08W 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	
0.00-0.24	328	190	18	2	.	.	.	.	.	.	538
0.25-0.49	69	422	77	12	.	.	.	.	.	.	580
0.50-0.74	.	290	332	47	1	.	.	.	.	.	670
0.75-0.99	.	2	187	67	3	.	.	.	.	.	259
1.00-1.24	.	.	149	126	12	2	1	.	.	.	290
1.25-1.49	.	.	2	122	17	.	.	.	.	.	141
1.50-1.74	.	.	.	82	25	1	.	.	.	.	108
1.75-1.99	.	.	.	8	16	3	.	.	.	.	27
2.00-2.24	.	.	.	.	17	4	.	.	.	.	21
2.25-2.49	.	.	.	.	2	1	.	.	.	.	3
2.50-2.74	.	.	.	.	.	2	.	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	397	904	765	466	93	13	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 2478.

STATION M66 43.53N 87.08W 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	
0.00-0.24	399	304	25	3	.	.	.	.	.	.	731
0.25-0.49	74	545	133	21	1	.	.	.	.	.	774
0.50-0.74	.	282	472	80	3	.	.	.	.	.	837
0.75-0.99	.	1	194	143	4	1	.	.	.	.	343
1.00-1.24	.	.	96	212	18	.	1	.	.	.	327
1.25-1.49	.	.	1	84	52	.	.	.	.	.	137
1.50-1.74	.	.	.	50	47	3	.	.	.	.	100
1.75-1.99	.	.	.	6	25	3	.	.	.	.	34
2.00-2.24	.	.	.	.	16	4	.	.	.	.	20
2.25-2.49	.	.	.	.	7	4	.	.	.	.	11
2.50-2.74	.	.	.	.	.	9	.	.	.	.	9
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	473	1132	921	599	173	26	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.7 NO. OF CASES= 3122.

STATION M66 43.53N 87.08W 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	
0.00-0.24	448	437	59	4	.	.	.	.	.	.	949
0.25-0.49	105	986	339	60	3	.	.	.	.	.	1493
0.50-0.74	.	412	747	267	9	.	.	.	.	.	1435
0.75-0.99	.	6	243	305	26	.	.	.	.	.	580
1.00-1.24	.	.	148	291	99	3	1	.	.	.	542
1.25-1.49	.	.	6	100	99	3	.	.	.	.	208
1.50-1.74	.	.	.	58	131	16	.	.	.	.	205
1.75-1.99	.	.	.	1	64	11	.	.	.	.	76
2.00-2.24	.	.	.	.	37	17	.	.	.	.	54
2.25-2.49	.	.	.	.	8	7	.	.	.	.	15
2.50-2.74	.	.	.	.	1	14	.	.	.	.	15
2.75-2.99	.	.	.	.	.	2	1	.	.	.	3
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	554	1841	1542	1086	477	73	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 5230.

STATION M66 43.53N 87.08W 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	
0.00-0.24	757	998	227	65	.	.	.	.	.	.	2047
0.25-0.49	142	1738	1112	470	21	.	.	.	.	.	3483
0.50-0.74	.	641	1514	1446	143	.	.	.	.	.	3744
0.75-0.99	.	23	381	765	210	.	.	.	.	.	1379
1.00-1.24	.	.	265	530	440	7	.	.	.	.	1242
1.25-1.49	.	.	18	219	315	14	.	.	.	.	566
1.50-1.74	.	.	1	159	311	63	1	.	.	.	535
1.75-1.99	.	.	.	23	112	63	.	.	.	.	198
2.00-2.24	.	.	.	2	133	103	7	.	.	.	245
2.25-2.49	.	.	.	.	43	54	25	.	.	.	122
2.50-2.74	.	.	.	.	5	73	28	.	.	.	106
2.75-2.99	.	.	.	.	.	17	22	.	.	.	39
3.00-3.24	.	.	.	.	.	27	29	2	.	.	58
3.25-3.49	.	.	.	.	.	2	12	.	.	.	14
3.50+	.	.	.	.	.	.	43	9	.	.	52
TOTAL	899	3400	3518	3679	1733	423	167	11	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.0 MEAN TP(SEC)= 4.3 NO. OF CASES= 12956.

STATION M66 43.53N 87.08W 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	
0.00-0.24	753	1015	159	11	1	.	.	.	.	.	1939
0.25-0.49	147	1834	602	194	22	.	.	.	.	.	2799
0.50-0.74	.	656	1347	694	137	4	.	.	.	.	2838
0.75-0.99	.	34	498	685	167	2	.	.	.	.	1386
1.00-1.24	.	.	317	685	392	11	.	.	.	.	1405
1.25-1.49	.	.	33	401	322	22	.	.	.	.	778
1.50-1.74	.	.	1	339	432	78	.	.	.	.	850
1.75-1.99	.	.	.	32	331	73	4	.	.	.	440
2.00-2.24	.	.	.	3	347	113	6	.	.	.	469
2.25-2.49	.	.	.	.	151	40	10	.	.	.	201
2.50-2.74	.	.	.	.	65	145	27	.	.	.	237
2.75-2.99	.	.	.	.	.	68	12	.	.	.	80
3.00-3.24	.	.	.	.	.	55	34	1	.	.	90
3.25-3.49	.	.	.	.	.	9	19	1	.	.	29
3.50+	.	.	.	.	.	4	58	12	.	.	74
TOTAL	900	3539	2957	3044	2367	624	170	14	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.4 NO. OF CASES= 12755.

STATION M66 43.53N 87.08W 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	
0.00-0.24	731	760	22	1	1	.	.	.	.	.	1515
0.25-0.49	127	1270	183	24	1	.	.	.	.	.	1605
0.50-0.74	.	596	1007	142	24	1	.	.	.	.	1770
0.75-0.99	.	22	475	312	32	4	.	.	.	.	845
1.00-1.24	.	.	318	564	103	8	.	.	.	.	993
1.25-1.49	.	.	25	367	105	.	.	.	.	.	501
1.50-1.74	.	.	.	344	212	16	.	.	.	.	572
1.75-1.99	.	.	.	34	236	9	2	.	.	.	281
2.00-2.24	.	.	.	2	281	11	2	.	.	.	296
2.25-2.49	.	.	.	.	119	10	2	.	.	.	131
2.50-2.74	.	.	.	.	49	82	4	.	.	.	135
2.75-2.99	.	.	.	.	.	57	.	.	.	.	57
3.00-3.24	.	.	.	.	1	44	1	.	.	.	46
3.25-3.49	.	.	.	.	.	11	1	.	.	.	12
3.50+	.	.	.	.	.	2	36	7	.	.	45
TOTAL	858	2648	2030	1790	1164	259	48	7	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.1 NO. OF CASES= 8254.

STATION M66 43.53N 87.08W 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	
0.00-0.24	512	408	9	3	.	.	.	.	.	.	932
0.25-0.49	79	752	94	23	.	.	.	.	.	.	948
0.50-0.74	.	395	598	67	11	.	.	.	.	.	1071
0.75-0.99	.	6	380	121	8	.	.	.	.	.	515
1.00-1.24	.	.	227	330	11	.	.	.	.	.	568
1.25-1.49	.	.	10	385	9	1	.	.	.	.	405
1.50-1.74	.	.	1	464	14	1	.	.	.	.	480
1.75-1.99	.	.	.	51	140	1	.	.	.	.	192
2.00-2.24	.	.	.	1	133	1	.	.	.	.	135
2.25-2.49	.	.	.	.	53	.	.	.	.	.	54
2.50-2.74	.	.	.	.	35	2	.	.	.	.	37
2.75-2.99	.	.	.	.	1	8	.	.	.	.	9
3.00-3.24	.	.	.	.	.	6	.	.	.	.	6
3.25-3.49	.	.	.	.	.	3	.	.	.	.	3
3.50+	.	.	.	.	.	4	1	.	.	.	5
TOTAL	591	1561	1319	1445	415	28	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.9 NO. OF CASES= 5028.

STATION M66 43.53N 87.08W 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	
0.00-0.24	548	397	19	3	.	.	.	.	.	.	968
0.25-0.49	73	751	121	25	1	.	.	.	.	.	971
0.50-0.74	.	383	634	94	12	.	.	.	.	.	1123
0.75-0.99	.	7	403	102	7	.	.	.	.	.	519
1.00-1.24	.	.	208	311	8	.	.	.	.	.	527
1.25-1.49	.	.	14	345	5	1	.	.	.	.	365
1.50-1.74	.	.	1	484	16	.	.	.	.	.	501
1.75-1.99	.	.	.	41	151	.	.	.	.	.	192
2.00-2.24	.	.	.	.	167	.	.	.	.	.	167
2.25-2.49	.	.	.	.	63	.	.	.	.	.	63
2.50-2.74	.	.	.	.	33	4	.	.	.	.	37
2.75-2.99	.	.	.	.	.	10	.	.	.	.	10
3.00-3.24	.	.	.	.	.	9	.	.	.	.	9
3.25-3.49	.	.	.	.	.	4	.	.	.	.	4
3.50+	.	.	.	.	.	2	.	.	.	.	2
TOTAL	622	1538	1400	1405	463	30	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.7 MEAN TP(SEC)= 3.9 NO. OF CASES= 5120.

STATION M66 43.53N 87.08W 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	
0.00-0.24	363	321	13	1	.	.	.	.	.	.	698
0.25-0.49	48	814	106	21	2	.	.	.	.	.	991
0.50-0.74	.	390	786	120	9	.	.	.	.	.	1305
0.75-0.99	.	10	419	232	7	2	.	.	.	.	670
1.00-1.24	.	.	233	455	16	.	.	.	.	.	704
1.25-1.49	.	.	10	439	16	2	.	.	.	.	467
1.50-1.74	.	.	1	471	47	.	.	.	.	.	519
1.75-1.99	.	.	.	43	159	.	.	.	.	.	202
2.00-2.24	.	.	.	.	202	1	.	.	.	.	203
2.25-2.49	.	.	.	.	63	1	.	.	.	.	64
2.50-2.74	.	.	.	.	28	21	.	.	.	.	49
2.75-2.99	.	.	.	.	2	14	.	.	.	.	16
3.00-3.24	.	.	.	.	.	12	.	.	.	.	12
3.25-3.49	.	.	.	.	.	2	.	.	.	.	2
3.50+	.	.	.	.	.	5	2	.	.	.	7
TOTAL	411	1535	1568	1782	551	60	2	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 4.1 NO. OF CASES= 5541.

STATION M66 43.53N 87.08W 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	
0.00-0.24	445	421	22	6	.	.	.	.	.	.	894
0.25-0.49	40	728	196	28	2	.	.	.	.	.	994
0.50-0.74	.	285	808	233	16	1	.	.	.	.	1343
0.75-0.99	.	7	309	374	22	2	.	.	.	.	714
1.00-1.24	.	.	181	724	59	3	1	.	.	.	968
1.25-1.49	.	.	12	362	85	2	.	.	.	.	461
1.50-1.74	.	.	1	393	227	5	.	.	.	.	626
1.75-1.99	.	.	.	12	305	2	.	.	.	.	319
2.00-2.24	.	.	.	1	301	5	.	.	.	.	307
2.25-2.49	.	.	.	.	103	3	1	.	.	.	107
2.50-2.74	.	.	.	.	48	62	1	.	.	.	111
2.75-2.99	.	.	.	.	1	38	.	.	.	.	39
3.00-3.24	.	.	.	.	.	20	.	.	.	.	20
3.25-3.49	.	.	.	.	.	5	.	.	.	.	5
3.50+	.	.	.	.	.	6	8	.	.	.	14
TOTAL	485	1441	1529	2133	1169	154	11	0	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M)= 4.5 MEAN TP(SEC)= 4.4 NO. OF CASES= 6491.

STATION M66 43.53N 87.08W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

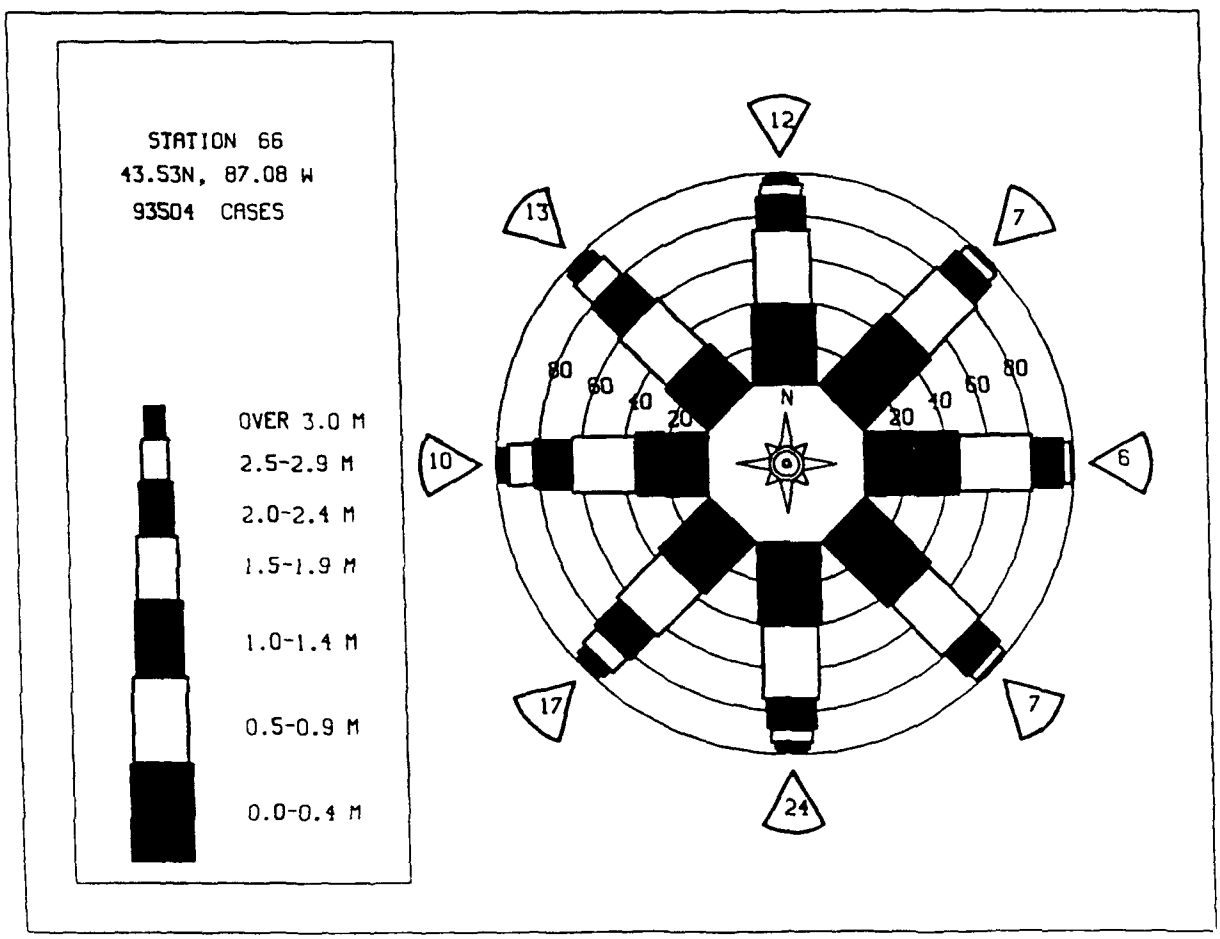
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	521	430	23	2	1	.	.	.	.	.	977
0.25-0.49	45	793	197	29	5	.	.	.	.	.	1069
0.50-0.74	.	298	820	283	24	.	.	.	.	.	1425
0.75-0.99	.	3	288	393	39	4	.	.	.	.	727
1.00-1.24	.	.	122	453	139	3	1	.	.	.	718
1.25-1.49	.	.	5	209	156	3	.	.	.	.	373
1.50-1.74	.	.	.	189	210	22	2	.	.	.	423
1.75-1.99	.	.	.	7	143	32	.	.	.	.	182
2.00-2.24	.	.	.	.	152	48	6	.	.	.	206
2.25-2.49	.	.	.	.	54	27	4	.	.	.	95
2.50-2.74	.	.	.	.	27	42	9	.	.	.	78
2.75-2.99	.	.	.	.	.	35	8	.	.	.	43
3.00-3.24	.	.	.	.	.	20	8	.	.	.	28
3.25-3.49	.	.	.	.	.	2	9	.	.	.	11
3.50+	.	.	.	.	.	5	24	5	1	.	35
TOTAL	566	1524	1455	1565	960	243	71	5	1	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.3 NO. OF CASES= 5998.

STATION M66 43.53N 87.08W 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	
0.00-0.24	828	741	71	11	.	.	.	.	.	.	1651
0.25-0.49	127	1445	410	111	6	.	.	.	.	.	2099
0.50-0.74	.	618	1206	437	48	.	.	.	.	.	2309
0.75-0.99	.	13	505	422	62	2	.	.	.	.	1004
1.00-1.24	.	.	306	570	154	6	.	.	.	.	1036
1.25-1.49	.	.	16	371	143	6	.	.	.	.	536
1.50-1.74	.	.	.	360	189	24	.	.	.	.	573
1.75-1.99	.	.	.	34	184	24	1	.	.	.	243
2.00-2.24	.	.	.	1	195	40	2	.	.	.	238
2.25-2.49	.	.	.	.	71	19	5	.	.	.	95
2.50-2.74	.	.	.	.	31	49	9	.	.	.	89
2.75-2.99	.	.	.	.	.	27	5	.	.	.	32
3.00-3.24	.	.	.	.	.	21	8	.	.	.	29
3.25-3.49	.	.	.	.	.	4	5	.	.	.	9
3.50+	.	.	.	.	.	2	19	4	.	.	25
TOTAL	955	2817	2514	2317	1083	224	54	4	0	0	

MEAN HS(M)= 0.8 LARGEST HS(M)= 6.1 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M66 (43.53N 87.08W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M66 (43.53N 87.08W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.0	3.2	2.6	2.0	1.5	1.4	1.1	2.0	1.8	2.3	3.2	2.7
1957	2.5	2.7	3.7	2.2	1.6	1.2	1.3	1.4	1.8	2.3	2.9	3.5
1958	3.1	2.5	1.7	2.3	1.9	1.5	1.4	1.8	2.5	2.6	3.3	2.4
1959	2.1	2.6	3.4	2.0	1.7	1.5	1.6	1.5	1.9	2.4	2.4	2.8
1960	3.2	3.3	3.0	2.6	1.4	1.6	1.1	1.7	1.6	2.2	4.8	3.2
1961	2.8	2.5	3.0	1.8	1.5	1.5	1.1	1.6	2.5	3.3	4.1	3.8
1962	3.8	2.9	2.2	2.8	2.2	1.5	1.7	1.6	2.4	2.4	4.3	3.5
1963	3.0	3.1	3.0	4.0	2.1	1.5	1.5	2.5	2.2	2.6	4.0	3.0
1964	4.5	3.5	3.7	4.6	3.1	2.2	1.3	2.2	5.0	3.0	3.1	2.7
1965	3.3	5.0	3.7	2.0	1.9	1.5	1.6	1.5	2.3	2.8	3.9	3.4
1966	3.3	2.9	3.2	1.8	2.0	1.5	1.3	1.4	2.4	3.8	5.2	3.1
1967	5.4	3.6	2.9	2.0	2.3	1.7	1.5	2.0	2.5	3.1	2.9	2.3
1968	3.1	3.7	3.0	2.8	1.9	2.1	1.6	2.3	2.0	2.7	2.8	5.0
1969	2.8	3.0	2.9	2.3	1.5	1.9	1.1	2.2	2.0	2.4	3.3	2.8
1970	3.2	3.7	2.8	2.6	2.6	1.9	2.0	1.9	2.6	2.7	3.7	4.4
1971	4.5	5.7	3.5	2.8	1.9	1.3	1.8	2.3	3.3	3.8	4.4	3.0
1972	4.7	3.2	3.3	2.1	1.4	1.6	1.6	1.6	2.8	3.0	2.8	3.9
1973	4.1	3.2	4.8	3.0	2.0	2.5	1.6	2.1	1.9	2.7	3.2	3.0
1974	4.2	4.5	3.2	3.3	1.8	2.1	1.5	1.8	2.5	3.3	2.8	3.5
1975	6.1	3.2	2.6	2.6	1.8	2.2	1.7	2.0	1.8	3.0	4.3	4.1
1976	3.9	4.5	4.1	2.5	2.6	2.2	1.9	2.5	2.8	2.8	2.5	3.5
1977	3.5	3.1	4.0	2.5	1.9	1.8	2.0	3.1	2.6	3.7	4.1	3.9
1978	5.9	2.7	3.1	2.1	2.6	2.5	1.4	2.1	1.9	3.1	3.8	3.3
1979	3.6	2.3	2.9	3.2	2.4	1.7	1.4	1.6	2.0	2.6	3.0	3.8
1980	4.6	3.2	2.6	1.6	1.6	1.5	1.0	1.0	1.7	2.7	2.4	3.8
1981	2.4	2.7	2.4	3.1	1.8	1.8	1.3	1.6	2.4	2.9	2.6	3.0
1982	4.1	2.8	3.8	3.4	1.5	0.9	1.4	1.7	1.9	3.2	3.0	3.0
1983	3.6	1.9	1.8	2.8	1.2	1.1	1.8	1.7	2.1	2.3	3.6	3.2
1984	2.6	3.8	3.4	2.9	1.8	2.5	1.1	1.4	2.9	3.2	2.7	3.9
1985	3.0	4.1	3.3	2.3	1.9	1.8	1.4	1.5	3.1	3.1	2.7	3.2
1986	3.8	2.6	4.3	2.1	2.3	1.4	2.2	1.7	1.7	2.2	3.1	2.8
1987	2.3	5.7	2.2	2.4	1.2	1.1	1.4	1.5	1.8	2.5	2.2	2.8

32 YR. STATISTICS FOR WIS STATION M66

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	4.1
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	6.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	214.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011118

STATION M67 43.97N 87.05W 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	
0.00-0.24	486	380	27	2	.	.	.	.	.	.	895
0.25-0.49	54	725	213	64	4	.	.	.	.	.	1060
0.50-0.74	.	244	757	272	63	.	.	.	.	.	1336
0.75-0.99	.	1	206	276	80	5	.	.	.	.	568
1.00-1.24	.	.	114	327	141	19	.	.	.	.	601
1.25-1.49	.	.	3	90	149	18	.	.	.	.	260
1.50-1.74	.	.	.	48	148	25	2	.	.	.	224
1.75-1.99	.	.	.	4	62	27	.	.	.	.	93
2.00-2.24	.	.	.	.	45	78	2	.	.	.	125
2.25-2.49	.	.	.	.	14	26	4	.	.	.	44
2.50-2.74	.	.	.	.	2	45	5	.	.	.	52
2.75-2.99	.	.	.	.	.	20	3	1	.	.	24
3.00-3.24	.	.	.	.	.	22	7	.	.	.	29
3.25-3.49	.	.	.	.	.	1	6	.	.	.	7
3.50+	.	.	.	.	.	1	24	2	.	.	27
TOTAL	540	1350	1320	1084	708	287	53	3	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.2 NO. OF CASES= 5018.

STATION M67 43.97N 87.05W 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	
0.00-0.24	541	380	31	4	.	.	.	.	.	.	956
0.25-0.49	67	787	217	45	1	.	.	.	.	.	1117
0.50-0.74	.	269	679	282	41	.	.	.	.	.	1271
0.75-0.99	.	1	223	258	44	2	.	.	.	.	528
1.00-1.24	.	.	86	288	73	11	.	.	.	.	458
1.25-1.49	.	.	4	97	69	14	.	.	.	.	184
1.50-1.74	.	.	.	59	78	12	.	.	.	.	149
1.75-1.99	.	.	.	3	49	8	1	.	.	.	61
2.00-2.24	.	.	.	.	39	10	.	.	.	.	49
2.25-2.49	.	.	.	.	9	6	.	.	.	.	15
2.50-2.74	.	.	.	.	2	7	2	.	.	.	11
2.75-2.99	.	.	.	.	2	5	1	.	.	.	8
3.00-3.24	.	.	.	.	.	2	3	.	.	.	5
3.25-3.49	.	.	.	.	.	.	2	.	.	.	2
3.50+	.	.	.	.	.	.	3	.	.	.	3
TOTAL	608	1437	1240	1036	407	77	12	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 4522.

STATION M67 43.97N 87.05W 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	
0.00-0.24	589	509	39	4	.	.	.	.	.	.	1141
0.25-0.49	85	871	254	71	.	.	.	.	.	.	1281
0.50-0.74	.	328	546	213	21	.	.	.	.	.	1108
0.75-0.99	.	.	243	182	25	2	.	.	.	.	452
1.00-1.24	.	.	108	267	58	4	.	.	.	.	437
1.25-1.49	.	.	8	167	23	3	.	.	.	.	201
1.50-1.74	.	.	.	144	58	5	.	.	.	.	207
1.75-1.99	.	.	.	4	78	1	.	.	.	.	83
2.00-2.24	.	.	.	.	84	1	2	.	.	.	87
2.25-2.49	.	.	.	.	24	1	.	.	.	.	25
2.50-2.74	.	.	.	.	21	6	3	.	.	.	30
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	3	.	.	.	.	3
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	674	1708	1198	1052	392	27	5	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 4743.

STATION M67 43.97N 87.05W 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	
0.00-0.24	466	362	34	6	1	.	.	.	.	.	869
0.25-0.49	52	608	151	41	.	.	.	.	.	.	852
0.50-0.74	.	286	366	118	12	1	.	.	.	.	783
0.75-0.99	.	.	205	59	12	.	.	.	.	.	276
1.00-1.24	.	.	140	100	10	1	.	.	.	.	251
1.25-1.49	.	.	5	110	2	1	1	.	.	.	119
1.50-1.74	.	.	.	89	11	2	.	.	.	.	102
1.75-1.99	.	.	.	5	21	1	.	.	.	.	27
2.00-2.24	.	.	.	2	10	.	1	.	.	.	13
2.25-2.49	.	.	.	.	2	.	.	.	.	.	2
2.50-2.74	.	.	.	.	4	.	.	.	.	.	4
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	518	1256	901	530	85	6	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.5 NO. OF CASES= 3098.

STATION M67 43.97N 87.05W 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	
0.00-0.24	509	377	27								913
0.25-0.49	84	485	118	36	2						725
0.50-0.74		242	247	60	10						559
0.75-0.99			165	1	6						172
1.00-1.24			172	28	2	1					203
1.25-1.49			1	101	1						103
1.50-1.74				39		2					41
1.75-1.99				10							10
2.00-2.24					3						3
2.25-2.49											0
2.50-2.74											0
2.75-2.99											0
3.00-3.24											0
3.25-3.49											0
3.50+											0
TOTAL	593	1104	730	275	24	3	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 2562.

STATION M67 43.97N 87.05W 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	
0.00-0.24	358	286	22	3							669
0.25-0.49	72	332	55	31	2						492
0.50-0.74		179	160	17	4						360
0.75-0.99		1	106	5	4						116
1.00-1.24			121	39	2	1					163
1.25-1.49			3	59							62
1.50-1.74				43	1						44
1.75-1.99				3	3						6
2.00-2.24					5						5
2.25-2.49											0
2.50-2.74											0
2.75-2.99											0
3.00-3.24											0
3.25-3.49											0
3.50+											0
TOTAL	430	798	467	200	21	1	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.3 NO. OF CASES= 1803.

STATION M67 43.97N 87.05W 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	
0.00-0.24	458	380	36	4							878
0.25-0.49	60	357	133	38	2						590
0.50-0.74		249	258	63	8						578
0.75-0.99			130	35	8						173
1.00-1.24			68	74	7						149
1.25-1.49			3	52	2	1					58
1.50-1.74				26	1	2					29
1.75-1.99				3	5	1					9
2.00-2.24					16						16
2.25-2.49											0
2.50-2.74											0
2.75-2.99											0
3.00-3.24											0
3.25-3.49											0
3.50+											0
TOTAL	518	986	628	295	49	4	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 2330.

STATION M67 43.97N 87.05W 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	
0.00-0.24	491	636	167	16	2						1312
0.25-0.49	127	744	366	133	6						1376
0.50-0.74		343	576	407	53						1379
0.75-0.99		6	195	259	72	3					535
1.00-1.24			116	194	109	10					429
1.25-1.49			3	108	41	8					160
1.50-1.74				104	37	14					155
1.75-1.99				16	22	6					44
2.00-2.24				3	21	10					34
2.25-2.49					1	3	1				5
2.50-2.74											0
2.75-2.99						1					1
3.00-3.24											1
3.25-3.49											
3.50+											
TOTAL	618	1729	1423	1240	364	55	1	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 5094.

STATION M67 43.97N 87.05W 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	
0.00-0.24	967	1325	463	173	13	.	.	.	.	.	2941
0.25-0.49	178	1648	1511	966	120	2	.	.	.	.	4426
0.50-0.74	.	597	1451	2199	528	8	.	.	.	.	4783
0.75-0.99	.	23	326	802	562	18	.	.	.	.	1731
1.00-1.24	.	.	218	476	737	75	1	.	.	.	1507
1.25-1.49	.	.	12	172	365	69	1	.	.	.	619
1.50-1.74	.	.	1	118	240	136	7	.	.	.	502
1.75-1.99	.	.	.	14	104	70	11	.	.	.	199
2.00-2.24	.	.	.	.	80	69	33	.	.	.	182
2.25-2.49	.	.	.	.	24	31	32	.	.	.	87
2.50-2.74	.	.	.	.	5	45	31	.	.	.	81
2.75-2.99	.	.	.	.	.	9	19	2	.	.	30
3.00-3.24	.	.	.	.	.	12	16	8	.	.	36
3.25-3.49	.	.	.	.	.	1	14	1	.	.	16
3.50+	.	.	.	.	.	.	12	3	3	.	18
TOTAL	1145	3594	3982	4920	2778	545	177	14	3	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.4 NO. OF CASES= 16070.

STATION M67 43.97N 87.05W 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	
0.00-0.24	1011	1224	190	63	13	.	.	.	.	.	2501
0.25-0.49	210	1855	680	295	55	1	.	.	.	.	3096
0.50-0.74	.	758	1296	765	308	8	.	.	.	.	3135
0.75-0.99	.	25	441	530	295	14	.	.	.	.	1305
1.00-1.24	.	.	303	636	549	62	.	.	.	.	1550
1.25-1.49	.	.	35	304	325	63	2	.	.	.	729
1.50-1.74	.	.	1	241	398	133	5	.	.	.	778
1.75-1.99	.	.	.	14	287	90	12	.	.	.	403
2.00-2.24	.	.	.	2	299	105	41	.	.	.	447
2.25-2.49	.	.	.	.	135	43	22	.	.	.	200
2.50-2.74	.	.	.	.	43	111	45	.	.	.	199
2.75-2.99	.	.	.	.	.	36	19	2	.	.	57
3.00-3.24	.	.	.	.	.	35	27	6	.	.	68
3.25-3.49	.	.	.	.	.	8	13	5	.	.	26
3.50+	.	.	.	.	.	2	28	22	2	.	54
TOTAL	1221	3862	2946	2850	2707	711	214	35	2	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.4 NO. OF CASES= 13632.

STATION M67 43.97N 87.05W 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	
0.00-0.24	998	759	32	7	1	.	.	.	.	.	1797
0.25-0.49	157	1275	136	71	4	2	.	.	.	.	1645
0.50-0.74	.	710	914	97	43	1	.	.	.	.	1765
0.75-0.99	.	13	465	223	48	7	.	.	.	.	756
1.00-1.24	.	1	373	485	112	12	1	.	.	.	984
1.25-1.49	.	.	29	336	91	23	1	.	.	.	480
1.50-1.74	.	.	.	286	180	26	2	.	.	.	494
1.75-1.99	.	.	.	48	160	14	2	.	.	.	225
2.00-2.24	.	.	.	4	205	29	10	.	.	.	248
2.25-2.49	.	.	.	.	99	13	5	.	.	.	117
2.50-2.74	.	.	.	.	32	54	6	.	.	.	92
2.75-2.99	.	.	.	.	3	23	4	.	.	.	30
3.00-3.24	.	.	.	.	2	19	4	.	.	.	25
3.25-3.49	.	.	.	.	.	7	1	.	.	.	8
3.50+	.	.	.	.	.	8	16	2	.	.	26
TOTAL	1155	2758	1949	1558	980	238	52	2	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.4 MEAN TP(SEC)= 3.9 NO. OF CASES= 8152.

STATION M67 43.97N 87.05W 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	
0.00-0.24	729	470	18	6	1	.	.	.	.	.	1224
0.25-0.49	83	882	75	53	7	.	.	.	.	.	1100
0.50-0.74	.	456	657	43	29	2	.	.	.	.	1187
0.75-0.99	.	6	412	102	10	3	.	.	.	.	533
1.00-1.24	.	.	249	376	14	1	.	.	.	.	640
1.25-1.49	.	.	21	434	10	2	.	.	.	.	467
1.50-1.74	.	.	.	504	25	1	.	.	.	.	530
1.75-1.99	.	.	.	49	121	3	.	.	.	.	173
2.00-2.24	.	.	.	5	126	1	.	.	.	.	132
2.25-2.49	.	.	.	.	33	.	.	.	.	.	33
2.50-2.74	.	.	.	.	19	.	.	.	.	.	19
2.75-2.99	.	.	.	.	4	6	.	.	.	.	10
3.00-3.24	.	.	.	.	.	8	.	.	.	.	8
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	1	.	.	.	.	1
TOTAL	812	1814	1432	1572	399	29	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.8 NO. OF CASES= 6682.

STATION M67 43.97N 87.05W 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	
0.00-0.24	668	504	20	4	.	.	.	.	.	.	1196
0.25-0.49	97	905	135	52	7	.	.	.	.	.	1196
0.50-0.74	.	430	753	85	31	1	.	.	.	.	1300
0.75-0.99	.	4	439	130	10	1	.	.	.	.	584
1.00-1.24	.	.	248	389	8	1	.	.	.	.	646
1.25-1.49	.	.	16	450	2	1	.	.	.	.	469
1.50-1.74	.	.	.	474	13	2	.	.	.	.	489
1.75-1.99	.	.	.	42	174	4	.	.	.	.	220
2.00-2.24	.	.	.	.	140	.	.	.	.	.	140
2.25-2.49	.	.	.	.	38	.	.	.	.	.	38
2.50-2.74	.	.	.	.	19	2	.	.	.	.	21
2.75-2.99	.	.	.	.	.	5	.	.	.	.	5
3.00-3.24	.	.	.	.	.	4	.	.	.	.	4
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	765	1843	1611	1626	442	21	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.9 NO. OF CASES= 5913.

STATION M67 43.97N 87.05W 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	
0.00-0.24	429	355	21	3	.	.	.	.	.	.	808
0.25-0.49	65	902	99	32	4	.	.	.	.	.	1102
0.50-0.74	.	434	689	126	55	.	.	.	.	.	1304
0.75-0.99	.	5	359	148	27	7	.	.	.	.	546
1.00-1.24	.	.	233	322	16	8	.	.	.	.	579
1.25-1.49	.	.	14	288	2	2	.	.	.	.	306
1.50-1.74	.	.	1	298	13	1	1	.	.	.	314
1.75-1.99	.	.	.	23	95	.	.	.	.	.	118
2.00-2.24	.	.	.	2	103	1	.	.	.	.	106
2.25-2.49	.	.	.	.	32	.	.	.	.	.	32
2.50-2.74	.	.	.	.	26	4	.	.	.	.	30
2.75-2.99	.	.	.	.	.	4	.	.	.	.	4
3.00-3.24	.	.	.	.	.	3	.	.	.	.	3
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	1	.	.	.	.	1
TOTAL	494	1696	1416	1242	373	31	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.6 NO. OF CASES= 4927.

STATION M67 43.97N 87.05W 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	
0.00-0.24	348	271	14	3	1	.	.	.	.	.	637
0.25-0.49	36	702	158	59	4	.	.	.	.	.	959
0.50-0.74	.	335	840	178	55	3	.	.	.	.	1411
0.75-0.99	.	7	402	283	41	11	.	.	.	.	744
1.00-1.24	.	.	235	475	24	17	1	.	.	.	752
1.25-1.49	.	.	3	377	16	5	2	.	.	.	403
1.50-1.74	.	.	1	476	36	.	1	.	.	.	514
1.75-1.99	.	.	.	41	150	1	1	.	.	.	193
2.00-2.24	.	.	.	3	133	3	1	.	.	.	140
2.25-2.49	.	.	.	.	39	2	.	.	.	.	41
2.50-2.74	.	.	.	.	22	2	1	.	.	.	25
2.75-2.99	.	.	.	.	2	6	.	.	.	.	8
3.00-3.24	.	.	.	.	1	2	.	.	.	.	3
3.25-3.49	.	.	.	.	.	2	.	.	.	.	2
3.50+	.	.	.	.	.	2	3	.	.	.	5
TOTAL	384	1315	1653	1895	524	56	10	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.2 NO. OF CASES= 5477.

STATION M67 43.97N 87.05W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

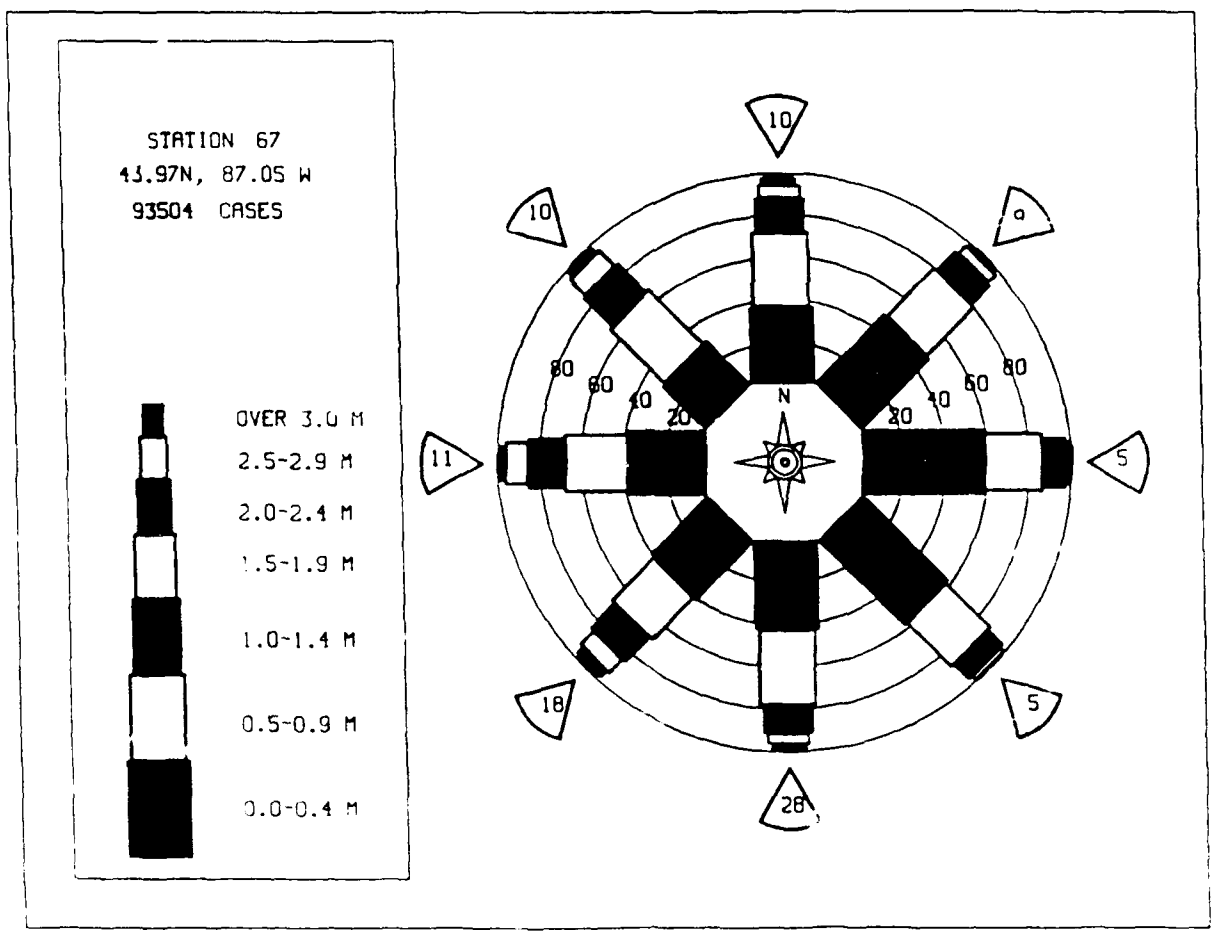
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	296	250	17	6	.	.	.	.	.	.	569
0.25-0.49	39	484	126	58	6	.	.	.	.	.	713
0.50-0.74	.	195	612	203	59	1	.	.	.	.	1070
0.75-0.99	.	2	235	249	52	7	.	.	.	.	545
1.00-1.24	.	.	142	386	113	21	.	.	.	.	662
1.25-1.49	.	.	11	219	103	9	1	.	.	.	343
1.50-1.74	.	.	.	201	133	21	8	.	.	.	363
1.75-1.99	.	.	.	21	102	21	3	.	.	.	147
2.00-2.24	.	.	.	2	132	45	.	.	.	.	179
2.25-2.49	.	.	.	.	44	14	1	.	.	.	59
2.50-2.74	.	.	.	.	14	35	5	.	.	.	54
2.75-2.99	.	.	.	.	.	14	1	.	.	.	16
3.00-3.24	.	.	.	.	.	18	6	.	.	.	24
3.25-3.49	.	.	.	.	.	1	4	.	.	.	5
3.50+	.	.	.	.	.	2	13	5	.	.	20
TOTAL	335	931	1143	1345	759	209	42	5	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.6 MEAN TP(SEC)= 4.4 NO. OF CASES= 4481.

STATION M67 43.97N 87.05W 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	
0.00-0.24	935	847	116	30	3	.	.	.	.	.	1931
0.25-0.49	147	1357	443	205	22	.	.	.	.	.	2174
0.50-0.74	.	606	1080	513	132	2	.	.	.	.	2333
0.75-0.99	.	9	456	355	130	8	.	.	.	.	958
1.00-1.24	.	.	293	487	198	24	.	.	.	.	1002
1.25-1.49	.	.	17	337	120	22	.	.	.	.	496
1.50-1.74	.	.	.	316	138	38	2	.	.	.	494
1.75-1.99	.	.	.	30	143	25	3	.	.	.	201
2.00-2.24	.	.	.	2	144	35	9	.	.	.	190
2.25-2.49	.	.	.	.	50	14	6	.	.	.	70
2.50-2.74	.	.	.	.	21	31	10	.	.	.	62
2.75-2.99	.	.	.	.	1	13	4	.	.	.	18
3.00-3.24	.	.	.	.	.	13	6	1	.	.	20
3.25-3.49	.	.	.	.	.	2	4	.	.	.	6
3.50+	.	.	.	.	.	1	10	3	.	.	14
TOTAL	1082	2819	2405	2275	1102	228	54	4	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.0 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M67 (43.97N 87.05W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M67 (43.97N 87.05W)

MONTH

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

32 YR. STATISTICS FOR WIS STATION M67

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	4.0
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.6
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	6.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	210.0
DATE OF LARGEST HS OCCURRENCE IS (YR.MO.DA.HR)		79011118

STATION M68 44.39N 86.82W 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	
0.00-0.24	457	343	19	.	.	.	.	.	.	.	819
0.25-0.49	48	712	182	17	1	.	.	.	.	.	960
0.50-0.74	.	234	755	269	13	.	.	.	.	.	1271
0.75-0.99	.	1	202	302	38	1	.	.	.	.	544
1.00-1.24	.	.	112	408	171	10	.	.	.	.	701
1.25-1.49	.	.	1	78	171	2	.	.	.	.	252
1.50-1.74	.	.	.	52	163	27	1	.	.	.	243
1.75-1.99	.	.	.	2	88	34	.	.	.	.	124
2.00-2.24	.	.	.	.	81	72	2	.	.	.	155
2.25-2.49	.	.	.	.	24	40	3	.	.	.	67
2.50-2.74	.	.	.	.	2	69	2	.	.	.	73
2.75-2.99	.	.	.	.	.	20	3	.	.	.	23
3.00-3.24	.	.	.	.	.	17	8	.	.	.	25
3.25-3.49	.	.	.	.	.	.	6	.	.	.	6
3.50+	.	.	.	.	.	.	32	1	.	.	33
TOTAL	505	1290	1271	1128	752	292	57	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.8 MEAN TP(SEC)= 4.3 NO. OF CASES= 4967.

STATION M68 44.39N 86.82W 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	
0.00-0.24	542	356	11	1	.	.	.	.	.	.	910
0.25-0.49	69	841	199	14	.	.	.	.	.	.	1123
0.50-0.74	.	286	841	252	8	.	.	.	.	.	1387
0.75-0.99	.	.	243	306	34	.	.	.	.	.	583
1.00-1.24	.	.	69	361	121	6	.	.	.	.	557
1.25-1.49	.	.	1	74	105	3	.	.	.	.	183
1.50-1.74	.	.	.	35	100	12	.	.	.	.	147
1.75-1.99	.	.	.	4	59	18	.	.	.	.	81
2.00-2.24	.	.	.	.	28	14	1	.	.	.	43
2.25-2.49	.	.	.	.	8	5	.	.	.	.	13
2.50-2.74	.	.	.	.	1	7	1	.	.	.	9
2.75-2.99	.	.	.	.	.	4	4	.	.	.	8
3.00-3.24	.	.	.	.	.	3	2	.	.	.	5
3.25-3.49	.	.	.	.	.	.	5	.	.	.	5
3.50+	.	.	.	.	.	.	2	.	.	.	2
TOTAL	611	1483	1364	1047	464	72	15	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.9 NO. OF CASES= 4747.

STATION M68 44.39N 86.82W 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	
0.00-0.24	796	514	24	.	.	.	.	.	.	.	1334
0.25-0.49	104	920	206	28	2	.	.	.	.	.	1260
0.50-0.74	.	346	580	190	3	.	.	.	.	.	1119
0.75-0.99	.	3	268	175	23	1	.	.	.	.	470
1.00-1.24	.	.	146	253	54	1	.	.	.	.	454
1.25-1.49	.	.	8	157	29	5	.	.	.	.	199
1.50-1.74	.	.	.	146	50	6	.	.	.	.	202
1.75-1.99	.	.	.	5	66	3	.	.	.	.	74
2.00-2.24	.	.	.	.	56	4	.	.	.	.	60
2.25-2.49	.	.	.	.	19	3	.	.	.	.	22
2.50-2.74	.	.	.	.	9	5	1	.	.	.	15
2.75-2.99	.	.	.	.	1	3	1	.	.	.	5
3.00-3.24	.	.	.	.	.	1	3	.	.	.	4
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	900	1783	1232	954	312	32	5	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.6 NO. OF CASES= 4895.

STATION M68 44.39N 86.82W 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	
0.00-0.24	553	379	28								960
0.25-0.49	58	634	128	16							836
0.50-0.74		199	293	72							580
0.75-0.99			132	31							169
1.00-1.24			147	41							193
1.25-1.49			4	85							89
1.50-1.74				34							35
1.75-1.99				5							9
2.00-2.24				1		2					4
2.25-2.49											0
2.50-2.74											1
2.75-2.99											0
3.00-3.24											0
3.25-3.49											0
3.50+											0
TOTAL	611	1212	732	295	94	2	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.6 MEAN TP(SEC)= 3.2 NO. OF CASES= 3599

STATION M68 44.39N 86.82W 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	
0.00-0.24	651	362	23	7	.	.	.	.	.	.	1043
0.25-0.49	41	479	105	12	1	.	.	.	.	.	638
0.50-0.74	.	161	177	34	2	.	.	.	.	.	374
0.75-0.99	.	.	109	6	4	.	.	.	.	.	119
1.00-1.24	.	.	170	8	1	.	.	.	.	.	179
1.25-1.49	.	.	2	33	1	.	.	.	.	.	36
1.50-1.74	.	.	.	14	.	.	.	.	.	.	14
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	692	1002	586	115	9	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.9 MEAN TP(SEC)= 3.1 NO. OF CASES= 2256.

STATION M68 44.39N 86.82W 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	
0.00-0.24	450	268	9	1	.	.	.	.	.	.	728
0.25-0.49	55	288	86	13	.	.	.	.	.	.	442
0.50-0.74	.	136	119	17	3	.	.	.	.	.	275
0.75-0.99	.	.	96	5	.	.	.	.	.	.	101
1.00-1.24	.	.	95	7	2	.	.	.	.	.	104
1.25-1.49	.	.	1	42	.	.	.	.	.	.	43
1.50-1.74	.	.	.	14	.	.	.	.	.	.	14
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	505	692	406	99	5	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 1605.

STATION M68 44.39N 86.82W 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	
0.00-0.24	494	322	16	1	.	.	.	.	.	.	833
0.25-0.49	56	350	60	12	1	.	.	.	.	.	479
0.50-0.74	.	189	132	18	3	.	.	.	.	.	342
0.75-0.99	.	.	83	2	1	.	.	.	.	.	86
1.00-1.24	.	.	105	.	1	.	.	.	.	.	106
1.25-1.49	.	.	2	26	1	1	.	.	.	.	30
1.50-1.74	.	.	.	9	.	.	.	.	.	.	10
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	550	861	398	68	7	1	1	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 3.0 NO. OF CASES= 1772.

STATION M68 44.39N 86.82W 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	
0.00-0.24	504	433	106	28	1	.	.	.	.	.	1072
0.25-0.49	145	714	136	75	13	1	.	.	.	.	1084
0.50-0.74	.	396	334	81	44	4	.	.	.	.	859
0.75-0.99	.	4	173	19	11	.	.	.	.	.	207
1.00-1.24	.	.	219	19	14	5	.	.	.	.	257
1.25-1.49	.	.	20	58	6	6	.	.	.	.	90
1.50-1.74	.	.	.	25	7	6	.	.	.	.	38
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	1	.	.	.	.	.	1
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	649	1547	988	306	97	22	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.2 MEAN TP(SEC)= 3.4 NO. OF CASES= 3390

STATION M68 44.39N 86.82W 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	
0.00-0.24	799	1348	526	274	27	.	.	.	.	.	2974
0.25-0.49	194	1452	1593	1239	257	11	.	.	.	.	4746
0.50-0.74	.	599	1170	2489	952	70	.	.	.	.	5280
0.75-0.99	.	14	300	566	914	86	2	.	.	.	1882
1.00-1.24	.	.	223	339	720	258	7	.	.	.	1547
1.25-1.49	.	.	22	154	219	208	17	.	.	.	620
1.50-1.74	.	.	.	104	139	161	41	.	.	.	445
1.75-1.99	.	.	.	16	62	43	39	.	.	.	160
2.00-2.24	.	.	.	2	44	29	58	1	.	.	134
2.25-2.49	.	.	.	.	11	13	27	5	.	.	56
2.50-2.74	.	.	.	.	2	16	28	6	.	.	52
2.75-2.99	.	.	.	.	.	8	8	4	.	.	20
3.00-3.24	.	.	.	.	.	2	5	5	.	.	12
3.25-3.49	.	.	.	.	.	.	6	4	1	.	11
3.50+	.	.	.	.	.	.	1	2	4	.	7
TOTAL	993	3413	3834	5183	3347	905	239	27	5	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.6 NO. OF CASES= 16810.

STATION M68 44.39N 86.82W 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	
0.00-0.24	1094	1211	267	58	25	1	.	.	.	.	2656
0.25-0.49	245	2096	884	367	109	10	.	.	.	.	3711
0.50-0.74	.	913	1523	938	383	54	.	.	.	.	3811
0.75-0.99	.	24	507	701	373	66	1	.	.	.	1672
1.00-1.24	.	.	368	715	597	152	8	.	.	.	1840
1.25-1.49	.	.	23	284	410	148	9	.	.	.	874
1.50-1.74	.	.	1	210	376	227	48	.	.	.	862
1.75-1.99	.	.	.	13	221	133	35	.	.	.	402
2.00-2.24	.	.	.	.	227	170	93	1	.	.	491
2.25-2.49	.	.	.	.	54	68	57	2	.	.	181
2.50-2.74	.	.	.	.	18	124	54	5	.	.	201
2.75-2.99	.	.	.	.	1	55	31	6	.	.	93
3.00-3.24	.	.	.	.	.	31	20	10	1	.	62
3.25-3.49	.	.	.	.	.	3	23	7	1	.	34
3.50+	.	.	.	.	.	.	29	11	4	.	44
TOTAL	1339	4244	3573	3286	2794	1242	408	42	6	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.4 NO. OF CASES= 15865.

STATION M68 44.39N 86.82W 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	
0.00-0.24	1129	796	37	2	2	.	.	.	.	.	1966
0.25-0.49	163	1721	224	33	3	.	.	.	.	.	2144
0.50-0.74	.	784	1179	146	37	9	.	.	.	.	2155
0.75-0.99	.	10	498	346	56	12	1	.	.	.	923
1.00-1.24	.	.	389	593	145	37	1	.	.	.	1165
1.25-1.49	.	.	31	324	194	43	.	.	.	.	592
1.50-1.74	.	.	1	267	243	53	17	.	.	.	581
1.75-1.99	.	.	.	45	154	41	16	.	.	.	256
2.00-2.24	.	.	.	3	195	48	33	1	.	.	280
2.25-2.49	.	.	.	.	43	51	21	1	.	.	116
2.50-2.74	.	.	.	.	17	64	14	2	.	.	97
2.75-2.99	.	.	.	.	2	31	2	3	.	.	38
3.00-3.24	.	.	.	.	.	28	2	1	.	.	31
3.25-3.49	.	.	.	.	.	5	5	.	.	.	10
3.50+	.	.	.	.	.	.	23	4	2	.	29
TOTAL	1292	3311	2359	1759	1091	422	135	12	2	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.0 NO. OF CASES= 9732.

STATION M68 44.39N 86.82W 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	
0.00-0.24	802	472	10	1	.	.	.	.	.	.	1285
0.25-0.49	96	1147	105	20	.	.	.	.	.	.	1368
0.50-0.74	.	514	798	54	12	1	.	.	.	.	1379
0.75-0.99	.	5	460	136	10	4	.	.	.	.	615
1.00-1.24	.	.	281	425	8	8	1	.	.	.	723
1.25-1.49	.	.	13	383	24	4	.	.	.	.	424
1.50-1.74	.	.	.	453	40	10	.	.	.	.	503
1.75-1.99	.	.	.	63	135	2	2	.	.	.	202
2.00-2.24	.	.	.	2	95	4	.	.	.	.	101
2.25-2.49	.	.	.	.	22	4	.	.	.	.	26
2.50-2.74	.	.	.	.	24	4	.	.	.	.	28
2.75-2.99	.	.	.	.	4	4	.	.	.	.	8
3.00-3.24	.	.	.	.	.	5	.	.	.	.	5
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	898	2138	1667	1537	374	51	3	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 3.8 NO. OF CASES= 6254.

STATION M68 44.39N 86.82W 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	
0.00-0.24	647	374	9	3	.	.	.	.	.	.	1033
0.25-0.49	67	1047	110	16	2	.	.	.	.	.	1242
0.50-0.74	.	517	801	91	9	2	.	.	.	.	1420
0.75-0.99	.	3	450	150	6	3	.	.	.	.	612
1.00-1.24	.	.	243	432	5	2	.	.	.	.	682
1.25-1.49	.	.	11	328	3	3	.	.	.	.	345
1.50-1.74	.	.	.	383	27	5	.	.	.	.	415
1.75-1.99	.	.	.	28	124	3	1	.	.	.	156
2.00-2.24	.	.	.	3	102	3	1	.	.	.	109
2.25-2.49	.	.	.	.	35	.	.	.	.	.	35
2.50-2.74	.	.	.	.	20	6	.	.	.	.	26
2.75-2.99	.	.	.	.	2	2	.	.	.	.	4
3.00-3.24	.	.	.	.	.	5	.	.	.	.	5
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	714	1941	1624	1434	335	34	2	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 5703.

STATION M68 44.39N 86.82W 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	
0.00-0.24	327	268	6	1	.	.	.	.	.	.	602
0.25-0.49	66	808	103	7	.	.	.	.	.	.	984
0.50-0.74	.	370	714	114	9	1	.	.	.	.	1208
0.75-0.99	.	7	340	146	18	.	.	.	.	.	511
1.00-1.24	.	.	194	287	16	4	.	.	.	.	501
1.25-1.49	.	.	12	216	4	1	.	.	.	.	233
1.50-1.74	.	.	.	244	18	4	.	.	.	.	266
1.75-1.99	.	.	.	27	88	2	.	.	.	.	117
2.00-2.24	.	.	.	4	88	2	.	.	.	.	94
2.25-2.49	.	.	.	.	18	.	.	.	.	.	18
2.50-2.74	.	.	.	.	16	.	.	.	.	.	16
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	1	.	.	.	.	1
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	393	1453	1369	1046	275	17	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.9 NO. OF CASES= 4270.

STATION M68 44.39N 86.82W 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	
0.00-0.24	291	228	6	.	.	.	.	.	.	.	525
0.25-0.49	32	617	133	16	1	.	.	.	.	.	799
0.50-0.74	.	250	705	148	13	1	.	.	.	.	1117
0.75-0.99	.	6	317	284	32	3	.	.	.	.	642
1.00-1.24	.	.	171	426	33	4	.	.	.	.	634
1.25-1.49	.	.	7	294	5	.	.	.	.	.	306
1.50-1.74	.	.	.	392	28	2	.	.	.	.	422
1.75-1.99	.	.	.	28	112	4	.	.	.	.	144
2.00-2.24	.	.	.	2	75	3	.	.	.	.	80
2.25-2.49	.	.	.	.	14	2	.	.	.	.	16
2.50-2.74	.	.	.	.	14	2	1	.	.	.	17
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	1	2	.	.	.	.	3
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	323	1101	1339	1590	328	25	1	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.4 MEAN TP(SEC)= 4.1 NO. OF CASES= 4417.

STATION M68 44.39N 86.82W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

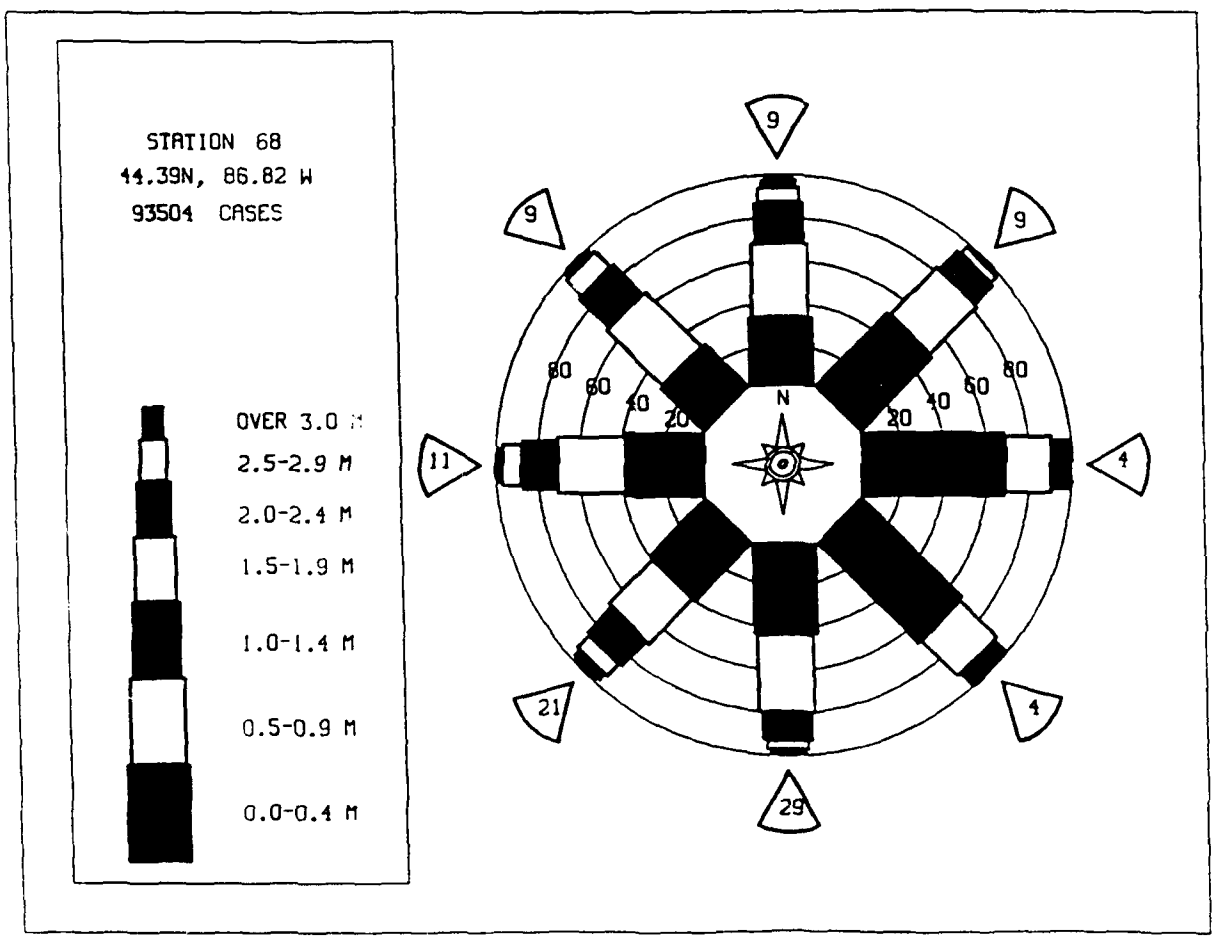
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	272	218	10	1	.	.	.	.	.	.	501
0.25-0.49	36	448	116	13	.	.	.	.	.	.	613
0.50-0.74	.	193	597	180	11	.	.	.	.	.	981
0.75-0.99	.	3	231	283	29	3	.	.	.	.	549
1.00-1.24	.	.	140	395	115	9	.	.	.	.	659
1.25-1.49	.	.	8	207	115	9	.	.	.	.	339
1.50-1.74	.	.	.	206	117	17	1	.	.	.	341
1.75-1.99	.	.	.	18	114	14	.	.	.	.	146
2.00-2.24	.	.	.	1	104	28	2	.	.	.	135
2.25-2.49	.	.	.	.	31	14	.	.	.	.	45
2.50-2.74	.	.	.	.	7	22	.	.	.	.	29
2.75-2.99	.	.	.	.	1	13	.	.	.	.	14
3.00-3.24	.	.	.	.	.	17	1	.	.	.	18
3.25-3.49	.	.	.	.	.	1	3	.	.	.	4
3.50+	.	.	.	.	.	1	10	2	.	.	13
TOTAL	308	862	1102	1304	644	148	17	2	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 4.4 NO. OF CASES= 4122.

STATION M68 44.39N 86.82W 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	
0.00-0.24	981	790	111	38	5	.	.	.	.	.	1925
0.25-0.49	148	1428	438	190	39	2	.	.	.	.	2245
0.50-0.74	.	609	1072	511	151	14	.	.	.	.	2357
0.75-0.99	.	8	441	346	156	18	.	.	.	.	969
1.00-1.24	.	.	307	471	201	50	1	.	.	.	1030
1.25-1.49	.	.	17	274	129	43	2	.	.	.	465
1.50-1.74	.	.	.	259	131	53	11	.	.	.	454
1.75-1.99	.	.	.	26	123	30	9	.	.	.	188
2.00-2.24	.	.	.	1	110	38	19	.	.	.	168
2.25-2.49	.	.	.	.	28	20	11	.	.	.	59
2.50-2.74	.	.	.	.	13	32	10	1	.	.	56
2.75-2.99	.	.	.	.	1	14	5	1	.	.	21
3.00-3.24	.	.	.	.	.	11	4	1	.	.	16
3.25-3.49	.	.	.	.	.	1	5	1	.	.	7
3.50+	.	.	.	.	.	.	9	2	1	.	12
TOTAL	1129	2835	2386	2116	1087	326	86	6	1	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 6.3 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M68 (44.39N 86.82W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M68 (44.39N 86.82W)

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.3	2.6	3.0	1.7	1.4	1.5	1.1	1.3	1.7	2.1	2.9	3.2
1957	2.7	2.3	3.0	2.6	2.1	1.6	1.8	1.4	1.9	2.5	2.6	3.7
1958	3.1	2.4	1.2	2.6	2.6	1.7	2.0	1.6	2.6	2.5	4.7	2.4
1959	2.7	2.8	3.1	2.0	1.9	1.4	1.9	1.5	2.3	2.8	2.4	2.9
1960	2.5	3.1	2.3	2.0	1.4	1.1	1.2	2.3	1.4	2.2	3.7	3.7
1961	2.9	2.0	3.2	1.8	1.3	1.5	1.2	1.6	2.3	3.4	3.1	3.0
1962	4.0	2.7	1.7	2.3	2.1	1.4	1.6	1.6	1.9	2.3	3.6	3.1
1963	3.0	2.6	2.6	3.6	1.8	1.5	1.2	1.8	1.7	2.2	3.0	3.2
1964	3.9	4.2	3.2	4.6	2.5	2.3	1.2	2.0	4.0	2.6	3.5	2.4
1965	2.9	3.7	2.6	1.7	1.7	1.4	1.4	1.9	2.1	2.6	3.2	3.5
1966	2.3	2.3	3.3	1.5	1.5	1.3	1.3	1.6	2.0	3.8	4.4	2.5
1967	4.2	3.5	2.4	2.2	2.1	1.4	1.4	2.4	2.1	2.3	2.3	2.1
1968	2.9	3.2	2.7	3.0	2.3	1.5	1.9	2.4	1.8	2.7	2.5	4.7
1969	2.8	2.8	2.4	1.9	1.3	2.1	1.2	2.8	1.9	2.8	3.1	3.0
1970	2.5	3.6	1.9	2.6	1.9	1.4	1.5	1.4	2.4	2.8	3.4	3.8
1971	3.4	5.6	2.8	2.2	1.8	1.1	1.7	2.0	3.1	3.5	3.5	2.5
1972	4.3	2.5	2.8	1.8	1.3	1.6	1.2	1.4	2.8	2.6	2.5	3.1
1973	3.4	2.7	3.5	2.3	1.5	1.9	1.7	1.7	1.8	3.0	2.8	2.7
1974	3.3	3.4	3.0	2.5	1.5	1.3	1.4	2.1	2.6	2.7	2.3	2.8
1975	6.3	2.5	2.2	2.3	1.6	1.9	1.5	2.3	1.5	2.8	3.9	3.6
1976	3.7	3.4	4.3	2.1	2.3	2.1	1.6	2.1	2.8	2.8	2.3	3.8
1977	2.8	2.9	3.7	2.3	1.6	1.6	1.9	3.4	2.7	3.3	3.9	2.8
1978	5.1	2.3	2.4	1.9	2.2	2.0	1.2	1.7	2.4	2.6	3.4	3.0
1979	2.6	2.0	2.5	2.7	1.9	1.6	1.3	1.3	1.8	2.5	3.2	3.0
1980	4.1	2.9	2.5	1.5	1.2	1.1	0.9	1.2	1.9	3.4	2.7	4.4
1981	2.2	2.7	2.0	2.7	1.7	1.9	1.2	1.3	2.3	2.7	2.4	2.5
1982	3.5	3.1	3.5	2.9	1.2	1.0	1.6	1.6	1.9	3.2	2.8	2.5
1983	3.2	2.4	1.8	2.6	1.1	1.0	1.6	1.5	1.9	2.7	3.2	2.8
1984	2.9	3.4	3.1	2.4	2.0	2.2	1.1	1.7	2.7	3.3	3.0	3.4
1985	2.5	3.1	2.8	2.2	1.7	1.7	1.4	1.4	2.5	2.3	2.3	2.4
1986	3.5	1.7	3.3	1.7	1.8	1.1	1.7	1.6	1.4	2.4	3.3	3.0
1987	2.1	4.4	2.7	2.0	1.3	0.9	1.3	1.2	1.6	3.1	2.0	2.6

32 YR. STATISTICS FOR WIS STATION M68

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	4.1
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	6.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	210.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011118

STATION M69 44.82N 86.58W 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	
0.00-0.24	721	299	10	.	.	.	.	.	.	.	1030
0.25-0.49	114	955	121	1	.	.	.	.	.	.	1191
0.50-0.74	.	429	1039	163	1	1	.	.	.	.	1633
0.75-0.99	.	5	359	372	7	2	.	.	.	.	745
1.00-1.24	.	.	160	724	57	2	1	.	.	.	944
1.25-1.49	.	.	11	254	140	2	.	.	.	.	407
1.50-1.74	.	.	.	136	264	1	1	.	.	.	402
1.75-1.99	.	.	.	3	143	7	.	.	.	.	153
2.00-2.24	.	.	.	.	182	5	2	.	.	.	189
2.25-2.49	.	.	.	.	72	16	1	.	.	.	89
2.50-2.74	.	.	.	.	8	55	1	.	.	.	64
2.75-2.99	.	.	.	.	.	41	.	.	.	.	41
3.00-3.24	.	.	.	.	.	31	1	.	.	.	32
3.25-3.49	.	.	.	.	.	2	.	.	.	.	2
3.50+	.	.	.	.	.	3	22	.	.	.	25
TOTAL	835	1688	1700	1653	874	168	29	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.4 MEAN TP(SEC)= 4.1 NO. OF CASES= 6512.

STATION M69 44.82N 86.58W 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	
0.00-0.24	583	235	3	.	.	.	.	.	.	.	821
0.25-0.49	71	780	67	.	1	.	.	.	.	.	919
0.50-0.74	.	272	691	74	.	.	.	.	.	.	1037
0.75-0.99	.	3	226	237	4	.	.	.	.	.	470
1.00-1.24	.	.	88	368	49	.	.	.	.	.	505
1.25-1.49	.	.	6	84	103	3	.	.	.	.	196
1.50-1.74	.	.	.	42	114	3	1	.	.	.	160
1.75-1.99	.	.	.	3	65	10	.	.	.	.	78
2.00-2.24	.	.	.	.	33	26	.	.	.	.	59
2.25-2.49	.	.	.	.	13	11	.	.	.	.	24
2.50-2.74	.	.	.	.	2	1	.	.	.	.	28
2.75-2.99	.	.	.	.	.	2	.	.	.	.	2
3.00-3.24	.	.	.	.	.	3	2	.	.	.	5
3.25-3.49	.	.	.	.	.	.	3	.	.	.	3
3.50+	.	.	.	.	.	.	5	1	.	.	6
TOTAL	654	1290	1081	808	384	84	11	1	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 5.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 4050.

STATION M69 44.82N 86.58W 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	
0.00-0.24	903	299	13	1	.	.	.	.	.	.	1216
0.25-0.49	87	888	75	.	.	.	.	.	.	.	1050
0.50-0.74	.	295	570	75	1	2	1	.	.	.	944
0.75-0.99	.	2	221	209	.	.	.	.	.	.	432
1.00-1.24	.	.	87	219	62	1	.	.	.	.	369
1.25-1.49	.	.	2	79	111	.	.	.	.	.	192
1.50-1.74	.	.	.	44	122	1	.	.	.	.	167
1.75-1.99	.	.	.	2	38	7	.	.	.	.	47
2.00-2.24	.	.	.	.	26	27	.	.	.	.	53
2.25-2.49	.	.	.	.	6	16	.	.	.	.	22
2.50-2.74	.	.	.	.	.	16	.	.	.	.	16
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	2	1	.	.	.	3
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	2	.	.	.	2
TOTAL	990	1484	968	629	366	73	5	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 4235.

STATION M69 44.82N 86.58W 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	
0.00-0.24	540	188	6	.	.	.	.	.	.	.	734
0.25-0.49	40	510	72	3	.	.	.	.	.	.	625
0.50-0.74	.	172	343	54	.	.	.	.	.	.	569
0.75-0.99	.	.	121	70	.	2	.	.	.	.	193
1.00-1.24	.	.	96	67	19	1	.	.	.	.	183
1.25-1.49	.	.	2	42	16	.	.	.	.	.	60
1.50-1.74	.	.	.	26	14	.	.	.	.	.	40
1.75-1.99	.	.	.	.	6	1	.	.	.	.	7
2.00-2.24	.	.	.	.	5	1	.	.	.	.	6
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	1	.	.	.	.	1
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	580	870	640	262	60	7	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.3 NO. OF CASES= 2271.

STATION M69 44.82N 86.58W 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	
0.00-0.24	396	177	3	.	.	.	.	.	.	.	576
0.25-0.49	36	506	66	1	.	.	.	.	.	.	609
0.50-0.74	.	172	225	43	2	.	.	.	.	.	442
0.75-0.99	.	.	130	16	1	1	.	.	.	.	148
1.00-1.24	.	.	139	11	2	.	.	.	.	.	152
1.25-1.49	.	.	3	29	1	.	.	.	.	.	33
1.50-1.74	.	.	.	8	2	.	.	.	.	.	10
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	432	855	566	108	8	1	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 3.2 NO. OF CASES= 1850.

STATION M69 44.82N 86.58W 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	
0.00-0.24	301	150	5	.	.	.	.	.	.	.	456
0.25-0.49	35	362	28	.	.	.	.	.	.	.	425
0.50-0.74	.	166	156	11	.	.	.	.	.	.	333
0.75-0.99	.	.	72	4	.	.	.	.	.	.	76
1.00-1.24	.	.	86	2	2	.	.	.	.	.	90
1.25-1.49	.	.	2	20	.	.	.	.	.	.	22
1.50-1.74	.	.	.	1	.	.	.	.	.	.	1
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	336	678	349	38	2	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.7 MEAN TP(SEC)= 3.1 NO. OF CASES= 1319.

STATION M69 44.82N 86.58W 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	
0.00-0.24	422	203	7	1	.	.	.	.	.	.	633
0.25-0.49	52	485	50	6	1	.	.	.	.	.	594
0.50-0.74	.	238	158	23	5	.	.	.	.	.	424
0.75-0.99	.	.	71	6	1	.	.	.	.	.	78
1.00-1.24	.	.	77	1	1	.	.	.	.	.	79
1.25-1.49	.	.	2	19	2	.	.	.	.	.	23
1.50-1.74	.	.	.	1	.	1	.	.	.	.	2
1.75-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	474	926	365	57	10	1	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.6 MEAN TP(SEC)= 3.0 NO. OF CASES= 1720.

STATION M69 44.82N 86.58W 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	
0.00-0.24	687	320	51	12	.	.	.	.	.	.	1070
0.25-0.49	121	886	74	35	8	1	.	.	.	.	1125
0.50-0.74	.	474	439	60	23	2	.	.	.	.	998
0.75-0.99	.	1	213	21	8	2	.	.	.	.	245
1.00-1.24	.	.	219	42	9	6	.	.	.	.	276
1.25-1.49	.	.	17	54	8	2	.	.	.	.	81
1.50-1.74	.	.	.	24	4	2	.	.	.	.	30
1.75-1.99	.	.	.	1	2	3	.	.	.	.	6
2.00-2.24	.	.	.	.	1	1	.	.	.	.	2
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	808	1681	1013	249	63	20	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.3 NO. OF CASES= 3600.

STATION M69 44.82N 86.58W 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	
0.00-0.24	1088	1207	804	440	57	4	.	.	.	.	3600
0.25-0.49	220	1753	1698	1651	351	31	1	.	.	.	5705
0.50-0.74	.	840	1176	2613	1225	172	10	.	.	.	6036
0.75-0.99	.	23	466	547	1012	212	11	.	.	.	2271
1.00-1.24	.	.	343	373	668	469	50	.	.	.	1904
1.25-1.49	.	.	26	197	166	279	47	.	.	.	715
1.50-1.74	.	.	1	140	120	173	120	1	.	.	555
1.75-1.99	.	.	.	9	60	39	78	1	.	.	187
2.00-2.24	.	.	.	.	41	19	79	5	.	.	144
2.25-2.49	.	.	.	.	13	5	39	6	1	.	64
2.50-2.74	.	.	.	.	2	17	23	6	1	.	49
2.75-2.99	.	.	.	.	.	3	4	7	.	.	14
3.00-3.24	.	.	.	.	.	3	5	5	1	.	14
3.25-3.49	.	.	.	.	.	.	1	.	.	.	1
3.50+	.	.	.	.	.	.	4	2	1	.	7
TOTAL	1308	3823	4514	5970	3716	1426	472	33	4	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 4.6 NO. OF CASES= 19912.

STATION M69 44.82N 86.58W 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	
0.00-0.24	1289	1010	259	95	23	5	.	.	.	.	2681
0.25-0.49	242	2179	797	337	110	28	2	.	.	.	3695
0.50-0.74	.	1063	1736	929	327	132	9	.	.	.	4196
0.75-0.99	.	21	656	839	299	87	10	.	.	.	1912
1.00-1.24	.	.	479	913	592	218	28	1	.	.	2231
1.25-1.49	.	.	29	421	420	159	39	.	.	.	1068
1.50-1.74	.	.	.	297	471	236	91	1	.	.	1096
1.75-1.99	.	.	.	23	251	139	85	.	.	.	498
2.00-2.24	.	.	.	2	247	157	136	8	.	.	550
2.25-2.49	.	.	.	.	89	78	74	7	.	.	248
2.50-2.74	.	.	.	.	19	104	52	13	1	.	189
2.75-2.99	.	.	.	.	2	36	16	8	.	.	62
3.00-3.24	.	.	.	.	.	45	29	11	4	.	89
3.25-3.49	.	.	.	.	.	8	12	4	3	.	27
3.50+	.	.	.	.	.	1	32	12	4	.	49
TOTAL	1531	4273	3956	3856	2850	1433	615	65	12	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.9 MEAN TP(SEC)= 4.5 NO. OF CASES= 17417.

STATION M69 44.82N 86.58W 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	
0.00-0.24	1122	616	21	2	.	1	.	.	.	.	1762
0.25-0.49	186	1712	173	19	4	1	.	.	.	.	2095
0.50-0.74	.	854	1337	122	34	9	1	.	.	.	2357
0.75-0.99	.	10	663	343	36	17	2	.	.	.	1071
1.00-1.24	.	.	418	633	91	53	5	.	.	.	1200
1.25-1.49	.	.	26	380	149	43	19	.	.	.	617
1.50-1.74	.	.	3	351	231	55	26	1	.	.	667
1.75-1.99	.	.	.	49	166	31	27	1	.	.	274
2.00-2.24	.	.	.	10	181	29	47	3	.	.	270
2.25-2.49	.	.	.	.	60	22	18	4	.	.	104
2.50-2.74	.	.	.	.	31	33	10	3	.	.	77
2.75-2.99	.	.	.	.	4	31	2	1	.	.	38
3.00-3.24	.	.	.	.	1	24	1	.	1	.	27
3.25-3.49	.	.	.	.	.	11	4	1	1	.	17
3.50+	.	.	.	.	.	2	16	2	1	0	21
TOTAL	1308	3192	2641	1909	988	362	178	16	3	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.0 NO. OF CASES= 9933.

STATION M69 44.82N 86.58W 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	
0.00-0.24	647	286	6	1	.	.	.	.	.	.	940
0.25-0.49	94	960	79	4	.	.	.	.	.	.	1137
0.50-0.74	.	494	796	25	3	4	.	.	.	.	1322
0.75-0.99	.	3	470	143	5	4	1	.	.	.	626
1.00-1.24	.	.	272	443	6	5	3	.	.	.	729
1.25-1.49	.	.	16	393	6	2	2	.	.	.	419
1.50-1.74	.	.	.	401	14	13	4	.	.	.	432
1.75-1.99	.	.	.	44	73	6	2	1	.	.	126
2.00-2.24	.	.	.	9	87	3	6	1	.	.	106
2.25-2.49	.	.	.	.	29	.	3	.	.	.	32
2.50-2.74	.	.	.	.	23	3	2	.	.	.	28
2.75-2.99	.	.	.	.	2	2	.	.	.	.	4
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	741	1743	1639	1463	248	44	23	2	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.1 MEAN TP(SEC)= 3.8 NO. OF CASES= 5537.

STATION M69 44.82N 86.58W 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	
0.00-0.24	427	258	5	.	.	.	.	.	.	.	690
0.25-0.49	68	730	67	1	.	.	.	.	.	.	866
0.50-0.74	.	356	652	42	.	2	1	.	.	.	1053
0.75-0.99	.	2	343	105	1	1	.	.	.	.	452
1.00-1.24	.	.	226	353	2	5	1	.	.	.	587
1.25-1.49	.	.	17	283	2	3	.	.	.	.	305
1.50-1.74	.	.	1	313	19	3	.	.	.	.	336
1.75-1.99	.	.	.	26	70	3	1	.	.	.	100
2.00-2.24	.	.	.	2	63	1	1	.	.	.	67
2.25-2.49	.	.	.	.	23	.	.	.	.	.	23
2.50-2.74	.	.	.	.	8	.	.	.	.	.	8
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	1	.	1	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	495	1346	1311	1125	188	20	4	1	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 3.8 NO. OF CASES= 4211.

STATION M69 44.82N 86.58W 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	
0.00-0.24	263	179	2	.	.	.	.	.	.	.	444
0.25-0.49	53	571	58	4	.	.	.	.	.	.	686
0.50-0.74	.	287	575	45	.	.	.	.	.	.	907
0.75-0.99	.	3	280	77	1	2	.	.	.	.	363
1.00-1.24	.	.	149	238	2	1	.	.	.	.	390
1.25-1.49	.	.	8	190	.	1	.	.	.	.	199
1.50-1.74	.	.	.	237	6	1	1	.	.	.	245
1.75-1.99	.	.	.	26	49	.	.	.	.	.	75
2.00-2.24	.	.	.	2	52	1	1	.	.	.	56
2.25-2.49	.	.	.	.	10	.	1	.	.	.	11
2.50-2.74	.	.	.	.	4	.	.	.	.	.	4
2.75-2.99	.	.	.	.	1	.	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	316	1040	1072	819	125	6	3	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.8 MEAN TP(SEC)= 3.8 NO. OF CASES= 3172.

STATION M69 44.82N 86.58W 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	
0.00-0.24	308	176	2	.	.	.	.	.	.	.	486
0.25-0.49	39	440	63	1	.	1	.	.	.	.	544
0.50-0.74	.	195	556	50	1	1	.	.	.	.	803
0.75-0.99	.	1	296	154	3	1	.	.	.	.	455
1.00-1.24	.	.	151	351	.	.	.	.	.	.	502
1.25-1.49	.	.	4	299	2	.	.	.	.	.	305
1.50-1.74	.	.	.	339	8	2	.	.	.	.	349
1.75-1.99	.	.	.	21	86	.	.	.	.	.	107
2.00-2.24	.	.	.	.	62	.	.	.	.	.	62
2.25-2.49	.	.	.	.	25	.	.	.	.	.	25
2.50-2.74	.	.	.	.	10	.	.	.	.	.	10
2.75-2.99	.	.	.	.	.	6	.	.	.	.	6
3.00-3.24	.	.	.	.	.	5	.	.	.	.	5
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	347	812	1072	1215	197	16	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.2 MEAN TP(SEC)= 4.0 NO. OF CASES= 3431.

STATION M69 44.82N 86.58W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

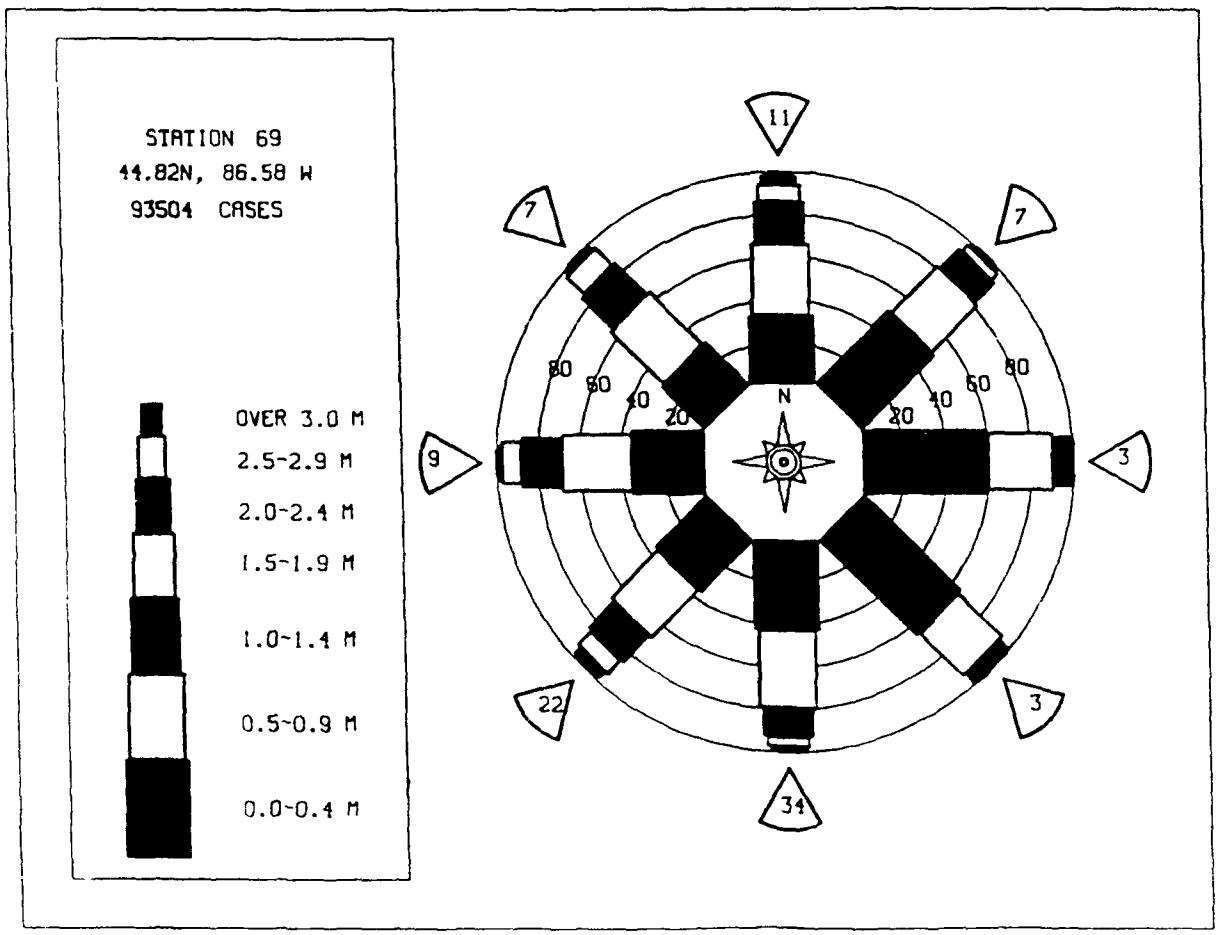
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	350	188	3	.	.	.	.	.	.	.	541
0.25-0.49	59	562	73	2	.	.	.	.	.	.	696
0.50-0.74	.	258	637	77	3	1	.	.	.	.	976
0.75-0.99	.	2	295	234	3	1	1	.	.	.	536
1.00-1.24	.	.	155	512	31	2	1	.	.	.	701
1.25-1.49	.	.	11	273	60	1	.	.	.	.	345
1.50-1.74	.	.	.	298	118	2	1	.	.	.	419
1.75-1.99	.	.	.	21	118	1	.	.	.	.	140
2.00-2.24	.	.	.	2	136	.	.	.	.	.	138
2.25-2.49	.	.	.	.	53	6	.	.	.	.	59
2.50-2.74	.	.	.	.	13	20	.	.	.	.	33
2.75-2.99	.	.	.	.	.	16	.	.	.	.	16
3.00-3.24	.	.	.	.	.	6	.	.	.	.	6
3.25-3.49	.	.	.	.	.	5	.	.	.	.	5
3.50+	.	.	.	.	.	.	8	.	.	.	8
TOTAL	409	1010	1174	1419	535	61	11	0	0	0	

MEAN HS(M) = 0.9 LARGEST HS(M)= 4.3 MEAN TP(SEC)= 4.2 NO. OF CASES= 4334.

STATION M69 44.82N 86.58W 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	
0.00-0.24	1005	579	120	55	8	1	.	.	.	.	1768
0.25-0.49	152	1428	356	206	47	6	.	.	.	.	2195
0.50-0.74	.	657	1109	441	162	32	2	.	.	.	2403
0.75-0.99	.	7	486	338	138	33	2	.	.	.	1006
1.00-1.24	.	.	315	525	159	76	9	.	.	.	1084
1.25-1.49	.	.	18	302	119	49	10	.	.	.	498
1.50-1.74	.	.	.	266	151	49	24	.	.	.	490
1.75-1.99	.	.	.	23	113	25	19	.	.	.	180
2.00-2.24	.	.	.	2	112	27	27	1	.	.	168
2.25-2.49	.	.	.	.	40	15	13	1	.	.	69
2.50-2.74	.	.	.	.	12	27	8	2	.	.	49
2.75-2.99	.	.	.	.	.	14	2	1	.	.	17
3.00-3.24	.	.	.	.	.	12	4	1	.	.	17
3.25-3.49	.	.	.	.	.	2	2	.	.	.	4
3.50+	.	.	.	.	.	.	9	1	.	.	10
TOTAL	1157	2671	2406	2158	1061	368	131	7	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 6.0 MEAN TP(SEC)= 4.1 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M69 (44.82N 86.58W)

MONTH

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

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M69 (44.82N 86.58W)

MONTH

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

32 YR. STATISTICS FOR WIS STATION M69

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	4.1
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	180.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	6.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	216.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		7011118

STATION M70 45.25N 86.34W 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	
0.00-0.24	1052	198	2	.	.	.	.	.	.	.	1252
0.25-0.49	156	1334	40	.	.	.	.	.	.	.	1530
0.50-0.74	.	544	1187	33	.	.	.	.	.	.	1764
0.75-0.99	.	2	497	399	.	.	.	.	.	.	898
1.00-1.24	.	.	234	752	2	.	.	.	.	.	988
1.25-1.49	.	.	6	424	13	.	.	.	.	.	443
1.50-1.74	.	.	.	432	88	.	.	.	.	.	520
1.75-1.99	.	.	.	9	214	.	.	.	.	.	223
2.00-2.24	.	.	.	.	181	.	.	.	.	.	181
2.25-2.49	.	.	.	.	69	.	.	.	.	.	69
2.50-2.74	.	.	.	.	43	23	.	.	.	.	66
2.75-2.99	.	.	.	.	1	24	.	.	.	.	25
3.00-3.24	.	.	.	.	.	18	.	.	.	.	18
3.25-3.49	.	.	.	.	.	8	.	.	.	.	8
3.50+	.	.	.	.	.	8	5	.	.	.	13
TOTAL	1208	2078	1966	2049	611	81	5	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 3.9 MEAN TP(SEC)= 3.9 NO. OF CASES= 7493.

STATION M70 45.25N 86.34W 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	
0.00-0.24	894	168	6	.	.	.	.	.	.	.	1068
0.25-0.49	99	876	13	.	.	.	.	.	.	.	988
0.50-0.74	.	312	609	12	.	.	.	.	.	.	933
0.75-0.99	.	1	250	192	.	.	.	.	.	.	443
1.00-1.24	.	.	105	326	2	.	.	.	.	.	433
1.25-1.49	.	.	2	165	6	.	.	.	.	.	173
1.50-1.74	.	.	.	151	54	.	.	.	.	.	205
1.75-1.99	.	.	.	1	68	.	.	.	.	.	69
2.00-2.24	.	.	.	.	54	.	.	.	.	.	54
2.25-2.49	.	.	.	.	25	.	.	.	.	.	25
2.50-2.74	.	.	.	.	12	6	.	.	.	.	18
2.75-2.99	.	.	.	.	.	4	.	.	.	.	4
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	1	2	.	.	.	3
TOTAL	993	1357	985	847	221	13	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 4.1 MEAN TP(SEC)= 3.5 NO. OF CASES= 4144.

STATION M70 45.25N 86.34W 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	
0.00-0.24	1284	267	3	.	.	.	.	.	.	.	1554
0.25-0.49	89	1047	17	.	.	.	.	.	.	.	1153
0.50-0.74	.	296	627	12	.	.	.	.	.	.	935
0.75-0.99	.	1	195	165	.	.	.	.	.	.	361
1.00-1.24	.	.	74	283	.	.	.	.	.	.	357
1.25-1.49	.	.	5	135	19	.	.	.	.	.	159
1.50-1.74	.	.	.	82	59	.	.	.	.	.	141
1.75-1.99	.	.	.	1	62	.	.	.	.	.	63
2.00-2.24	.	.	.	.	50	.	.	.	.	.	50
2.25-2.49	.	.	.	.	7	.	.	.	.	.	7
2.50-2.74	.	.	.	.	4	4	.	.	.	.	8
2.75-2.99	.	.	.	.	.	1	.	.	.	.	1
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	1	.	.	.	.	1
TOTAL	1373	1611	921	678	201	6	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 3.5 MEAN TP(SEC)= 3.3 NO. OF CASES= 4489.

STATION M70 45.25N 86.34W 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	
0.00-0.24	574	135	.	.	.	.	.	.	.	.	709
0.25-0.49	51	576	8	.	.	.	.	.	.	.	635
0.50-0.74	.	179	396	9	.	.	.	.	.	.	584
0.75-0.99	.	.	139	75	.	.	.	.	.	.	214
1.00-1.24	.	.	47	119	.	.	.	.	.	.	166
1.25-1.49	.	.	.	60	3	.	.	.	.	.	63
1.50-1.74	.	.	.	38	21	.	.	.	.	.	59
1.75-1.99	.	.	.	1	13	.	.	.	.	.	14
2.00-2.24	.	.	.	.	8	.	.	.	.	.	8
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	1	1	.	.	.	.	2
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	625	890	590	302	47	1	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.3 NO. OF CASES= 2305.

STATION M70 45.25N 86.34W 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	
0.00-0.24	558	142	1	.	.	.	.	.	.	.	701
0.25-0.49	49	638	8	.	.	.	.	.	.	.	695
0.50-0.74	.	172	319	5	.	.	.	.	.	.	496
0.75-0.99	.	.	133	44	.	.	.	.	.	.	177
1.00-1.24	.	.	51	88	.	.	.	.	.	.	139
1.25-1.49	.	.	.	64	1	.	.	.	.	.	65
1.50-1.74	.	.	.	27	1	.	.	.	.	.	28
1.75-1.99	.	.	.	1	3	.	.	.	.	.	4
2.00-2.24	.	.	.	.	3	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	607	952	512	229	8	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.2 NO. OF CASES= 2165.

STATION M70 45.25N 86.34W 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	
0.00-0.24	452	89	.	.	.	.	.	.	.	.	541
0.25-0.49	49	471	4	.	.	.	.	.	.	.	524
0.50-0.74	.	225	222	2	.	.	.	.	.	.	449
0.75-0.99	.	.	118	8	.	.	.	.	.	.	126
1.00-1.24	.	.	82	28	.	.	.	.	.	.	110
1.25-1.49	.	.	4	37	.	.	.	.	.	.	41
1.50-1.74	.	.	.	13	.	.	.	.	.	.	13
1.75-1.99	.	.	.	1	.	.	.	.	.	.	1
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	1	.	.	.	.	.	1
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	501	785	430	89	1	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.3 MEAN TP(SEC)= 3.1 NO. OF CASES= 1696.

STATION M70 45.25N 86.34W 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	
0.00-0.24	612	132	2	.	.	.	.	.	.	.	746
0.25-0.49	64	598	4	.	.	.	.	.	.	.	666
0.50-0.74	.	271	279	1	.	.	.	.	.	.	551
0.75-0.99	.	1	104	4	.	.	.	.	.	.	109
1.00-1.24	.	.	146	6	.	.	.	.	.	.	152
1.25-1.49	.	.	3	38	.	.	.	.	.	.	41
1.50-1.74	.	.	.	12	.	.	.	.	.	.	12
1.75-1.99	.	.	.	2	.	.	.	.	.	.	2
2.00-2.24	.	.	.	.	.	.	.	.	.	.	0
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	676	1002	538	63	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M)= 1.8 MEAN TP(SEC)= 3.0 NO. OF CASES= 2138.

STATION M70 45.25N 86.34W 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	
0.00-0.24	861	248	3	1	.	.	.	.	.	.	1113
0.25-0.49	121	1007	14	.	.	.	.	.	.	.	1142
0.50-0.74	.	505	489	.	1	.	.	.	.	.	995
0.75-0.99	.	.	232	29	.	.	.	.	.	.	261
1.00-1.24	.	.	243	55	.	.	.	.	.	.	298
1.25-1.49	.	.	2	59	6	.	.	.	.	.	67
1.50-1.74	.	.	.	40	2	.	.	.	.	.	42
1.75-1.99	.	.	.	2	1	.	.	.	.	.	3
2.00-2.24	.	.	.	1	2	.	.	.	.	.	3
2.25-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.74	.	.	.	.	.	.	.	.	.	.	0
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	982	1760	983	187	12	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M)= 2.1 MEAN TP(SEC)= 3.1 NO. OF CASES= 3679.

STATION M70 45.25N 86.34W 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	
0.00-0.24	1778	606	17	1	2	.	.	.	.	.	2404
0.25-0.49	222	1781	162	10	.	2	.	.	.	.	2177
0.50-0.74	.	863	1307	174	2	.	.	.	.	.	2346
0.75-0.99	.	4	495	361	11	.	.	.	.	.	871
1.00-1.24	.	.	335	500	59	1	.	.	.	.	895
1.25-1.49	.	.	12	231	115	.	.	.	.	.	358
1.50-1.74	.	.	.	131	127	4	.	.	.	.	262
1.75-1.99	.	.	.	8	74	5	.	.	.	.	87
2.00-2.24	.	.	.	.	63	6	.	.	.	.	69
2.25-2.49	.	.	.	.	17	7	.	.	.	.	24
2.50-2.74	.	.	.	.	4	14	.	.	.	.	18
2.75-2.99	.	.	.	.	.	11	.	.	.	.	11
3.00-3.24	.	.	.	.	.	4	.	.	.	.	4
3.25-3.49	.	.	.	.	.	1	2	.	.	.	3
3.50+							1				1
TOTAL	2000	3254	2328	1416	474	55	3	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M)= 3.8 MEAN TP(SEC)= 3.5 NO. OF CASES= 8927.

STATION M70 45.25N 86.34W 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	
0.00-0.24	1784	1332	722	289	18	.	.	.	.	.	4145
0.25-0.49	318	2741	1522	1240	145	3	.	.	.	.	5969
0.50-0.74	.	1359	2409	1900	566	18	.	.	.	.	6252
0.75-0.99	.	42	770	1107	412	44	1	.	.	.	2376
1.00-1.24	.	.	500	1069	627	89	8	.	.	.	2293
1.25-1.49	.	.	13	452	497	59	13	.	.	.	1034
1.50-1.74	.	.	1	318	534	126	23	3	.	.	1005
1.75-1.99	.	.	.	7	300	97	19	1	.	.	424
2.00-2.24	.	.	.	.	275	98	27	2	.	.	402
2.25-2.49	.	.	.	.	113	65	14	1	.	.	193
2.50-2.74	.	.	.	.	23	144	8	3	1	.	179
2.75-2.99	.	.	.	.	1	75	11	1	.	.	88
3.00-3.24	.	.	.	.	.	54	10	1	.	.	65
3.25-3.49	.	.	.	.	.	24	7	.	.	.	31
3.50+						11	41	1			53
TOTAL	2102	5474	5937	6382	3511	907	182	13	1	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 4.9 MEAN TP(SEC)= 4.3 NO. OF CASES= 22949.

STATION M70 45.25N 86.34W 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	
0.00-0.24	1386	605	44	13	.	.	.	.	.	.	2048
0.25-0.49	289	2057	156	67	9	.	.	.	.	.	2578
0.50-0.74	.	1100	1568	210	65	2	.	.	.	.	2945
0.75-0.99	.	14	762	383	56	7	.	.	.	.	1222
1.00-1.24	.	.	519	796	129	14	1	.	.	.	1459
1.25-1.49	.	.	42	413	238	19	6	.	.	.	718
1.50-1.74	.	.	2	327	313	29	6	1	.	.	678
1.75-1.99	.	.	.	25	199	24	5	1	.	.	254
2.00-2.24	.	.	.	4	193	19	6	1	.	.	223
2.25-2.49	.	.	.	.	84	20	4	.	.	.	108
2.50-2.74	.	.	.	.	29	62	5	.	.	.	96
2.75-2.99	.	.	.	.	2	50	2	.	.	.	54
3.00-3.24	.	.	.	.	.	34	3	.	.	.	37
3.25-3.49	.	.	.	.	.	17	3	.	.	.	20
3.50+						4	32	4			40
TOTAL	1675	3776	3093	2238	1317	301	73	7	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.9 NO. OF CASES= 11695.

STATION M70 45.25N 86.34W 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	
0.00-0.24	702	227	3	.	.	.	.	.	.	.	932
0.25-0.49	142	995	22	2	.	.	.	.	.	.	1161
0.50-0.74	.	639	779	8	1	.	.	.	.	.	1427
0.75-0.99	.	4	576	28	2	.	.	.	.	.	610
1.00-1.24	.	.	839	106	2	.	.	.	.	.	947
1.25-1.49	.	.	62	401	11	1	.	.	.	.	475
1.50-1.74	.	.	2	232	19	.	.	.	.	.	253
1.75-1.99	.	.	.	44	19	.	.	.	.	.	63
2.00-2.24	.	.	.	3	58	4	.	.	.	.	65
2.25-2.49	.	.	.	1	17	1	.	.	.	.	19
2.50-2.74	.	.	.	.	11	.	.	.	.	.	11
2.75-2.99	.	.	.	.	2	2	.	.	.	.	4
3.00-3.24	.	.	.	.	.	2	.	.	.	.	2
3.25-3.49	.	.	.	.	.	1	.	.	.	.	1
3.50+							1				1
TOTAL	844	1865	2283	825	142	11	1	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 3.6 MEAN TP(SEC)= 3.6 NO. OF CASES= 5596.

STATION M70 45.25N 86.34W 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	
0.00-0.24	572	201	1	.	.	.	.	.	.	.	774
0.25-0.49	106	829	23	.	.	.	.	.	.	.	958
0.50-0.74	.	394	562	.	.	.	.	.	.	.	956
0.75-0.99	.	2	385	7	.	.	.	.	.	.	394
1.00-1.24	.	.	648	70	.	.	.	.	.	.	718
1.25-1.49	.	.	38	334	.	.	.	.	.	.	372
1.50-1.74	.	.	.	197	.	.	.	.	.	.	197
1.75-1.99	.	.	.	34	8	.	.	.	.	.	42
2.00-2.24	.	.	.	1	26	.	.	.	.	.	27
2.25-2.49	.	.	.	.	7	.	.	.	.	.	7
2.50-2.74	.	.	.	.	3	.	.	.	.	.	3
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	678	1426	1657	643	44	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.7 MEAN TP(SEC)= 3.5 NO. OF CASES= 4168.

STATION M70 45.25N 86.34W 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	
0.00-0.24	381	142	2	.	.	.	.	.	.	.	525
0.25-0.49	84	679	25	.	.	.	.	.	.	.	788
0.50-0.74	.	360	568	7	.	.	.	.	.	.	935
0.75-0.99	.	.	374	6	.	.	.	.	.	.	380
1.00-1.24	.	.	625	38	.	.	.	.	.	.	663
1.25-1.49	.	.	21	339	.	.	.	.	.	.	360
1.50-1.74	.	.	.	204	.	.	.	.	.	.	204
1.75-1.99	.	.	.	35	1	.	.	.	.	.	36
2.00-2.24	.	.	.	3	23	.	.	.	.	.	26
2.25-2.49	.	.	.	.	4	.	.	.	.	.	4
2.50-2.74	.	.	.	.	1	.	.	.	.	.	1
2.75-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	465	1181	1615	632	29	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M)= 2.5 MEAN TP(SEC)= 3.6 NO. OF CASES= 3675.

STATION M70 45.25N 86.34W 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	
0.00-0.24	444	119	2	.	.	.	.	.	.	.	565
0.25-0.49	48	553	27	.	.	.	.	.	.	.	628
0.50-0.74	.	302	550	13	.	.	.	.	.	.	865
0.75-0.99	.	3	346	20	.	.	.	.	.	.	369
1.00-1.24	.	.	756	21	.	.	.	.	.	.	777
1.25-1.49	.	.	26	376	.	.	.	.	.	.	402
1.50-1.74	.	.	.	209	3	.	.	.	.	.	212
1.75-1.99	.	.	.	32	4	.	.	.	.	.	36
2.00-2.24	.	.	.	1	29	.	.	.	.	.	30
2.25-2.49	.	.	.	.	9	.	.	.	.	.	9
2.50-2.74	.	.	.	.	8	.	.	.	.	.	8
2.75-2.99	.	.	.	.	5	.	.	.	.	.	5
3.00-3.24	.	.	.	.	.	.	.	.	.	.	0
3.25-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	492	977	1707	672	58	0	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 2.9 MEAN TP(SEC)= 3.7 NO. OF CASES= 3664.

STATION M70 45.25N 86.34W AZIMUTH(DEGREES) =337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

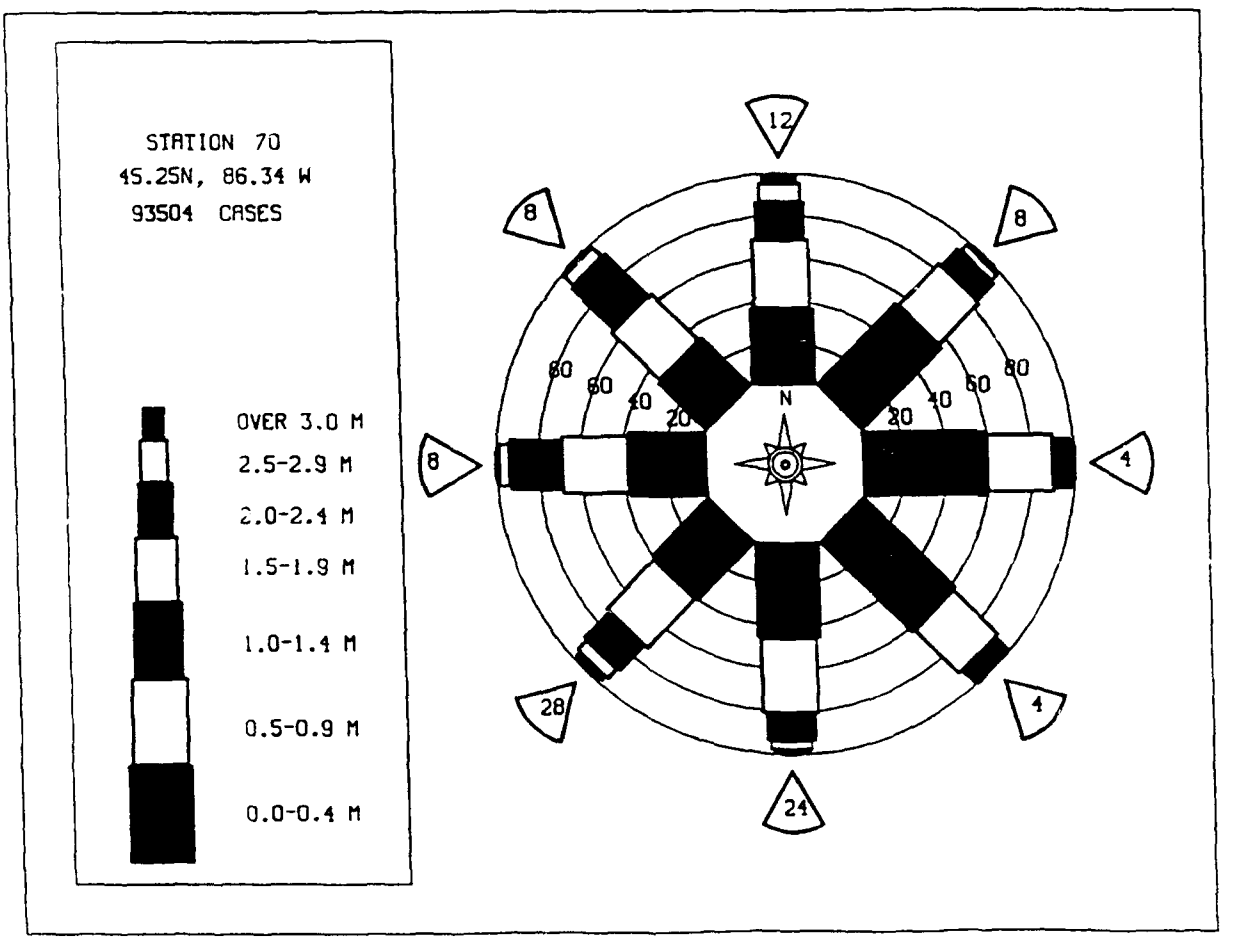
HEIGHT(METRES)	PEAK PERIOD(SECONDS)										TOTAL
	<3.0	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0-7.9	8.0-8.9	9.0-9.9	10.0-10.9	11.0-LONGER	
0.00-0.24	643	164	.	.	.	.	.	.	.	.	807
0.25-0.49	97	822	25	.	.	.	.	.	.	.	944
0.50-0.74	.	341	697	20	.	.	.	.	.	.	1058
0.75-0.99	.	1	340	114	.	.	.	.	.	.	455
1.00-1.24	.	.	546	224	2	.	.	.	.	.	772
1.25-1.49	.	.	22	345	3	.	.	.	.	.	370
1.50-1.74	.	.	.	322	34	.	.	.	.	.	356
1.75-1.99	.	.	.	36	65	.	.	.	.	.	101
2.00-2.24	.	.	.	4	99	.	.	.	.	.	103
2.25-2.49	.	.	.	.	28	.	.	.	.	.	28
2.50-2.74	.	.	.	.	14	4	.	.	.	.	18
2.75-2.99	.	.	.	.	1	8	.	.	.	.	9
3.00-3.24	.	.	.	.	.	6	.	.	.	.	6
3.25-3.49	.	.	.	.	.	4	.	.	.	.	4
3.50+	.	.	.	.	.	3	2	.	.	.	5
TOTAL	740	1328	1630	1065	246	25	2	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M)= 4.0 MEAN TP(SEC)= 3.8 NO. OF CASES= 4721.

STATION M70 45.25N 86.34W 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	
0.00-0.24	1398	478	81	30	2	.	.	.	.	.	1989
0.25-0.49	199	1701	207	132	15	.	.	.	.	.	2254
0.50-0.74	.	786	1257	241	63	2	.	.	.	.	2349
0.75-0.99	.	7	572	295	48	5	.	.	.	.	927
1.00-1.24	.	.	575	449	82	10	.	.	.	.	1116
1.25-1.49	.	.	26	388	91	8	2	.	.	.	515
1.50-1.74	.	.	.	274	125	16	2	.	.	.	417
1.75-1.99	.	.	.	24	103	12	2	.	.	.	141
2.00-2.24	.	.	.	1	107	12	3	.	.	.	123
2.25-2.49	.	.	.	.	38	9	1	.	.	.	48
2.50-2.74	.	.	.	.	15	26	1	.	.	.	42
2.75-2.99	.	.	.	.	1	17	1	.	.	.	19
3.00-3.24	.	.	.	.	.	12	1	.	.	.	13
3.25-3.49	.	.	.	.	.	5	1	.	.	.	6
3.50+	.	.	.	.	.	2	8	.	.	.	10
TOTAL	1597	2972	2718	1834	690	136	22	0	0	0	

MEAN HS(M)= 0.7 LARGEST HS(M)= 5.3 MEAN TP(SEC)= 3.8 TOTAL CASES= 93504.



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION M70 (45.25N 86.34W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	0.6	0.6	0.6	0.6	0.5	0.3	0.3	0.3	0.6	0.8	0.9	0.9	0.6
1957	1.0	0.8	0.6	0.6	0.5	0.5	0.4	0.4	0.6	0.7	1.2	1.1	0.7
1958	0.8	0.9	0.3	0.5	0.5	0.4	0.4	0.5	0.8	0.7	1.0	0.9	0.7
1959	0.9	0.9	0.6	0.5	0.6	0.4	0.4	0.5	0.8	0.7	0.8	0.9	0.7
1960	0.8	0.9	0.5	0.6	0.4	0.4	0.4	0.6	0.6	0.6	1.0	1.2	0.7
1961	0.8	0.7	0.8	0.5	0.5	0.5	0.3	0.4	0.7	0.8	0.9	0.9	0.7
1962	1.1	0.7	0.4	0.7	0.6	0.4	0.3	0.4	0.7	0.6	0.7	1.0	0.6
1963	0.9	0.9	0.7	0.7	0.5	0.4	0.4	0.4	0.5	0.6	0.9	0.8	0.6
1964	1.1	1.2	0.9	0.8	0.6	0.5	0.4	0.6	0.7	0.8	0.9	0.9	0.8
1965	1.0	1.2	0.7	0.5	0.5	0.4	0.4	0.5	0.7	0.9	0.9	1.0	0.7
1966	0.9	0.8	0.8	0.5	0.5	0.5	0.5	0.6	0.6	1.1	1.1	0.8	0.7
1967	1.1	1.1	0.8	0.7	0.5	0.4	0.4	0.5	0.6	0.8	0.9	0.8	0.7
1968	0.9	0.9	0.8	0.6	0.4	0.4	0.5	0.6	0.6	0.9	0.7	1.0	0.7
1969	0.9	0.7	0.7	0.6	0.5	0.5	0.3	0.6	0.6	0.8	0.7	0.9	0.6
1970	0.8	1.0	0.5	0.7	0.5	0.5	0.4	0.5	0.7	0.8	0.8	0.9	0.7
1971	1.0	1.1	0.7	0.5	0.5	0.4	0.5	0.5	0.6	0.7	0.9	0.8	0.7
1972	1.2	0.8	0.7	0.4	0.3	0.5	0.4	0.5	0.7	0.9	0.7	0.8	0.6
1973	1.0	0.8	0.7	0.6	0.4	0.4	0.4	0.6	0.6	0.7	0.8	0.9	0.7
1974	0.8	0.8	0.7	0.6	0.4	0.5	0.4	0.5	0.7	0.8	0.8	0.8	0.7
1975	1.0	0.8	0.7	0.5	0.4	0.4	0.4	0.5	0.6	0.9	0.9	0.8	0.6
1976	1.0	1.0	0.9	0.6	0.5	0.4	0.4	0.5	0.7	0.6	0.8	0.9	0.7
1977	0.9	1.0	0.6	0.5	0.4	0.4	0.5	0.6	0.6	0.8	0.8	0.8	0.6
1978	1.0	0.6	0.6	0.5	0.5	0.4	0.4	0.5	0.7	0.8	0.8	0.9	0.6
1979	0.8	0.7	0.6	0.5	0.4	0.4	0.4	0.5	0.7	1.4	1.6	1.5	0.8
1980	0.8	0.6	0.7	0.4	0.3	0.5	0.5	0.8	1.3	1.6	1.7	0.9	0.8
1981	0.6	0.9	0.7	0.6	0.5	0.5	0.5	0.6	1.0	1.1	1.1	0.7	0.7
1982	0.9	0.7	0.7	0.6	0.4	0.4	0.5	0.7	1.2	1.2	1.3	0.8	0.8
1983	0.8	0.7	0.6	0.5	0.3	0.3	0.4	0.6	1.2	1.1	1.2	0.7	0.7
1984	0.8	0.8	0.6	0.5	0.5	0.5	0.6	0.7	1.3	1.2	1.8	0.9	0.8
1985	0.8	0.8	0.8	0.7	0.5	0.3	0.5	0.4	0.6	0.6	0.6	0.8	0.6
1986	1.0	0.5	0.7	0.5	0.3	0.3	0.3	0.4	0.4	0.6	0.9	0.7	0.6
1987	0.8	0.7	0.6	0.4	0.3	0.3	0.3	0.5	0.5	0.8	0.7	0.8	0.6
MEAN	0.9	0.8	0.7	0.6	0.5	0.4	0.4	0.5	0.7	0.9	1.0	0.9	

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION M70 (45.25N 86.34W)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.0	2.2	3.0	2.2	1.9	1.4	1.4	1.1	1.8	2.8	3.1	3.5
1957	3.3	2.6	3.1	3.6	2.8	2.1	1.8	1.9	2.5	2.5	4.1	3.7
1958	3.5	2.4	1.2	2.9	3.1	2.4	2.2	1.9	2.8	2.3	4.9	2.3
1959	2.5	3.4	2.7	2.3	1.9	1.8	1.7	1.8	3.0	2.6	2.3	2.9
1960	2.5	2.6	2.2	1.8	1.5	1.3	1.7	2.3	1.9	2.4	3.0	3.7
1961	2.7	2.1	2.8	1.8	1.3	1.4	1.2	1.8	1.9	2.8	2.6	3.0
1962	3.2	1.8	1.6	2.3	2.2	1.4	1.3	1.6	2.0	2.1	3.1	3.0
1963	2.7	2.4	2.5	3.6	1.7	1.8	1.2	1.9	1.9	2.0	2.3	3.3
1964	3.5	3.9	2.3	3.6	2.3	1.9	1.1	2.0	3.1	2.6	3.3	2.0
1965	2.9	3.4	2.0	1.9	1.7	1.3	1.3	1.5	2.4	2.4	2.9	3.3
1966	2.5	1.9	3.4	1.5	1.4	1.3	1.4	1.6	1.6	3.7	3.9	2.6
1967	3.3	3.0	2.0	2.3	1.8	1.2	1.2	2.3	2.0	2.1	2.5	2.0
1968	2.3	2.5	2.0	2.9	1.7	1.4	1.7	2.2	1.7	2.1	2.1	3.2
1969	2.0	2.0	2.0	1.5	1.2	2.5	1.4	2.5	1.9	2.3	2.0	2.7
1970	2.1	2.8	1.7	2.3	2.3	1.3	1.5	1.5	2.4	2.5	3.1	2.9
1971	3.6	5.0	2.2	1.7	1.5	1.1	1.5	2.1	2.7	3.2	2.7	2.3
1972	3.3	2.2	1.9	1.2	1.2	1.4	1.2	1.5	2.3	2.5	1.9	2.4
1973	2.8	2.0	3.1	1.7	1.3	1.7	1.6	1.5	2.1	2.7	2.3	2.1
1974	3.3	2.7	2.3	1.7	1.4	1.0	1.3	1.9	2.6	2.0	1.9	2.4
1975	5.3	2.0	2.0	1.8	1.6	1.4	1.2	1.8	1.6	2.7	3.1	2.6
1976	2.8	3.4	2.8	1.5	2.1	1.6	1.4	2.3	2.4	2.2	1.9	2.8
1977	2.4	2.6	3.0	1.6	1.5	1.2	1.4	2.6	2.2	2.3	3.5	2.3
1978	4.0	2.1	1.8	1.4	2.3	1.6	1.1	1.6	2.2	2.4	2.9	2.5
1979	2.3	1.7	1.8	1.5	1.3	1.5	1.2	1.2	2.1	3.7	4.5	4.3
1980	3.3	2.7	1.9	1.4	1.3	1.8	1.9	2.0	4.3	4.1	4.5	4.1
1981	1.7	2.3	2.0	1.8	2.5	3.0	1.9	1.9	3.6	4.3	3.5	2.0
1982	3.0	2.1	3.1	1.8	1.1	1.2	2.0	2.2	2.7	3.1	3.2	2.6
1983	2.8	2.2	1.8	2.3	1.0	0.9	1.5	2.2	3.3	3.2	3.6	2.1
1984	2.4	2.8	2.3	2.2	2.1	2.1	2.3	2.7	3.6	4.1	4.2	3.8
1985	2.2	2.7	2.8	2.8	2.0	1.8	3.0	1.4	1.8	2.3	2.2	2.3
1986	3.4	2.0	2.3	1.6	1.8	1.5	1.8	1.5	1.7	2.7	3.0	2.8
1987	1.9	3.5	2.1	1.7	1.3	1.3	1.6	1.7	1.7	2.8	2.1	2.8

32 YR. STATISTICS FOR WIS STATION M70

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.8
MOST FREQUENT 22.5 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	202.5
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.2
LARGEST WAVE HS	(METERS)	5.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	219.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		75011118

APPENDIX B

RETURN PERIOD TABLES

Station 1 (41.81N , 87.38W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.0(0.03)	3.4(0.06)	4.9(0.10)	4.9(0.10)
5.00	2.2(0.04)	3.7(0.09)	5.3(0.14)	5.3(0.14)
10.00	2.3(0.05)	3.9(0.11)	5.6(0.17)	5.7(0.17)
20.00	2.4(0.06)	4.1(0.13)	6.0(0.21)	6.0(0.20)
50.00	2.5(0.07)	4.4(0.16)	6.4(0.25)	6.4(0.24)

Station 2 (41.95N , 87.55W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.3(0.03)	3.6(0.07)	5.0(0.10)	5.1(0.10)
5.00	2.4(0.05)	3.9(0.10)	5.5(0.14)	5.5(0.14)
10.00	2.5(0.06)	4.1(0.12)	5.8(0.17)	5.8(0.17)
20.00	2.6(0.07)	4.3(0.14)	6.1(0.20)	6.1(0.20)
50.00	2.8(0.08)	4.6(0.17)	6.5(0.24)	6.5(0.24)

Station 3 (42.10N , 87.55W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.5(0.04)	3.5(0.07)	4.9(0.10)	5.0(0.09)
5.00	2.6(0.05)	3.8(0.09)	5.4(0.13)	5.4(0.13)
10.00	2.8(0.06)	4.0(0.11)	5.7(0.16)	5.7(0.16)
20.00	2.9(0.07)	4.2(0.13)	6.0(0.19)	6.0(0.18)
50.00	3.0(0.09)	4.5(0.16)	6.4(0.23)	6.3(0.22)

Station 4 (42.25N , 87.73W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.4(0.05)	3.0(0.07)	5.0(0.09)	5.0(0.09)
5.00	2.6(0.07)	3.3(0.10)	5.4(0.12)	5.4(0.12)
10.00	2.8(0.08)	3.6(0.12)	5.7(0.15)	5.6(0.15)
20.00	2.9(0.10)	3.8(0.14)	5.9(0.18)	5.9(0.18)
50.00	3.1(0.12)	4.1(0.17)	6.3(0.22)	6.3(0.22)

Station 5 (42.35N , 87.73W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.6(0.04)	3.0(0.05)	4.9(0.09)	4.9(0.09)
5.00	2.8(0.06)	3.2(0.08)	5.3(0.13)	5.3(0.13)
10.00	2.9(0.07)	3.4(0.09)	5.6(0.15)	5.6(0.15)
20.00	3.0(0.08)	3.5(0.11)	5.9(0.18)	5.9(0.18)
50.00	3.2(0.10)	3.8(0.13)	6.3(0.22)	6.3(0.22)

Station 6 (42.54N , 87.73W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.8(0.03)	3.1(0.05)	5.1(0.10)	5.1(0.10)
5.00	2.9(0.05)	3.3(0.07)	5.5(0.13)	5.5(0.13)
10.00	3.0(0.06)	3.5(0.09)	5.8(0.16)	5.8(0.16)
20.00	3.1(0.07)	3.7(0.11)	6.1(0.19)	6.1(0.19)
50.00	3.3(0.08)	3.9(0.13)	6.5(0.24)	6.5(0.23)

Station 7 (42.68N , 87.72W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.1(0.04)	3.2(0.05)	5.2(0.11)	5.2(0.11)
5.00	3.3(0.05)	3.4(0.07)	5.7(0.15)	5.7(0.15)
10.00	3.4(0.07)	3.6(0.09)	6.0(0.18)	6.0(0.18)
20.00	3.5(0.08)	3.7(0.10)	6.3(0.22)	6.3(0.22)
50.00	3.7(0.10)	3.9(0.12)	6.8(0.26)	6.8(0.26)

Station 8 (42.83N , 87.70W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.4(0.04)	4.0(0.08)	5.0(0.10)	5.2(0.11)
5.00	3.5(0.05)	4.3(0.11)	5.4(0.14)	5.7(0.16)
10.00	3.7(0.06)	4.6(0.14)	5.7(0.17)	6.0(0.19)
20.00	3.8(0.08)	4.8(0.16)	6.1(0.20)	6.4(0.22)
50.00	3.9(0.09)	5.1(0.19)	6.5(0.24)	6.8(0.27)

Station 9 (42.98N , 87.70W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.6(0.04)	3.9(0.09)	4.8(0.10)	5.0(0.10)
5.00	3.8(0.06)	4.3(0.12)	5.3(0.13)	5.4(0.14)
10.00	4.0(0.07)	4.5(0.15)	5.6(0.16)	5.7(0.17)
20.00	4.1(0.09)	4.8(0.17)	5.9(0.19)	6.1(0.21)
50.00	4.3(0.11)	5.1(0.21)	6.3(0.23)	6.5(0.25)

Station 10 (43.12N , 87.68W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.8(0.05)	3.3(0.05)	4.8(0.10)	4.8(0.10)
5.00	4.0(0.07)	3.5(0.07)	5.3(0.14)	5.3(0.14)
10.00	4.2(0.09)	3.7(0.09)	5.6(0.17)	5.6(0.17)
20.00	4.3(0.10)	3.8(0.11)	5.9(0.20)	5.9(0.20)
50.00	4.5(0.12)	4.1(0.13)	6.3(0.25)	6.3(0.24)

Station 11 (43.27N , 87.68W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.0(0.06)	3.0(0.05)	4.5(0.10)	4.6(0.09)
5.00	4.2(0.08)	3.2(0.07)	4.9(0.13)	5.0(0.13)
10.00	4.4(0.10)	3.4(0.08)	5.2(0.16)	5.3(0.15)
20.00	4.6(0.12)	3.5(0.10)	5.5(0.19)	5.6(0.18)
50.00	4.8(0.15)	3.7(0.12)	5.9(0.23)	6.0(0.22)

Station 12 (43.42N , 87.67W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.0(0.06)	4.3(0.10)	3.3(0.06)	4.5(0.09)
5.00	4.3(0.08)	4.8(0.14)	3.6(0.08)	4.9(0.12)
10.00	4.4(0.10)	5.1(0.17)	3.8(0.10)	5.2(0.15)
20.00	4.6(0.12)	5.4(0.20)	4.0(0.12)	5.4(0.17)
50.00	4.9(0.15)	5.8(0.25)	4.2(0.15)	5.8(0.21)

Station 13 (43.55N , 87.67W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.0(0.07)	2.7(0.05)	4.0(0.08)	4.3(0.08)
5.00	4.3(0.09)	2.9(0.07)	4.4(0.12)	4.6(0.11)
10.00	4.5(0.12)	3.1(0.08)	4.6(0.14)	4.9(0.13)
20.00	4.7(0.14)	3.2(0.10)	4.9(0.17)	5.1(0.15)
50.00	5.0(0.16)	3.4(0.12)	5.2(0.20)	5.4(0.18)

Station 14 (43.70N , 87.66W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.9(0.07)	2.6(0.04)	3.8(0.07)	4.1(0.07)
5.00	4.2(0.10)	2.8(0.06)	4.1(0.10)	4.4(0.10)
10.00	4.5(0.13)	2.9(0.07)	4.3(0.12)	4.7(0.12)
20.00	4.7(0.15)	3.1(0.08)	4.5(0.15)	4.9(0.14)
50.00	5.0(0.18)	3.2(0.10)	4.8(0.18)	5.2(0.17)

Station 15 (43.85N , 87.65W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.9(0.08)	2.5(0.04)	3.7(0.07)	4.1(0.06)
5.00	4.2(0.11)	2.7(0.06)	4.0(0.10)	4.4(0.09)
10.00	4.5(0.13)	2.8(0.07)	4.3(0.12)	4.6(0.11)
20.00	4.7(0.15)	2.9(0.08)	4.5(0.14)	4.8(0.13)
50.00	5.0(0.18)	3.1(0.10)	4.8(0.17)	5.0(0.16)

Station 16 (43.98N , 87.64W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.9(0.08)	2.4(0.05)	4.0(0.08)	4.2(0.07)
5.00	4.2(0.11)	2.7(0.07)	4.3(0.12)	4.5(0.10)
10.00	4.4(0.13)	2.8(0.08)	4.6(0.14)	4.8(0.12)
20.00	4.7(0.16)	3.0(0.10)	4.8(0.17)	5.0(0.15)
50.00	5.0(0.19)	3.2(0.12)	5.2(0.20)	5.3(0.18)

Station 17 (44.13N , 87.43W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.1(0.08)	2.3(0.05)	3.8(0.07)	4.3(0.08)
5.00	4.5(0.12)	2.5(0.07)	4.1(0.10)	4.6(0.10)
10.00	4.8(0.14)	2.7(0.08)	4.3(0.12)	4.9(0.13)
20.00	5.0(0.17)	2.8(0.10)	4.5(0.14)	5.1(0.15)
50.00	5.4(0.21)	3.0(0.12)	4.8(0.17)	5.4(0.18)

Station 18 (44.27N , 87.43W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.1(0.09)	3.5(0.08)	3.5(0.09)	4.3(0.07)
5.00	4.5(0.12)	3.9(0.11)	3.9(0.13)	4.6(0.10)
10.00	4.7(0.15)	4.1(0.13)	4.2(0.16)	4.8(0.12)
20.00	5.0(0.17)	4.4(0.16)	4.5(0.19)	5.0(0.14)
50.00	5.4(0.21)	4.7(0.19)	4.9(0.22)	5.3(0.17)

Station 19 (44.41N , 87.42W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.2(0.10)	2.4(0.05)	3.8(0.07)	4.3(0.08)
5.00	4.6(0.13)	2.7(0.07)	4.1(0.10)	4.7(0.11)
10.00	4.9(0.16)	2.8(0.09)	4.3(0.12)	4.9(0.13)
20.00	5.2(0.19)	3.0(0.10)	4.5(0.14)	5.2(0.16)
50.00	5.6(0.23)	3.2(0.12)	4.8(0.17)	5.5(0.19)

Station 20 (44.55N , 87.22W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.2(0.11)	2.0(0.04)	3.4(0.06)	4.3(0.10)
5.00	4.7(0.15)	2.2(0.06)	3.7(0.08)	4.7(0.14)
10.00	5.0(0.18)	2.3(0.07)	3.9(0.10)	5.0(0.17)
20.00	5.3(0.21)	2.5(0.08)	4.0(0.11)	5.3(0.20)
50.00	5.8(0.26)	2.6(0.10)	4.3(0.14)	5.6(0.24)

Station 21 (44.70N , 87.20W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.1(0.11)	2.0(0.04)	3.3(0.06)	4.1(0.10)
5.00	4.5(0.15)	2.2(0.05)	3.6(0.08)	4.5(0.14)
10.00	4.8(0.18)	2.3(0.07)	3.8(0.10)	4.8(0.17)
20.00	5.1(0.21)	2.4(0.08)	4.0(0.12)	5.1(0.20)
50.00	5.5(0.26)	2.5(0.09)	4.2(0.14)	5.5(0.24)

Station 22 (44.83N , 87.18W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.1(0.11)	2.1(0.04)	3.2(0.06)	4.1(0.10)
5.00	4.5(0.15)	2.3(0.05)	3.4(0.08)	4.5(0.14)
10.00	4.8(0.19)	2.4(0.07)	3.6(0.10)	4.8(0.18)
20.00	5.1(0.22)	2.5(0.08)	3.8(0.11)	5.1(0.21)
50.00	5.6(0.26)	2.7(0.09)	4.0(0.14)	5.5(0.25)

Station 23 (44.98N , 86.98W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.9(0.10)	1.9(0.04)	2.9(0.06)	4.0(0.10)
5.00	4.3(0.13)	2.0(0.05)	3.1(0.08)	4.4(0.14)
10.00	4.6(0.16)	2.1(0.06)	3.3(0.10)	4.7(0.17)
20.00	4.9(0.19)	2.2(0.07)	3.5(0.11)	5.0(0.20)
50.00	5.3(0.23)	2.4(0.09)	3.7(0.14)	5.4(0.24)

Station 24 (45.13N , 86.97W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.8(0.08)	2.1(0.04)	2.8(0.06)	3.9(0.08)
5.00	4.2(0.12)	2.3(0.06)	3.1(0.09)	4.3(0.12)
10.00	4.5(0.14)	2.4(0.07)	3.3(0.11)	4.5(0.14)
20.00	4.7(0.17)	2.5(0.08)	3.5(0.13)	4.8(0.17)
50.00	5.1(0.20)	2.7(0.10)	3.7(0.15)	5.1(0.20)

Station 25 (45.27N , 86.75W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.0(0.09)	2.1(0.05)	2.7(0.06)	4.0(0.09)
5.00	4.4(0.12)	2.3(0.06)	2.9(0.08)	4.4(0.12)
10.00	4.7(0.15)	2.4(0.08)	3.0(0.09)	4.7(0.15)
20.00	4.9(0.17)	2.6(0.09)	3.2(0.11)	5.0(0.17)
50.00	5.3(0.21)	2.8(0.11)	3.4(0.13)	5.3(0.21)

Station 26 (45.40N , 86.75W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.0(0.09)	2.0(0.04)	2.4(0.05)	4.0(0.08)
5.00	4.3(0.12)	2.2(0.06)	2.6(0.07)	4.4(0.12)
10.00	4.6(0.14)	2.3(0.07)	2.8(0.08)	4.6(0.14)
20.00	4.9(0.17)	2.5(0.08)	2.9(0.10)	4.9(0.17)
50.00	5.3(0.21)	2.7(0.10)	3.1(0.12)	5.3(0.21)

Station 27 (45.53N , 86.53W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.2(0.04)	4.1(0.09)	2.3(0.04)	4.1(0.08)
5.00	2.4(0.06)	4.5(0.12)	2.4(0.06)	4.5(0.12)
10.00	2.5(0.08)	4.8(0.15)	2.6(0.07)	4.8(0.14)
20.00	2.7(0.09)	5.0(0.17)	2.7(0.09)	5.0(0.17)
50.00	2.9(0.11)	5.4(0.21)	2.8(0.10)	5.4(0.21)

Station 28 (45.68N , 86.31W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.1(0.07)	3.9(0.07)	2.0(0.04)	3.9(0.07)
5.00	3.4(0.10)	4.2(0.10)	2.2(0.05)	4.2(0.10)
10.00	3.6(0.12)	4.5(0.13)	2.3(0.06)	4.5(0.12)
20.00	3.8(0.14)	4.7(0.15)	2.4(0.08)	4.7(0.14)
50.00	4.1(0.17)	5.0(0.18)	2.6(0.09)	5.0(0.17)

Station 29 (45.82N , 86.10W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.6(0.06)	3.9(0.07)	1.8(0.03)	3.9(0.07)
5.00	2.8(0.08)	4.2(0.10)	2.0(0.04)	4.2(0.10)
10.00	3.0(0.09)	4.4(0.12)	2.0(0.05)	4.4(0.12)
20.00	3.2(0.11)	4.7(0.15)	2.1(0.06)	4.7(0.14)
50.00	3.4(0.13)	5.0(0.18)	2.3(0.07)	4.9(0.17)

Station 30 (45.80N , 85 90W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.5(0.08)	3.8(0.08)	1.6(0.02)	4.0(0.08)
5.00	3.9(0.11)	4.1(0.11)	1.7(0.03)	4.3(0.11)
10.00	4.2(0.14)	4.4(0.14)	1.8(0.04)	4.6(0.13)
20.00	4.4(0.16)	4.6(0.16)	1.8(0.05)	4.8(0.16)
50.00	4.8(0.20)	5.0(0.19)	1.9(0.06)	5.2(0.19)

Station 31 (45.65N , 85.70W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.0(0.04)	2.5(0.04)	4.2(0.08)	4.2(0.08)
5.00	2.1(0.05)	2.7(0.05)	4.5(0.11)	4.5(0.11)
10.00	2.2(0.06)	2.8(0.07)	4.8(0.14)	4.8(0.14)
20.00	2.3(0.07)	2.9(0.08)	5.0(0.17)	5.0(0.17)
50.00	2.5(0.09)	3.1(0.10)	5.4(0.20)	5.4(0.20)

Station 32 (45.50N , 85.50W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	1.5(0.03)	2.5(0.05)	4.1(0.09)	4.1(0.08)
5.00	1.6(0.04)	2.8(0.06)	4.4(0.12)	4.4(0.12)
10.00	1.6(0.04)	2.9(0.08)	4.7(0.14)	4.7(0.14)
20.00	1.7(0.05)	3.0(0.09)	5.0(0.17)	5.0(0.17)
50.00	1.8(0.06)	3.2(0.11)	5.3(0.21)	5.3(0.21)

Station 33 (45.48N , 85.30W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	1.4(0.03)	2.0(0.03)	3.8(0.09)	3.8(0.09)
5.00	1.5(0.04)	2.2(0.05)	4.2(0.13)	4.2(0.13)
10.00	1.6(0.05)	2.3(0.06)	4.5(0.15)	4.5(0.15)
20.00	1.7(0.06)	2.4(0.07)	4.8(0.18)	4.8(0.18)
50.00	1.9(0.08)	2.5(0.08)	5.1(0.22)	5.1(0.22)

Station 34 (45.35N , 85.53W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.4(0.05)	3.0(0.05)	4.1(0.10)	4.1(0.09)
5.00	2.7(0.07)	3.2(0.07)	4.5(0.13)	4.5(0.13)
10.00	2.8(0.09)	3.4(0.08)	4.8(0.16)	4.8(0.16)
20.00	3.0(0.10)	3.5(0.10)	5.1(0.19)	5.1(0.18)
50.00	3.2(0.12)	3.7(0.11)	5.5(0.23)	5.4(0.22)

Station 35 (45.23N , 85.73W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.9(0.06)	3.2(0.05)	4.1(0.09)	4.1(0.08)
5.00	3.2(0.09)	3.4(0.07)	4.5(0.12)	4.5(0.11)
10.00	3.4(0.11)	3.6(0.09)	4.8(0.15)	4.8(0.14)
20.00	3.6(0.13)	3.8(0.11)	5.1(0.18)	5.0(0.16)
50.00	3.9(0.16)	4.0(0.13)	5.4(0.22)	5.3(0.20)

Station 36 (45.23N , 85.93W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.3(0.08)	3.0(0.05)	4.3(0.08)	4.3(0.07)
5.00	3.6(0.10)	3.3(0.08)	4.6(0.11)	4.6(0.10)
10.00	3.8(0.13)	3.5(0.09)	4.9(0.13)	4.9(0.12)
20.00	4.1(0.15)	3.6(0.11)	5.1(0.16)	5.1(0.15)
50.00	4.4(0.18)	3.8(0.13)	5.4(0.19)	5.4(0.17)

Station 37 (45.23N , 86.15W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.4(0.07)	2.9(0.05)	4.4(0.08)	4.4(0.07)
5.00	3.7(0.09)	3.1(0.07)	4.7(0.11)	4.7(0.10)
10.00	3.9(0.11)	3.3(0.09)	5.0(0.13)	4.9(0.12)
20.00	4.1(0.13)	3.5(0.11)	5.2(0.15)	5.2(0.15)
50.00	4.4(0.16)	3.7(0.13)	5.5(0.19)	5.5(0.18)

Station 38 (45.09N , 86.15W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.7(0.08)	3.2(0.06)	4.2(0.08)	4.4(0.07)
5.00	4.1(0.12)	3.5(0.09)	4.6(0.11)	4.7(0.10)
10.00	4.3(0.14)	3.7(0.10)	4.8(0.13)	4.9(0.12)
20.00	4.6(0.17)	3.9(0.12)	5.1(0.16)	5.1(0.14)
50.00	4.9(0.21)	4.1(0.15)	5.4(0.19)	5.4(0.17)

Station 39 (44.95N , 86.17W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.0(0.09)	3.3(0.06)	4.2(0.09)	4.5(0.08)
5.00	4.3(0.12)	3.5(0.08)	4.6(0.13)	4.8(0.12)
10.00	4.6(0.15)	3.7(0.10)	4.9(0.16)	5.1(0.14)
20.00	4.9(0.18)	3.9(0.12)	5.2(0.18)	5.4(0.17)
50.00	5.3(0.22)	4.2(0.14)	5.5(0.22)	5.7(0.20)

Station 40 (44.80N , 86.18W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.0(0.04)	4.2(0.10)	3.9(0.09)	4.5(0.09)
5.00	2.2(0.06)	4.6(0.13)	4.3(0.12)	4.8(0.12)
10.00	2.4(0.08)	4.9(0.16)	4.6(0.15)	5.1(0.15)
20.00	2.5(0.09)	5.2(0.19)	4.8(0.17)	5.4(0.18)
50.00	2.7(0.11)	5.6(0.23)	5.2(0.21)	5.8(0.21)

Station 41 (44.67N , 86.40W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.4(0.10)	3.0(0.04)	4.1(0.11)	4.7(0.10)
5.00	4.8(0.14)	3.2(0.06)	4.6(0.15)	5.2(0.14)
10.00	5.1(0.17)	3.3(0.08)	4.9(0.18)	5.5(0.17)
20.00	5.5(0.21)	3.5(0.09)	5.2(0.21)	5.8(0.20)
50.00	5.9(0.25)	3.7(0.11)	5.7(0.26)	6.2(0.25)

Station 42 (44.53N , 86.40W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.5(0.11)	2.8(0.04)	4.0(0.10)	4.8(0.11)
5.00	4.9(0.16)	3.0(0.06)	4.4(0.14)	5.2(0.15)
10.00	5.3(0.19)	3.1(0.07)	4.7(0.17)	5.6(0.18)
20.00	5.7(0.23)	3.3(0.08)	5.0(0.20)	5.9(0.22)
50.00	6.1(0.27)	3.4(0.10)	5.4(0.24)	6.3(0.26)

Station 43 (44.38N , 86.41W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.4(0.12)	3.0(0.04)	4.0(0.11)	4.7(0.11)
5.00	4.9(0.16)	3.2(0.06)	4.5(0.15)	5.2(0.16)
10.00	5.3(0.20)	3.3(0.07)	4.8(0.18)	5.6(0.20)
20.00	5.7(0.24)	3.4(0.08)	5.1(0.22)	6.0(0.23)
50.00	6.1(0.28)	3.6(0.10)	5.5(0.26)	6.4(0.28)

Station 44 (44.23N , 86.43W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.5(0.12)	3.1(0.04)	4.0(0.12)	4.9(0.12)
5.00	5.1(0.17)	3.3(0.05)	4.5(0.16)	5.4(0.17)
10.00	5.5(0.21)	3.4(0.07)	4.8(0.20)	5.8(0.21)
20.00	5.8(0.25)	3.5(0.08)	5.2(0.23)	6.2(0.25)
50.00	6.4(0.30)	3.7(0.09)	5.7(0.28)	6.7(0.30)

Station 45 (44.10N , 86.63W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.3(0.11)	3.1(0.05)	4.6(0.10)	5.0(0.10)
5.00	4.8(0.16)	3.3(0.06)	5.1(0.14)	5.4(0.14)
10.00	5.2(0.19)	3.5(0.08)	5.4(0.17)	5.8(0.18)
20.00	5.5(0.23)	3.6(0.09)	5.7(0.20)	6.1(0.21)
50.00	6.0(0.27)	3.8(0.11)	6.1(0.25)	6.5(0.25)

Station 46 (43.95N , 86.65W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.5(0.12)	3.5(0.05)	4.9(0.11)	5.2(0.11)
5.00	5.1(0.17)	3.7(0.07)	5.3(0.15)	5.7(0.15)
10.00	5.5(0.21)	3.8(0.09)	5.7(0.18)	6.1(0.19)
20.00	5.8(0.25)	4.0(0.10)	6.0(0.22)	6.4(0.22)
50.00	6.3(0.30)	4.2(0.13)	6.4(0.26)	6.9(0.27)

Station 47 (43.82N , 86.65W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.8(0.13)	3.7(0.06)	5.1(0.11)	5.5(0.11)
5.00	5.4(0.18)	3.9(0.08)	5.5(0.15)	6.0(0.16)
10.00	5.8(0.22)	4.1(0.10)	5.9(0.18)	6.3(0.19)
20.00	6.2(0.26)	4.3(0.12)	6.2(0.21)	6.7(0.23)
50.00	6.7(0.31)	4.5(0.14)	6.6(0.26)	7.2(0.27)

Station 48 (43.67N , 86.67W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.0(0.13)	3.8(0.06)	5.3(0.10)	5.7(0.11)
5.00	5.6(0.19)	4.1(0.09)	5.7(0.14)	6.1(0.16)
10.00	6.0(0.23)	4.3(0.11)	6.0(0.18)	6.5(0.19)
20.00	6.5(0.27)	4.5(0.13)	6.3(0.21)	6.8(0.22)
50.00	7.0(0.33)	4.7(0.15)	6.8(0.25)	7.3(0.27)

Station 49 (43.53N , 86.68W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.2(0.13)	4.6(0.09)	5.1(0.10)	5.8(0.12)
5.00	5.7(0.18)	5.0(0.13)	5.5(0.13)	6.3(0.17)
10.00	6.2(0.22)	5.3(0.16)	5.8(0.16)	6.7(0.20)
20.00	6.6(0.26)	5.6(0.19)	6.0(0.19)	7.1(0.24)
50.00	7.1(0.32)	6.0(0.23)	6.4(0.23)	7.6(0.29)

Station 50 (43.38N , 86.48W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.8(0.09)	4.9(0.09)	5.1(0.10)	5.6(0.10)
5.00	5.2(0.12)	5.3(0.13)	5.5(0.13)	6.1(0.14)
10.00	5.5(0.15)	5.7(0.16)	5.8(0.16)	6.4(0.17)
20.00	5.8(0.18)	5.9(0.19)	6.0(0.19)	6.7(0.21)
50.00	6.1(0.22)	6.3(0.23)	6.4(0.23)	7.1(0.25)

Station 51 (43.23N , 86.50W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.0(0.09)	5.3(0.13)	4.6(0.05)	5.6(0.11)
5.00	5.4(0.13)	5.9(0.17)	4.8(0.07)	6.1(0.15)
10.00	5.7(0.16)	6.3(0.21)	5.0(0.09)	6.4(0.18)
20.00	6.0(0.19)	6.7(0.25)	5.2(0.10)	6.7(0.21)
50.00	6.4(0.23)	7.2(0.30)	5.4(0.13)	7.2(0.26)

Station 52 (43.08N , 86.32W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.2(0.09)	5.3(0.11)	4.4(0.05)	5.7(0.10)
5.00	5.6(0.12)	5.8(0.15)	4.6(0.07)	6.1(0.13)
10.00	5.8(0.15)	6.1(0.19)	4.8(0.09)	6.4(0.16)
20.00	6.1(0.18)	6.5(0.22)	4.9(0.11)	6.7(0.19)
50.00	6.5(0.22)	6.9(0.27)	5.2(0.13)	7.1(0.23)

Station 53 (42.93N , 86.33W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.3(0.09)	5.0(0.09)	4.7(0.10)	5.7(0.10)
5.00	5.7(0.13)	5.4(0.12)	5.1(0.14)	6.2(0.14)
10.00	6.0(0.16)	5.7(0.15)	5.4(0.17)	6.5(0.17)
20.00	6.3(0.19)	5.9(0.18)	5.7(0.20)	6.8(0.20)
50.00	6.7(0.23)	6.3(0.21)	6.0(0.24)	7.2(0.24)

Station 54 (42.78N , 86.33W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.4(0.11)	4.9(0.09)	4.6(0.10)	5.7(0.10)
5.00	5.8(0.15)	5.3(0.12)	4.9(0.14)	6.2(0.14)
10.00	6.2(0.18)	5.6(0.15)	5.2(0.17)	6.5(0.18)
20.00	6.5(0.22)	5.8(0.18)	5.5(0.20)	6.8(0.21)
50.00	7.0(0.26)	6.2(0.21)	5.9(0.24)	7.3(0.25)

Station 55 (42.64N , 86.35W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.3(0.11)	4.6(0.08)	4.4(0.09)	5.5(0.09)
5.00	5.7(0.15)	4.9(0.11)	4.8(0.13)	5.9(0.13)
10.00	6.1(0.18)	5.2(0.13)	5.1(0.16)	6.2(0.16)
20.00	6.4(0.22)	5.4(0.15)	5.4(0.19)	6.5(0.19)
50.00	6.8(0.26)	5.7(0.19)	5.8(0.23)	6.8(0.23)

Station 56 (42.50N , 86.36W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	5.0(0.11)	4.5(0.07)	4.3(0.08)	5.3(0.09)
5.00	5.4(0.15)	4.8(0.09)	4.7(0.12)	5.7(0.13)
10.00	5.8(0.19)	5.0(0.11)	4.9(0.14)	6.0(0.16)
20.00	6.1(0.22)	5.2(0.13)	5.2(0.17)	6.3(0.19)
50.00	6.6(0.26)	5.5(0.16)	5.5(0.21)	6.7(0.23)

Station 57 (42.35N , 86.37W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.4(0.10)	4.9(0.10)	4.1(0.07)	5.1(0.09)
5.00	4.8(0.14)	5.3(0.14)	4.4(0.10)	5.4(0.12)
10.00	5.1(0.17)	5.6(0.17)	4.7(0.12)	5.7(0.15)
20.00	5.4(0.20)	5.9(0.20)	4.9(0.15)	6.0(0.18)
50.00	5.8(0.24)	6.3(0.24)	5.2(0.18)	6.4(0.22)

Station 58 (42.22N , 86.58W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.1(0.10)	4.7(0.09)	4.0(0.06)	4.9(0.08)
5.00	4.5(0.14)	5.1(0.12)	4.3(0.09)	5.3(0.12)
10.00	4.9(0.17)	5.3(0.15)	4.5(0.11)	5.6(0.14)
20.00	5.2(0.20)	5.6(0.17)	4.7(0.13)	5.8(0.17)
50.00	5.6(0.24)	6.0(0.21)	4.9(0.15)	6.2(0.21)

Station 59 (42.08N , 86.58W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.6(0.11)	4.5(0.08)	3.6(0.05)	4.9(0.09)
5.00	5.0(0.15)	4.8(0.11)	3.8(0.07)	5.3(0.13)
10.00	5.4(0.19)	5.1(0.13)	4.0(0.09)	5.6(0.15)
20.00	5.7(0.22)	5.3(0.16)	4.2(0.11)	5.8(0.18)
50.00	6.2(0.27)	5.6(0.19)	4.4(0.13)	6.2(0.22)

Station 60 (41.93N , 86.78W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.4(0.10)	4.9(0.11)	3.5(0.05)	5.0(0.11)
5.00	3.8(0.13)	5.4(0.15)	3.7(0.07)	5.5(0.15)
10.00	4.1(0.16)	5.8(0.19)	3.9(0.09)	5.8(0.19)
20.00	4.3(0.19)	6.1(0.22)	4.0(0.10)	6.2(0.22)
50.00	4.7(0.23)	6.6(0.27)	4.2(0.12)	6.6(0.27)

Station 61 (41.80N , 86.98W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.7(0.05)	4.6(0.10)	3.1(0.04)	4.6(0.10)
5.00	3.0(0.07)	5.1(0.15)	3.3(0.06)	5.1(0.14)
10.00	3.1(0.09)	5.4(0.18)	3.4(0.07)	5.4(0.18)
20.00	3.3(0.10)	5.7(0.21)	3.6(0.09)	5.7(0.21)
50.00	3.5(0.12)	6.2(0.25)	3.7(0.11)	6.1(0.25)

Station 62 (41.80N , 87.18W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.9(0.06)	4.4(0.10)	3.6(0.08)	4.5(0.09)
5.00	3.2(0.08)	4.8(0.14)	3.9(0.11)	4.9(0.13)
10.00	3.4(0.10)	5.2(0.18)	4.2(0.14)	5.2(0.16)
20.00	3.5(0.12)	5.5(0.21)	4.4(0.16)	5.5(0.19)
50.00	3.8(0.14)	5.9(0.25)	4.8(0.19)	5.9(0.22)

Station 63 (42.28N , 87.16W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	2.9(0.04)	4.4(0.10)	3.9(0.07)	4.5(0.08)
5.00	3.1(0.06)	4.8(0.14)	4.2(0.10)	4.9(0.11)
10.00	3.2(0.07)	5.2(0.17)	4.4(0.12)	5.1(0.14)
20.00	3.3(0.09)	5.5(0.20)	4.6(0.14)	5.4(0.16)
50.00	3.5(0.11)	5.9(0.24)	4.9(0.17)	5.7(0.20)

Station 64 (42.67N , 87.13W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.0(0.07)	2.5(0.03)	4.7(0.09)	4.8(0.09)
5.00	4.3(0.09)	2.7(0.05)	5.1(0.13)	5.2(0.12)
10.00	4.5(0.11)	2.8(0.06)	5.4(0.15)	5.5(0.15)
20.00	4.7(0.13)	2.9(0.07)	5.7(0.18)	5.8(0.18)
50.00	4.9(0.16)	3.0(0.08)	6.0(0.22)	6.1(0.21)

Station 65 (43.10N , 87.10W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.5(0.09)	2.6(0.04)	4.5(0.10)	5.0(0.10)
5.00	4.9(0.13)	2.7(0.05)	4.9(0.14)	5.4(0.14)
10.00	5.2(0.16)	2.8(0.06)	5.3(0.17)	5.7(0.17)
20.00	5.5(0.18)	3.0(0.07)	5.6(0.20)	6.0(0.20)
50.00	5.8(0.22)	3.1(0.09)	6.0(0.25)	6.4(0.24)

Station 66 (43.53N , 87.08W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.4(0.11)	3.4(0.06)	4.7(0.10)	5.0(0.10)
5.00	4.9(0.15)	3.7(0.08)	5.1(0.14)	5.4(0.13)
10.00	5.2(0.18)	3.8(0.10)	5.4(0.16)	5.7(0.16)
20.00	5.6(0.21)	4.0(0.12)	5.7(0.19)	6.0(0.19)
50.00	6.0(0.26)	4.3(0.15)	6.1(0.24)	6.4(0.23)

Station 67 (43.97N , 87.05W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.8(0.08)	2.9(0.05)	4.3(0.09)	4.6(0.09)
5.00	4.2(0.11)	3.1(0.06)	4.7(0.12)	4.9(0.13)
10.00	4.4(0.13)	3.3(0.08)	4.9(0.15)	5.2(0.15)
20.00	4.6(0.16)	3.4(0.09)	5.2(0.17)	5.5(0.18)
50.00	4.9(0.19)	3.6(0.11)	5.6(0.21)	5.9(0.22)

Station 68 (44.39N , 86.82W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.8(0.08)	2.7(0.04)	4.2(0.09)	4.4(0.09)
5.00	4.1(0.11)	2.9(0.05)	4.6(0.13)	4.8(0.12)
10.00	4.4(0.13)	3.0(0.07)	4.9(0.16)	5.1(0.15)
20.00	4.6(0.16)	3.1(0.08)	5.2(0.19)	5.4(0.18)
50.00	4.9(0.19)	3.3(0.09)	5.6(0.22)	5.8(0.22)

Station 69 (44.82N , 86.58W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	3.7(0.07)	2.6(0.04)	4.2(0.09)	4.3(0.09)
5.00	4.0(0.10)	2.7(0.05)	4.6(0.12)	4.7(0.12)
10.00	4.2(0.12)	2.8(0.06)	4.8(0.15)	4.9(0.15)
20.00	4.4(0.15)	3.0(0.07)	5.1(0.18)	5.2(0.17)
50.00	4.8(0.18)	3.1(0.09)	5.5(0.22)	5.6(0.21)

Station 70 (44.25N , 86.34W)

Return Period (yr)	Angle Class			
	1	2	3	All
2.00	4.2(0.08)	1.8(0.04)	3.4(0.06)	4.2(0.07)
5.00	4.5(0.11)	2.0(0.05)	3.7(0.09)	4.6(0.10)
10.00	4.8(0.13)	2.1(0.06)	3.9(0.11)	4.8(0.12)
20.00	5.0(0.15)	2.2(0.07)	4.1(0.13)	5.0(0.15)
50.00	5.3(0.19)	2.4(0.09)	4.3(0.16)	5.3(0.18)