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ATMOSPHERIC STRUCTURE WHITE SANDS MISSILE RANGE, NEW MIXICO. PART 3. UPPER AIR AND SURFACE DATA: WHITE SANDS DESERT SITE

Marjorie M. Hoidale, et al

Army Electronics Command
White Sands Missile Range, New Mexico

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ATMOSPHERIC STRUCTURE

WHITE SANDS MISSILE RANGE

NEW MEXICO

PART 3

UPPER AIR AND SURFACE DATA: WHITE SANDS DESERT SITE

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM
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A statistical analysis of surface and upper air rawinsonde data is presented for White Sands Desert Site, White Sands Missile Range, New Mexico. Atmospheric parameters covered for the layer from the surface to 100,000 feet above mean sea level are: wind, temperature, pressure, density, moisture, index of refraction and freezing level. Upper air climatological information is based on the period of observation from 1961-1973; while surface temperature data spans 1960-1973; precipitation records 1963-1973, and wind data 1966-1973.

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FOREWORD

This report is a revision of Data Report 327 titled "Atmospheric Structure, White Sands Missile Range, New Mexico, Part 3, Upper Air Data: White Sands Desert Site" published in 1968 and Data Report 397, "White Sands Missile Range Climatography No. 4, White Sands Desert Site" published in 1969.

This revision updates the original records to cover the period through 1973 and combines material previously offered so that surface data and rawinsonde data for each 1,000 feet up to 16,000 feet above mean sea level, as well as rawinsonde data for additional levels up to 100,000 feet, are available in a single report.

ACKNOWLEDGEMENTS

It would be impossible to acknowledge all whose work have made this report possible; however, the authors do wish to acknowledge the important contribution made by those personnel - military, contractor and civilian - whose efforts made possible the acquisition of upper air and surface records during the years 1960-1973.

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INTRODUCTION

Activities of various projects on Range often necessitate a knowledge of upper air atmospheric conditions or surface data weeks or months in advance of the scheduled mission. As this exceeds the capability of the usual 24-56 hour forecast and the longer five-day outlook, a statistical analysis of exoteric meteorological data is desirable. Missions at specific launch complexes frequently demand a detailed knowledge of conditions for that particular area as opposed to data for the entire Range. For this reason, an analysis has been presented for individual rawinsonde stations proximate to Range test sites and launch complexes (1-9).*

Section 1 of this report, based on rawinsonde data collected during the observational period 1961-1973, presents the frequency of occurrence of the upper air meteorological conditions, and the mean and extreme values classified by months and seasons that can be expected from the surface to 100,000 feet above mean sea level (MSL) at White Sands Desert Site [Figure 1], latitude 32° 24' north, longitude 106° 22' west, elevation 3989 feet MSL. Seven parameters are analyzed: wind, temperature, pressure, density, moisture, index of refraction and freezing level. Note should be made at this point that White Sands Missile Range (WSMR) rawinsonde releases do not follow a routine schedule, but are taken depending upon the mission requirements [Table I].

Surface measurements of meteorological conditions at White Sands Desert Site consist of wind, temperature, and precipitation data. These are presented in tabular form in Section II.

---

*Upper air and surface data have been published in earlier reports for Jallen, Holloman, Small Missile Range, Stallion, and Apache Sites. With acquisition of significant amounts of additional data, these reports will be republished in a format similar to that adopted for this data report. Reports 1 and 2 in the Atmospheric Structure series presented analyses of surface data for "A" Station [10, 11].

EXPLANATION OF TERMS

1. Winds Aloft or Surface Wind

   A. Wind directions are given as the true direction from which the wind is blowing.

   B. Wind speeds are measured in knots (nautical miles per hour).

2. Resultant Wind [12, p.480]

   In climatology, the resultant wind is the vectorial average of all wind directions and speeds for a given level at a given place for a certain period, as a month.

   It is obtained by resolving each wind observation into components from north and east, summing over the given period, obtaining the averages, and reconverting the average components into a single vector.

3. Surface Wind Gusts

   Wind gusts are characterized by sudden, intermittent increases in speed, with at least nine knots variation between peaks and lulls. The average time interval between peaks and lulls usually should not exceed 20 seconds.

4. Standard Vector Deviation of the Wind [13, p.173, 179, 195-198]

   The standard vector deviation of the wind is a measure of dispersion about the end of the mean resultant wind vector. A circle drawn with the center at the end of the mean resultant wind vector and a radius of the standard vector deviation includes 63 per cent of the vector winds.

$$\sigma^2 = \sum \frac{V^2}{N} - V_R^2$$

where,

σ = Standard vector deviation, knots

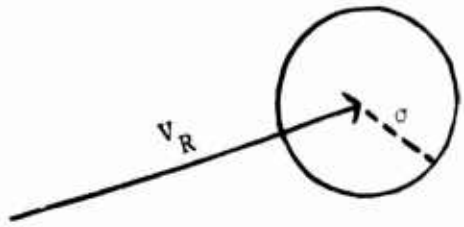
N = Number of cases

V_R = Speed of vector mean wind

V = Module of the vector wind

EXPLANATION OF TERMS

4. Standard Vector Deviation of the Wind [13] (Cont)



5. Constancy [13, pp. 198-199]

Constancy is a term used to show how constant the direction of the wind is. It is determined by dividing the mean scalar wind into the magnitude of the mean resultant wind.

$$Q = \frac{100\ V_R}{V_S} \qquad \text{(per cent)}$$

where,

Q = Constancy of wind direction (per cent)

V_R = Module or speed of vector mean wind

V_S = Speed of scalar mean wind

The constancy of a set of winds is zero when they blow equally frequently from all directions, with the same average speed; the constancy is 100 when they blow from exactly the same direction, but not necessarily all with the same speed.

6. Temperature

A. Temperatures are reported in degrees Fahrenheit for surface observations and in degrees Celsius for upper air (rawinsonde) observations.

B. Surface maximum and minimum temperatures are measured by standard liquid-in-glass thermometers which are read and reset each working day. When stations are not manned on weekends and holidays, the extreme temperatures are obtained from calibrated thermographs adjusted to maximum and minimum thermometers.

EXPLANATION OF TERMS

6. Temperature (Cont)

C. Temperature Extreme. In climatology, the highest and, in some cases, the lowest temperature observed during a given period or during a given month or season of that period. If this is the whole period for which observations are available, it is the absolute extreme [12, p.216].

7. Density [14]

$$\rho_X = 348.38 \left[\frac{p}{K_{VX}}\right] \quad \text{grams/cubic meter}$$

$$K_{VX} = K \left[\frac{p}{p - 0.379e}\right]$$

$$e = 0.0611 \; f \; 10^{\left(\frac{7.5C}{C + 237.3}\right)}$$

where,

ρ_X = Density, in grams/cubic meter

p = Pressure, in millibars

K_{VX} = Virtual temperature, in degrees Kelvin

e = Partial pressure of aqueous vapor, in millibars

C = Temperature, in degrees Celsius

K = C + 273.16, Temperature, Absolute, in degrees Kelvin

f = Relative humidity, in per cent

8. Index of Refraction [14]

$$n_x = 1 + \frac{77.6}{K} \left[p + e \left(\frac{4830}{K} - \frac{11}{77.6}\right)\right] 10^{-6}$$

EXPLANATION OF TERMS

8. Index of Refraction [14] (Cont)

$$e = 0.0611 \; f \; 10^{\left(\frac{7.5C}{C + 237.3}\right)}$$

where,

n_X = Index of refraction, dimensionless

K = C + 273.16, Temperature, Absolute, in degrees Kelvin

C = Temperature, in degrees Celsius

p = Pressure, in millibars

f = Relative humidity, in per cent

e = Partial pressure of aqueous vapor, in millibars

9. Mixing Ratio [12, p.374; 15]

In a system of moist air, the dimensionless ratio of the mass of water vapor to the mass of dry air.

$$\omega = \frac{0.622e}{p - e} \times 10^3$$

where,

ω = Mixing ratio, grams/kilogram

p = Pressure, in millibars

e = Partial pressure of aqueous vapor, in millibars

$$e = re_s$$

where,

r = Relative humidity, in per cent

e_s = Saturation vapor pressure, in millibars

9. Mixing Ratio [12,p.374; 15] (Cont)

$$\log_{10} e_s = -7.90298\left(\frac{T_s}{T} - 1\right) + 5.02808 \log_{10}\left(\frac{T_s}{T}\right) - 1.3816 \times 10^{-7}$$

$$\left[10^{11.344\left(1 - \frac{T}{T_s}\right)} - 1\right] + 8.1328 \times 10^{-3}\left[10^{-3.49149\left(\frac{T_s}{T} - 1\right)} - 1\right] + \log_{10} e_{w_s}$$

where,

T = Dry bulb temperature, in degrees Kelvin

T_s = Steam point temperature, 373.16 degrees Kelvin

e_{w_s} = Saturation pressure of pure ordinary liquid water at steam point temperature (T_s), 1013.246 millibars

10. Precipitable Water [12, p.437; 15]

Precipitable water is defined as the total atmospheric water vapor contained in a vertical column of unit cross-sectional area extending between any two specified levels. It may be expressed as the height to which that water substance would stand if completely condensed and collected in a vessel of the same unit cross section.

Mathematically,

$$W = \frac{1}{g} \int_{p_1}^{p_2} \omega dp$$

where,

W = Precipitable water vapor, centimeters

ω = Mixing ratio, grams/kilogram

p = Pressure, bounded by p_1 and p_2, millibars

g = Acceleration of gravity, centimeters per sec^2

If g is expressed in cm sec^{-2}, p in millibars, and ω in g kg^{-1}, then W is in centimeters. With these units, the above equation may be written as:

$$W_{(cm)} = 0.001 \int_{p_1}^{p_2} \omega dp$$

EXPLANATION OF TERMS

10. Precipitable Water [12,p.437; 15] (Cont)

To determine the precipitable water within the various layers, the preceding equation will be numerically integrated. Since the mixing ratio, ω, may be expressed as

$$\omega = \frac{0.622e}{p - e}$$

it is seen that

$$W_{(cm)} = 0.622 \int_{p_1}^{p_2} \frac{e}{p - e}\, dp$$

where e and p are expressed in millibars. Note that a factor of 10^3 has been introduced to compensate for units.

11. Relative Humidity [12, p.477]

Popularly called humidity. The (dimensionless) ratio of the actual vapor pressure of the air to the saturation vapor pressure. The relative humidity is usually expressed in per cent.

12. Precipitation

Precipitation is measured in a standard eight-inch rain gage, and is recorded in hundredths of an inch. Less than .01 inch is reported as a trace (an amount too small to measure).

13. Season [12, p.499]

A division of the year according to some regularly recurrent phenomena, usually astronomical or climatic.

In middle latitudes four seasons are recognized, which for climatological purposes are (Northern Hemisphere): winter - December, January and February; spring - March, April and May; summer - June, July and August; autumn or fall - September, October and November. The annual course of weather does not always follow these divisions closely, but the use of four periods of three calendar months each is so convenient for statistical purposes that no other division has been seriously considered.

RELIABILITY OF DATA [16]

The standard reliabilities of the instrumentation and the derived data are as follows:

UPPER AIR
METEOROLOGICAL PARAMETERS

Parameter and Instrument Types	Range of Values or Environemnt	Data Reliability
WIND VELOCITY		
Rawin Sets, AN/GMD-1A, WBRT-47 (without slant range)	Surface to 30 km alt. (98,425 Ft) [2 minutes or 0.6 km (1,969 Ft) mean layer winds]	6 knots or 12% of vector wind, whichever is greater
Rawin Sets, AN/GMD-2, 2A, 4 (with slant range)	Surface to 30 km alt. (98,425 Ft) [2 minutes or 0.6 km (1,969 Ft) mean layer winds]	4 knots or 10% of vector wind, whichever is greater
Rawin using FPS-16 or similar radar	Surface to 30 km alt. (98,425 Ft) [20 seconds or 100 m. (328 Ft) mean layer winds]	3 knots or 6% of vector wind, whichever is greater
Note: All rawinsonde mean layer winds are unreliable when tracking angles are within 6 degrees of the horizon or surface obstructions which often occurs under strong jet stream conditions.		
DENSITY		
Rawin Sets AN/GMD-1A*, 2A*, 4*, WTRT-57*, etc.	(15 to 1200 gm/m^3) Surface to 10 km alt. (32,808 Ft)	0.4%
	10 to 30 km alt. (32,808 to 98,425 Ft)	1%

*Density Computed

RELIABILITY OF DATA [16]

UPPER AIR METEOROLOGICAL PARAMETERS

Parameter and Instrument Types	Range of Values or Environment	Data Reliability
RELATIVE HUMIDITY		
Rawin Sets, AN/GMD-1A, 2A 4, WBRT-57, etc. using ML-476 Hygristor or equiv.	(5 to 99%) Temperature greater than 0°C	5%
	Temperature 0° to -20°C	10%
	-21°C to -40°C	20%
	Below -40°C	unreliable
PRESSURE		
Rawin Sets, AN/GMD-1A, 2A*, 4*, WBRT-57, etc.	10 to 50 mb	1.0%
	50 to 200 mb	0.6%
	200 to 500 mb	0.3%
	greater than 500 mb	0.2%

*Pressure Computed

INDEX OF REFRACTION		
Rawin Sets*, AN/GMD-1A, 2A, 4, WBRT-57, SMQ-1, 3	5 to 200 N-units	1%
	200 to 400 N-units	2.5%

*Refractive Index Computed

TEMPERATURE		
Rawin Sets, AN/GMD-1A, 2A, 4, WBRT-57, SMQ 1, etc. using ML-419 element or equiv.	(-90°C to 60°C) Surface to 20 km alt. (65,617 Ft)	1°C*
	20 km to 30 km alt. (65,617 to 98,425 Ft)	2.5°C*

*Root Mean Square (RMS) deviations about a mean value which can be considered the best estimate of the measure of the quantity.

RELIABILITY OF DATA [16]

SURFACE METEOROLOGICAL PARAMETERS

Parameter and Instrument Types	Range of Values or Environment	Data Reliability
WIND		
Wind Measuring Set AN/GMQ-11	Direction 0-360 degrees Speed 1-160 knots	3 de . 2.0 knots or 3%
RAINFALL		
Precipitation Gauges ML-17, ML-217, etc.	0.01 to 20 inches	0.01 inches
TEMPERATURE		
Liquid in Glass ML-24, M1-7, etc.	-90°F to + 145°F	0.5°F*
Thermographs, Bimetal & Bourdon tube	-20°F to + 110°F	2.0°F*

*Root Mean Square (RMS) deviations about a mean value which can be considered the best estimate of the measure of the quantity.

Manual and computer verification techniques were employed to insure a high degree of accuracy.

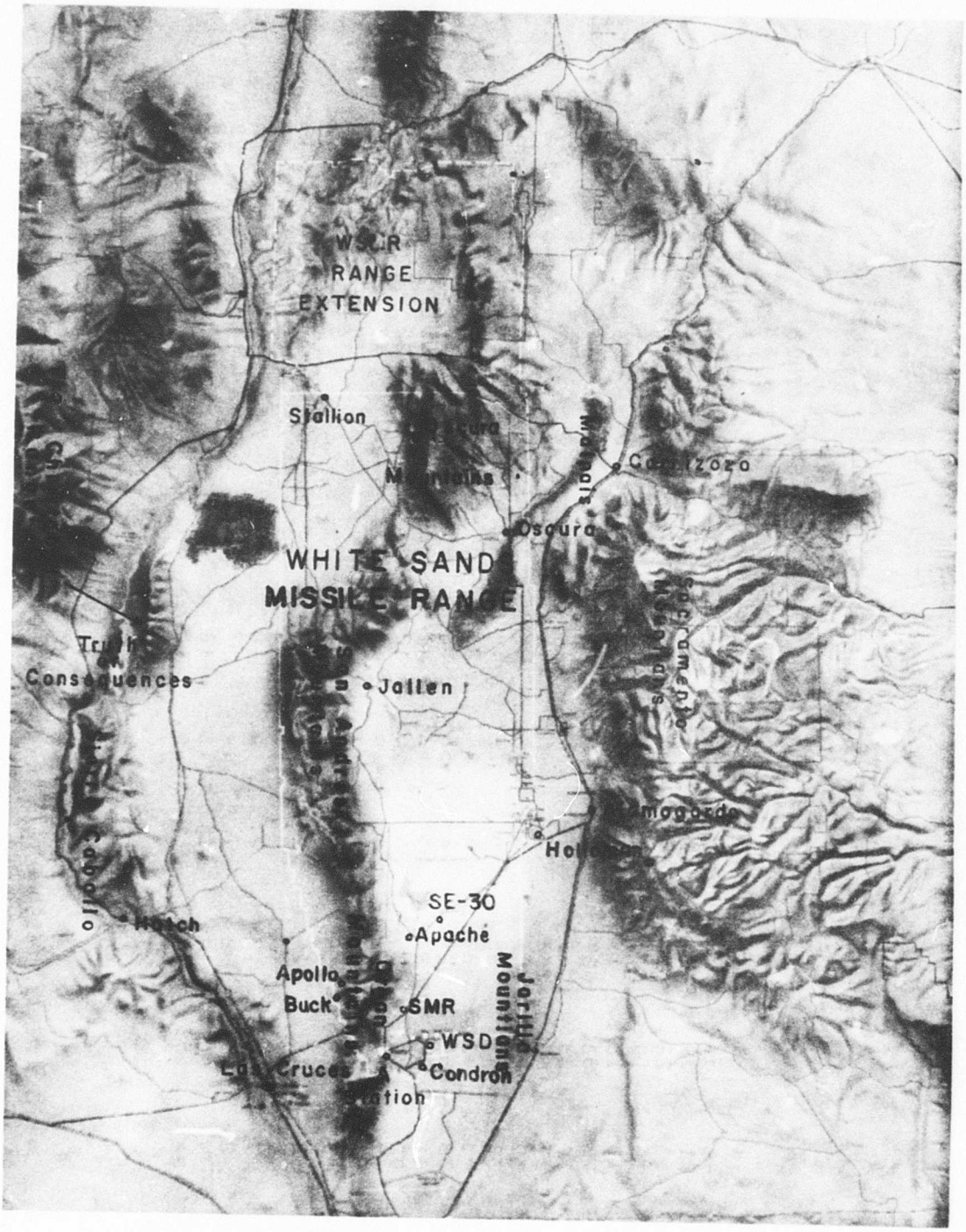


FIGURE 1. MAP OF WHITE SANDS MISSILE RANGE

TABLE I

FREQUENCY DISTRIBUTION OF UPPER AIR SOUNDINGS BY HOURS AND MONTHS
PERIOD OF RECORD 1961-1973
WHITE SANDS DESERT SITE (WSI)

HOUR (MST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL BY HOURS
1	7	14	20	36	126	141	121	154	108	119	18	12	876
2	145	146	154	138	55	55	49	63	62	64	156	111	1198
3	24	21	39	48	28	18	26	17	23	39	28	15	325
4	14	13	22	23	15	20	29	32	33	20	19	20	260
5	21	10	10	15	12	14	39	19	16	21	18	60	255
6	9	13	15	17	24	35	17	31	30	32	26	23	272
7	12	14	33	24	38	39	46	44	33	39	23	9	354
8	41	30	33	51	115	105	101	110	94	99	45	39	863
9	141	127	163	153	80	96	101	97	103	111	148	132	1452
10	47	39	43	45	38	38	41	35	30	39	41	40	476
11	35	38	41	35	41	27	49	46	34	34	28	21	429
12	39	43	42	37	16	34	23	26	28	27	45	40	400
13	37	38	34	27	62	55	53	40	32	32	30	18	458
14	50	41	56	57	51	43	41	36	40	63	44	38	562
15	35	42	52	34	20	24	18	27	27	22	30	39	370
16	18	17	18	14	14	19	8	12	22	17	15	17	191
17	6	9	16	12	7	17	4	9	8	10	2	6	106
18	6	8	9	9	10	11	9	7	5	9	1	2	86
19	3	2	15	10	6	8	1	3	7	9	5	13	82
20	10	4	22	10	8	8	6	6	7	11	7	5	104
21	5	7	10	7	2	2	8	11	7	14	6	5	84
22	6	2	5	8	7	14	7	12	3	10	9	8	91
23	5	9	5	9	11	10	12	15	11	10	9	6	112
24	47	28	47	45	36	42	68	25	40	55	36	25	494
TOTAL BY MONTHS	763	715	904	804	822	875	877	879	803	906	789	704	

9901 UPPER AIR SOUNDINGS WERE TAKEN DURING THIS PERIOD

ATMOSPHERIC STRUCTURE REPORT

WHITE SANDS DESERT SITE

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UPPER AIR WIND DATA

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TABLE II

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS) +N	-S	+E	-W	RESULTANT WIND DIRECTION (DEGREES)	RESULTANT WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
3989.	757.	29.	0.	.4		-1.2		290.	1.	4.	34.	6.
5000.	756.	29.	0.	1.6		-3.2		296.	4.	7.	48.	8.
6000.	758.	36.	0.	1.5		-6.4		283.	7.	11.	59.	11.
7000.	758.	43.	0.	1.0		-9.2		276.	9.	14.	66.	13.
8000.	759.	52.	0.	1.1		-11.9		275.	12.	17.	72.	14.
9000.	758.	53.	1.	1.3		-14.2		275.	14.	19.	75.	15.
10000.	759.	55.	1.	1.5		-16.2		275.	16.	21.	76.	17.
11000.	757.	60.	0.	1.6		-17.9		275.	18.	23.	77.	18.
12000.	758.	62.	0.	1.6		-19.5		275.	20.	25.	77.	19.
13000.	757.	66.	2.	1.7		-20.9		275.	21.	27.	77.	21.
14000.	757.	70.	0.	1.7		-22.2		274.	22.	29.	78.	22.
15000.	755.	75.	0.	1.5		-23.3		274.	23.	30.	77.	23.
16000.	755.	82.	0.	1.6		-24.6		274.	25.	32.	78.	25.
18000.	753.	108.	2.	1.6		-26.8		273.	27.	35.	78.	27.
20000.	747.	98.	0.	1.5		-28.9		273.	29.	37.	78.	29.
25000.	742.	132.	3.	.6		-35.3		271.	35.	46.	77.	36.
30000.	737.	132.	0.	.3		-42.1		270.	42.	54.	78.	42.
35000.	720.	158.	0.	-1.3		-49.7		268.	50.	61.	82.	45.
40000.	690.	163.	0.	-2.1		-53.5		268.	54.	62.	87.	40.
45000.	669.	117.	4.	-2.0		-50.9		268.	51.	56.	90.	32.
50000.	638.	110.	6.	-2.2		-46.3		267.	46.	50.	92.	27.
55000.	608.	130.	3.	-2.2		-38.3		267.	38.	41.	93.	24.
60000.	579.	103.	0.	-.8		-25.8		268.	26.	29.	89.	21.
65000.	550.	76.	0.	.7		-18.1		272.	18.	21.	86.	17.
70000.	528.	72.	0.	.9		-11.7		274.	12.	17.	69.	18.
75000.	510.	70.	1.	1.3		-8.3		279.	8.	16.	52.	18.
80000.	484.	71.	1.	1.5		-8.9		280.	9.	18.	50.	20.
85000.	459.	82.	0.	.9		-9.1		275.	9.	20.	45.	23.
90000.	426.	95.	0.	.1		-11.8		271.	12.	23.	52.	25.
95000.	362.	92.	0.	-1.0		-16.4		266.	16.	29.	56.	31.
100000.	280.	114.	0.	-1.6		-20.9		266.	21.	34.	61.	36.

TABLE II (CONT)

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS) +N	-S	+E	-W	RESULTANT WIND DIRECTION (DEGREES)	RESULTANT WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
3989.	711.	30.	0.	.7			-.7	313.	1.	4.	23.	6.
5000.	709.	33.	0.	1.7			-2.3	306.	3.	7.	38.	9.
6000.	709.	47.	0.	1.4			-4.7	287.	5.	10.	47.	11.
7000.	710.	55.	1.	1.0			-6.9	278.	7.	13.	55.	13.
8000.	710.	61.	1.	.9			-9.4	276.	9.	15.	63.	14.
9000.	710.	61.	0.	1.2			-11.5	276.	12.	17.	68.	15.
10000.	711.	62.	0.	1.6			-13.5	277.	14.	19.	71.	17.
11000.	711.	62.	0.	1.9			-15.2	277.	15.	21.	73.	18.
12000.	709.	69.	0.	2.0			-16.8	277.	17.	23.	74.	19.
13000.	710.	67.	0.	2.1			-18.4	276.	19.	25.	75.	20.
14000.	710.	75.	0.	2.2			-20.0	276.	20.	27.	76.	22.
15000.	710.	81.	0.	2.4			-21.5	276.	22.	28.	76.	23.
16000.	710.	89.	0.	2.5			-23.1	276.	23.	30.	77.	24.
18000.	711.	100.	0.	2.6			-26.1	276.	26.	34.	77.	27.
20000.	709.	99.	1.	2.7			-28.7	275.	29.	37.	77.	29.
25000.	706.	123.	2.	2.1			-37.0	273.	37.	48.	78.	36.
30000.	700.	145.	3.	1.0			-46.7	271.	47.	58.	80.	43.
35000.	689.	180.	2.	3.3			-56.6	273.	57.	67.	84.	47.
40000.	675.	206.	0.	-.8			-62.2	269.	62.	70.	89.	42.
45000.	644.	204.	7.	-.3			-57.9	270.	58.	64.	91.	35.
50000.	623.	164.	9.	-.5			-50.5	269.	51.	55.	92.	28.
55000.	580.	101.	0.	.8			-39.9	271.	40.	43.	92.	24.
60000.	544.	87.	0.	1.4			-26.2	273.	26.	30.	89.	20.
65000.	515.	84.	1.	1.1			-17.1	274.	17.	21.	81.	18.
70000.	504.	79.	1.	1.7			-10.4	279.	11.	17.	61.	18.
75000.	486.	69.	0.	1.7			-9.0	281.	9.	17.	52.	18.
80000.	460.	74.	1.	.8			-9.2	275.	9.	18.	50.	20.
85000.	429.	81.	0.	.0			-11.2	270.	11.	21.	53.	22.
90000.	400.	84.	1.	.3			-14.4	271.	14.	24.	60.	24.
95000.	348.	80.	1.	.5			-19.0	271.	19.	28.	68.	28.
100000.	285.	94.	0.	-1.0			-26.0	268.	26.	35.	74.	32.

TABLE II (CONT)

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS) +N -S	+E -W	RESULTANT WIND DIRECTION (DEGREES)	RESULTANT WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
3989.	901.	34.	0.	.2	-1.7	276.	2.	6.	31.	8.
5000.	896.	42.	0.	.2	-3.4	274.	3.	9.	39.	10.
6000.	896.	50.	0.	-.9	-5.6	261.	6.	12.	49.	12.
7000.	895.	54.	0.	-1.5	-7.8	259.	8.	14.	58.	14.
8000.	897.	51.	0.	-1.7	-10.1	261.	10.	15.	67.	14.
9000.	900.	56.	0.	-1.7	-12.7	262.	13.	17.	74.	15.
10000.	900.	61.	1.	-1.7	-15.1	264.	15.	19.	76.	16.
11000.	900.	60.	1.	-1.7	-17.4	265.	17.	22.	80.	17.
12000.	901.	62.	1.	-1.7	-19.5	265.	20.	24.	81.	18.
13000.	900.	69.	1.	-1.8	-21.3	265.	21.	26.	82.	20.
14000.	901.	75.	0.	-2.0	-23.0	265.	23.	28.	82.	21.
15000.	901.	81.	1.	-2.1	-24.9	265.	25.	30.	83.	22.
16000.	900.	84.	1.	-2.2	-26.8	265.	27.	32.	83.	23.
18000.	899.	92.	1.	-2.5	-30.6	265.	31.	37.	84.	26.
20000.	898.	107.	1.	-2.9	-34.1	265.	34.	40.	84.	29.
25000.	890.	136.	3.	-4.0	-43.2	265.	43.	51.	86.	35.
30000.	880.	190.	0.	-5.2	-53.3	264.	54.	61.	87.	41.
35000.	859.	177.	4.	-5.1	-61.1	265.	61.	69.	89.	44.
40000.	799.	186.	4.	-7.4	-63.5	263.	64.	69.	93.	39.
45000.	761.	166.	2.	-7.3	-58.9	263.	59.	62.	95.	30.
50000.	731.	151.	2.	-6.7	-52.8	263.	53.	56.	96.	25.
55000.	687.	115.	3.	-5.7	-41.3	262.	42.	44.	95.	22.
60000.	659.	88.	2.	-3.5	-26.1	262.	26.	29.	90.	20.
65000.	637.	99.	0.	-1.7	-16.0	264.	16.	20.	81.	18.
70000.	621.	109.	0.	-1.2	-11.2	264.	11.	16.	71.	17.
75000.	599.	88.	0.	-1.1	-8.5	262.	9.	14.	60.	15.
80000.	583.	83.	0.	-1.5	-10.9	262.	11.	17.	66.	17.
85000.	558.	69.	1.	-1.2	-13.0	265.	13.	19.	69.	18.
90000.	519.	68.	1.	-1.7	-17.4	264.	17.	23.	76.	20.
95000.	472.	82.	2.	-1.8	-21.7	265.	22.	27.	81.	21.
100000.	371.	94.	1.	-2.3	-26.5	265.	27.	31.	85.	23.

TABLE II (CONT)

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS) +N -S	+E -W	RESULTANT WIND DIRECTION (DEGREES)	RESULTANT WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
3989.	859.	36.	0.	-.2	-2.8	265.	3.	6.	45.	8.
5000.	852.	33.	0.	-.8	-4.5	260.	5.	9.	48.	10.
6000.	852.	44.	0.	-1.9	-6.7	254.	7.	13.	55.	13.
7000.	852.	45.	1.	-3.0	-8.5	251.	9.	14.	63.	14.
8000.	855.	45.	1.	-3.8	-10.4	250.	11.	16.	70.	14.
9000.	857.	48.	1.	-4.5	-12.5	250.	13.	18.	76.	15.
10000.	858.	52.	0.	-5.2	-14.5	250.	15.	19.	80.	15.
11000.	857.	57.	0.	-5.9	-16.5	250.	17.	21.	82.	17.
12000.	859.	59.	0.	-6.7	-18.4	250.	20.	24.	83.	18.
13000.	859.	66.	0.	-7.4	-20.3	250.	22.	26.	84.	19.
14000.	859.	72.	1.	-8.2	-22.0	249.	23.	28.	85.	20.
15000.	858.	77.	0.	-8.8	-23.7	250.	25.	30.	85.	21.
16000.	857.	81.	0.	-9.1	-25.5	250.	27.	32.	86.	22.
18000.	856.	87.	1.	-9.7	-28.9	251.	31.	35.	86.	24.
20000.	853.	98.	0.	-10.2	-32.3	253.	34.	39.	87.	26.
25000.	846.	127.	5.	-11.9	-40.4	254.	42.	48.	88.	31.
30000.	837.	142.	4.	-14.4	-48.6	254.	51.	57.	89.	36.
35000.	826.	144.	5.	-1.3	-56.2	269.	56.	65.	87.	42.
40000.	807.	187.	5.	-15.7	-58.9	255.	61.	66.	92.	36.
45000.	773.	145.	7.	-14.5	-55.1	255.	57.	61.	94.	30.
50000.	740.	139.	0.	-11.4	-47.1	256.	48.	51.	94.	25.
55000.	703.	88.	0.	-10.5	-36.0	254.	38.	40.	93.	22.
60000.	680.	100.	1.	-6.3	-20.1	252.	21.	25.	84.	20.
65000.	663.	77.	1.	-3.5	-8.9	248.	10.	14.	66.	16.
70000.	635.	77.	0.	-2.4	-3.2	234.	4.	11.	35.	14.
75000.	615.	77.	0.	-2.0	-1.0	206.	2.	11.	21.	13.
80000.	590.	78.	0.	-1.5	-.3	190.	2.	10.	15.	13.
85000.	553.	78.	0.	-1.4	-3.0	245.	3.	11.	30.	13.
90000.	509.	72.	1.	-1.6	-6.1	255.	6.	13.	48.	14.
95000.	466.	74.	1.	-1.7	-11.6	261.	12.	17.	70.	16.
100000.	380.	65.	1.	-1.9	-16.1	263.	16.	20.	80.	17.

TABLE II (CONT)

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS) +N -S	+E -W	RESULTANT WIND DIRECTION (DEGREES)	RESULTANT WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
3989.	819.	30.	0.	-.4	-1.8	257.	2.	5.	37.	7.
5000.	813.	33.	0.	-.7	-3.0	256.	3.	8.	38.	9.
6000.	812.	38.	0.	-2.0	-4.6	246.	5.	11.	46.	11.
7000.	812.	41.	0.	-2.9	-5.9	244.	7.	12.	53.	13.
8000.	816.	40.	0.	-3.2	-7.1	246.	8.	13.	60.	13.
9000.	813.	43.	0.	-3.6	-8.3	247.	9.	14.	67.	13.
10000.	814.	49.	0.	-4.0	-9.6	247.	10.	14.	72.	13.
11000.	813.	51.	0.	-4.5	-10.5	247.	11.	15.	74.	14.
12000.	814.	57.	0.	-5.1	-11.5	246.	13.	17.	76.	15.
13000.	814.	61.	0.	-5.5	-12.6	246.	14.	18.	77.	16.
14000.	811.	69.	0.	-6.0	-13.8	246.	15.	19.	77.	17.
15000.	813.	77.	0.	-6.4	-15.1	247.	16.	21.	78.	18.
16000.	812.	78.	1.	-6.6	-16.4	248.	18.	22.	79.	19.
18000.	810.	87.	0.	-6.7	-18.7	250.	20.	25.	81.	21.
20000.	811.	88.	1.	-6.8	-20.8	252.	22.	27.	83.	22.
25000.	803.	113.	0.	-7.4	-27.0	255.	28.	33.	86.	26.
30000.	795.	137.	0.	-8.5	-34.5	256.	36.	40.	88.	30.
35000.	791.	138.	1.	-3.8	-42.5	265.	43.	49.	88.	35.
40000.	787.	125.	3.	-8.1	-48.1	260.	49.	54.	91.	34.
45000.	761.	119.	5.	-7.5	-45.7	261.	46.	50.	93.	27.
50000.	738.	89.	7.	-6.8	-37.0	260.	38.	40.	93.	21.
55000.	687.	86.	0.	-5.3	-24.8	258.	25.	28.	89.	19.
60000.	665.	75.	0.	-2.9	-9.8	254.	10.	14.	72.	14.
65000.	646.	55.	0.	-.9	-.3	200.	1.	9.	10.	10.
70000.	634.	71.	0.	-.7	3.5	102.	4.	9.	38.	11.
75000.	625.	68.	0.	-.4	5.7	94.	6.	10.	58.	11.
80000.	603.	55.	0.	-.7	6.0	96.	6.	10.	58.	11.
85000.	579.	47.	0.	-.8	5.5	98.	6.	11.	52.	11.
90000.	553.	45.	0.	-.9	3.9	103.	4.	11.	36.	12.
95000.	498.	53.	1.	-1.2	1.5	129.	2.	12.	16.	14.
100000.	411.	72.	0.	-.9	-.8	221.	1.	13.	9.	16.

TABLE II (CONT)

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS) +N -S	+E -W	RESULTANT WIND DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
3989.	870.	24.	0.	-.8	-.7	219.	1.	5.	23.	6.
5000.	866.	26.	0.	-1.4	-1.3	225.	2.	7.	26.	8.
6000.	864.	31.	0.	-2.9	-2.4	219.	4.	10.	37.	11.
7000.	865.	42.	0.	-3.6	-3.3	222.	5.	11.	43.	12.
8000.	870.	43.	0.	-3.7	-4.0	227.	5.	11.	48.	12.
9000.	869.	41.	0.	-3.6	-4.7	232.	6.	11.	52.	12.
10000.	866.	45.	0.	-3.4	-5.2	237.	6.	12.	54.	12.
11000.	867.	58.	0.	-3.4	-5.7	239.	7.	12.	54.	13.
12000.	867.	63.	0.	-3.5	-6.1	240.	7.	14.	52.	14.
13000.	865.	62.	0.	-3.7	-6.5	240.	8.	15.	51.	15.
14000.	862.	61.	1.	-3.9	-7.0	241.	8.	16.	50.	17.
15000.	858.	61.	0.	-4.1	-7.5	242.	9.	17.	49.	18.
16000.	857.	55.	0.	-4.1	-8.1	243.	9.	18.	49.	19.
18000.	855.	57.	1.	-4.0	-9.6	247.	10.	20.	52.	20.
20000.	855.	71.	1.	-3.9	-11.5	251.	12.	21.	58.	21.
25000.	853.	78.	0.	-4.0	-16.0	256.	17.	24.	68.	23.
30000.	844.	83.	0.	-4.5	-21.5	258.	22.	30.	73.	26.
35000.	835.	96.	0.	-6.6	-27.6	256.	28.	37.	77.	30.
40000.	822.	110.	5.	-6.5	-33.4	259.	34.	42.	80.	31.
45000.	799.	98.	4.	-7.0	-32.4	258.	33.	40.	84.	28.
50000.	781.	83.	1.	-6.3	-22.8	255.	24.	29.	82.	21.
55000.	755.	62.	1.	-4.3	-9.9	247.	11.	17.	64.	16.
60000.	736.	46.	0.	-2.4	3.1	128.	4.	10.	38.	11.
65000.	721.	40.	1.	-1.8	10.2	100.	10.	13.	82.	9.
70000.	709.	36.	0.	-1.0	14.3	94.	14.	16.	93.	9.
75000.	690.	43.	1.	-.6	17.4	92.	17.	18.	96.	8.
80000.	669.	41.	4.	-.6	19.3	92.	19.	20.	97.	9.
85000.	648.	48.	3.	-.9	20.6	92.	21.	21.	97.	9.
90000.	608.	54.	1.	-.5	21.3	91.	21.	22.	96.	11.
95000.	570.	50.	2.	-.7	22.0	92.	22.	23.	95.	11.
100000.	493.	50.	1.	-.6	23.3	92.	23.	25.	94.	13.

TABLE II (CONT)

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS) +N -S	+E -W	RESULTANT WIND DIRECTION (DEGREES)	RESULTANT WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
3989.	874.	28.	0.	-.7	.5	146.	1.	4.	23.	5.
5000.	872.	28.	0.	-1.1	1.1	135.	2.	5.	29.	6.
6000.	869.	30.	0.	-2.7	1.5	151.	3.	7.	41.	8.
7000.	869.	28.	0.	-3.4	1.4	158.	4.	8.	46.	9.
8000.	874.	25.	0.	-3.4	1.3	159.	4.	8.	45.	9.
9000.	869.	27.	0.	-3.1	1.1	161.	3.	8.	40.	9.
10000.	871.	29.	0.	-2.5	1.2	155.	3.	8.	33.	9.
11000.	870.	31.	0.	-1.9	1.5	141.	2.	9.	28.	10.
12000.	871.	29.	0.	-1.2	2.1	121.	2.	9.	26.	10.
13000.	869.	34.	0.	-.6	2.9	103.	3.	10.	30.	11.
14000.	867.	32.	0.	-.2	3.7	94.	4.	11.	36.	11.
15000.	866.	34.	0.	.2	4.4	88.	4.	11.	40.	12.
16000.	866.	39.	1.	.4	4.9	85.	5.	12.	42.	12.
18000.	865.	43.	0.	.2	4.9	87.	5.	12.	42.	13.
20000.	858.	39.	0.	-.7	4.4	99.	4.	12.	38.	13.
25000.	853.	45.	1.	-2.0	3.0	123.	4.	13.	28.	14.
30000.	846.	55.	1.	-1.3	2.7	116.	3.	15.	20.	17.
35000.	842.	66.	1.	-.7	2.1	109.	2.	18.	12.	20.
40000.	835.	59.	1.	-.0	1.7	91.	2.	20.	9.	23.
45000.	821.	55.	1.	.1	2.3	87.	2.	19.	12.	21.
50000.	795.	49.	0.	-.7	4.9	98.	5.	15.	33.	16.
55000.	769.	44.	0.	-.8	9.3	95.	9.	13.	71.	11.
60000.	741.	37.	1.	-1.0	14.5	94.	14.	16.	93.	8.
65000.	725.	41.	6.	-.7	19.4	92.	19.	20.	97.	7.
70000.	680.	57.	8.	-.9	23.5	92.	23.	24.	98.	7.
75000.	639.	50.	13.	-.5	27.4	91.	27.	28.	99.	7.
80000.	622.		14.	.1	30.6	90.	31.	31.	99.	8.
85000.	587.	71.	17.	-.7	32.8	91.	33.	33.	99.	9.
90000.	545.	62.	16.	-.6	34.4	91.	34.	35.	98.	9.
95000.	492.	57.	11.	-.2	36.6	90.	37.	37.	99.	9.
100000.	433.	62.	13.	-.7	40.0	91.	40.	40.	99.	10.

TABLE II (CONT)

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

AUGUST

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS) +N -S	+E -W	RESULTANT WIND DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
3989.	878.	35.	0.	-.4	.6	128.	1.	3.	22.	5.
5000.	874.	21.	0.	-.6	1.2	117.	1.	5.	25.	6.
6000.	872.	27.	0.	-2.4	1.6	146.	3.	8.	36.	8.
7000.	872.	32.	0.	-3.1	1.5	155.	3.	8.	41.	9.
8000.	873.	29.	0.	-2.9	1.3	155.	3.	8.	36.	9.
9000.	873.	29.	0.	-2.3	1.2	152.	3.	9.	31.	9.
10000.	872.	33.	0.	-1.4	1.3	137.	2.	9.	22.	10.
11000.	871.	35.	0.	-.5	1.6	107.	2.	9.	18.	10.
12000.	869.	34.	0.	.3	2.0	82.	2.	10.	21.	11.
13000.	867.	31.	0.	.9	2.6	71.	3.	10.	26.	11.
14000.	863.	32.	0.	1.2	3.1	68.	3.	11.	30.	12.
15000.	860.	36.	0.	1.4	3.5	68.	4.	12.	33.	12.
16000.	859.	35.	0.	1.4	3.6	69.	4.	12.	33.	13.
18000.	860.	38.	0.	1.1	3.3	71.	4.	12.	29.	13.
20000.	857.	52.	0.	.8	2.5	72.	3.	12.	22.	13.
25000.	855.	47.	0.	1.2	.1	3.	1.	13.	9.	15.
30000.	851.	62.	0.	1.7	-2.4	306.	3.	17.	18.	19.
35000.	841.	61.	0.	2.9	-5.3	299.	6.	20.	30.	23.
40000.	831.	73.	0.	4.7	-7.7	301.	9.	23.	39.	25.
45000.	821.	59.	0.	5.1	-5.9	311.	8.	22.	36.	23.
50000.	800.	47.	1.	3.4	-1.3	339.	4.	16.	23.	18.
55000.	770.	42.	0.	.9	5.4	81.	5.	11.	49.	12.
60000.	743.	32.	2.	.4	11.6	88.	12.	14.	86.	9.
65000.	715.	37.	2.	-.3	17.1	91.	17.	18.	96.	7.
70000.	697.	36.	7.	-.4	22.0	91.	22.	22.	98.	7.
75000.	681.	45.	11.	-.2	26.0	90.	26.	26.	98.	7.
80000.	654.	48.	12.	-.4	29.5	91.	30.	30.	99.	7.
85000.	625.	54.	11.	-.6	31.5	91.	32.	32.	99.	8.
90000.	581.	64.	17.	-.4	33.9	91.	34.	34.	99.	8.
95000.	530.	63.	13.	-.5	35.3	91.	35.	36.	99.	9.
100000.	442.	60.	11.	-.2	37.4	90.	37.	38.	99.	10.

TABLE II (CONT)

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS

WHITE SANDS DESERT SITE (WSD)

PERIOD OF RECORD 1961-1973

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS) +N -S	+E -W	RESULTANT WIND DIRECTION (DEGREES)	RESULTANT WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATIO (KNOTS)
3989.	796.	18.	0.	-.3	.2	144.	0.	3.	12.	5.
5000.	799.	32.	0.	-.3	.2	151.	0.	6.	6.	7.
6000.	800.	45.	0.	-1.8	-.1	184.	2.	8.	23.	10.
7000.	800.	46.	0.	-2.6	-.8	197.	3.	9.	30.	10.
8000.	802.	48.	0.	-2.6	-1.5	209.	3.	10.	31.	11.
9000.	801.	49.	0.	-2.5	-2.1	220.	3.	10.	33.	11.
10000.	802.	49.	0.	-2.3	-2.6	229.	3.	11.	33.	12.
11000.	801.	50.	0.	-2.1	-3.0	235.	4.	11.	33.	13.
12000.	802.	55.	0.	-1.9	-3.4	241.	4.	12.	33.	14.
13000.	800.	62.	0.	-1.7	-3.9	246.	4.	13.	34.	14.
14000.	798.	62.	0.	-1.5	-4.5	252.	5.	13.	36.	15.
15000.	797.	63.	0.	-1.4	-5.1	255.	5.	14.	39.	15.
16000.	795.	66.	0.	-1.4	-6.0	256.	6.	14.	44.	16.
18000.	792.	73.	1.	-1.5	-7.5	259.	8.	15.	51.	16.
20000.	787.	84.	0.	-1.8	-9.3	259.	9.	16.	58.	17.
25000.	782.	77.	1.	-3.0	-14.5	258.	15.	21.	69.	20.
30000.	779.	94.	1.	-4.5	-21.1	258.	22.	28.	77.	23.
35000.	768.	93.	1.	-6.1	-28.6	258.	29.	36.	82.	26.
40000.	761.	111.	0.	-5.9	-34.5	260.	35.	41.	86.	28.
45000.	751.	106.	2.	-4.4	-32.7	262.	33.	38.	87.	25.
50000.	737.	100.	0.	-3.9	-24.3	261.	25.	29.	85.	20.
55000.	713.	66.	0.	-2.0	-11.4	260.	12.	16.	71.	15.
60000.	697.	62.	0.	-1.4	-.5	198.	2.	10.	15.	12.
65000.	676.	52.	0.	-.7	5.8	97.	6.	10.	58.	10.
70000.	665.	42.	0.	-.8	9.9	95.	10.	12.	82.	9.
75000.	645.	45.	1.	.0	13.3	90.	13.	15.	91.	9.
80000.	618.	43.	1.	-.7	15.7	93.	16.	17.	94.	10.
85000.	591.	38.	2.	-.7	17.0	92.	17.	18.	95.	9.
90000.	548.	39.	1.	-.4	17.6	91.	18.	18.	96.	10.
95000.	505.	53.	1.	.2	18.2	89.	18.	19.	94.	11.
100000.	429.	48.	1.	-.4	18.0	91.	18.	20.	92.	12.

TABLE II (CONT)
UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS) +N	-S	+E	-W	RESULTANT WIND DIRECTION (DEGREES)	RESULTANT WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
3989.	903.	25.	0.	-.0		-.3		267.	0.	3.	11.	5.
5000.	900.	35.	0.	.0		-1.0		271.	1.	6.	17.	7.
6000.	899.	45.	0.	-1.3		-2.2		239.	3.	9.	28.	10.
7000.	898.	47.	0.	-1.9		-3.4		241.	4.	11.	36.	12.
8000.	898.	42.	0.	-1.8		-4.6		248.	5.	12.	43.	13.
9000.	898.	42.	0.	-1.8		-5.8		253.	6.	13.	47.	14.
10000.	898.	50.	0.	-1.5		-6.7		257.	7.	14.	49.	15.
11000.	900.	55.	0.	-1.4		-7.6		259.	8.	15.	50.	16.
12000.	900.	57.	0.	-1.3		-8.3		261.	8.	17.	51.	17.
13000.	900.	61.	0.	-1.3		-9.1		262.	9.	18.	52.	18.
14000.	899.	65.	0.	-1.2		-9.9		263.	10.	18.	54.	19.
15000.	898.	65.	0.	-1.2		-10.8		264.	11.	19.	56.	20.
16000.	896.	65.	0.	-1.0		-11.6		265.	12.	20.	58.	21.
18000.	895.	84.	0.	-1.0		-13.3		266.	13.	22.	61.	22.
20000.	895.	96.	0.	-1.0		-14.9		266.	15.	24.	62.	24.
25000.	889.	138.	0.	-1.2		-19.6		266.	20.	30.	64.	30.
30000.	883.	139.	1.	-1.7		-25.1		266.	25.	37.	68.	35.
35000.	870.	145.	3.	-2.0		-31.8		266.	32.	44.	73.	38.
40000.	863.	145.	3.	-2.1		-38.3		267.	38.	48.	80.	37.
45000.	851.	130.	0.	-1.8		-37.3		267.	37.	44.	85.	31.
50000.	831.	106.	0.	-1.0		-30.3		268.	30.	35.	87.	23.
55000.	805.	92.	0.	-.1		-19.4		270.	19.	23.	84.	18.
60000.	767.	78.	0.	.8		-8.5		275.	9.	13.	66.	13.
65000.	756.	74.	0.	-.5		-3.9		263.	4.	10.	40.	12.
70000.	725.	74.	0.	-1.1		-2.5		246.	3.	9.	31.	11.
75000.	706.	46.	0.	-.6		-1.0		240.	1.	9.	13.	11.
80000.	688.	48.	0.	-.6		-1.5		246.	2.	11.	15.	12.
85000.	659.	54.	0.	-.6		-3.1		258.	3.	12.	26.	14.
90000.	623.	65.	0.	-.2		-5.6		268.	6.	14.	40.	16.
95000.	571.	60.	0.	-.6		-9.2		266.	9.	17.	56.	18.
100000.	479.	68.	0.	-.6		-13.4		267.	13.	19.	69.	19.

TABLE II (CONT)
UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS) +N	-S	+E	-W	RESULTANT WIND DIRECTION (DEGREES)	RESULTANT WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
3989.	785.	22.	0.	.5			-.3	328.	1.	3.	17.	5.
5000.	771.	30.	0.	1.3			-1.6	308.	2.	7.	31.	8.
6000.	771.	46.	0.	.4			-3.7	276.	4.	10.	39.	11.
7000.	772.	56.	0.	-.3			-5.9	267.	6.	12.	49.	13.
8000.	777.	57.	0.	-.7			-8.1	265.	8.	14.	57.	14.
9000.	780.	57.	1.	-.9			-10.2	265.	10.	16.	62.	16.
10000.	782.	62.	1.	-.9			-12.2	266.	12.	18.	66.	17.
11000.	782.	63.	1.	-.8			-14.3	267.	14.	21.	69.	18.
12000.	782.	64.	1.	-.7			-16.1	267.	16.	22.	71.	20.
13000.	784.	69.	0.	-.8			-17.7	267.	18.	24.	73.	21.
14000.	783.	71.	0.	-.9			-19.0	267.	19.	26.	75.	22.
15000.	783.	73.	0.	-.9			-20.3	268.	20.	27.	75.	23.
16000.	784.	78.	0.	-.8			-21.5	268.	21.	28.	76.	24.
18000.	781.	107.	0.	-.9			-24.0	268.	24.	32.	76.	27.
20000.	777.	101.	1.	-1.2			-26.6	267.	27.	35.	76.	29.
25000.	766.	122.	3.	-2.4			-34.1	266.	34.	44.	78.	35.
30000.	756.	129.	3.	-3.2			-41.2	266.	41.	52.	79.	40.
35000.	743.	133.	6.	-3.8			-47.7	266.	48.	58.	83.	41.
40000.	736.	147.	3.	-3.7			-52.2	266.	52.	60.	87.	38.
45000.	718.	134.	4.	-3.3			-48.2	266.	48.	54.	89.	32.
50000.	698.	127.	7.	-3.4			-42.6	265.	43.	47.	90.	27.
55000.	668.	116.	1.	-1.8			-31.4	267.	31.	35.	89.	23.
60000.	634.	80.	2.	-.7			-19.5	268.	20.	23.	84.	18.
65000.	609.	77.	0.	.5			-13.0	272.	13.	17.	76.	15.
70000.	596.	58.	0.	.7			-10.7	274.	11.	15.	73.	14.
75000.	572.	58.	0.	.2			-11.1	271.	11.	16.	71.	15.
80000.	558.	60.	0.	.4			-13.5	272.	13.	18.	73.	17.
85000.	525.	64.	0.	-.5			-17.6	268.	18.	22.	81.	18.
90000.	487.	92.	1.	-1.2			-22.9	267.	23.	27.	85.	21.
95000.	427.	97.	1.	-2.2			-28.2	265.	28.	32.	89.	23.
100000.	335.	97.	1.	-2.5			-33.5	266.	34.	37.	91.	26.

TABLE II (CONT)

UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS) +N	-S	+E	-W	RESULTANT WIND DIRECTION (DEGREES)	RESULTANT WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
3989.	701.	30.	0.	.4		-.9		291.	1.	4.	27.	6.
5000.	695.	38.	0.	1.1		-3.0		290.	3.	7.	43.	9.
6000.	697.	48.	0.	.3		-6.2		272.	6.	11.	56.	12.
7000.	696.	58.	0.	-.1		-9.4		269.	9.	14.	66.	14.
8000.	699.	64.	0.	-.2		-12.1		269.	12.	17.	71.	15.
9000.	701.	66.	0.	-.3		-14.4		269.	14.	20.	74.	17.
10000.	702.	66.	0.	-.3		-16.4		269.	16.	22.	74.	19.
11000.	701.	70.	1.	-.3		-18.2		269.	18.	24.	75.	20.
12000.	701.	78.	0.	-.5		-19.7		269.	20.	26.	76.	22.
13000.	701.	83.	0.	-.7		-21.1		268.	21.	28.	76.	23.
14000.	702.	84.	1.	-.9		-22.4		268.	22.	29.	76.	24.
15000.	702.	81.	1.	-1.0		-23.8		268.	24.	31.	76.	26.
16000.	701.	85.	0.	-1.2		-25.3		267.	25.	33.	77.	27.
18000.	699.	93.	0.	-1.6		-28.0		267.	28.	37.	76.	30.
20000.	697.	101.	0.	-1.8		-30.6		267.	31.	40.	76.	33.
25000.	690.	123.	4.	-3.2		-37.2		265.	37.	49.	77.	40.
30000.	685.	175.	2.	-5.9		-44.4		262.	45.	57.	78.	46.
35000.	676.	167.	3.	-7.3		-50.2		262.	51.	64.	79.	50.
40000.	661.	152.	0.	-8.4		-53.4		261.	54.	63.	86.	42.
45000.	642.	149.	4.	-5.7		-50.3		263.	51.	57.	88.	34.
50000.	625.	136.	3.	-5.2		-44.5		263.	45.	50.	90.	29.
55000.	600.	115.	0.	-4.4		-35.0		263.	35.	40.	87.	27.
60000.	581.	107.	3.	-2.5		-24.2		264.	24.	28.	86.	21.
65000.	557.	96.	1.	-.6		-16.4		268.	16.	21.	79.	19.
70000.	535.	75.	1.	.6		-12.1		273.	12.	17.	72.	17.
75000.	517.	82.	0.	1.2		-10.3		277.	10.	16.	63.	17.
80000.	494.	74.	0.	1.4		-11.2		277.	11.	18.	63.	19.
85000.	465.	87.	1.	1.7		-16.4		276.	16.	22.	74.	21.
90000.	428.	122.	2.	1.2		-21.8		273.	22.	27.	80.	25.
95000.	384.	96.	2.	.5		-28.7		271.	29.	34.	85.	28.
100000.	317.	128.	6.	-.8		-37.3		269.	37.	43.	87.	32.

TABLE III

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JANUARY

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES) ≥360 <30	≥30 <60	≥60 <90	≥90 <120	≥120 <150	≥150 <180	≥180 <210	≥210 <240	≥240 <270	≥270 <300	≥300 <330	≥330 <360	CALM.
3989.	757.	5.	10.	3.	2.	3.	5.	5.	3.	4.	11.	5.	3.	41.
5000.	756.	11.	5.	4.	3.	2.	4.	7.	5.	9.	14.	15.	21.	1.
6000.	758.	8.	2.	2.	3.	4.	3.	5.	10.	16.	20.	15.	13.	0.
7000.	758.	5.	1.	0.	2.	3.	3.	5.	10.	21.	24.	14.	10.	0.
8000.	759.	3.	2.	1.	2.	2.	4.	4.	9.	24.	26.	14.	10.	0.
9000.	758.	4.	1.	1.	1.	1.	2.	4.	9.	23.	28.	15.	8.	0.
10000.	759.	3.	1.	1.	2.	0.	1.	4.	9.	24.	30.	17.	7.	0.
11000.	757.	3.	1.	1.	1.	1.	1.	3.	11.	25.	27.	17.	8.	0.
12000.	758.	3.	1.	1.	1.	0.	1.	2.	12.	26.	28.	16.	7.	0.
13000.	757.	3.	2.	1.	1.	0.	1.	2.	12.	27.	28.	16.	7.	0.
14000.	757.	3.	2.	1.	1.	0.	1.	2.	13.	25.	29.	16.	6.	0.
15000.	755.	3.	2.	1.	1.	0.	1.	1.	13.	28.	28.	15.	6.	0.
16000.	755.	3.	2.	1.	0.	0.	1.	1.	12.	30.	29.	13.	7.	0.
18000.	753.	4.	2.	1.	0.	0.	0.	1.	13.	28.	30.	13.	7.	0.
20000.	747.	3.	2.	1.	1.	0.	0.	2.	14.	26.	30.	13.	8.	0.
25000.	742.	3.	3.	0.	1.	0.	0.	1.	13.	33.	24.	14.	8.	0.
30000.	737.	3.	2.	1.	1.	0.	0.	1.	12.	35.	24.	14.	7.	0.
35000.	720.	3.	1.	1.	0.	0.	0.	0.	12.	38.	25.	12.	7.	0.
40000.	690.	1.	1.	1.	0.	0.	0.	0.	10.	43.	26.	12.	5.	0.
45000.	669.	2.	1.	0.	0.	0.	0.	0.	8.	45.	32.	10.	3.	0.
50000.	638.	1.	0.	0.	0.	0.	0.	0.	7.	46.	35.	8.	3.	0.
55000.	608.	1.	0.	0.	0.	0.	0.	0.	7.	47.	32.	10.	2.	0.
60000.	579.	1.	1.	1.	0.	0.	0.	2.	7.	41.	32.	12.	3.	0.
65000.	550.	3.	1.	1.	1.	1.	2.	2.	7.	32.	29.	15.	6.	0.
70000.	528.	8.	5.	6.	3.	2.	1.	2.	6.	24.	27.	11.	5.	0.
75000.	510.	6.	9.	10.	7.	2.	1.	2.	6.	22.	20.	9.	7.	0.
80000.	484.	8.	10.	13.	3.	2.	1.	1.	5.	23.	22.	9.	4.	0.
85000.	459.	6.	10.	15.	5.	2.	2.	2.	3.	26.	19.	7.	4.	0.
90000.	426.	5.	10.	12.	5.	2.	3.	2.	4.	28.	19.	7.	3.	0.
95000.	362.	4.	7.	12.	6.	2.	3.	3.	4.	30.	21.	5.	4.	1.
100000.	280.	4.	10.	6.	6.	4.	2.	3.	7.	29.	21.	6.	3.	0.

TABLE III (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FEBRUARY

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES) ≥360 <30	≥30 <60	≥60 <90	≥90 <120	≥120 <150	≥150 <180	≥180 <210	≥210 <240	≥240 <270	≥270 <300	≥300 <330	≥330 <360	CALM.
3989.	711.	8.	10.	5.	3.	5.	5.	5.	5.	5.	7.	6.	3.	34.
5000.	709.	12.	7.	5.	3.	4.	5.	6.	6.	6.	12.	14.	17.	2.
6000.	709.	8.	3.	2.	4.	7.	4.	7.	8.	12.	18.	13.	15.	1.
7000.	710.	5.	2.	2.	3.	5.	6.	6.	9.	17.	17.	16.	11.	0.
8000.	710.	3.	3.	2.	3.	3.	5.	6.	9.	21.	19.	16.	11.	0.
9000.	710.	3.	2.	2.	2.	3.	3.	5.	12.	20.	22.	16.	10.	0.
10000.	711.	3.	3.	1.	2.	1.	2.	5.	12.	21.	23.	18.	10.	0.
11000.	711.	2.	3.	1.	1.	1.	1.	5.	12.	23.	22.	19.	10.	0.
12000.	709.	3.	3.	1.	1.	0.	1.	4.	12.	24.	23.	20.	8.	0.
13000.	710.	3.	3.	1.	0.	0.	1.	3.	12.	25.	22.	21.	8.	0.
14000.	710.	3.	3.	1.	0.	0.	1.	2.	13.	26.	24.	18.	8.	0.
15000.	710.	2.	3.	1.	0.	0.	1.	3.	12.	26.	25.	17.	10.	0.
16000.	710.	2.	4.	1.	0.	0.	1.	2.	13.	26.	27.	17.	8.	0.
18000.	711.	2.	3.	1.	0.	0.	0.	2.	11.	29.	26.	17.	8.	0.
20000.	709.	3.	3.	1.	0.	0.	1.	2.	11.	32.	25.	15.	7.	0.
25000.	706.	3.	3.	1.	0.	0.	0.	2.	11.	33.	24.	14.	8.	0.
30000.	700.	2.	1.	2.	0.	0.	1.	1.	12.	34.	26.	14.	7.	0.
35000.	689.	2.	1.	1.	0.	0.	0.	1.	11.	36.	29.	13.	6.	0.
40000.	675.	1.	1.	0.	0.	0.	0.	0.	8.	43.	31.	12.	4.	0.
45000.	644.	1.	0.	0.	0.	0.	0.	0.	9.	40.	36.	9.	3.	0.
50000.	623.	1.	0.	0.	0.	0.	0.	0.	6.	43.	39.	9.	2.	0.
55000.	580.	1.	0.	0.	0.	0.	0.	0.	6.	39.	39.	11.	3.	0.
60000.	544.	1.	1.	0.	0.	1.	1.	2.	7.	32.	36.	14.	5.	0.
65000.	515.	4.	3.	1.	1.	1.	1.	3.	9.	27.	31.	16.	3.	0.
70000.	504.	4.	5.	7.	5.	1.	1.	1.	6.	24.	26.	14.	5.	0.
75000.	486.	4.	7.	10.	4.	1.	1.	1.	5.	27.	28.	8.	4.	0.
80000.	460.	4.	5.	12.	5.	2.	1.	2.	6.	28.	23.	9.	4.	0.
85000.	429.	3.	6.	12.	4.	2.	1.	1.	7.	33.	19.	8.	3.	0.
90000.	400.	3.	3.	11.	3.	2.	1.	1.	5.	35.	23.	7.	4.	0.
95000.	348.	3.	5.	10.	3.	1.	1.	2.	3.	32.	29.	6.	4.	0.
100000.	285.	1.	3.	10.	4.	1.	1.	1.	3.	41.	26.	6.	3.	0.

TABLE III (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)

WHITE SANDS DESERT SITE (WSD)

PERIOD OF RECORD 1961-1973

MARCH

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES) ≥360 <30	≥30 <60	≥60 <90	≥90 <120	≥120 <150	≥150 <180	≥180 <210	≥210 <240	≥240 <270	≥270 <300	≥300 <330	≥330 <360	CALM.
3989.	901.	6.	6.	3.	2.	5.	6.	7.	5.	7.	13.	8.	4.	27.
5000.	896.	10.	6.	4.	3.	5.	7.	8.	7.	10.	18.	13.	9.	1.
6000.	896.	6.	2.	2.	4.	7.	8.	7.	11.	17.	18.	9.	9.	1.
7000.	895.	4.	1.	1.	4.	5.	8.	9.	12.	21.	18.	10.	8.	0.
8000.	897.	2.	1.	1.	2.	3.	6.	8.	14.	24.	20.	11.	8.	0.
9000.	900.	3.	1.	2.	1.	2.	3.	7.	16.	27.	20.	12.	7.	0.
10000.	900.	2.	1.	1.	1.	1.	2.	5.	15.	29.	23.	13.	6.	0.
11000.	900.	2.	1.	1.	0.	1.	1.	4.	15.	33.	24.	13.	5.	0.
12000.	901.	2.	1.	1.	0.	1.	1.	3.	17.	31.	25.	13.	4.	0.
13000.	900.	2.	1.	1.	0.	1.	1.	2.	17.	32.	26.	13.	4.	0.
14000.	901.	2.	1.	1.	0.	0.	1.	3.	16.	36.	24.	13.	3.	0.
15000.	901.	2.	1.	1.	0.	0.	1.	2.	15.	36.	25.	13.	3.	0.
16000.	900.	1.	2.	1.	0.	0.	1.	2.	15.	37.	25.	13.	4.	0.
18000.	899.	1.	1.	1.	0.	0.	1.	2.	14.	38.	27.	12.	3.	0.
20000.	898.	1.	1.	1.	0.	0.	1.	2.	14.	40.	27.	10.	3.	0.
25000.	890.	2.	1.	1.	0.	1.	0.	1.	12.	43.	25.	10.	4.	0.
30000.	880.	1.	1.	1.	0.	0.	0.	1.	12.	43.	26.	9.	4.	0.
35000.	859.	1.	1.	1.	0.	0.	0.	1.	11.	43.	29.	9.	4.	0.
40000.	799.	1.	0.	0.	0.	0.	0.	0.	9.	52.	28.	7.	2.	0.
45000.	761.	0.	0.	0.	0.	0.	0.	0.	6.	59.	29.	6.	0.	0.
50000.	731.	0.	0.	0.	0.	0.	0.	0.	6.	60.	30.	4.	0.	0.
55000.	687.	0.	0.	0.	0.	0.	0.	0.	7.	55.	33.	3.	0.	0.
60000.	659.	1.	1.	1.	1.	0.	1.	2.	10.	45.	31.	7.	1.	0.
65000.	637.	2.	2.	1.	2.	1.	3.	4.	11.	37.	26.	8.	3.	0.
70000.	621.	4.	4.	5.	3.	2.	3.	4.	10.	33.	21.	7.	5.	0.
75000.	599.	6.	6.	6.	4.	3.	3.	4.	9.	31.	21.	5.	2.	0.
80000.	583.	3.	4.	7.	5.	3.	1.	3.	11.	34.	21.	5.	4.	0.
85000.	558.	3.	3.	8.	4.	2.	1.	2.	8.	36.	26.	6.	2.	0.
90000.	519.	2.	3.	6.	4.	2.	1.	1.	6.	42.	27.	6.	2.	0.
95000.	472.	2.	3.	4.	3.	2.	1.	1.	4.	47.	27.	4.	2.	0.
100000.	371.	1.	2.	5.	3.	1.	1.	2.	5.	46.	30.	3.	1.	0.

TABLE III (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

APRIL

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES) ≥360 <30	≥30 <60	≥60 <90	≥90 <120	≥120 <150	≥150 <180	≥180 <210	≥210 <240	≥240 <270	≥270 <300	≥300 <330	≥330 <360	CALM.
3989.	859.	6.	6.	2.	2.	5.	8.	8.	8.	9.	15.	9.	3.	20.
5000.	852.	6.	6.	4.	3.	4.	7.	11.	11.	12.	18.	10.	7.	1.
6000.	852.	5.	2.	2.	4.	7.	8.	8.	16.	21.	15.	7.	6.	0.
7000.	852.	3.	2.	2.	3.	5.	6.	10.	18.	25.	16.	6.	5.	0.
8000.	855.	2.	2.	1.	3.	4.	5.	10.	20.	27.	16.	6.	5.	0.
9000.	857.	1.	1.	1.	2.	2.	4.	10.	22.	29.	16.	6.	5.	0.
10000.	858.	1.	1.	0.	2.	2.	3.	7.	25.	33.	16.	6.	4.	0.
11000.	857.	1.	1.	1.	2.	1.	1.	7.	24.	36.	16.	7.	4.	0.
12000.	859.	1.	1.	1.	1.	1.	1.	7.	25.	34.	18.	6.	4.	0.
13000.	859.	2.	1.	0.	1.	1.	1.	6.	25.	37.	16.	7.	3.	0.
14000.	859.	2.	1.	1.	1.	1.	1.	6.	24.	39.	16.	6.	3.	0.
15000.	858.	2.	1.	0.	1.	1.	1.	6.	24.	39.	16.	6.	3.	0.
16000.	857.	2.	1.	0.	0.	0.	2.	5.	25.	39.	17.	7.	3.	0.
18000.	856.	2.	1.	0.	0.	1.	1.	4.	23.	42.	16.	7.	4.	0.
20000.	853.	1.	0.	0.	0.	0.	1.	3.	22.	45.	16.	6.	4.	0.
25000.	846.	2.	0.	0.	0.	0.	0.	2.	21.	48.	17.	7.	3.	0.
30000.	837.	1.	1.	0.	0.	0.	0.	3.	21.	48.	19.	5.	3.	0.
35000.	826.	1.	0.	0.	0.	0.	0.	2.	20.	49.	19.	5.	2.	0.
40000.	807.	0.	0.	0.	0.	0.	0.	1.	19.	54.	18.	5.	2.	0.
45000.	773.	0.	0.	0.	0.	0.	0.	1.	20.	54.	21.	3.	1.	0.
50000.	740.	0.	0.	0.	0.	0.	0.	1.	16.	56.	23.	2.	1.	0.
55000.	703.	0.	0.	0.	0.	0.	0.	2.	22.	50.	21.	2.	1.	0.
60000.	680.	1.	1.	1.	1.	1.	2.	7.	23.	36.	21.	5.	1.	0.
65000.	663.	2.	2.	4.	4.	5.	5.	8.	18.	27.	14.	7.	3.	0.
70000.	635.	4.	4.	9.	10.	6.	8.	10.	11.	17.	10.	7.	4.	0.
75000.	615.	3.	7.	13.	12.	9.	6.	8.	12.	14.	8.	3.	4.	0.
80000.	590.	4.	8.	12.	11.	9.	8.	7.	10.	14.	9.	4.	4.	0.
85000.	553.	4.	6.	10.	10.	5.	7.	6.	10.	22.	12.	5.	3.	1.
90000.	509.	4.	4.	7.	6.	3.	6.	6.	13.	27.	16.	6.	4.	0.
95000.	466.	2.	3.	3.	4.	3.	3.	3.	12.	36.	21.	6.	3.	0.
100000.	380.	2.	1.	3.	2.	3.	2.	3.	10.	39.	26.	7.	3.	0.

TABLE III (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)

WHITE SANDS DESERT SITE (WSD)

PERIOD OF RECORD 1961-1973

MAY

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES) ≥360 <30	≥30 <60	≥60 <90	≥90 <120	≥120 <150	≥150 <180	≥180 <210	≥210 <240	≥240 <270	≥270 <300	≥300 <330	≥330 <360	CALM.
3989.	819.	4.	3.	3.	4.	6.	9.	8.	7.	9.	12.	8.	2.	23.
5000.	813.	7.	5.	7.	2.	6.	9.	11.	11.	11.	17.	9.	6.	1.
6000.	812.	5.	2.	1.	5.	8.	9.	12.	12.	17.	17.	6.	5.	0.
7000.	812.	4.	2.	1.	4.	7.	10.	12.	14.	21.	16.	6.	5.	0.
8000.	816.	2.	2.	1.	4.	5.	9.	10.	16.	24.	16.	6.	5.	0.
9000.	813.	3.	1.	1.	3.	4.	7.	9.	19.	26.	15.	6.	5.	0.
10000.	814.	2.	1.	1.	4.	3.	5.	8.	19.	32.	14.	7.	3.	0.
11000.	813.	2.	2.	1.	3.	3.	4.	9.	21.	30.	16.	6.	3.	0.
12000.	814.	2.	2.	1.	2.	3.	3.	9.	22.	30.	15.	6.	4.	0.
13000.	814.	3.	2.	2.	2.	3.	2.	9.	22.	32.	15.	5.	3.	0.
14000.	811.	3.	2.	1.	2.	2.	2.	9.	22.	33.	16.	6.	3.	0.
15000.	813.	3.	2.	1.	1.	2.	2.	7.	23.	32.	16.	6.	3.	0.
16000.	812.	4.	1.	2.	1.	2.	2.	7.	22.	33.	16.	6.	3.	0.
18000.	810.	3.	3.	2.	1.	1.	2.	6.	20.	36.	17.	6.	3.	0.
20000.	811.	2.	3.	1.	1.	1.	2.	5.	19.	41.	15.	7.	3.	0.
25000.	803.	2.	2.	1.	0.	1.	2.	4.	18.	41.	20.	5.	4.	0.
30000.	795.	2.	1.	1.	0.	1.	1.	4.	15.	44.	21.	7.	4.	0.
35000.	791.	2.	1.	1.	0.	0.	1.	4.	13.	51.	18.	8.	3.	0.
40000.	787.	1.	0.	1.	0.	0.	0.	3.	11.	50.	24.	7.	2.	0.
45000.	761.	0.	0.	0.	0.	0.	0.	1.	12.	53.	25.	7.	1.	0.
50000.	738.	0.	0.	0.	0.	0.	0.	3.	11.	56.	23.	6.	1.	0.
55000.	687.	1.	0.	0.	0.	0.	1.	5.	14.	45.	24.	7.	2.	1.
60000.	665.	3.	1.	2.	2.	3.	5.	8.	18.	26.	18.	8.	4.	0.
65000.	646.	5.	4.	12.	11.	9.	8.	7.	9.	11.	9.	8.	6.	0.
70000.	634.	4.	9.	21.	20.	10.	7.	5.	5.	6.	5.	4.	3.	0.
75000.	625.	4.	9.	27.	25.	9.	4.	3.	4.	4.	4.	3.	3.	1.
80000.	603.	3.	7.	24.	27.	10.	5.	4.	3.	5.	3.	4.	3.	0.
85000.	579.	3.	7.	25.	24.	11.	5.	5.	5.	7.	4.	2.	3.	0.
90000.	553.	3.	7.	20.	22.	9.	7.	4.	5.	10.	6.	4.	3.	0.
95000.	498.	3.	7.	16.	16.	9.	4.	5.	9.	13.	8.	3.	5.	0.
100000.	411.	4.	6.	15.	14.	5.	5.	4.	8.	18.	10.	7.	3.	0.

TABLE III (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JUNE

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES) ≥360 <30	≥30 <60	≥60 <90	≥90 <120	≥120 <150	≥150 <180	≥180 <210	≥210 <240	≥240 <270	≥270 <300	≥300 <330	≥330 <360	CALM.
3989.	870.	3.	6.	3.	5.	9.	10.	9.	7.	7.	9.	6.	2.	24.
5000.	866.	7.	7.	6.	5.	9.	11.	12.	9.	8.	13.	6.	5.	2.
6000.	864.	4.	2.	2.	7.	13.	12.	11.	11.	11.	15.	5.	5.	1.
7000.	865.	4.	2.	2.	6.	11.	14.	12.	12.	15.	15.	3.	4.	0.
8000.	870.	3.	2.	2.	5.	8.	13.	13.	15.	18.	12.	5.	3.	1.
9000.	869.	3.	3.	3.	4.	7.	11.	12.	17.	20.	11.	5.	4.	0.
10000.	866.	4.	3.	3.	4.	5.	10.	11.	17.	23.	10.	5.	5.	0.
11000.	867.	4.	5.	3.	4.	3.	7.	10.	19.	22.	10.	7.	5.	0.
12000.	867.	4.	5.	4.	4.	3.	6.	10.	20.	19.	12.	6.	7.	0.
13000.	865.	6.	6.	5.	3.	3.	5.	11.	20.	20.	8.	8.	5.	0.
14000.	862.	7.	7.	5.	2.	2.	3.	11.	21.	19.	10.	6.	6.	0.
15000.	858.	8.	6.	5.	3.	2.	3.	11.	22.	19.	10.	5.	6.	0.
16000.	857.	7.	8.	5.	3.	2.	2.	10.	23.	18.	10.	6.	6.	0.
18000.	855.	7.	8.	5.	3.	1.	4.	8.	22.	20.	10.	7.	5.	0.
20000.	855.	4.	8.	5.	2.	2.	3.	7.	21.	24.	12.	7.	6.	0.
25000.	853.	4.	5.	4.	1.	2.	2.	6.	19.	29.	14.	7.	6.	0.
30000.	844.	5.	4.	1.	1.	0.	2.	7.	21.	31.	15.	8.	6.	0.
35000.	835.	4.	3.	1.	0.	0.	1.	5.	21.	33.	17.	8.	6.	0.
40000.	822.	4.	2.	1.	0.	0.	0.	3.	23.	37.	18.	9.	5.	0.
45000.	799.	3.	1.	1.	0.	0.	0.	3.	22.	37.	21.	8.	4.	0.
50000.	781.	3.	1.	1.	0.	0.	1.	5.	23.	34.	21.	7.	4.	0.
55000.	755.	4.	3.	3.	2.	1.	5.	12.	20.	23.	14.	6.	5.	0.
60000.	736.	4.	9.	15.	14.	12.	11.	11.	8.	5.	3.	4.	3.	0.
65000.	721.	2.	5.	30.	33.	18.	5.	4.	2.	1.	1.	0.	0.	0.
70000.	709.	0.	4.	37.	45.	8.	3.	1.	0.	0.	0.	0.	0.	0.
75000.	690.	0.	2.	41.	50.	5.	1.	0.	0.	0.	0.	0.	0.	0.
80000.	669.	0.	2.	41.	51.	5.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	648.	0.	1.	42.	52.	4.	2.	0.	0.	0.	0.	0.	0.	0.
90000.	608.	1.	2.	43.	48.	4.	1.	1.	0.	0.	0.	0.	0.	0.
95000.	570.	0.	2.	42.	49.	3.	1.	0.	0.	0.	1.	0.	0.	0.
100000.	493.	0.	2.	43.	45.	4.	2.	0.	1.	0.	1.	0.	0.	0.

TABLE III (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)

WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JULY

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES) ≥360 <30	≥30 <60	≥60 <90	≥90 <120	≥120 <150	≥150 <180	≥180 <210	≥210 <240	≥240 <270	≥270 <300	≥300 <330	≥330 <360	CALM.
3989.	874.	5.	7.	5.	5.	8.	9.	13.	5.	3.	3.	3.	2.	30.
5000.	872.	8.	13.	12.	8.	10.	12.	13.	5.	2.	7.	4.	5.	2.
6000.	869.	7.	5.	6.	11.	16.	16.	13.	7.	4.	5.	4.	4.	1.
7000.	869.	5.	4.	6.	10.	17.	16.	15.	8.	5.	6.	4.	4.	0.
8000.	874.	4.	4.	5.	12.	14.	16.	14.	9.	7.	6.	4.	4.	0.
9000.	869.	4.	3.	6.	12.	13.	15.	12.	10.	9.	6.	5.	4.	0.
10000.	871.	4.	3.	9.	13.	12.	14.	11.	9.	8.	6.	5.	6.	0.
11000.	870.	6.	6.	10.	13.	13.	10.	10.	7.	7.	7.	6.	5.	1.
12000.	871.	6.	8.	12.	13.	11.	9.	9.	8.	7.	4.	5.	6.	0.
13000.	869.	6.	9.	14.	14.	11.	8.	8.	7.	6.	5.	5.	6.	0.
14000.	867.	7.	11.	16.	14.	9.	9.	7.	7.	4.	4.	5.	6.	1.
15000.	866.	8.	13.	16.	15.	11.	9.	7.	7.	4.	2.	4.	5.	0.
16000.	866.	7.	13.	16.	16.	10.	10.	6.	6.	3.	3.	4.	5.	0.
18000.	865.	8.	12.	16.	14.	12.	12.	6.	6.	4.	3.	3.	5.	0.
20000.	858.	8.	9.	15.	13.	12.	12.	9.	5.	4.	4.	3.	6.	0.
25000.	853.	6.	7.	12.	12.	11.	11.	12.	8.	6.	5.	6.	6.	0.
30000.	846.	5.	8.	14.	11.	11.	8.	11.	9.	5.	6.	7.	6.	0.
35000.	842.	5.	9.	13.	12.	8.	9.	9.	8.	6.	7.	6.	7.	0.
40000.	835.	5.	11.	11.	11.	9.	8.	6.	8.	7.	7.	10.	8.	0.
45000.	821.	8.	10.	12.	10.	8.	9.	8.	5.	5.	9.	8.	9.	0.
50000.	795.	7.	12.	15.	13.	12.	8.	8.	6.	3.	5.	5.	6.	0.
55000.	769.	5.	11.	24.	27.	14.	7.	3.	3.	1.	1.	2.	2.	0.
60000.	741.	1.	5.	35.	48.	9.	1.	0.	0.	0.	0.	0.	0.	0.
65000.	725.	0.	2.	40.	55.	3.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	680.	0.	1.	39.	59.	1.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	639.	0.	1.	41.	58.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	622.	0.	0.	46.	53.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	587.	0.	0.	41.	59.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	545.	0.	0.	43.	57.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	492.	0.	0.	46.	53.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	433.	0.	0.	43.	57.	0.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE III (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

AUGUST

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES) ≥360 <30	≥30 <60	≥60 <90	≥90 <120	≥120 <150	≥150 <180	≥180 <210	≥210 <240	≥240 <270	≥270 <300	≥300 <330	≥330 <360	CALM.
3989.	878.	5.	7.	5.	6.	7.	8.	10.	5.	3.	2.	3.	2.	34.
5000.	874.	8.	15.	14.	6.	10.	10.	12.	4.	3.	6.	4.	6.	2.
6000.	872.	4.	5.	7.	13.	16.	15.	12.	6.	4.	6.	4.	6.	1.
7000.	872.	4.	3.	6.	12.	18.	15.	11.	8.	6.	7.	4.	4.	0.
8000.	873.	4.	3.	6.	15.	17.	12.	10.	9.	8.	7.	5.	4.	0.
9000.	873.	4.	3.	9.	14.	15.	10.	10.	11.	8.	6.	6.	5.	0.
10000.	872.	5.	6.	11.	13.	12.	7.	9.	9.	8.	7.	7.	6.	0.
11000.	871.	6.	10.	13.	10.	10.	8.	7.	8.	6.	7.	7.	7.	1.
12000.	869.	7.	12.	14.	12.	7.	8.	6.	7.	5.	6.	7.	8.	0.
13000.	867.	8.	13.	16.	11.	7.	7.	7.	7.	5.	5.	6.	8.	0.
14000.	863.	8.	15.	18.	8.	8.	7.	6.	7.	4.	6.	4.	7.	0.
15000.	860.	9.	15.	17.	10.	8.	6.	9.	6.	5.	5.	4.	5.	0.
16000.	859.	9.	16.	15.	11.	7.	7.	8.	5.	6.	4.	4.	6.	0.
18000.	860.	8.	14.	15.	9.	8.	8.	7.	8.	7.	4.	3.	7.	0.
20000.	857.	11.	10.	14.	9.	10.	7.	7.	8.	7.	3.	6.	7.	0.
25000.	855.	10.	9.	10.	8.	7.	6.	7.	10.	8.	6.	9.	10.	0.
30000.	851.	9.	9.	7.	5.	6.	6.	7.	11.	10.	10.	9.	11.	0.
35000.	841.	9.	9.	5.	7.	4.	5.	5.	10.	14.	10.	11.	11.	0.
40000.	831.	11.	8.	5.	5.	3.	4.	4.	9.	16.	10.	12.	13.	0.
45000.	821.	11.	8.	5.	6.	5.	3.	3.	7.	11.	14.	10.	17.	0.
50000.	800.	10.	13.	8.	7.	5.	5.	5.	7.	10.	8.	9.	12.	0.
55000.	770.	9.	14.	23.	17.	8.	5.	5.	5.	5.	3.	2.	5.	0.
60000.	743.	1.	13.	37.	31.	8.	4.	2.	1.	1.	1.	1.	1.	0.
65000.	715.	0.	2.	43.	50.	4.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	697.	0.	0.	43.	55.	1.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	681.	0.	0.	46.	53.	1.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	654.	0.	0.	44.	56.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	625.	0.	0.	39.	60.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	581.	0.	0.	45.	55.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	530.	0.	0.	42.	58.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	442.	0.	0.	46.	53.	0.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE III (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)

WHITE SANDS DESERT SITE (WSD)

PERIOD OF RECORD 1961-1973

SEPTEMBER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES) ≥360 <30	≥30 <60	≥60 <90	≥90 <120	≥120 <150	≥150 <180	≥180 <210	≥210 <240	≥240 <270	≥270 <300	≥300 <330	≥330 <360	CALM.
3989.	796.	6.	8.	5.	4.	9.	9.	9.	4.	4.	4.	2.	2.	35.
5000.	799.	9.	12.	12.	5.	9.	9.	10.	5.	6.	9.	7.	6.	2.
6000.	800.	6.	4.	6.	9.	13.	12.	11.	9.	9.	8.	5.	7.	1.
7000.	800.	4.	3.	4.	9.	13.	14.	11.	10.	11.	9.	6.	5.	1.
8000.	802.	4.	3.	5.	9.	10.	15.	9.	11.	13.	11.	6.	4.	0.
9000.	801.	4.	4.	5.	7.	9.	13.	10.	11.	14.	11.	8.	4.	0.
10000.	802.	3.	4.	6.	6.	9.	10.	10.	13.	14.	12.	7.	5.	0.
11000.	801.	4.	5.	7.	5.	7.	9.	9.	15.	14.	11.	7.	5.	0.
12000.	802.	6.	5.	7.	6.	7.	7.	8.	14.	16.	11.	7.	6.	0.
13000.	800.	6.	6.	7.	6.	6.	6.	8.	13.	18.	11.	7.	6.	1.
14000.	798.	7.	7.	7.	6.	5.	6.	7.	14.	18.	12.	8.	4.	0.
15000.	797.	7.	6.	6.	5.	5.	6.	8.	14.	17.	15.	7.	5.	0.
16000.	795.	6.	6.	5.	4.	5.	5.	8.	15.	18.	15.	7.	6.	0.
18000.	792.	6.	4.	3.	4.	3.	5.	9.	16.	18.	15.	9.	6.	0.
20000.	787.	5.	4.	2.	4.	4.	3.	9.	17.	21.	16.	10.	6.	0.
25000.	782.	2.	2.	1.	2.	3.	3.	10.	20.	24.	18.	10.	6.	0.
30000.	779.	2.	1.	1.	1.	1.	2.	7.	20.	31.	20.	9.	4.	0.
35000.	768.	1.	1.	1.	0.	1.	2.	5.	19.	34.	24.	8.	4.	0.
40000.	761.	1.	1.	0.	1.	0.	1.	5.	18.	35.	28.	7.	4.	0.
45000.	751.	1.	0.	0.	1.	1.	1.	4.	16.	36.	29.	8.	3.	0.
50000.	737.	1.	0.	1.	0.	1.	1.	6.	15.	34.	30.	8.	3.	0.
55000.	713.	5.	3.	2.	2.	2.	4.	6.	17.	27.	21.	8.	5.	0.
60000.	697.	5.	8.	12.	9.	10.	7.	7.	10.	13.	8.	6.	5.	0.
65000.	676.	3.	8.	25.	24.	11.	6.	5.	5.	4.	3.	2.	3.	0.
70000.	665.	1.	5.	35.	34.	11.	4.	2.	2.	3.	2.	1.	1.	0.
75000.	645.	1.	4.	41.	41.	7.	1.	1.	1.	1.	1.	1.	1.	0.
80000.	618.	1.	4.	35.	50.	6.	2.	1.	1.	0.	0.	0.	0.	0.
85000.	591.	2.	2.	34.	52.	7.	1.	1.	0.	0.	0.	0.	0.	0.
90000.	548.	0.	3.	40.	47.	7.	1.	0.	1.	0.	0.	0.	0.	0.
95000.	505.	1.	6.	42.	40.	6.	1.	1.	1.	1.	0.	1.	0.	0.
100000.	429.	2.	4.	39.	40.	7.	2.	1.	1.	1.	1.	1.	1.	0.

TABLE III (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

OCTOBER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES) ≥360 <30	≥30 <60	≥60 <90	≥90 <120	≥120 <150	≥150 <180	≥180 <210	≥210 <240	≥240 <270	≥270 <300	≥300 <330	≥330 <360	CALM.
3989.	903.	6.	9.	3.	3.	3.	7.	9.	5.	4.	5.	5.	2.	40.
5000.	900.	9.	7.	8.	5.	5.	9.	9.	6.	5.	13.	11.	10.	3.
6000.	899.	6.	2.	3.	6.	11.	9.	10.	11.	9.	13.	9.	9.	1.
7000.	898.	4.	3.	2.	6.	10.	10.	11.	11.	13.	13.	9.	8.	0.
8000.	898.	4.	2.	2.	6.	8.	9.	9.	13.	15.	16.	7.	8.	1.
9000.	898.	4.	3.	3.	5.	6.	7.	9.	13.	16.	16.	8.	8.	1.
10000.	898.	4.	4.	4.	5.	5.	6.	8.	15.	16.	14.	11.	7.	0.
11000.	900.	5.	4.	5.	5.	3.	5.	8.	15.	17.	15.	11.	7.	0.
12000.	900.	6.	5.	5.	5.	3.	3.	7.	16.	19.	14.	10.	7.	0.
13000.	900.	6.	6.	5.	3.	3.	2.	7.	17.	21.	14.	9.	7.	0.
14000.	899.	7.	5.	4.	4.	2.	2.	7.	17.	20.	15.	9.	8.	0.
15000.	898.	7.	5.	4.	2.	2.	2.	6.	19.	20.	16.	10.	7.	0.
16000.	896.	7.	4.	4.	2.	1.	3.	7.	18.	20.	16.	12.	7.	0.
18000.	895.	7.	4.	3.	2.	1.	2.	6.	17.	22.	17.	11.	8.	0.
20000.	895.	8.	4.	3.	3.	1.	1.	5.	18.	21.	18.	11.	7.	0.
25000.	889.	8.	4.	2.	1.	2.	1.	5.	17.	24.	17.	12.	7.	0.
30000.	883.	7.	4.	2.	1.	1.	1.	4.	18.	25.	18.	12.	7.	0.
35000.	870.	6.	2.	2.	0.	0.	1.	2.	19.	28.	20.	13.	7.	0.
40000.	863.	4.	2.	0.	0.	0.	0.	1.	16.	32.	27.	12.	6.	0.
45000.	851.	2.	0.	0.	0.	0.	0.	0.	13.	34.	32.	11.	5.	0.
50000.	831.	1.	0.	0.	0.	0.	0.	1.	12.	34.	34.	13.	5.	0.
55000.	805.	2.	0.	0.	0.	0.	0.	2.	13.	31.	28.	16.	7.	0.
60000.	767.	5.	3.	2.	2.	3.	3.	5.	10.	21.	20.	16.	11.	0.
65000.	756.	7.	5.	6.	5.	6.	7.	7.	13.	16.	12.	10.	6.	0.
70000.	725.	6.	5.	7.	8.	8.	6.	7.	12.	16.	13.	8.	4.	0.
75000.	706.	4.	6.	13.	12.	5.	7.	6.	7.	16.	13.	6.	5.	1.
80000.	688.	4.	7.	13.	14.	6.	4.	6.	7.	18.	12.	5.	3.	1.
85000.	659.	3.	7.	15.	11.	7.	4.	4.	6.	20.	13.	5.	3.	1.
90000.	623.	4.	7.	12.	10.	5.	3.	4.	7.	22.	19.	5.	2.	0.
95000.	571.	3.	5.	9.	9.	4.	4.	4.	7.	25.	21.	5.	4.	0.
100000.	479.	3.	5.	6.	6.	5.	3.	3.	6.	29.	23.	7.	4.	0.

TABLE III (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)

WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

NOVEMBER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES) ≥360 <30	≥30 <60	≥60 <90	≥90 <120	≥120 <150	≥150 <180	≥180 <210	≥210 <240	≥240 <270	≥270 <300	≥300 <330	≥330 <360	CALM.
3989.	785.	7.	10.	4.	3.	4.	5.	5.	3.	3.	7.	5.	4.	39.
5000.	771.	10.	8.	7.	4.	3.	7.	7.	5.	5.	13.	15.	15.	1.
6000.	771.	6.	2.	3.	6.	6.	5.	7.	10.	11.	16.	11.	13.	0.
7000.	772.	4.	2.	2.	5.	6.	5.	8.	11.	17.	19.	12.	9.	0.
8000.	777.	4.	2.	2.	3.	5.	6.	6.	12.	18.	21.	12.	8.	0.
9000.	780.	4.	1.	1.	4.	3.	6.	8.	12.	21.	19.	14.	8.	0.
10000.	782.	4.	2.	1.	2.	3.	3.	7.	14.	22.	19.	15.	8.	0.
11000.	782.	4.	2.	1.	2.	2.	2.	5.	16.	23.	20.	14.	8.	0.
12000.	782.	3.	2.	2.	1.	1.	3.	6.	16.	23.	22.	14.	9.	0.
13000.	784.	3.	2.	1.	1.	1.	1.	7.	15.	26.	23.	12.	8.	0.
14000.	783.	3.	2.	1.	1.	1.	1.	6.	15.	25.	23.	14.	8.	0.
15000.	783.	2.	2.	0.	1.	1.	1.	5.	15.	27.	22.	13.	9.	0.
16000.	784.	2.	2.	0.	1.	1.	1.	4.	16.	27.	22.	14.	9.	0.
18000.	781.	2.	1.	1.	1.	1.	1.	5.	15.	28.	22.	16.	8.	0.
20000.	777.	2.	1.	0.	0.	0.	1.	5.	16.	28.	22.	17.	7.	0.
25000.	766.	2.	1.	0.	0.	0.	1.	4.	16.	30.	23.	15.	7.	0.
30000.	756.	2.	1.	0.	0.	0.	1.	4.	14.	34.	24.	13.	6.	0.
35000.	743.	2.	1.	0.	0.	0.	0.	2.	15.	36.	26.	12.	6.	0.
40000.	736.	1.	0	0.	0.	0.	0.	0.	15.	39.	27.	13.	4.	0.
45000.	718.	1.	0.	0.	0.	0.	0.	1.	12.	44.	30.	10.	2.	0.
50000.	698.	0.	0.	0.	0.	0.	0.	2.	10.	45.	31.	9.	2.	0.
55000.	668.	1.	0.	0.	0.	0.	0.	3.	10.	41.	32.	10.	2.	0.
60000.	634.	1.	2.	1.	1.	1.	1.	2.	11.	34.	30.	12.	4.	0.
65000.	609.	3.	3.	2.	2.	1.	1.	4.	9.	29.	29.	11.	7.	0.
70000.	596.	3.	4.	4.	2.	1.	1.	3.	9.	27.	25.	13.	7.	0.
75000.	572.	5.	5.	5.	2.	1.	2.	2.	9.	31.	24.	9.	5.	1.
80000.	558.	2.	6.	5.	2.	0.	0.	2.	7.	36.	26.	9.	5.	0.
85000.	525.	3.	3.	3.	2.	0.	2.	0.	5.	42.	26.	8.	4.	0.
90000.	487.	2.	5.	2.	2.	1.	0.	1.	4.	48.	23.	7.	4.	0.
95000.	427.	3.	3.	3.	1.	0.	1.	1.	5.	46.	28.	5.	3.	0.
100000.	335.	1.	2.	3.	1.	1.	0.	1.	3.	49.	31.	7.	2.	0.

TABLE III (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

DECEMBER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES) ≥360 <30	≥30 <60	≥60 <90	≥90 <120	≥120 <150	≥150 <180	≥180 <210	≥210 <240	≥240 <270	≥270 <300	≥300 <330	≥330 <360	CALM.
3989.	701.	8.	8.	3.	2.	3.	5.	7.	2.	4.	7.	6.	4.	43.
5000.	695.	9.	4.	6.	4.	3.	3.	7.	6.	7.	13.	17.	20.	1.
6000.	697.	6.	1.	1.	3.	4.	4.	8.	10.	10.	20.	13.	12.	1.
7000.	696.	4.	1.	1.	3.	3.	3.	5.	14.	19.	21.	15.	10.	0.
8000.	699.	4.	1.	1.	2.	2.	2.	4.	14.	24.	20.	16.	10.	0.
9000.	701.	4.	1.	1.	1.	1.	2.	3.	14.	25.	21.	17.	9.	0.
10000.	702.	6.	2.	1.	0.	1.	2.	3.	14.	26.	21.	17.	7.	0.
11000.	701.	4.	2.	1.	1.	0.	2.	4.	14.	26.	22.	18.	7.	0.
12000.	701.	4.	1.	0.	1.	0.	1.	4.	14.	28.	23.	16.	7.	0.
13000.	701.	4.	1.	1.	0.	0.	1.	4.	16.	28.	22.	15.	7.	0.
14000.	702.	3.	1.	1.	0.	0.	1.	4.	17.	28.	22.	15.	8.	0.
15000.	702.	4.	1.	1.	0.	0.	1.	4.	18.	28.	22.	15.	7.	0.
16000.	701.	4.	1.	1.	0.	0.	1.	3.	17.	27.	24.	14.	6.	0.
18000.	699.	4.	2.	0.	0.	0.	1.	3.	17.	28.	23.	14.	6.	0.
20000.	697.	4.	2.	0.	0.	0.	1.	2.	19.	29.	22.	13.	7.	0.
25000.	690.	4.	2.	0.	0.	0.	0.	3.	21.	29.	21.	14.	6.	0.
30000.	685.	2.	1.	1.	0.	0.	0.	2.	22.	31.	21.	11.	8.	0.
35000.	676.	3.	2.	0.	0.	0.	0.	1.	23.	32.	20.	12.	6.	0.
40000.	661.	2.	1.	0.	0.	0.	0.	0.	20.	35.	27.	10.	4.	1.
45000.	642.	1.	0.	0.	0.	0.	0.	0.	16.	41.	27.	11.	4.	0.
50000.	625.	1.	0.	0.	0.	0.	0.	0.	13.	44.	28.	10.	3.	0.
55000.	600.	1.	0.	0.	0.	0.	0.	1.	14.	39.	29.	10.	4.	0.
60000.	581.	1.	0.	0.	1.	0.	1.	1.	15.	36.	29.	12.	4.	0.
65000.	557.	3.	3.	1.	1.	0.	1.	2.	10.	31.	29.	13.	6.	0.
70000.	535.	6.	6.	2.	2.	1.	1.	2.	9.	30.	23.	11.	7.	0.
75000.	517.	6.	6.	4.	3.	2.	1.	3.	5.	30.	22.	11.	7.	0.
80000.	494.	5.	9.	6.	1.	1.	1.	1.	3.	31.	23.	8.	7.	0.
85000.	465.	6.	6.	4.	2.	1.	1.	1.	4.	29.	31.	6.	9.	0.
90000.	428.	3.	5.	3.	1.	1.	0.	0.	3.	39.	28.	10.	7.	0.
95000.	384.	4.	3.	2.	0.	0.	0.	1.	4.	40.	33.	9.	3.	0.
100000.	317.	2.	4.	2.	0.	0.	1.	1.	3.	44.	34.	5.	3.	0.

TABLE IV

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JANUARY

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND SPEED (KNOTS)													
		CALM	≥1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥150
3989.	757.	41.	46.	11.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	756.	1.	74.	21.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	758.	0.	49.	39.	11.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	758.	0.	30.	49.	17.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	759.	0.	21.	45.	27.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	758.	0.	16.	40.	32.	10.	2.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	759.	0.	11.	34.	36.	14.	4.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	757.	0.	7.	30.	37.	19.	5.	1.	0.	0.	0.	0.	0.	0.	0.
12000.	758.	0.	6.	25.	36.	21.	9.	2.	0.	0.	0.	0.	0.	0.	0.
13000.	757.	0.	7.	21.	32.	25.	12.	3.	0.	0.	0.	0.	0.	0.	0.
14000.	757.	0.	5.	20.	29.	27.	12.	6.	1.	0.	0.	0.	0.	0.	0.
15000.	755.	0.	5.	18.	27.	27.	14.	7.	1.	0.	0.	0.	0.	0.	0.
16000.	755.	0.	5.	16.	26.	23.	18.	8.	3.	1.	0.	0.	0.	0.	0.
18000.	753.	0.	4.	14.	24.	21.	20.	10.	5.	1.	0.	0.	0.	0.	0.
20000.	747.	0.	3.	10.	22.	22.	18.	13.	7.	3.	0.	1.	0.	0.	0.
25000.	742.	0.	2.	7.	16.	17.	17.	14.	11.	9.	4.	2.	1.	0.	0.
30000.	737.	0.	1.	7.	10.	14.	15.	15.	13.	10.	6.	5.	4.	1.	0.
35000.	720.	0.	1.	4.	7.	11.	13.	15.	14.	11.	7.	6.	8.	2.	0.
40000.	690.	0.	1.	3.	6.	9.	13.	16.	16.	13.	9.	6.	7.	1.	0.
45000.	669.	0.	1.	3.	4.	11.	17.	22.	18.	13.	6.	3.	3.	0.	0.
50000.	638.	0.	1.	5.	9.	15.	19.	23.	14.	10.	3.	2.	1.	0.	0.
55000.	608.	0.	2.	9.	16.	18.	24.	14.	9.	4.	2.	1.	0.	0.	0.
60000.	579.	0.	7.	25.	26.	18.	13.	6.	3.	1.	0.	0.	0.	0.	0.
65000.	550.	0.	25.	27.	24.	15.	5.	3.	1.	1.	0.	0.	0.	0.	0.
70000.	528.	0.	33.	33.	19.	9.	4.	1.	1.	0.	0.	0.	0.	0.	0.
75000.	510.	0.	35.	36.	16.	8.	3.	2.	0.	0.	0.	0.	0.	0.	0.
80000.	484.	0.	29.	38.	18.	8.	4.	1.	1.	0.	0.	0.	0.	0.	0.
85000.	459.	0.	24.	36.	18.	11.	5.	2.	2.	1.	0.	0.	0.	0.	0.
90000.	426.	0.	23.	30.	18.	16.	5.	4.	2.	1.	0.	0.	0.	0.	0.
95000.	362.	1.	14.	22.	22.	17.	10.	8.	3.	3.	1.	1.	0.	0.	0.
100000.	280.	0.	10.	20.	21.	11.	14.	9.	6.	4.	3.	0.	2.	0.	0.

TABLE IV (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FEBRUARY

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND SPEED (KNOTS)													
		CALM	≥1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥150
3989.	711.	34.	52.	13.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	709.	2.	73.	22.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	709.	1.	53.	36.	9.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	710.	0.	40.	43.	15.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	710.	0.	27.	46.	21.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	710.	0.	20.	45.	25.	8.	1.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	711.	0.	15.	43.	26.	12.	3.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	711.	0.	13.	37.	30.	13.	6.	1.	0.	0.	0.	0.	0.	0.	0.
12000.	709.	0.	11.	32.	32.	15.	8.	2.	0.	0.	0.	0.	0.	0.	0.
13000.	710.	0.	9.	27.	35.	18.	7.	4.	1.	0.	0.	0.	0.	0.	0.
14000.	710.	0.	7.	22.	33.	22.	9.	4.	1.	0.	0.	0.	0.	0.	0.
15000.	710.	0.	7.	19.	32.	25.	11.	4.	2.	0.	0.	0.	0.	0.	0.
16000.	710.	0.	6.	16.	30.	25.	13.	6.	3.	1.	0.	0.	0.	0.	0.
18000.	711.	0.	5.	13.	23.	26.	16.	9.	5.	1.	1.	0.	0.	0.	0.
20000.	709.	0.	4.	11.	17.	26.	20.	12.	6.	3.	1.	0.	0.	0.	0.
25000.	706.	0.	2.	7.	12.	16.	18.	17.	15.	7.	4.	2.	1.	0.	0.
30000.	700.	0.	2.	4.	7.	11.	12.	16.	15.	13.	8.	5.	5.	1.	0.
35000.	689.	0.	1.	4.	6.	7.	9.	12.	17.	13.	10.	8.	11.	2.	1.
40000.	675.	0.	0.	4.	3.	7.	7.	16.	13.	15.	11.	11.	10.	2.	1.
45000.	644.	0.	0.	2.	3.	8.	13.	19.	19.	18.	7.	6.	4.	1.	1.
50000.	623.	0.	0.	2.	6.	11.	20.	23.	18.	12.	4.	3.	1.	0.	0.
55000.	580.	0.	1.	6.	14.	21.	25.	18.	8.	4.	2.	1.	0.	0.	0.
60000.	544.	0.	5.	23.	28.	23.	11.	5.	3.	2.	0.	0.	0.	0.	0.
65000.	515.	0.	18.	41.	22.	10.	5.	2.	2.	1.	0.	0.	0.	0.	0.
70000.	504.	0.	25.	43.	18.	10.	2.	1.	1.	1.	0.	0.	0.	0.	0.
75000.	486.	0.	26.	38.	23.	8.	3.	1.	0.	0.	0.	0.	0.	0.	0.
80000.	460.	0.	25.	33.	25.	11.	5.	1.	0.	0.	0.	0.	0.	0.	0.
85000.	429.	0.	22.	31.	22.	14.	8.	2.	1.	0.	0.	0.	0.	0.	0.
90000.	400.	0.	15.	30.	22.	16.	9.	4.	2.	0.	0.	0.	0.	0.	0.
95000.	348.	0.	17.	22.	19.	16.	12.	7.	4.	3.	1.	0.	0.	0.	0.
100000.	285.	0.	14.	16.	15.	17.	12.	9.	9.	5.	3.	0.	0.	0.	0.

TABLE IV (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

MARCH

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND SPEED (KNOTS)													
		CALM	≥1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥150
3989.	901.	27.	50.	21.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	896.	1.	62.	31.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	896.	1.	46.	39.	13.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	895.	0.	36.	43.	16.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	897.	0.	27.	45.	21.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	900.	0.	22.	42.	24.	9.	2.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	900.	0.	18.	37.	29.	12.	3.	1.	0.	0.	0.	0.	0.	0.	0.
11000.	900.	0.	13.	32.	31.	17.	5.	1.	0.	0.	0.	0.	0.	0.	0.
12000.	901.	0.	11.	28.	31.	20.	9.	2.	0.	0.	0.	0.	0.	0.	0.
13000.	900.	0.	8.	25.	31.	21.	11.	4.	1.	0.	0.	0.	0.	0.	0.
14000.	901.	0.	7.	20.	30.	24.	13.	4.	1.	0.	0.	0.	0.	0.	0.
15000.	901.	0.	5.	17.	29.	25.	14.	6.	2.	0.	0.	0.	0.	0.	0.
16000.	900.	0.	4.	16.	26.	23.	18.	8.	4.	1.	0.	0.	0.	0.	0.
18000.	899.	0.	3.	12.	22.	24.	16.	12.	7.	2.	1.	0.	0.	0.	0.
20000.	898.	0.	3.	10.	18.	20.	17.	15.	9.	4.	2.	1.	0.	0.	0.
25000.	890.	0.	2.	6.	12.	14.	15.	16.	13.	10.	6.	3.	2.	0.	0.
30000.	880.	0.	2.	4.	8.	10.	12.	11.	15.	12.	10.	7.	7.	1.	0.
35000.	859.	0.	1.	3.	7.	8.	10.	10.	14.	11.	11.	9.	13.	2.	1.
40000.	799.	0.	1.	2.	5.	9.	9.	14.	13.	13.	12.	11.	9.	3.	1.
45000.	761.	0.	0.	1.	5.	9.	15.	17.	17.	16.	8.	6.	4.	1.	0.
50000.	731.	0.	1.	2.	6.	11.	20.	19.	20.	11.	6.	3.	2.	0.	0.
55000.	687.	0.	1.	6.	14.	22.	23.	17.	9.	5.	2.	1.	0.	0.	0.
60000.	659.	0.	7.	23.	29.	20.	11.	4.	3.	2.	1.	0.	0.	0.	0.
65000.	637.	0.	21.	39.	22.	10.	4.	1.	1.	0.	1.	0.	0.	0.	0.
70000.	621.	0.	35.	38.	15.	7.	2.	1.	0.	1.	0.	0.	0.	0.	0.
75000.	599.	0.	36.	41.	14.	5.	2.	0.	1.	0.	0.	0.	0.	0.	0.
80000.	583.	0.	30.	39.	19.	6.	4.	1.	1.	0.	0.	0.	0.	0.	0.
85000.	558.	0.	24.	35.	24.	11.	4.	1.	1.	0.	0.	0.	0.	0.	0.
90000.	519.	0.	14.	29.	28.	18.	7.	2.	1.	0.	0.	0.	0.	0.	0.
95000.	472.	0.	9.	23.	29.	22.	10.	5.	1.	1.	0.	0.	0.	0.	0.
100000.	371.	0.	8.	19.	20.	25.	18.	8.	2.	1.	0.	0.	0.	0.	0.

TABLE IV (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

APRIL

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND SPEED (KNOTS)													
		CALM	≥ 1 <10	≥10 < 20	≥20 <30	≥30 < 40	≥40 < 50	≥50 <60	≥60 <70	≥70 <80	≥80 < 90	≥90 <100	≥100 < 125	≥125 < 150	≥ 150
3989.	859.	20.	55.	21.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	852.	1.	56.	37.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	852.	0.	37.	46.	15.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	852.	0.	30.	44.	22.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	855.	0.	25.	43.	24.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	857.	0.	23.	39.	26.	11.	2.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	858.	0.	19.	35.	28.	14.	4.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	857.	0.	15.	34.	26.	18.	5.	1.	0.	0.	0.	0.	0.	0.	0.
12000.	859.	0.	12.	30.	26.	20.	9.	3.	0.	0.	0.	0.	0.	0.	0.
13000.	859.	0.	9.	26.	29.	21.	10.	4.	0.	0.	0.	0.	0.	0.	0.
14000.	859.	0.	8.	22.	29.	21.	14.	5.	2.	0.	0.	0.	0.	0.	0.
15000.	858.	0.	8.	17.	27.	23.	14.	7.	3.	0.	0.	0.	0.	0.	0.
16000.	857.	0.	7.	15.	25.	24.	15.	8.	5.	1.	0.	0.	0.	0.	0.
18000.	856.	0.	5.	14.	21.	24.	17.	11.	6.	3.	1.	0.	0.	0.	0.
20000.	853.	0.	4.	13.	15.	24.	18.	12.	7.	4.	2.	1.	0.	0.	0.
25000.	846.	0.	2.	8.	10.	16.	20.	16.	13.	7.	4.	2.	1.	0.	0.
30000.	837.	0.	1.	5.	8.	11.	15.	17.	14.	12.	8.	5.	4.	0.	0.
35000.	826.	0.	0.	3.	7.	8.	11.	14.	17.	13.	11.	6.	9.	2.	0.
40000.	807.	0.	0.	3.	4.	9.	10.	14.	15.	17.	11.	8.	7.	1.	0.
45000.	773.	0.	1.	1.	6.	9.	14.	17.	21.	13.	9.	6.	3.	1.	0.
50000.	740.	0.	0.	2.	8.	15.	21.	22.	15.	10.	4.	1.	1.	0.	0.
55000.	703.	0.	1.	7.	18.	25.	24.	13.	6.	5.	2.	0.	0.	0.	0.
60000.	680.	0.	11.	31.	27.	16.	9.	3.	1.	1.	0.	0.	0.	0.	0.
65000.	663.	0.	40.	35.	14.	8.	2.	0.	0.	1.	0.	0.	0.	0.	0.
70000.	635.	0.	52.	36.	8.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	615.	0.	54.	36.	6.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	590.	0.	57.	33.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	553.	1.	51.	37.	9.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	509.	0.	38.	47.	11.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	466.	0.	27.	39.	25.	7.	2.	1.	0.	0.	0.	0.	0.	0.	0.
100000.	380.	0.	18.	35.	29.	11.	4.	1.	1.	0.	0.	0.	0.	0.	0.

TABLE IV (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

MAY

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	WIND SPEED (KNOTS) ≥1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥150
3989.	819.	23.	58.	17.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	813.	1.	65.	31.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	812.	0.	45.	46.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	812.	0.	38.	47.	14.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	816.	0.	37.	45.	15.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	813.	0.	35.	44.	16.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	814.	0.	33.	43.	17.	5.	2.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	813.	0.	30.	43.	18.	6.	2.	1.	0.	0.	0.	0.	0.	0.	0.
12000.	814.	0.	26.	43.	20.	8.	3.	1.	0.	0.	0.	0.	0.	0.	0.
13000.	814.	0.	22.	42.	22.	10.	3.	1.	0.	0.	0.	0.	0.	0.	0.
14000.	811.	0.	19.	38.	24.	13.	4.	1.	0.	0.	0.	0.	0.	0.	0.
15000.	813.	0.	16.	36.	25.	15.	5.	2.	0.	0.	0.	0.	0.	0.	0.
16000.	812.	0.	15.	33.	25.	17.	6.	3.	1.	0.	0.	0.	0.	0.	0.
18000.	810.	0.	13.	30.	23.	18.	9.	3.	2.	1.	0.	0.	0.	0.	0.
20000.	811.	0.	12.	28.	23.	18.	12.	4.	3.	1.	1.	0.	0.	0.	0.
25000.	803.	0.	9.	19.	21.	18.	13.	10.	4.	2.	2.	1.	0.	0.	0.
30000.	795.	0.	5.	15.	17.	16.	16.	10.	9.	7.	2.	2.	1.	0.	0.
35000.	791.	0.	3.	11.	12.	15.	12.	13.	11.	10.	7.	2.	2.	1.	0.
40000.	787.	0.	1.	8.	12.	11.	13.	13.	13.	10.	9.	5.	4.	0.	0.
45000.	761.	0.	0.	7.	10.	16.	19.	16.	15.	9.	4.	2.	2.	0.	0.
50000.	738.	0.	0.	7.	17.	25.	25.	17.	6.	3.	1.	0.	0.	0.	0.
55000.	687.	1.	4.	25.	30.	22.	11.	5.	2.	1.	0.	0.	0.	0.	0.
60000.	665.	0.	35.	43.	15.	4.	1.	1.	0.	0.	0.	0.	0.	0.	0.
65000.	646.	0.	62.	33.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	634.	0.	62.	32.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	625.	1.	56.	37.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	603.	0.	51.	41.	7.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	579.	0.	47.	45.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	553.	0.	48.	39.	10.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	498.	0.	44.	39.	13.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	411.	0.	38.	43.	14.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE IV (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JUNE

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	WIND SPEED (KNOTS) ≥1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥150
3989.	870.	24.	61.	14.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	866.	2.	69.	28.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	864.	1.	51.	41.	8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	865.	0.	44.	44.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	870.	1.	43.	45.	11.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	869.	0.	44.	45.	10.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	866.	0.	42.	45.	11.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	867.	0.	39.	46.	13.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	867.	0.	35.	43.	18.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13000.	865.	0.	32.	43.	20.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	862.	0.	27.	42.	21.	8.	1.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	858.	0.	23.	40.	23.	11.	2.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	857.	0.	20.	39.	25.	12.	4.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	855.	0.	19.	35.	26.	16.	3.	1.	0.	0.	0.	0.	0.	0.	0.
20000.	855.	0.	17.	33.	27.	16.	6.	1.	0.	0.	0.	0.	0.	0.	0.
25000.	853.	0.	14.	27.	26.	17.	11.	3.	1.	0.	0.	0.	0.	0.	0.
30000.	844.	0.	8.	20.	24.	20.	14.	9.	4.	1.	0.	0.	0.	0.	0.
35000.	835.	0.	3.	13.	23.	19.	17.	11.	8.	3.	1.	0.	0.	0.	0.
40000.	822.	0.	1.	12.	15.	18.	23.	13.	11.	5.	2.	0.	0.	0.	0.
45000.	799.	0.	2.	10.	17.	25.	20.	14.	9.	3.	1.	0.	0.	0.	0.
50000.	781.	0.	6.	23.	25.	25.	13.	6.	1.	0.	0.	0.	0.	0.	0.
55000.	755.	0.	25.	41.	24.	8.	2.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	736.	0.	49.	45.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	721.	0.	29.	60.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	709.	0.	18.	56.	25.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	690.	0.	8.	51.	37.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	669.	0.	6.	44.	40.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	648.	0.	7.	36.	42.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	608.	0.	8.	33.	38.	20.	1.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	570.	0.	6.	30.	39.	21.	3.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	493.	0.	6.	23.	38.	27.	6.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE IV (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JULY

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	WIND SPEED (KNOTS) ≥ 1 < 10	≥10 < 20	≥20 <30	≥30 < 40	≥40 < 50	≥ 50 < 60	≥60 <70	≥70 <80	≥80 < 90	≥ 90 < 100	≥ 10 < 125	≥ 125 < 150	≥ 150
3989.	874.	30.	63.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	872.	2.	87.	11.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	869.	1.	71.	26.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	869.	0.	68.	29.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	874.	0.	67.	31.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	869.	0.	65.	33.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	871.	0.	63.	34.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	870.	1.	61.	36.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	871.	0.	58.	38.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13000.	869.	0.	53.	41.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	867.	1.	46.	46.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	866.	0.	43.	48.	9.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	866.	0.	42.	47.	9.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	865.	0.	43.	44.	11.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	858.	0.	43.	43.	12.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	853.	0.	37.	47.	14.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30000.	846.	0.	26.	50.	18.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.
35000.	842.	0.	22.	41.	23.	12.	1.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	835.	0.	19.	35.	24.	16.	4.	0.	0.	0.	0.	0.	0.	0.	0.
45000.	821.	0.	20.	38.	25.	14.	3.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	795.	0.	28.	47.	20.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	769.	0.	32.	52.	14.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	741.	0.	15.	61.	23.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	725.	0.	2.	47.	47.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	680.	0.	0.	20.	64.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	639.	0.	0.	8.	54.	36.	3.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	622.	0.	0.	3.	36.	51.	9.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	587.	0.	0.	1.	29.	55.	13.	2.	0.	0.	0.	0.	0.	0.	0.
90000.	545.	0.	0.	1.	21.	53.	22.	3.	0.	0.	0.	0.	0.	0.	0.
95000.	492.	0.	0.	1.	13.	48.	33.	5.	0.	0.	0.	0.	0.	0.	0.
100000.	433.	0.	0.	0.	8.	37.	41.	13.	0.	0.	0.	0.	0.	0.	0.

TABLE IV (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

AUGUST

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND SPEED (KNOTS)													
		CALM	≥ 1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥150
3989.	878.	34.	59.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	874.	2.	88.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	872.	1.	71.	27.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	872.	0.	65.	32.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	873.	0.	65.	32.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	873.	0.	65.	32.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	872.	0.	61.	35.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	871.	1.	59.	37.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	869.	0.	55.	41.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13000.	867.	0.	49.	45.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	863.	0.	43.	48.	8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	860.	0.	40.	50.	9.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	859.	0.	39.	49.	11.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	860.	0.	38.	49.	12.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	857.	0.	42.	44.	12.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	855.	0.	36.	44.	17.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30000.	851.	0.	25.	41.	23.	8.	2.	0.	0.	0.	0.	0.	0.	0.	0.
35000.	841.	0.	20.	34.	24.	17.	4.	2.	0.	0.	0.	0.	0.	0.	0.
40000.	831.	0.	15.	31.	24.	16.	10.	3.	1.	0.	0.	0.	0.	0.	0.
45000.	821.	0.	14.	38.	24.	13.	8.	2.	0.	0.	0.	0.	0.	0.	0.
50000.	800.	0.	25.	45.	21.	7.	2.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	770.	0.	45.	45.	9.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	743.	0.	25.	59.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	715.	0.	8.	54.	36.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	697.	0.	1.	29.	60.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	681.	0.	0.	11.	61.	28.	1.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	654.	0.	0.	3.	45.	48.	4.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	625.	0.	0.	2.	33.	52.	12.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	581.	0.	0.	1.	24.	52.	21.	1.	0.	0.	0.	0.	0.	0.	0.
95000.	530.	0.	0.	1.	20.	48.	28.	3.	0.	0.	0.	0.	0.	0.	0.
100000.	442.	0.	0.	1.	12.	45.	35.	6.	0.	0.	0.	0.	0.	0.	0.

TABLE IV (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SEPTEMBER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND SPEED (KNOTS)													
		CALM	≥ 1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥ 150
3989.	796.	35.	58.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	799.	2.	83.	14.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	800.	1.	67.	29.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	800.	1.	59.	35.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	802.	0.	56.	37.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	801.	0.	54.	39.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	802.	0.	50.	41.	7.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	801.	0.	47.	41.	10.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	802.	0.	45.	39.	13.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13000.	800.	1.	40.	40.	15.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	798.	0.	39.	41.	16.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	797.	0.	38.	41.	17.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	795.	0.	34.	43.	17.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	792.	0.	34.	40.	18.	6.	2.	1.	0.	0.	0.	0.	0.	0.	0.
20000.	787.	0.	29.	40.	21.	7.	2.	1.	1.	0.	0.	0.	0.	0.	0.
25000.	782.	0.	15.	34.	30.	14.	5.	2.	1.	0.	0.	0.	0.	0.	0.
30000.	779.	0.	7.	22.	29.	22.	12.	4.	2.	1.	0.	0.	0.	0.	0.
35000.	768.	0.	5.	13.	20.	23.	19.	11.	6.	2.	0.	0.	0.	0.	0.
40000.	761.	0.	3.	10.	14.	20.	21.	18.	10.	3.	1.	0.	0.	0.	0.
45000.	751.	0.	3.	12.	17.	23.	22.	15.	7.	2.	1.	0.	0.	0.	0.
50000.	737.	0.	5.	18.	32.	27.	13.	4.	1.	0.	0.	0.	0.	0.	0.
55000.	713.	0.	25.	45.	20.	8.	2.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	697.	0.	55.	39.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	676.	0.	53.	42.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	665.	0.	38.	51.	10.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	645.	0.	26.	49.	23.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	618.	0.	19.	45.	31.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	591.	0.	16.	40.	38.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	548.	0.	20.	34.	36.	11.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	505.	0.	15.	37.	33.	14.	1.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	429.	0.	20.	31.	32.	15.	2.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE IV (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

OCTOBER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND SPEED (KNOTS)													
		CALM	≥1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥150
3989.	903.	40.	51.	9.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	900.	3.	78.	18.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	899.	1.	60.	34.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	898.	0.	51.	37.	10.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	898.	1.	45.	40.	12.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	898.	1.	39.	43.	14.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	898.	0.	36.	41.	17.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	900.	0.	29.	43.	18.	6.	2.	1.	0.	0.	0.	0.	0.	0.	0.
12000.	900.	0.	26.	44.	18.	8.	3.	1.	0.	0.	0.	0.	0.	0.	0.
13000.	900.	0.	24.	39.	23.	9.	3.	1.	0.	0.	0.	0.	0.	0.	0.
14000.	899.	0.	23.	37.	25.	9.	4.	2.	0.	0.	0.	0.	0.	0.	0.
15000.	898.	0.	23.	34.	25.	11.	4.	2.	0.	0.	0.	0.	0.	0.	0.
16000.	896.	0.	23.	32.	25.	12.	5.	2.	1.	0.	0.	0.	0.	0.	0.
18000.	895.	0.	20.	29.	26.	14.	6.	3.	2.	0.	0.	0.	0.	0.	0.
20000.	895.	0.	16.	28.	25.	17.	7.	4.	2.	1.	0.	0.	0.	0.	0.
25000.	889.	0.	11.	22.	22.	20.	11.	7.	4.	2.	1.	1.	1.	0.	0.
30000.	883.	0.	7.	15.	19.	19.	17.	9.	7.	3.	2.	1.	1.	0.	0.
35000.	870.	0.	4.	11.	14.	17.	18.	13.	9.	6.	4.	2.	2.	0.	0.
40000.	863.	0.	2.	10.	12.	15.	19.	15.	10.	8.	5.	2.	3.	0.	0.
45000.	851.	0.	1.	8.	15.	21.	20.	14.	10.	6.	2.	1.	1.	0.	0.
50000.	831.	0.	3.	15.	24.	22.	18.	11.	5.	2.	0.	0.	0.	0.	0.
55000.	805.	0.	11.	36.	26.	14.	9.	2.	1.	0.	0.	0.	0.	0.	0.
60000.	767.	0.	42.	41.	12.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	756.	0.	59.	34.	5.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	725.	0.	65.	29.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	706.	1.	62.	32.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	688.	1.	52.	38.	9.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	659.	1.	43.	39.	13.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	623.	0.	38.	37.	18.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	571.	0.	34.	32.	19.	10.	4.	1.	0.	0.	0.	0.	0.	0.	0.
100000.	479.	0.	30.	28.	16.	14.	8.	2.	1.	0.	0.	0.	0.	0.	0.

TABLE IV (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

NOVEMBER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	WIND SPEED (KNOTS) ≥ 1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥150
3989.	785.	39.	51.	9.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	771.	1.	77.	20.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	771.	0.	59.	34.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	772.	0.	42.	43.	12.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	777.	0.	31.	44.	19.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	780.	0.	25.	41.	24.	8.	1.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	782.	0.	20.	38.	27.	11.	3.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	782.	0.	16.	35.	28.	15.	6.	1.	0.	0.	0.	0.	0.	0.	0.
12000.	782.	0.	15.	30.	29.	16.	9.	1.	0.	0.	0.	0.	0.	0.	0.
13000.	784.	0.	13.	26.	28.	18.	10.	3.	1.	0.	0.	0.	0.	0.	0.
14000.	783.	0.	12.	24.	27.	21.	11.	4.	1.	0.	0.	0.	0.	0.	0.
15000.	783.	0.	12.	21.	26.	21.	12.	5.	2.	1.	0.	0.	0.	0.	0.
16000.	784.	0.	11.	18.	28.	19.	13.	7.	2.	1.	0.	0.	0.	0.	0.
18000.	781.	0.	8.	18.	23.	20.	15.	8.	5.	2.	1.	0.	0.	0.	0.
20000.	777.	0.	6.	16.	21.	21.	15.	11.	5.	3.	1.	1.	0.	0.	0.
25000.	766.	0.	2.	10.	16.	20.	16.	12.	10.	6.	4.	2.	1.	0.	0.
30000.	756.	0.	1.	8.	9.	15.	17.	15.	11.	10.	6.	5.	3.	0.	0.
35000.	743.	0.	1.	5.	9.	10.	14.	16.	14.	10.	10.	5.	6.	1.	0.
40000.	736.	0.	0.	2.	8.	10.	15.	15.	15.	13.	9.	6.	5.	1.	0.
45000.	718.	0.	0.	3.	9.	13.	18.	19.	16.	12.	5.	2.	3.	0.	0.
50000.	698.	0.	0.	4.	13.	18.	19.	20.	15.	6.	2.	1.	1.	0.	0.
55000.	668.	0.	3.	14.	23.	22.	21.	10.	4.	2.	1.	0.	0.	0.	0.
60000.	634.	0.	11.	35.	30.	14.	7.	3.	1.	0.	0.	0.	0.	0.	0.
65000.	609.	0.	26.	44.	17.	8.	3.	1.	0.	0.	0.	0.	0.	0.	0.
70000.	596.	0.	33.	43.	15.	6.	2.	1.	0.	0.	0.	0.	0.	0.	0.
75000.	572.	1.	30.	40.	20.	7.	1.	1.	0.	0.	0.	0.	0.	0.	0.
80000.	558.	0.	20.	39.	25.	10.	4.	1.	0.	0.	0.	0.	0.	0.	0.
85000.	525.	0.	17.	36.	22.	13.	7.	3.	1.	0.	0.	0.	0.	0.	0.
90000.	487.	0.	13.	24.	25.	17.	11.	5.	4.	0.	0.	0.	0.	0.	0.
95000.	427.	0.	11.	17.	19.	21.	16.	9.	4.	1.	1.	0.	0.	0.	0.
100000.	335.	0.	8.	14.	13.	23.	15.	12.	9.	4.	1.	1.	0.	0.	0.

TABLE IV (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

DECEMBER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CAL.	WIND SPEED (KNOTS) ≥1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥150
3989.	701.	43.	43.	13.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	695.	1.	73.	20.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	697.	1.	51.	36.	9.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	696.	0.	33.	44.	16.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	699.	0.	22.	46.	21.	8.	2.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	701.	0.	18.	36.	27.	15.	3.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	702.	0.	14.	33.	27.	17.	7.	1.	0.	0.	0.	0.	0.	0.	0.
11000.	701.	0.	11.	31.	26.	20.	10.	3.	0.	0.	0.	0.	0.	0.	0.
12000.	701.	0.	8.	29.	27.	19.	11.	5.	1.	0.	0.	0.	0.	0.	0.
13000.	701.	0.	9.	25.	27.	20.	12.	7.	1.	0.	0.	0.	0.	0.	0.
14000.	702.	0.	8.	20.	27.	21.	11.	9.	3.	1.	0.	0.	0.	0.	0.
15000.	702.	0.	6.	20.	24.	20.	14.	10.	4.	1.	0.	0.	0.	0.	0.
16000.	701.	0.	6.	17.	22.	21.	14.	12.	5.	3.	0.	0.	0.	0.	0.
18000.	699.	0.	5.	14.	21.	18.	15.	13.	8.	4.	2.	0.	0.	0.	0.
20000.	697.	0.	4.	12.	19.	19.	15.	12.	10.	5.	3.	1.	0.	0.	0.
25000.	690.	0.	3.	8.	15.	17.	13.	13.	10.	7.	7.	5.	2.	0.	0.
30000.	685.	0.	1.	6.	10.	15.	13.	11.	12.	9.	8.	7.	7.	1.	0.
35000.	676.	0.	1.	4.	9.	10.	11.	11.	12.	11.	8.	7.	12.	2.	0.
40000.	661.	1.	0.	2.	7.	11.	13.	16.	12.	13.	9.	6.	8.	2.	0.
45000.	642.	0.	0.	2.	6.	12.	17.	20.	17.	14.	5.	5.	2.	0.	0.
50000.	625.	0.	1.	3.	10.	15.	24.	18.	14.	8.	4.	2.	1.	0.	0.
55000.	600.	0.	1.	7.	21.	29.	16.	11.	7.	4.	2.	0.	1.	0.	0.
60000.	581.	0.	4.	29.	32.	19.	7.	3.	3.	1.	1.	1.	0.	0.	0.
65000.	557.	0.	16.	43.	23.	8.	5.	1.	2.	1.	0.	0.	0.	0.	0.
70000.	535.	0.	28.	43.	17.	6.	2.	2.	1.	0.	0.	0.	0.	0.	0.
75000.	517.	0.	32.	38.	17.	8.	3.	1.	1.	0.	0.	0.	0.	0.	0.
80000.	494.	0.	29.	36.	19.	9.	4.	2.	1.	0.	0.	0.	0.	0.	0.
85000.	465.	0.	20.	32.	20.	15.	6.	4.	1.	1.	0.	0.	0.	0.	0.
90000.	428.	0.	13.	35.	15.	13.	11.	7.	3.	2.	0.	0.	0.	0.	0.
95000.	384.	0.	7.	21.	26.	13.	11.	10.	5.	3.	2.	2.	0.	0.	0.
100000.	317.	0.	1.	14.	23.	19.	13.	9.	5.	6.	4.	3.	3.	0.	0.

TABLE V

UPPER AIR WIND DATA AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS) +N -S	+E -W	RESULTANT WIND DIRECTION (DEGREES)	RESULTANT WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
3989.	2169.	30.	0.	.5	-1.0	297.	1.	4.	27.	6.
5000.	2160.	38.	0.	1.5	-2.8	297.	3.	7.	43.	9.
6000.	2164.	48.	0.	1.1	-5.8	280.	6.	11.	54.	12.
7000.	2164.	58.	0.	.7	-8.5	274.	9.	14.	63.	13.
8000.	2168.	64.	0.	.6	-11.1	273.	11.	16.	69.	15.
9000.	2169.	66.	0.	.8	-13.4	273.	13.	19.	72.	16.
10000.	2172.	66.	0.	1.0	-15.3	274.	15.	21.	74.	17.
11000.	2169.	70.	0.	1.1	-17.1	274.	17.	23.	75.	19.
12000.	2168.	78.	0.	1.1	-18.7	273.	19.	25.	76.	20.
13000.	2168.	83.	0.	1.1	-20.1	273.	20.	27.	76.	21.
14000.	2169.	84.	0.	1.0	-21.5	273.	22.	28.	76.	23.
15000.	2167.	81.	0.	1.0	-22.9	273.	23.	30.	76.	24.
16000.	2166.	89.	0.	1.0	-24.3	272.	24.	32.	77.	25.
18000.	2163.	108.	0.	.9	-26.9	272.	27.	35.	77.	28.
20000.	2153.	101.	0.	.8	-29.4	272.	29.	38.	77.	31.
25000.	2138.	132.	2.	-.1	-36.5	270.	36.	47.	77.	37.
30000.	2122.	175.	0.	-1.5	-44.3	268.	44.	56.	79.	44.
35000.	2085.	180.	0.	-1.7	-52.1	268.	52.	64.	81.	47.
40000.	2026.	206.	0.	-3.7	-56.4	266.	56.	65.	87.	42.
45000.	1955.	204.	4.	-2.7	-53.0	267.	53.	59.	90.	34.
50000.	1886.	164.	3.	-2.6	-47.1	267.	47.	52.	91.	28.
55000.	1788.	130.	0.	-2.0	-37.7	267.	38.	42.	91.	25.
60000.	1704.	107.	0.	-.7	-25.4	268.	25.	29.	88.	21.
65000.	1622.	96.	0.	.4	-17.2	271.	17.	21.	82.	19.
70000.	1567.	79.	0.	1.0	-11.4	275.	11.	17.	67.	18.
75000.	1513.	82.	0.	1.4	-9.2	279.	9.	17.	56.	18.
80000.	1438.	74.	0.	1.2	-9.8	277.	10.	18.	55.	19.
85000.	1353.	87.	0.	.9	-12.3	274.	12.	21.	58.	22.
90000.	1254.	122.	0.	.5	-16.0	272.	16.	25.	65.	25.
95000.	1094.	96.	0.	-.0	-21.6	270.	22.	30.	71.	29.
100000.	882.	128.	0.	-1.1	-28.5	268.	28.	38.	76.	34.

TABLE V (CONT)

UPPER AIR WIND DATA AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SPRING

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS) +N -S	+E -W	RESULTANT WIND DIRECTION (DEGREES)	RESULTANT WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
3989.	2579.	36.	0.	-.2	-2.1	266.	2.	6.	36.	8.
5000.	2561.	42.	0.	-.4	-3.7	264.	4.	9.	42.	10.
6000.	2560.	50.	0.	-1.6	-5.6	254.	6.	12.	50.	12.
7000.	2559.	54.	0.	-2.4	-7.4	252.	8.	13.	58.	13.
8000.	2568.	51.	0.	-2.9	-9.3	253.	10.	15.	66.	14.
9000.	2570.	56.	0.	-3.2	-11.3	254.	12.	16.	72.	14.
10000.	2572.	61.	0.	-3.6	-13.2	255.	14.	18.	77.	15.
11000.	2570.	60.	0.	-4.0	-14.9	255.	15.	20.	79.	16.
12000.	2574.	62.	0.	-4.4	-16.6	255.	17.	22.	80.	18.
13000.	2573.	69.	0.	-4.8	-18.2	255.	19.	23.	80.	19.
14000.	2571.	75.	0.	-5.3	-19.8	255.	20.	25.	81.	20.
15000.	2572.	81.	0.	-5.7	-21.4	255.	22.	27.	82.	21.
16000.	2569.	84.	0.	-5.9	-23.1	256.	24.	29.	82.	22.
18000.	2565.	92.	0.	-6.2	-26.3	257.	27.	32.	83.	25.
20000.	2562.	107.	0.	-6.6	-29.3	257.	30.	36.	85.	27.
25000.	2539.	136.	0.	-7.7	-37.1	258.	38.	44.	86.	32.
30000.	2512.	190.	0.	-9.3	-45.8	259.	47.	53.	88.	37.
35000.	2476.	177.	1.	-3.4	-53.5	266.	54.	61.	88.	41.
40000.	2393.	187.	3.	-10.4	-56.9	260.	58.	63.	92.	37.
45000.	2295.	166.	2.	-9.8	-53.2	260.	54.	58.	94.	30.
50000.	2209.	151.	0.	-8.3	-45.6	260.	46.	49.	94.	25.
55000.	2077.	115.	0.	-7.2	-34.1	258.	35.	38.	93.	22.
60000.	2004.	100.	0.	-4.3	-19.7	257.	19.	23.	84.	20.
65000.	1946.	99.	0.	-2.0	-8.4	256.	9.	14.	60.	16.
70000.	1890.	109.	0.	-1.4	-3.6	248.	4.	12.	32.	15.
75000.	1839.	88.	0.	-1.2	-1.2	225.	2.	12.	14.	14.
80000.	1776.	83.	0.	-1.2	-1.6	233.	2.	12.	16.	16.
85000.	1690.	78.	0.	-1.1	-3.4	252.	4.	14.	26.	16.
90000.	1581.	72.	0.	-1.4	-6.3	257.	6.	16.	41.	18.
95000.	1436.	82.	1.	-1.6	-10.4	261.	10.	19.	57.	20.
100000.	1162.	94.	0.	-1.7	-14.0	263.	14.	21.	66.	21.

TABLE V (CONT)

UPPER AIR WIND DATA AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SUMMER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS) +N -S	+E -W	RESULTANT WIND DIRECTION (DEGREES)	RESULTANT WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
3989.	2622.	35.	0.	-.7	.1	170.	1.	4.	17.	5.
5000.	2612.	28.	0.	-1.0	.3	163.	1.	6.	18.	7.
6000.	2605.	31.	0.	-2.7	.2	175.	3.	8.	32.	9.
7000.	2606.	42.	0.	-3.4	-.1	182.	3.	9.	37.	10.
8000.	2617.	43.	0.	-3.3	-.4	188.	3.	9.	36.	10.
9000.	2611.	41.	0.	-3.0	-.8	195.	3.	9.	33.	10.
10000.	2609.	45.	0.	-2.4	-.9	201.	3.	10.	27.	11.
11000.	2608.	58.	0.	-1.9	-.9	205.	2.	10.	21.	12.
12000.	2607.	63.	0.	-1.5	-.7	205.	2.	11.	15.	12.
13000.	2601.	62.	0.	-1.2	-.4	197.	1.	12.	10.	14.
14000.	2592.	61.	0.	-1.0	-.1	184.	1.	13.	8.	15.
15000.	2584.	61.	0.	-.8	.2	169.	1.	13.	6.	16.
16000.	2582.	55.	0.	-.8	.2	169.	1.	14.	6.	16.
18000.	2580.	57.	0.	-.9	-.4	207.	1.	15.	7.	17.
20000.	2570.	71.	0.	-1.3	-1.5	230.	2.	15.	13.	18.
25000.	2561.	78.	0.	-1.6	-4.3	250.	5.	17.	27.	20.
30000.	2541.	83.	0.	-1.4	-7.1	259.	7.	21.	35.	24.
35000.	2518.	96.	0.	-1.5	-10.2	262.	10.	25.	41.	28.
40000.	2488.	110.	0.	-.6	-13.0	267.	13.	28.	46.	31.
45000.	2441.	98.	0.	-.5	-11.8	267.	12.	27.	45.	29.
50000.	2376.	83.	0.	-1.1	-6.3	260.	6.	20.	32.	22.
55000.	2294.	62.	0.	-1.4	1.7	130.	2.	14.	16.	16.
60000.	2220.	46.	0.	-1.0	9.8	96.	10.	13.	74.	11.
65000.	2161.	41.	1.	-.9	15.6	93.	16.	17.	93.	9.
70000.	2086.	57.	0.	-.7	19.9	92.	20.	21.	97.	9.
75000.	2010.	50.	1.	-.4	23.5	91.	23.	24.	98.	9.
80000.	1945.	56.	4.	-.3	26.3	91.	26.	27.	98.	10.
85000.	1860.	77.	3.	-.7	28.1	91.	28.	29.	98.	10.
90000.	1734.	64.	1.	-.5	29.7	91.	30.	30.	98.	11.
95000.	1592.	63.	2.	-.5	30.9	91.	31.	32.	98.	12.
100000.	1368.	62.	1.	-.5	33.1	91.	33.	34.	98.	13.

TABLE V (CONT)

UPPER AIR WIND DATA AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FALL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS) +N	-S	+E	-W	RESULTANT WIND DIRECTION (DEGREES)	RESULTANT WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
3989.	74.	25.	0.	.1		-.2		289.	0.	3.	5.	5.
5000.	2470.	35.	0.	.3		-.8		291.	1.	6.	14.	7.
6000.	2470.	46.	0.	-.9		-2.0		245.	2.	9.	25.	10.
7000.	2470.	56.	0.	-1.6		-3.3		244.	4.	11.	35.	12.
8000.	2477.	57.	0.	-1.7		-4.7		250.	5.	12.	42.	13.
9000.	2479.	57.	0.	-1.7		-6.0		254.	6.	13.	48.	14.
10000.	2482.	62.	0.	-1.6		-7.1		258.	7.	14.	51.	15.
11000.	2483.	63.	0.	-1.4		-8.2		260.	8.	16.	53.	17.
12000.	2484.	64.	0.	-1.3		-9.2		262.	9.	17.	55.	18.
13000.	2484.	69.	0.	-1.3		-10.1		263.	10.	18.	57.	19.
14000.	2480.	71.	0.	-1.2		-11.0		264.	11.	19.	59.	20.
15000.	2478.	73.	0.	-1.2		-12.0		265.	12.	20.	61.	21.
16000.	2475.	78.	0.	-1.1		-12.9		265.	13.	21.	62.	21.
18000.	2468.	107.	0.	-1.1		-14.8		266.	15.	23.	65.	23.
20000.	2459.	101.	0.	-1.3		-16.8		266.	17.	25.	67.	25.
25000.	2437.	138.	0.	-2.2		-22.5		264.	23.	32.	71.	30.
30000.	2418.	139.	1.	-3.1		-28.8		264.	29.	39.	74.	35.
35000.	2381.	145.	1.	-3.9		-35.7		264.	36.	46.	79.	37.
40000.	2360.	147.	0.	-3.8		-41.4		265.	42.	49.	84.	36.
45000.	2320.	134.	0.	-3.1		-39.2		265.	39.	45.	87.	30.
50000.	2266.	127.	0.	-2.7		-32.1		265.	32.	37.	88.	25.
55000.	2186.	116.	0.	-1.2		-20.5		267.	21.	25.	83.	21.
60000.	2098.	80.	0.	-.4		-9.2		268.	9.	15.	61.	16.
65000.	2041.	77.	0.	-.3		-3.4		266.	3.	12.	28.	14.
70000.	1986.	74.	0.	-.4		-.8		242.	1.	12.	8.	14.
75000.	1923.	58.	0.	-.1		.8		100.	1.	13.	6.	15.
80000.	1864.	60.	0.	-.4		.6		120.	1.	15.	5.	17.
85000.	1775.	64.	0.	-.6		-.7		228.	1.	17.	6.	20.
90000.	1658.	92.	0.	-.6		-3.0		259.	3.	19.	16.	23.
95000.	1503.	97.	0.	-.8		-5.4		262.	5.	22.	25.	26.
100000.	1243.	97.	0.	-1.1		-8.0		262.	8.	24.	33.	28.

TABLE VI

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

WINTER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES) ≥360 <30	≥30 <60	≥60 <90	≥90 <120	≥120 <150	≥150 <180	≥180 <210	≥210 <240	≥240 <270	≥270 <300	≥300 <330	≥330 <360	CALM.
3989.	2169.	7.	9.	4.	2.	4.	5.	5.	3.	4.	6.	6.	3.	39.
5000.	2160.	11.	5.	5.	3.	3.	4.	7.	6.	8.	13.	15.	19.	1.
6000.	2164.	7.	2.	2.	3.	5.	4.	6.	9.	14.	19.	14.	13.	1.
7000.	2164.	5.	1.	1.	2.	4.	4.	5.	11.	19.	21.	15.	11.	0.
8000.	2168.	3.	2.	1.	2.	2.	4.	5.	11.	23.	22.	15.	10.	0.
9000.	2169.	4.	2.	2.	1.	2.	2.	4.	12.	23.	24.	16.	9.	0.
10000.	2172.	4.	2.	1.	1.	1.	2.	4.	11.	24.	24.	17.	8.	0.
11000.	2169.	3.	2.	1.	1.	1.	1.	4.	12.	25.	24.	18.	8.	0.
12000.	2168.	3.	2.	1.	1.	0.	1.	3.	13.	26.	25.	17.	8.	0.
13000.	2168.	3.	2.	1.	0.	0.	1.	3.	13.	26.	24.	18.	7.	0.
14000.	2169.	3.	2.	1.	0.	0.	1.	2.	14.	26.	25.	17.	7.	0.
15000.	2167.	3.	2.	1.	0.	0.	1.	3.	14.	27.	25.	15.	7.	0.
16000.	2166.	3.	2.	1.	0.	0.	1.	2.	14.	28.	27.	15.	7.	0.
18000.	2163.	3.	2.	1.	0.	0.	0.	2.	14.	28.	27.	14.	7.	0.
20000.	2153.	4.	2.	1.	0.	0.	0.	2.	14.	29.	26.	14.	7.	0.
25000.	2138.	3.	2.	1.	0.	0.	0.	2.	15.	32.	23.	14.	8.	0.
30000.	2122.	2.	2.	1.	0.	0.	0.	1.	15.	33.	24.	13.	7.	0.
35000.	2085.	3.	1.	1.	0.	0.	0.	1.	15.	35.	25.	12.	6.	0.
40000.	2026.	1.	1.	0.	0.	0.	0.	0.	13.	40.	28.	12.	4.	0.
45000.	1955.	1.	0.	0.	0.	0.	0.	0.	11.	42.	32.	10.	3.	0.
50000.	1886.	1.	0.	0.	0.	0.	0.	0.	9.	44.	34.	9.	3.	0.
55000.	1788.	1.	0.	0.	0.	0.	0.	1.	9.	42.	34.	10.	3.	0.
60000.	1704.	1.	1.	0.	0.	0.	0.	1.	10.	37.	32.	12.	4.	0.
65000.	1622.	3.	2.	1.	1.	1.	1.	2.	9.	30.	30.	14.	5.	0.
70000.	1567.	6.	5.	5.	3.	1.	1.	2.	7.	26.	25.	12.	6.	0.
75000.	1513.	5.	7.	8.	4.	2.	1.	2.	5.	26.	23.	10.	6.	0.
80000.	1438.	5.	8.	10.	3.	1.	1.	1.	6.	27.	23.	9.	5.	0.
85000.	1353.	5.	7.	10.	3.	1.	1.	2.	5.	29.	23.	7.	5.	0.
90000.	1254.	4.	6.	8.	3.	2.	1.	1.	4.	34.	23.	8.	5.	0.
95000.	1094.	4.	5.	8.	3.	1.	2.	2.	4.	34.	28.	6.	4.	0.
100000.	882.	2.	5.	6.	3.	2.	1.	1.	4.	38.	28.	6.	3.	0.

TABLE VI (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SPRING

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES) ≥360 <30	≥30 <60	≥60 <90	≥90 <120	≥120 <150	≥150 <180	≥180 <210	≥210 <240	≥240 <270	≥270 <300	≥300 <330	≥330 <360	CALM.
3989.	2579.	5.	5.	3.	3.	6.	8.	8.	7.	8.	13.	8.	3.	24.
5000.	2561.	8.	6.	5.	2.	5.	7.	10.	10.	11.	17.	11.	7.	1.
6000.	2560.	5.	2.	2.	4.	7.	8.	9.	13.	18.	17.	7.	7.	0.
7000.	2559.	4.	2.	1.	3.	6.	8.	10.	14.	22.	16.	7.	6.	0.
8000.	2568.	2.	2.	1.	3.	4.	6.	9.	17.	25.	17.	8.	6.	0.
9000.	2570.	2.	1.	1.	2.	3.	5.	8.	19.	27.	17.	8.	5.	0.
10000.	2572.	2.	1.	1.	2.	2.	3.	7.	20.	31.	18.	9.	4.	0.
11000.	2570.	2.	1.	1.	2.	2.	2.	6.	20.	33.	19.	9.	4.	0.
12000.	2574.	2.	1.	1.	1.	2.	2.	6.	21.	32.	19.	8.	4.	0.
13000.	2573.	2.	1.	1.	1.	1.	1.	6.	21.	34.	19.	8.	3.	0.
14000.	2571.	2.	1.	1.	1.	1.	1.	6.	21.	36.	19.	8.	3.	0.
15000.	2572.	2.	1.	1.	1.	1.	1.	5.	21.	36.	19.	8.	3.	0.
16000.	2569.	2.	1.	1.	1.	1.	1.	5.	20.	36.	19.	9.	3.	0.
18000.	2565.	2.	2.	1.	1.	1.	1.	4.	19.	39.	20.	8.	3.	0.
20000.	2562.	2.	1.	1.	1.	1.	1.	3.	18.	42.	20.	8.	3.	0.
25000.	2539.	2.	1.	1.	0.	1.	1.	2.	17.	44.	21.	7.	4.	0.
30000.	2512.	1.	1.	1.	0.	0.	1.	2.	16.	45.	22.	7.	4.	0.
35000.	2476.	1.	1.	0.	0.	0.	0.	2.	15.	48.	22.	7.	3.	0.
40000.	2393.	1.	0.	0.	0.	0.	0.	1.	13.	52.	24.	6.	2.	0.
45000.	2295.	0.	0.	0.	0.	0.	0.	1.	13.	55.	25.	5.	1.	0.
50000.	2209.	0.	0.	0.	0.	0.	0.	1.	11.	57.	25.	4.	1.	0.
55000.	2077.	0.	0.	0.	0.	0.	0.	2.	14.	50.	26.	4.	1.	0.
60000.	2004.	2.	1.	1.	1.	1.	3.	6.	17.	36.	23.	7.	2.	0.
65000.	1946.	3.	3.	6.	5.	5.	5.	7.	13.	25.	16.	8.	4.	0.
70000.	1890.	4.	6.	12.	11.	6.	6.	6.	9.	19.	12.	6.	4.	0.
75000.	1839.	4.	7.	16.	14.	7.	5.	5.	8.	16.	11.	4.	3.	0.
80000.	1776.	3.	6.	14.	14.	7.	5.	5.	8.	18.	11.	4.	3.	0.
85000.	1690.	3.	5.	14.	13.	6.	4.	4.	8.	21.	14.	5.	3.	0.
90000.	1581.	3.	5.	11.	11.	5.	4.	3.	8.	26.	16.	5.	3.	0.
95000.	1436.	2.	5.	8.	8.	5.	3.	3.	8.	32.	19.	4.	3.	0.
100000.	1162.	2.	3.	8.	6.	3.	3.	3.	8.	34.	22.	6.	3.	0.

TABLE VI (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SUMMER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES) ≥360 <30	≥30 <60	≥60 <90	≥90 <120	≥120 <150	≥150 <180	≥180 <210	≥210 <240	≥240 <270	≥270 <300	≥300 <330	≥330 <360	CALM.
3989.	2622.	5.	7.	5.	5.	8.	9.	10.	6.	4.	5.	4.	2.	30.
5000.	2612.	8.	12.	11.	6.	10.	11.	12.	6.	4.	9.	5.	5.	2.
6000.	2605.	5.	4.	5.	10.	15.	15.	12.	8.	6.	8.	4.	5.	1.
7000.	2606.	4.	3.	5.	9.	15.	15.	13.	10.	9.	10.	4.	4.	0.
8000.	2617.	4.	3.	4.	11.	13.	13.	12.	11.	11.	9.	5.	4.	0.
9000.	2611.	4.	3.	6.	10.	12.	12.	11.	13.	12.	8.	5.	4.	0.
10000.	2609.	4.	4.	8.	10.	10.	11.	10.	12.	13.	7.	6.	5.	0.
11000.	2608.	5.	7.	9.	9.	9.	9.	9.	11.	12.	8.	7.	6.	0.
12000.	2607.	6.	8.	10.	10.	7.	8.	8.	12.	10.	7.	6.	7.	0.
13000.	2601.	7.	9.	12.	9.	7.	7.	8.	11.	10.	6.	6.	7.	0.
14000.	2592.	7.	11.	13.	8.	7.	7.	8.	12.	9.	7.	5.	6.	0.
15000.	2584.	8.	11.	13.	9.	7.	6.	9.	11.	9.	6.	5.	5.	0.
16000.	2582.	8.	12.	12.	10.	7.	7.	8.	11.	9.	5.	4.	6.	0.
18000.	2580.	8.	11.	12.	9.	7.	8.	7.	12.	10.	5.	5.	6.	0.
20000.	2570.	8.	9.	11.	8.	8.	8.	8.	11.	12.	6.	5.	6.	0.
25000.	2561.	7.	7.	9.	7.	7.	7.	8.	12.	14.	8.	7.	7.	0.
30000.	2541.	7.	7.	7.	5.	6.	5.	9.	13.	15	10.	8.	7.	0.
35000.	2518.	6.	7.	6.	6.	4.	5.	7.	13.	18.	11.	8.	8.	0.
40000.	2488.	6.	7.	6.	5.	4.	4.	4.	13.	20.	11.	10.	9.	0.
45000.	2441.	8.	6.	6.	5.	4.	4.	5.	11.	18.	14.	8.	10.	0.
50000.	2376.	7.	9.	8.	7.	6.	5.	6.	12.	15.	11.	7.	7.	0.
55000.	2294.	6.	10.	17.	15.	8.	6.	6.	9.	10.	6.	3.	4.	0.
60000.	2220.	2.	9.	29.	31.	10.	6.	4.	3.	2.	1.	2.	1.	0.
65000.	2161.	1.	3.	37.	46.	8.	2.	1.	1.	0.	0.	0.	0.	0.
70000.	2086.	0.	2.	40.	53.	3.	1.	0.	0.	0.	0.	0.	0.	0.
75000.	2010.	0.	1.	43.	54.	2.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	1945.	0.	1.	44.	53.	2.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	1860.	0.	0.	40.	57.	2.	1.	0.	0.	0.	0.	0.	0.	0.
90000.	1734.	0.	1.	44.	53.	1.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	1592.	0.	1.	43.	54.	1.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	1368.	0.	1.	44.	52.	2.	1.	0.	0.	0.	0.	0.	0.	0.

TABLE VI (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FALL

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES) ≥360 <30	≥30 <60	≥60 <90	≥90 <120	≥120 <150	≥150 <180	≥180 <210	≥210 <240	≥240 <270	≥270 <300	≥300 <330	≥330 <360	CALM.
3989.	2484.	6.	9.	4.	3.	5.	7.	8.	4.	4.	5.	4.	3.	38.
5000.	2470.	9.	9.	9.	4.	6.	8.	9.	5.	5.	12.	11.	10.	2.
6000.	2470.	6.	3.	4.	7.	10.	9.	10.	10.	10.	13.	8.	10.	1.
7000.	2470.	4.	3.	3.	6.	10.	10.	10.	10.	14.	14.	9.	7.	0.
8000.	2477.	4.	2.	3.	6.	8.	10.	8.	12.	16.	16.	8.	7.	0.
9000.	2479.	4.	3.	3.	5.	6.	9.	9.	12.	17.	15.	10.	7.	0.
10000.	2482.	4.	3.	4.	4.	5.	7.	8.	14.	17.	15.	11.	7.	0.
11000.	2483.	4.	4.	5.	4.	4.	6.	8.	15.	18.	15.	11.	7.	0.
12000.	2484.	5.	4.	5.	4.	4.	5.	7.	15.	19.	16.	10.	7.	0.
13000.	2484.	5.	4.	4.	3.	4.	3.	7.	15.	21.	16.	10.	7.	0.
14000.	2480.	6.	4.	4.	4.	3.	3.	7.	15.	21.	17.	10.	6.	0.
15000.	2478.	5.	4.	4.	3.	3.	3.	6.	16.	21.	17.	10.	7.	0.
16000.	2475.	5.	4.	3.	2.	2.	3.	6.	16.	21.	17.	11.	8.	0.
18000.	2468.	5.	3.	2.	2.	2.	3.	7.	16.	23.	18.	12.	7.	0.
20000.	2459.	5.	3.	2.	2.	2.	2.	6.	17.	23.	19.	12.	7.	0.
25000.	2437.	4.	3.	1.	1.	2.	2.	6.	18.	26.	19.	12.	7.	0.
30000.	2418.	4.	2.	1.	1.	1.	1.	5.	17.	30.	21.	11.	6.	0.
35000.	2381.	3.	1.	1.	0.	0.	1.	3.	18.	32.	23.	11.	6.	0.
40000.	2360.	2.	1.	0.	0.	0.	0.	2.	16.	35.	27.	11.	4.	0.
45000.	2320.	2.	0.	0.	0.	0.	1.	2.	13.	38.	30.	10.	4.	0.
50000.	2266.	1.	0.	0.	0.	0.	0.	3.	12.	37.	32.	10.	4.	0.
55000.	2186.	3.	1.	1.	1.	1.	1.	4.	13.	33.	27.	12.	4.	0.
60000.	2098.	4.	4.	5.	4.	4.	4.	5.	10.	22.	19.	11.	7.	0.
65000.	2041.	5.	5.	11.	10.	6.	5.	5.	9.	16.	14.	8.	6.	0.
70000.	1986.	4.	5.	15.	15.	7.	4.	4.	8.	15.	13.	7.	4.	0.
75000.	1923.	3.	5.	20.	19.	4.	3.	3.	6.	15.	12.	5.	3.	0.
80000.	1864.	3.	5.	18.	22.	4.	2.	3.	5.	17.	12.	5.	3.	0.
85000.	1775.	3.	4.	18.	22.	5.	2.	2.	4.	20.	13.	5.	3.	0.
90000.	1658.	2.	5.	18.	20.	5.	2.	2.	4.	22.	14.	4.	2.	0.
95000.	1503.	2.	5.	18.	17.	4.	2.	2.	4.	23.	16.	3.	3.	0.
100000.	1243.	2.	4.	17.	16.	5.	2.	2.	3.	25.	17.	5.	2.	0.

TABLE VII

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

WINTER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	WIND SPEED (KNOTS) ≥1 <10	≥10 <20	≥20 <30	≥30 <40	≥40 <50	≥50 <60	≥60 <70	≥70 <80	≥80 <90	≥90 <100	≥100 <125	≥125 <150	≥150
3989.	2169.	39.	47.	12.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	2160.	1.	73.	21.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	2164.	1.	51.	37.	10.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	2164.	0.	34.	45.	16.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	2168.	0.	24.	45.	23.	8.	1.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	2169.	0.	18.	40.	28.	11.	2.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	2172.	0.	13.	37.	30.	15.	5.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	2169.	0.	10.	32.	31.	17.	7.	1.	0.	0.	0.	0.	0.	0.	0.
12000.	2168.	0.	8.	29.	32.	19.	9.	3.	1.	0.	0.	0.	0.	0.	0.
13000.	2168.	0.	8.	24.	31.	21.	10.	5.	1.	0.	0.	0.	0.	0.	0.
14000.	2169.	0.	7.	21.	30.	23.	11.	6.	2.	0.	0.	0.	0.	0.	0.
15000.	2167.	0.	6.	19.	28.	24.	13.	7.	2.	1.	0.	0.	0.	0.	0.
16000.	2166.	0.	6.	16.	26.	23.	15.	8.	3.	1.	0.	0.	0.	0.	0.
18000.	2163.	0.	5.	13.	23.	22.	17.	11.	6.	2.	1.	0.	0.	0.	0.
20000.	2153.	0.	4.	11.	19.	22.	18.	12.	8.	4.	1.	1.	0.	0.	0.
25000.	2136.	0.	2.	7.	14.	17.	16.	15.	12.	8.	5.	3.	1.	0.	0.
30000.	2122.	0.	2.	6.	9.	13.	13.	14.	13.	11.	7.	6.	5.	1.	0.
35000.	2085.	0.	1.	4.	7.	9.	11.	13.	14.	11.	9.	7.	11.	2.	0.
40000.	2026.	0.	0.	3.	5.	9.	11.	16.	14.	14.	10.	7.	8.	2.	0.
45000.	1955.	0.	0.	2.	4.	10.	16.	20.	18.	15.	6.	5.	3.	0.	0.
50000.	1886.	0.	1.	3.	8.	14.	21.	22.	15.	10.	3.	2.	1.	0.	0.
55000.	1788.	0.	1.	8.	17.	23.	22.	14.	8.	4.	2.	1.	0.	0.	0.
60000.	1704.	0.	5.	25.	29.	20.	10.	5.	3.	1.	1.	0.	0.	0.	0.
65000.	1622.	0.	20.	37.	23.	11.	5.	2.	2.	1.	0.	0.	0.	0.	0.
70000.	1567.	0.	29.	40.	18.	8.	3.	1.	1.	0.	0.	0.	0.	0.	0.
75000.	1513.	0.	31.	37.	19.	8.	3.	1.	0.	0.	0.	0.	0.	0.	0.
80000.	1438.	0.	28.	36.	20.	9.	4.	1.	1.	0.	0.	0.	0.	0.	0.
85000.	1353.	0.	22.	33.	20.	13.	7.	3.	1.	1.	0.	0.	0.	0.	0.
90000.	1254.	0.	17.	32.	19.	15.	9.	5.	2.	1.	0.	0.	0.	0.	0.
95000.	1094.	0.	12.	22.	22.	19.	11.	9.	4.	3.	1.	1.	0.	0.	0.
100000.	882.	0.	8.	16.	20.	16.	13.	9.	7.	5.	3.	1.	2.	0.	0.

TABLE VII (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SPRING

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	WIND SPEED (KNOTS) ≥ 1 < 10	≥10 < 20	≥20 <30	≥30 <40	≥40 < 50	≥ 50 < 60	≥ 60 < 70	≥70 <80	≥80 < 90	≥ 90 < 100	≥ 100 < 125	≥ 125 < 150	≥ 150
3989.	2579.	24.	54.	20.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	2561.	1.	61.	33.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	2560.	0.	43.	43.	12.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	2559.	0.	35.	45.	17.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	2568.	0.	29.	45.	20.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	2570.	0.	26.	42.	22.	8.	2.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	2572.	0.	23.	38.	25.	10.	3.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	2570.	0.	19.	36.	25.	14.	4.	1.	0.	0.	0.	0.	0.	0.	0.
12000.	2574.	0.	16.	33.	26.	16.	7.	2.	0.	0.	0.	0.	0.	0.	0.
13000.	2573.	0.	13.	31.	27.	17.	8.	3.	0.	0.	0.	0.	0.	0.	0.
14000.	2571.	0.	11.	26.	28.	19.	10.	3.	1.	0.	0.	0.	0.	0.	0.
15000.	2572.	0.	10.	23.	27.	21.	11.	5.	2.	0.	0.	0.	0.	0.	0.
16000.	2569.	0.	8.	21.	26.	22.	13.	6.	3.	1.	0.	0.	0.	0.	0.
18000.	2565.	0.	7.	18.	22.	22.	14.	9.	5.	2.	1.	0.	0.	0.	0.
20000.	2562.	0.	6.	17.	18.	21.	16.	11.	7.	3.	1.	0.	0.	0.	0.
25000.	2539.	0.	4.	11.	14.	16.	16.	14.	10.	7.	4.	2.	1.	0.	0.
30000.	2512.	0.	2.	8.	11.	12.	14.	13.	13.	10.	7.	5.	4.	1.	0.
35000.	2476.	0.	2.	5.	8.	10.	11.	12.	14.	12.	10.	6.	8.	2.	0.
40000.	2393.	0.	1.	4.	7.	10.	11.	14.	14.	13.	11.	8.	7.	1.	1.
45000.	2295.	0.	0.	3.	7.	11.	16.	17.	18.	13.	7.	5.	3.	0.	0.
50000.	2209.	0.	0.	4.	10.	17.	22.	19.	13.	8.	3.	1.	1.	0.	0.
55000.	2077.	0.	2.	13.	21.	23.	19.	12.	6.	4.	1.	0.	0.	0.	0.
60000.	2004.	0.	18.	32.	23.	14.	7.	3.	2.	1.	0.	0.	0.	0.	0.
65000.	1946.	0.	41.	36.	13.	6.	2.	1.	0.	0.	0.	0.	0.	0.	0.
70000.	1890.	0.	50.	35.	9.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.
75000.	1839.	0.	49.	38.	8.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	1776.	0.	46.	38.	11.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	1690.	0.	41.	39.	13.	5.	2.	1.	0.	0.	0.	0.	0.	0.	0.
90000.	1581.	0.	33.	38.	17.	7.	3.	1.	1.	0.	0.	0.	0.	0.	0.
95000.	1436.	0.	27.	33.	22.	11.	4.	2.	0.	0.	0.	0.	0.	0.	0.
100000.	1162.	0.	22.	33.	21.	13.	8.	3.	1.	0.	0.	0.	0.	0.	0.

TABLE VII (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SUMMER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND SPEED (KNOTS)													
		CALM	≥ 1 < 10	≥10 < 20	≥20 <30	≥30 <40	≥40 < 50	≥50 <60	≥ 60 < 70	≥ 70 < 80	≥ 80 < 90	≥90 <100	≥100 <125	≥125 < 150	≥ 150
3989.	2622.	30.	61.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	2612.	2.	81.	16.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	2605.	1.	64.	31.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	2606.	0.	59.	35.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	2617.	0.	58.	36.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	2611.	0.	58.	36.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	2609.	0.	56.	38.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	2608.	0.	53.	40.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	2607.	0.	49.	41.	8.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13000.	2601.	0.	45.	43.	10.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	2592.	0.	39.	45.	12.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	2584.	0.	35.	46.	14.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	2582.	0.	34.	45.	15.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	2580.	0.	33.	43.	16.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	2570.	0.	34.	40.	17.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	2561.	0.	29.	39.	19.	7.	4.	1.	0.	0.	0.	0.	0.	0.	0.
30000.	2541.	0.	20.	37.	22.	11.	5.	3.	1.	0.	0.	0.	0.	0.	0.
35000.	2518.	0.	15.	29.	23.	16.	8.	4.	3.	1.	0.	0.	0.	0.	0.
40000.	2488.	0.	12.	26.	21.	17.	12.	5.	4.	2.	1.	0.	0.	0.	0.
45000.	2441.	0.	12.	29.	22.	17.	10.	6.	3.	1.	0.	0.	0.	0.	0.
50000.	2376.	0.	20.	39.	22.	12.	5.	2.	0.	0.	0.	0.	0.	0.	0.
55000.	2294.	0.	34.	46.	16.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	2220.	0.	30.	55.	14.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	2161.	0.	13.	54.	31.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	2086.	0.	7.	35.	49.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	2010.	0.	3.	24.	50.	22.	1.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	1945.	0.	2.	17.	41.	36.	4.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	1860.	0.	2.	14.	35.	40.	8.	1.	0.	0.	0.	0.	0.	0.	0.
90000.	1734.	0.	3.	13.	28.	41.	14.	1.	0.	0.	0.	0.	0.	0.	0.
95000.	1592.	0.	2.	11.	25.	38.	21.	2.	0.	0.	0.	0.	0.	0.	0.
100000.	1368.	0.	2.	9.	20.	36.	26.	6.	0.	0.	0.	0.	0.	0.	0.

TABLE VII (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FALL

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND SPEED (KNOTS)													
		CALM	≥ 1 < 10	≥10 < 20	≥20 <30	≥30 < 40	≥40 < 50	≥50 <60	≥60 <70	≥70 <80	≥80 < 90	≥ 90 < 100	≥ 100 < 125	≥ 125 < 150	≥150
3989.	2484.	38.	53.	8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	2470.	2.	79.	17.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	2470.	1.	62.	32.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	2470.	0.	51.	38.	9.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	2477.	0.	44.	40.	12.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	2479.	0.	39.	41.	15.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	2482.	0.	35.	40.	17.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	2483.	0.	31.	40.	19.	8.	3.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	2484.	0.	29.	38.	20.	9.	4.	1.	0.	0.	0.	0.	0.	0.	0.
13000.	2484.	0.	26.	36.	22.	10.	5.	1.	0.	0.	0.	0.	0.	0.	0.
14000.	2480.	0.	25.	34.	23.	10.	5.	2.	0.	0.	0.	0.	0.	0.	0.
15000.	2478.	0.	24.	32.	23.	12.	6.	3.	1.	0.	0.	0.	0.	0.	0.
16000.	2475.	0.	23.	31.	23.	12.	6.	3.	1.	0.	0.	0.	0.	0.	0.
18000.	2468.	0.	21.	29.	22.	13.	7.	4.	2.	1.	0.	0.	0.	0.	0.
20000.	2459.	0.	17.	28.	22.	15.	8.	5.	3.	2.	0.	0.	0.	0.	0.
25000.	2437.	0.	9.	22.	23.	18.	10.	7.	5.	3.	2.	1.	1.	0.	0.
30000.	2418.	0.	5.	15.	19.	18.	15.	9.	6.	4.	3.	2.	1.	0.	0.
35000.	2381.	0.	3.	10.	14.	17.	17.	13.	10.	6.	5.	2.	2.	0.	0.
40000.	2360.	0.	2.	7.	11.	15.	18.	16.	12.	8.	5.	3.	3.	1.	0.
45000.	2320.	0.	1.	8.	14.	19.	20.	16.	11.	7.	2.	1.	1.	0.	0.
50000.	2266.	0.	3.	13.	23.	22.	17.	12.	7.	3.	1.	0.	0.	0.	0.
55000.	2186.	0.	13.	32.	23.	14.	10.	4.	2.	1.	0.	0.	0.	0.	0.
60000.	2098.	0.	37.	38.	15.	6.	3.	1.	0.	0.	0.	0.	0.	0.	0.
65000.	2041.	0.	47.	40.	8.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	1986.	0.	46.	41.	9.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	1923.	0.	40.	40.	16.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	1864.	0.	31.	41.	21.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	1775.	0.	26.	39.	24.	7.	2.	1.	0.	0.	0.	0.	0.	0.	0.
90000.	1658.	0.	24.	32.	26.	11.	4.	2.	1.	0.	0.	0.	0.	0.	0.
95000.	1503.	0.	21.	29.	24.	15.	6.	3.	1.	0.	0.	0.	0.	0.	0.
100000.	1243.	0.	21.	26.	21.	17.	8.	4.	3.	1.	0.	0.	0.	0.	0.

ATMOSPHERIC STRUCTURE REPORT

WHITE SANDS DESERT SITE

SECTION I

UPPER AIR TEMPERATURE DATA

By Months

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TABLE VIII

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSL)
PERIOD OF RECORD 1961-1973

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4989.	757.	23.	5.	-17.
5000.	757.	20.	7.	-16.
6000.	757.	18.	5.	-18.
7000.	757.	16.	4.	-19.
8000.	756.	15.	3.	-20.
9000.	755.	13.	1.	-21.
10000.	756.	12.	-0.	-20.
11000.	756.	10.	-2.	-20.
12000.	755.	9.	-4.	-21.
13000.	755.	7.	-5.	-23.
14000.	754.	5.	-7.	-23.
15000.	754.	3.	-9.	-24.
16000.	755.	1.	-11.	-25.
18000.	753.	-4.	-15.	-29.
20000.	748.	-9.	-20.	-33.
25000.	743.	-21.	-31.	-45.
30000.	737.	-33.	-43.	-52.
35000.	722.	-39.	-52.	-63.
40000.	692.	-43.	-57.	-69.
45000.	673.	-48.	-60.	-75.
50000.	642.	-52.	-63.	-75.
55000.	613.	-55.	-66.	-78.
60000.	582.	-54.	-65.	-79.
65000.	555.	-55.	-63.	-78.
70000.	535.	-53.	-61.	-72.
75000.	513.	-46.	-58.	-71.
80000.	487.	-43.	-56.	-69.
85000.	462.	-46.	-54.	-66.
90000.	427.	-44.	-52.	-61.
95000.	364.	-38.	-50.	-60.
100000.	282.	-35.	-47.	-58.

TABLE VIII (CONT)

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	711.	25.	8.	-11.
5000.	711.	22.	8.	-10.
6000.	711.	19.	6.	-12.
7000.	712.	16.	4.	-14.
8000.	712.	14.	2.	-15.
9000.	712.	12.	1.	-14.
10000.	712.	9.	-1.	-15.
11000.	712.	8.	-3.	-17.
12000.	711.	6.	-5.	-20.
13000.	711.	5.	-6.	-23.
14000.	711.	3.	-8.	-24.
15000.	711.	1.	-10.	-25.
16000.	711.	-2.	-12.	-27.
18000.	711.	-6.	-16.	-32.
20000.	709.	-10.	-21.	-37.
25000.	705.	-20.	-32.	-46.
30000.	699.	-30.	-43.	-53.
35000.	689.	-37.	-52.	-61.
40000.	675.	-44.	-56.	-71.
45000.	644.	-48.	-59.	-74.
50000.	622.	-52.	-63.	-72.
55000.	583.	-52.	-66.	-82.
60000.	547.	-53.	-65.	-75.
65000.	521.	-54.	-63.	-71.
70000.	511.	-50.	-61.	-69.
75000.	492.	-51.	-58.	-66.
80000.	464.	-49.	-56.	-66.
85000.	431.	-46.	-54.	-66.
90000.	401.	-42.	-51.	-64.
95000.	349.	-37.	-48.	-65.
100000.	284.	-33.	-45.	-54.

TABLE VIII (CONT)

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3939.	902.	30.	11.	-12.
5000.	902.	26.	10.	-8.
6000.	902.	24.	8.	-10.
7000.	901.	21.	6.	-12.
8000.	902.	18.	4.	-14.
9000.	903.	15.	2.	-16.
10000.	902.	12.	-0.	-18.
11000.	901.	10.	-2.	-20.
12000.	901.	8.	-4.	-22.
13000.	899.	6.	-6.	-24.
14000.	901.	4.	-8.	-27.
15000.	900.	3.	-10.	-29.
16000.	898.	0.	-12.	-31.
17000.	896.	-5.	-17.	-34.
20000.	894.	-10.	-21.	-37.
25000.	887.	-21.	-32.	-46.
30000.	878.	-33.	-43.	-54.
35000.	859.	-40.	-52.	-60.
40000.	798.	-43.	-56.	-68.
45000.	760.	-49.	-59.	-71.
50000.	730.	-52.	-62.	-73.
55000.	689.	-52.	-64.	-76.
60000.	665.	-52.	-64.	-75.
65000.	641.	-53.	-62.	-69.
70000.	622.	-52.	-59.	-67.
75000.	596.	-49.	-57.	-65.
80000.	578.	-44.	-55.	-62.
85000.	552.	-42.	-52.	-59.
90000.	514.	-41.	-50.	-58.
95000.	467.	-36.	-47.	-55.
100000.	364.	-33.	-43.	-53.

TABLE VIII (CONT)

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSL)
PERIOD OF RECORD 1961-1973

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5989.	857.	33.	17.	-2.
5000.	857.	30.	16.	1.
6000.	857.	26.	13.	-2.
7000.	857.	23.	11.	-4.
8000.	857.	20.	8.	-6.
9000.	858.	17.	6.	-9.
10000.	858.	14.	4.	-11.
11000.	857.	11.	2.	-13.
12000.	857.	9.	-1.	-15.
13000.	857.	6.	-3.	-17.
14000.	857.	3.	-5.	-19.
15000.	856.	2.	-7.	-22.
16000.	855.	0.	-9.	-24.
18000.	854.	-6.	-13.	-29.
20000.	849.	-10.	-17.	-35.
25000.	842.	-20.	-29.	-43.
30000.	834.	-32.	-40.	-51.
35000.	825.	-39.	-51.	-59.
40000.	805.	-44.	-57.	-68.
45000.	773.	-50.	-59.	-72.
50000.	739.	-52.	-62.	-73.
55000.	708.	-53.	-64.	-75.
60000.	681.	-57.	-65.	-75.
65000.	666.	-52.	-62.	-71.
70000.	637.	-51.	-58.	-67.
75000.	617.	-49.	-55.	-66.
80000.	590.	-45.	-53.	-59.
85000.	553.	-43.	-50.	-58.
90000.	507.	-41.	-48.	-54.
95000.	464.	-37.	-45.	-53.
100000.	378.	-33.	-42.	-50.

TABLE VIII (CONT)

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5989.	817.	36.	21.	-2.
5000.	816.	30.	20.	5.
6000.	816.	27.	18.	3.
7000.	816.	24.	16.	1.
8000.	816.	22.	13.	-2.
9000.	815.	19.	11.	-4.
10000.	814.	16.	8.	-6.
11000.	813.	13.	6.	-8.
12000.	814.	13.	4.	-10.
13000.	813.	10.	1.	-12.
14000.	811.	7.	-1.	-15.
15000.	811.	5.	-3.	-18.
16000.	811.	4.	-6.	-20.
18000.	811.	-1.	-10.	-23.
20000.	811.	-5.	-14.	-26.
25000.	803.	-17.	-26.	-38.
30000.	795.	-29.	-37.	-47.
35000.	790.	-41.	-49.	-58.
40000.	786.	-45.	-58.	-65.
45000.	761.	-49.	-60.	-71.
50000.	737.	-53.	-63.	-72.
55000.	688.	-54.	-65.	-78.
60000.	665.	-56.	-65.	-73.
65000.	648.	-54.	-61.	-69.
70000.	630.	-52.	-58.	-63.
75000.	621.	-50.	-55.	-61.
80000.	599.	-46.	-52.	-57.
85000.	577.	-43.	-49.	-55.
90000.	555.	-38.	-46.	-53.
95000.	496.	-37.	-44.	-50.
100000.	409.	-33.	-41.	-49.

TABLE VIII (CONT)

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JUNE

GEO-METRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5000.	869.	41.	25.	9.
5000.	871.	36.	24.	11.
6000.	870.	33.	22.	3.
7000.	871.	30.	19.	2.
8000.	871.	29.	17.	2.
9000.	870.	24.	15.	2.
10000.	868.	21.	12.	1.
11000.	868.	18.	10.	0.
12000.	868.	15.	7.	-2.
13000.	866.	12.	5.	-4.
14000.	862.	11.	3.	-5.
15000.	859.	7.	0.	-7.
16000.	858.	4.	-2.	-10.
18000.	856.	0.	-6.	-13.
20000.	857.	-1.	-10.	-18.
25000.	853.	-14.	-21.	-29.
30000.	844.	-23.	-32.	-41.
35000.	836.	-32.	-44.	-53.
40000.	823.	-45.	-54.	-64.
45000.	798.	-53.	-61.	-68.
50000.	783.	-54.	-66.	-76.
55000.	756.	-57.	-68.	-76.
60000.	736.	-58.	-65.	-72.
65000.	719.	-55.	-60.	-66.
70000.	706.	-51.	-57.	-62.
75000.	687.	-48.	-54.	-59.
80000.	667.	-45.	-51.	-56.
85000.	647.	-43.	-48.	-54.
90000.	606.	-39.	-46.	-51.
95000.	568.	-34.	-43.	-51.
100000.	489.	-34.	-41.	-48.

TABLE VIII (CONT)

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5989.	873.	40.	26.	16.
5000.	874.	36.	25.	16.
6000.	874.	32.	23.	14.
7000.	874.	29.	21.	13.
8000.	877.	26.	18.	9.
9000.	873.	23.	16.	9.
10000.	873.	20.	14.	4.
11000.	872.	17.	11.	3.
12000.	873.	14.	9.	1.
13000.	870.	12.	7.	1.
14000.	868.	10.	5.	0.
15000.	869.	7.	2.	-3.
16000.	868.	5.	0.	-3.
18000.	864.	2.	-4.	-9.
20000.	859.	-3.	-7.	-13.
25000.	854.	-12.	-17.	-22.
30000.	848.	-22.	-28.	-37.
35000.	839.	-34.	-39.	-45.
40000.	835.	-46.	-52.	-57.
45000.	821.	-57.	-62.	-67.
50000.	797.	-63.	-70.	-77.
55000.	772.	-63.	-70.	-79.
60000.	741.	-57.	-65.	-72.
65000.	727.	-55.	-61.	-67.
70000.	676.	-51.	-57.	-62.
75000.	637.	-48.	-54.	-60.
80000.	619.	-42.	-51.	-58.
85000.	587.	-39.	-49.	-56.
90000.	543.	-40.	-46.	-53.
95000.	494.	-38.	-44.	-51.
100000.	429.	-35.	-41.	-49.

TABLE VIII (CONT)

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSO)
PERIOD OF RECORD 1961-1973

AUGUST

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5000.	876.	37.	25.	15.
5000.	875.	34.	24.	16.
6000.	876.	31.	22.	13.
7000.	876.	28.	19.	11.
8000.	876.	25.	17.	7.
9000.	875.	22.	15.	5.
10000.	874.	19.	13.	4.
11000.	873.	17.	10.	3.
12000.	871.	14.	8.	1.
13000.	869.	11.	6.	0.
14000.	865.	9.	3.	-2.
15000.	861.	6.	1.	-4.
16000.	860.	4.	-1.	-7.
18000.	860.	0.	-4.	-10.
20000.	858.	-3.	-8.	-13.
25000.	856.	-12.	-17.	-23.
30000.	851.	-23.	-28.	-34.
35000.	838.	-34.	-40.	-46.
40000.	829.	-46.	-52.	-57.
45000.	818.	-57.	-62.	-68.
50000.	799.	-63.	-70.	-76.
55000.	769.	-62.	-70.	-78.
60000.	738.	-59.	-65.	-70.
65000.	711.	-54.	-60.	-66.
70000.	692.	-51.	-57.	-62.
75000.	675.	-48.	-54.	-59.
80000.	649.	-45.	-52.	-57.
85000.	620.	-40.	-49.	-54.
90000.	577.	-37.	-47.	-52.
95000.	526.	-36.	-44.	-51.
100000.	437.	-35.	-42.	-47.

TABLE VIII (CONT)

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSC)
PERIOD OF RECORD 1961-1973

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5000.	796.	35.	22.	8.
5000.	801.	31.	21.	6.
6000.	801.	28.	19.	5.
7000.	800.	25.	17.	4.
8000.	799.	22.	15.	2.
9000.	799.	19.	13.	1.
10000.	799.	16.	10.	0.
11000.	799.	14.	8.	-2.
12000.	799.	11.	6.	-4.
13000.	798.	8.	4.	-5.
14000.	795.	6.	2.	-6.
15000.	794.	5.	-0.	-9.
16000.	792.	3.	-2.	-11.
18000.	792.	0.	-5.	-16.
20000.	788.	-3.	-9.	-21.
25000.	781.	-14.	-19.	-34.
30000.	779.	-23.	-31.	-45.
35000.	767.	-36.	-42.	-50.
40000.	760.	-47.	-52.	-60.
45000.	750.	-55.	-62.	-68.
50000.	736.	-59.	-69.	-77.
55000.	712.	-62.	-70.	-79.
60000.	695.	-58.	-65.	-73.
65000.	674.	-54.	-60.	-66.
70000.	664.	-52.	-57.	-62.
75000.	644.	-50.	-54.	-59.
80000.	617.	-46.	-52.	-57.
85000.	592.	-40.	-49.	-55.
90000.	550.	-38.	-47.	-53.
95000.	508.	-39.	-45.	-52.
100000.	430.	-37.	-43.	-51.

TABLE VIII (CONT)

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5989.	904.	32.	16.	-4.
5000.	906.	28.	17.	1.
6000.	905.	26.	15.	0.
7000.	904.	23.	13.	-2.
8000.	904.	21.	11.	-5.
9000.	902.	18.	9.	-7.
10000.	901.	18.	7.	-10.
11000.	901.	18.	5.	-12.
12000.	901.	11.	3.	-14.
13000.	900.	8.	1.	-16.
14000.	899.	6.	-1.	-18.
15000.	898.	4.	-3.	-21.
16000.	898.	3.	-4.	-23.
18000.	894.	-2.	-8.	-26.
20000.	894.	-6.	-12.	-28.
25000.	887.	-16.	-24.	-35.
30000.	882.	-27.	-35.	-43.
35000.	869.	-38.	-46.	-54.
40000.	864.	-48.	-55.	-65.
45000.	853.	-53.	-62.	-71.
50000.	834.	-58.	-67.	-74.
55000.	807.	-59.	-69.	-78.
60000.	769.	-57.	-66.	-73.
65000.	756.	-54.	-61.	-68.
70000.	726.	-53.	-58.	-66.
75000.	709.	-51.	-56.	-61.
80000.	690.	-48.	-53.	-60.
85000.	661.	-44.	-51.	-58.
90000.	624.	-42.	-49.	-56.
95000.	573.	-38.	-47.	-54.
100000.	478.	-25.	-45.	-54.

TABLE VIII (CONT)

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	784.	28.	9.	-9.
5000.	783.	24.	11.	-2.
6000.	782.	21.	9.	-5.
7000.	783.	17.	7.	-7.
8000.	782.	16.	6.	-9.
9000.	782.	14.	4.	-10.
10000.	782.	12.	3.	-13.
11000.	781.	10.	1.	-13.
12000.	781.	8.	-0.	-16.
13000.	783.	6.	-2.	-17.
14000.	781.	4.	-4.	-19.
15000.	781.	3.	-5.	-20.
16000.	782.	1.	-7.	-22.
18000.	780.	-3.	-11.	-27.
20000.	777.	-7.	-16.	-31.
25000.	767.	-19.	-27.	-43.
30000.	758.	-29.	-38.	-48.
35000.	744.	-40.	-49.	-57.
40000.	736.	-48.	-57.	-65.
45000.	719.	-51.	-63.	-72.
50000.	698.	-55.	-66.	-78.
55000.	670.	-55.	-68.	-77.
60000.	638.	-53.	-66.	-76.
65000.	613.	-55.	-63.	-71.
70000.	597.	-53.	-60.	-67.
75000.	575.	-50.	-58.	-70.
80000.	559.	-47.	-55.	-64.
85000.	526.	-44.	-53.	-60.
90000.	488.	-40.	-51.	-62.
95000.	429.	-37.	-49.	-58.
100000.	334.	-38.	-47.	-57.

TABLE VIII (CONT)

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	698.	24.	5.	-12.
5000.	701.	19.	7.	-5.
6000.	701.	16.	6.	-7.
7000.	701.	13.	5.	-9.
8000.	701.	12.	3.	-11.
9000.	701.	11.	2.	-13.
10000.	700.	9.	0.	-15.
11000.	701.	9.	-1.	-17.
12000.	701.	7.	-3.	-20.
13000.	701.	5.	-5.	-21.
14000.	702.	3.	-6.	-23.
15000.	702.	1.	-8.	-25.
16000.	701.	0.	-10.	-26.
18000.	699.	-5.	-14.	-30.
20000.	697.	-10.	-18.	-35.
25000.	689.	-20.	-29.	-43.
30000.	684.	-29.	-41.	-51.
35000.	675.	-32.	-51.	-59.
40000.	660.	-41.	-58.	-69.
45000.	641.	-51.	-61.	-72.
50000.	624.	-54.	-65.	-76.
55000.	602.	-54.	-66.	-76.
60000.	583.	-56.	-66.	-77.
65000.	559.	-53.	-63.	-74.
70000.	538.	-53.	-61.	-67.
75000.	518.	-49.	-58.	-65.
80000.	498.	-46.	-56.	-64.
85000.	470.	-43.	-54.	-63.
90000.	433.	-40.	-52.	-61.
95000.	387.	-36.	-50.	-60.
100000.	320.	-33.	-48.	-59.

TABLE IX

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSI)
PERIOD OF RECORD 1961-1973

JANUARY

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -30	≥-30 <-25	≥-25 <-20	≥-20 <-15	≥-15 <-10	≥-10 < -5	≥ -5 < 0	≥ 0 < 5	≥ 5 < 10	≥ 10 < 15	≥ 15 < 20	≥ 20 < 25	≥ 25
5989.	757.	0.	0.	0.	0.	1.	9.	16.	23.	20.	16.	11.	3.	0.
5000.	757.	0.	0.	0.	0.	1.	2.	8.	22.	31.	28.	7.	0.	0.
6000.	757.	0.	0.	0.	0.	1.	2.	12.	24.	38.	19.	2.	0.	0.
7000.	757.	0.	0.	0.	1.	1.	4.	14.	28.	40.	11.	1.	0.	0.
8000.	756.	0.	0.	0.	1.	1.	5.	17.	38.	35.	3.	0.	0.	0.
9000.	755.	0.	0.	0.	1.	2.	8.	24.	43.	21.	2.	0.	0.	0.
10000.	756.	0.	0.	0.	1.	3.	11.	31.	44.	9.	1.	0.	0.	0.
11000.	756.	0.	0.	0.	1.	6.	15.	40.	35.	4.	0.	0.	0.	0.
12000.	755.	0.	0.	0.	1.	9.	20.	47.	21.	2.	0.	0.	0.	0.
13000.	755.	0.	0.	0.	4.	10.	33.	44.	8.	1.	0.	0.	0.	0.
14000.	754.	0.	0.	1.	6.	16.	42.	32.	3.	0.	0.	0.	0.	0.
15000.	754.	0.	0.	2.	9.	25.	49.	14.	2.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-55	≥-55 <-50	≥-50 <-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥-30 <-25	≥-25 <-20	≥-20 <-15	≥-15 <-10	≥-10 < -5	≥-5 < 0	≥ 0
16000.	755.	0.	0.	0.	0.	0.	0.	0.	5.	12.	39.	38.	6.	0.
18000.	753.	0.	0.	0.	0.	0.	0.	3.	10.	34.	41.	10.	1.	0.
20000.	748.	0.	0.	0.	0.	0.	2.	9.	30.	47.	11.	1.	0.	0.
25000.	743.	0.	0.	0.	3.	14.	40.	36.	8.	0.	0.	0.	0.	0.
30000.	737.	0.	1.	22.	51.	24.	2.	0.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-85	≥-85 <-80	≥-80 <-75	≥-75 <-70	≥-70 <-65	≥-65 <-60	≥-60 <-55	≥-55 <-50	≥-50 <-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥-30
55000.	722.	0.	0.	0.	0.	0.	0.	20.	54.	22.	3.	0.	0.	0.
60000.	692.	0.	0.	0.	0.	5.	31.	30.	23.	10.	1.	0.	0.	0.
65000.	673.	0.	0.	0.	2.	8.	34.	42.	13.	1.	0.	0.	0.	0.
70000.	642.	0.	0.	0.	3.	26.	54.	16.	1.	0.	0.	0.	0.	0.
75000.	613.	0.	0.	1.	14.	40.	38.	7.	0.	0.	0.	0.	0.	0.
80000.	582.	0.	0.	1.	8.	41.	42.	8.	0.	0.	0.	0.	0.	0.
85000.	555.	0.	0.	0.	2.	21.	61.	15.	0.	0.	0.	0.	0.	0.
90000.	535.	0.	0.	0.	1.	7.	48.	43.	2.	0.	0.	0.	0.	0.
95000.	513.	0.	0.	0.	0.	2.	22.	62.	12.	1.	0.	0.	0.	0.
100000.	487.	0.	0.	0.	0.	1.	8.	56.	30.	4.	1.	0.	0.	0.
105000.	462.	0.	0.	0.	0.	0.	3.	32.	56.	9.	0.	0.	0.	0.
110000.	427.	0.	0.	0.	0.	0.	0.	17.	56.	25.	1.	0.	0.	0.
115000.	364.	0.	0.	0.	0.	0.	0.	5.	36.	48.	10.	1.	0.	0.
120000.	282.	0.	0.	0.	0.	0.	0.	2.	16.	49.	29.	4.	0.	0.

TABLE IX (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FEBRUARY

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-30	≥-30 <-25	≥-25 <-20	≥-20 <-15	≥-15 <-10	≥-10 <-5	≥-5 <0	≥0 <5	≥5 10	≥10 <15	≥15 <20	≥20 <25	≥25
3989.	711.	0.	0.	0.	0.	0.	3.	12.	21.	25.	21.	13.	5.	0.
5000.	711.	0.	0.	0.	0.	0.	1.	7.	21.	33.	26.	11.	1.	0.
6000.	711.	0.	0.	0.	0.	0.	2.	10.	27.	34.	24.	3.	0.	0.
7000.	712.	0.	0.	0.	0.	0.	3.	16.	33.	31.	15.	0.	0.	0.
8000.	712.	0.	0.	0.	0.	1.	6.	23.	36.	29.	6.	0.	0.	0.
9000.	712.	0.	0.	0.	0.	1.	11.	29.	39.	19.	1.	0.	0.	0.
10000.	712.	0.	0.	0.	0.	4.	17.	33.	37.	9.	0.	0.	0.	0.
11000.	712.	0.	0.	0.	0.	6.	23.	37.	29.	3.	0.	0.	0.	0.
12000.	711.	0.	0.	0.	2.	11.	27.	44.	15.	1.	0.	0.	0.	0.
13000.	711.	0.	0.	0.	4.	16.	33.	40.	6.	0.	0.	0.	0.	0.
14000.	711.	0.	0.	1.	7.	21.	46.	24.	1.	0.	0.	0.	0.	0.
15000.	711.	0.	0.	3.	11.	30.	45.	11.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -55	≥-55 <-50	≥-50 <-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥-30 <-25	≥-25 <-20	≥-20 <-15	≥-15 <-10	≥-10 <-5	≥-5 <0	≥0
16000.	711.	0.	0.	0.	0.	0.	0.	1.	4.	18.	42.	33.	3.	0.
18000.	711.	0.	0.	0.	0.	0.	0.	3.	14.	40.	37.	4.	0.	0.
20000.	709.	0.	0.	0.	0.	0.	4.	11.	36.	43.	6.	0.	0.	0.
25000.	705.	0.	0.	0.	3.	18.	41.	32.	4.	0.	0.	0.	0.	0.
30000.	699.	0.	2.	22.	55.	17.	3.	0.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<=-85	>=-85 <=-80	>=-80 <=-75	>=-75 <=-70	>=-70 <=-65	>=-65 <=-60	>=-60 <=-55	>=-55 <=-50	>=-50 <=-45	>=-45 <=-40	>=-40 <=-35	>=-35 <=-30	>=-30
35000.	689.	0.	0.	0.	0.	0.	0.	22.	50.	21.	4.	2.	0.	0.
40000.	675.	0.	0.	0.	0.	4.	23.	24.	33.	16.	1.	0.	0.	0.
45000.	644.	0.	0.	0.	1.	4.	24.	53.	17.	0.	0.	0.	0.	0.
50000.	622.	0.	0.	0.	1.	23.	54.	20.	1.	0.	0.	0.	0.	0.
55000.	583.	0.	0.	1.	12.	43.	38.	6.	1.	0.	0.	0.	0.	0.
60000.	547.	0.	0.	0.	12.	43.	37.	8.	1.	0.	0.	0.	0.	0.
65000.	521.	0.	0.	0.	0.	24.	57.	18.	1.	0.	0.	0.	0.	0.
70000.	511.	0.	0.	0.	0.	5.	49.	45.	2.	0.	0.	0.	0.	0.
75000.	492.	0.	0.	0.	0.	1.	24.	64.	11.	0.	0.	0.	0.	0.
80000.	464.	0.	0.	0.	0.	0.	7.	55.	37.	0.	0.	0.	0.	0.
85000.	431.	0.	0.	0.	0.	0.	2.	29.	58.	11.	0.	0.	0.	0.
90000.	401.	0.	0.	0.	0.	0.	1.	8.	53.	34.	3.	0.	0.	0.
95000.	349.	0.	0.	0.	0.	0.	1.	1.	28.	53.	14.	3.	0.	0.
100000.	284.	0.	0.	0.	0.	0.	0.	0.	10.	43.	35.	12.	1.	0.

TABLE IX (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

MARCH

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -30	≥-30 <-25	≥-25 <-20	≥-20 <-15	≥-15 <-10	≥-10 <-5	≥-5 <0	≥0 <5	≥5 <10	≥10 <15	≥15 <20	≥20 <25	≥25
3989.	902.	0.	0.	0.	0.	0.	1.	7.	14.	23.	25.	18.	9.	4.
5000.	902.	0.	0.	0.	0.	0.	1.	5.	14.	28.	28.	16.	6.	0.
6000.	902.	0.	0.	0.	0.	0.	2.	7.	20.	30.	25.	15.	1.	0.
7000.	901.	0.	0.	0.	0.	1.	3.	12.	26.	28.	25.	5.	0.	0.
8000.	902.	0.	0.	0.	0.	2.	5.	18.	30.	27.	17.	1.	0.	0.
9000.	903.	0.	0.	0.	0.	2.	9.	25.	29.	28.	6.	0.	0.	0.
10000.	902.	0.	0.	0.	1.	4.	15.	29.	33.	18.	1.	0.	0.	0.
11000.	901.	0.	0.	0.	2.	7.	20.	31.	34.	7.	0.	0.	0.	0.
12000.	901.	0.	0.	0.	2.	2.	23.	38.	23.	1.	0.	0.	0.	0.
13000.	899.	0.	0.	1.	5.	16.	28.	40.	9.	0.	0.	0.	0.	0.
14000.	901.	0.	0.	2.	9.	20.	39.	27.	3.	0.	0.	0.	0.	0.
15000.	900.	0.	1.	4.	13.	28.	43.	12.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-55	≥-55 <-50	≥-50 <-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥-30 <-25	≥-25 <-20	≥-20 <-15	≥-15 <-10	≥-10 <-5	≥-5 <0	≥0
16000.	898.	0.	0.	0.	0.	0.	0.	2.	5.	18.	39.	30.	5.	0.
18000.	896.	0.	0.	0.	0.	0.	1.	5.	15.	37.	36.	7.	0.	0.
20000.	894.	0.	0.	0.	0.	0.	4.	14.	34.	40.	9.	0.	0.	0.
25000.	887.	0.	0.	0.	4.	16.	47.	29.	5.	0.	0.	0.	0.	0.
30000.	878.	0.	2.	23.	49.	23.	3.	0.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-85	≥-85 <-80	≥-80 <-75	≥-75 <-70	≥-70 <-65	≥-65 <-60	≥-60 <-55	≥-55 <-50	≥-50 <-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥-30
35000.	859.	0.	0.	0.	0.	0.	0.	23.	51.	21.	6.	0.	0.	0.
40000.	798.	0.	0.	0.	0.	3.	24.	31.	31.	11.	1.	0.	0.	0.
45000.	760.	0.	0.	0.	1.	5.	25.	52.	17.	1.	0.	0.	0.	0.
50000.	730.	0.	0.	0.	1.	18.	55.	23.	2.	0.	0.	0.	0.	0.
55000.	689.	0.	0.	0.	7.	33.	43.	15.	1.	0.	0.	0.	0.	0.
60000.	665.	0.	0.	0.	4.	29.	49.	17.	1.	0.	0.	0.	0.	0.
65000.	641.	0.	0.	0.	0.	14.	61.	24.	1.	0.	0.	0.	0.	0.
70000.	622.	0.	0.	0.	0.	1.	34.	60.	6.	0.	0.	0.	0.	0.
75000.	596.	0.	0.	0.	0.	0.	7.	68.	24.	1.	0.	0.	0.	0.
80000.	578.	0.	0.	0.	0.	0.	0.	40.	55.	4.	0.	0.	0.	0.
85000.	552.	0.	0.	0.	0.	0.	0.	11.	64.	22.	2.	0.	0.	0.
90000.	514.	0.	0.	0.	0.	0.	0.	3.	45.	44.	9.	0.	0.	0.
95000.	467.	0.	0.	0.	0.	0.	0.	0.	14.	55.	27.	4.	0.	0.
100000.	364.	0.	0.	0.	0.	0.	0.	0.	2.	27.	51.	19.	1.	0.

TABLE IX (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

APRIL

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -25	≥-25 <-20	≥-20 <-15	≥-15 <-10	≥-10 <-5	≥-5 < 0	≥ 0 < 5	≥ 5 <10	≥10 <15	≥15 <20	≥20 < 25	≥ 25 < 30	≥ 30
3989.	857.	0.	0.	0.	0.	0.	0.	3.	11.	25.	27.	22.	10.	1.
5000.	857.	0.	0.	0.	0.	0.	0.	2.	11.	28.	40.	17.	2.	0.
6000.	857.	0.	0.	0.	0.	0.	1.	5.	16.	39.	32.	8.	0.	0.
7000.	857.	0.	0.	0.	0.	0.	2.	7.	27.	44.	18.	2.	0.	0.
8000.	857.	0.	0.	0.	0.	1.	4.	13.	43.	32.	8.	0.	0.	0.
9000.	858.	0.	0.	0.	0.	2.	6.	25.	47.	18.	2.	0.	0.	0.
10000.	858.	0.	0.	0.	0.	3.	10.	44.	34.	8.	0.	0.	0.	0.
11000.	857.	0.	0.	0.	2.	4.	22.	53.	17.	1.	0.	0.	0.	0.
12000.	857.	0.	0.	0.	3.	7.	41.	42.	8.	0.	0.	0.	0.	0.
13000.	857.	0.	0.	1.	4.	15.	55.	24.	1.	0.	0.	0.	0.	0.
14000.	857.	0.	0.	2.	5.	33.	51.	9.	0.	0.	0.	0.	0.	0.
15000.	856.	0.	0.	3.	10.	54.	31.	1.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -55	≥-55 <-50	≥-50 <-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥ -30 < -25	≥-25 <-20	≥-20 <-15	≥-15 <-10	≥-10 < -5	≥ -5 < 0	≥ 0
16000.	855.	0.	0.	0.	0.	0.	0.	0.	2.	4.	23.	59.	13.	0.
18000.	854.	0.	0.	0.	0.	0.	0.	1.	3.	17.	60.	19.	0.	0.
20000.	849.	0.	0.	0.	0.	0.	1.	2.	12.	58.	27.	0.	0.	0.
25000.	842.	0.	0.	0.	1.	2.	23.	60.	14.	0.	0.	0.	0.	0.
30000.	834.	0.	0.	4.	41.	51.	4.	0.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-80	≥-80 <-75	≥-75 <-70	≥-70 <-65	≥-65 <-60	≥-60 <-55	≥-55 <-50	≥-50 <-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥-30 <-25	≥-25
35000.	825.	0.	0.	0.	0.	0.	4.	52.	41.	3.	0.	0.	0.	0.
40000.	805.	0.	0.	0.	0.	28.	41.	24.	6.	0.	0.	0.	0.	0.
45000.	773.	0.	0.	1.	4.	29.	55.	11.	0.	0.	0.	0.	0.	0.
50000.	739.	0.	0.	1.	12.	62.	24.	1.	0.	0.	0.	0.	0.	0.
55000.	708.	0.	0.	3.	36.	48.	12.	0.	0.	0.	0.	0.	0.	0.
60000.	681.	0.	0.	4.	36.	53.	7.	0.	0.	0.	0.	0.	0.	0.
65000.	666.	0.	0.	0.	9.	64.	27.	1.	0.	0.	0.	0.	0.	0.
70000.	637.	0.	0.	0.	0.	18.	71.	11.	0.	0.	0.	0.	0.	0.
75000.	617.	0.	0.	0.	0.	5.	47.	49.	1.	0.	0.	0.	0.	0.
80000.	590.	0.	0.	0.	0.	0.	18.	70.	12.	0.	0.	0.	0.	0.
85000.	553.	0.	0.	0.	0.	0.	4.	47.	47.	2.	0.	0.	0.	0.
90000.	507.	0.	0.	0.	0.	0.	0.	20.	61.	19.	0.	0.	0.	0.
95000.	464.	0.	0.	0.	0.	0.	0.	3.	40.	51.	6.	0.	0.	0.
100000.	378.	0.	0.	0.	0.	0.	0.	0.	12.	55.	30.	3.	0.	0.

TABLE IX (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSL)
PERIOD OF RECORD 1961-1973

MAY

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-20	≥-20 <-15	≥-15 <-10	≥-10 <-5	≥-5 <0	≥0 <5	≥5 <10	≥10 <15	≥15 <20	≥20 <25	≥25 <30	≥30 <35	≥35
3989.	817.	0.	0.	0.	0.	0.	0.	3.	13.	25.	27.	20.	10.	1.
5000.	816.	0.	0.	0.	0.	0.	0.	2.	11.	32.	38.	15.	1.	0.
6000.	816.	0.	0.	0.	0.	0.	0.	5.	18.	40.	34.	4.	0.	0.
7000.	816.	0.	0.	0.	0.	0.	1.	9.	28.	44.	18.	0.	0.	0.
8000.	816.	0.	0.	0.	0.	0.	4.	17.	41.	36.	3.	0.	0.	0.
9000.	815.	0.	0.	0.	0.	1.	7.	25.	50.	17.	0.	0.	0.	0.
10000.	814.	0.	0.	0.	0.	2.	15.	44.	37.	2.	0.	0.	0.	0.
11000.	813.	0.	0.	0.	1.	5.	26.	54.	14.	0.	0.	0.	0.	0.
12000.	814.	0.	0.	0.	1.	12.	45.	40.	1.	0.	0.	0.	0.	0.
13000.	813.	0.	0.	0.	3.	28.	56.	13.	0.	0.	0.	0.	0.	0.
14000.	811.	0.	0.	1.	8.	48.	42.	1.	0.	0.	0.	0.	0.	0.
15000.	811.	0.	0.	2.	25.	60.	13.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-50	≥-50 <-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥-30 <-25	≥-25 <-20	≥-20 <-15	≥-15 <-10	≥-10 <-5	≥-5 <0	≥0 <5	≥5
16000.	811.	0.	0.	0.	0.	0.	0.	0.	0.	5.	47.	45.	2.	0.
18000.	811.	0.	0.	0.	0.	0.	0.	0.	3.	42.	51.	4.	0.	0.
20000.	811.	0.	0.	0.	0.	0.	0.	2.	34.	58.	5.	0.	0.	0.
25000.	803.	0.	0.	0.	1.	5.	50.	42.	3.	0.	0.	0.	0.	0.
30000.	795.	0.	0.	14.	64.	22.	1.	0.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-80	≥-80 <-75	≥-75 <-70	≥-70 <-65	≥-65 <-60	≥-60 <-55	≥-55 <-50	≥-50 <-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥-30 <-25	≥-25
35000.	790.	0.	0.	0.	0.	0.	1.	28.	63.	9.	0.	0.	0.	0.
40000.	786.	0.	0.	0.	0.	16.	66.	16.	2.	0.	0.	0.	0.	0.
45000.	761.	0.	0.	0.	10.	42.	41.	7.	1.	0.	0.	0.	0.	0.
50000.	737.	0.	0.	1.	18.	59.	21.	1.	0.	0.	0.	0.	0.	0.
55000.	688.	0.	0.	4.	42.	46.	7.	0.	0.	0.	0.	0.	0.	0.
60000.	665.	0.	0.	3.	38.	53.	5.	0.	0.	0.	0.	0.	0.	0.
65000.	648.	0.	0.	0.	5.	61.	34.	1.	0.	0.	0.	0.	0.	0.
70000.	630.	0.	0.	0.	0.	9.	81.	10.	0.	0.	0.	0.	0.	0.
75000.	621.	0.	0.	0.	0.	0.	35.	64.	1.	0.	0.	0.	0.	0.
80000.	599.	0.	0.	0.	0.	0.	3.	76.	21.	0.	0.	0.	0.	0.
85000.	577.	0.	0.	0.	0.	0.	0.	26.	71.	3.	0.	0.	0.	0.
90000.	553.	0.	0.	0.	0.	0.	0.	3.	66.	31.	0.	0.	0.	0.
95000.	496.	0.	0.	0.	0.	0.	0.	0.	21.	73.	6.	0.	0.	0.
100000.	409.	0.	0.	0.	0.	0.	0.	0.	3.	62.	35.	0.	0.	0.

TABLE IX (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JUNE

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-15	≥-15 <-10	≥-10 <-5	≥-5 <0	≥0 <5	≥5 <10	≥10 <15	≥15 <20	≥20 <25	≥25 <30	≥30 <35	≥35 <40	≥40
3989.	869.	0.	0.	0.	0.	0.	0.	1.	14.	31.	31.	17.	5.	0.
5000.	871.	0.	0.	0.	0.	0.	0.	1.	13.	44.	33.	8.	0.	0.
6000.	870.	0.	0.	0.	0.	0.	0.	3.	27.	48.	20.	1.	0.	0.
7000.	871.	0.	0.	0.	0.	0.	1.	9.	41.	43.	7.	0.	0.	0.
8000.	871.	0.	0.	0.	0.	0.	2.	24.	53.	21.	1.	0.	0.	0.
9000.	870.	0.	0.	0.	0.	0.	7.	41.	46.	5.	0.	0.	0.	0.
10000.	868.	0.	0.	0.	0.	1.	20.	57.	21.	0.	0.	0.	0.	0.
11000.	868.	0.	0.	0.	0.	4.	41.	50.	4.	0.	0.	0.	0.	0.
12000.	868.	0.	0.	0.	1.	16.	63.	20.	0.	0.	0.	0.	0.	0.
13000.	866.	0.	0.	0.	5.	40.	54.	3.	0.	0.	0.	0.	0.	0.
14000.	862.	0.	0.	0.	12.	69.	19.	0.	0.	0.	0.	0.	0.	0.
15000.	859.	0.	0.	1.	36.	60.	3.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥-30 <-25	≥-25 <-20	≥-20 <-15	≥-15 <-10	≥-10 <-5	≥-5 <0	≥0 <5	≥5 <10	≥10
16000.	858.	0.	0.	0.	0.	0.	0.	0.	0.	8.	71.	22.	0.	0.
18000.	856.	0.	0.	0.	0.	0.	0.	0.	5.	64.	31.	0.	0.	0.
20000.	857.	0.	0.	0.	0.	0.	0.	3.	49.	47.	1.	0.	0.	0.
25000.	853.	0.	0.	0.	0.	8.	51.	39.	2.	0.	0.	0.	0.	0.
30000.	844.	0.	0.	18.	59.	22.	1.	0.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-80	≥-80 <-75	≥-75 <-70	≥-70 <-65	≥-65 <-60	≥-60 <-55	≥-55 <-50	≥-50 <-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥-30 <-25	≥-25
35000.	836.	0.	0.	0.	0.	0.	0.	3.	29.	57.	11.	0.	0.	0.
40000.	823.	0.	0.	0.	0.	3.	32.	59.	5.	0.	0.	0.	0.	0.
45000.	798.	0.	0.	0.	5.	65.	28.	2.	0.	0.	0.	0.	0.	0.
50000.	783.	0.	0.	14.	49.	32.	5.	0.	0.	0.	0.	0.	0.	0.
55000.	756.	0.	1.	26.	50.	20.	3.	0.	0.	0.	0.	0.	0.	0.
60000.	736.	0.	0.	1.	44.	52.	3.	0.	0.	0.	0.	0.	0.	0.
65000.	719.	0.	0.	0.	0.	50.	50.	0.	0.	0.	0.	0.	0.	0.
70000.	706.	0.	0.	0.	0.	1.	87.	11.	0.	0.	0.	0.	0.	0.
75000.	687.	0.	0.	0.	0.	0.	17.	82.	1.	0.	0.	0.	0.	0.
80000.	667.	0.	0.	0.	0.	0.	0.	70.	30.	0.	0.	0.	0.	0.
85000.	647.	0.	0.	0.	0.	0.	0.	11.	84.	5.	0.	0.	0.	0.
90000.	606.	0.	0.	0.	0.	0.	0.	1.	56.	43.	0.	0.	0.	0.
95000.	568.	0.	0.	0.	0.	0.	0.	0.	15.	77.	8.	0.	0.	0.
100000.	489.	0.	0.	0.	0.	0.	0.	0.	4.	48.	47.	1.	0.	0.

TABLE IX (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JULY

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -10	≥ -10 < -5	≥ -5 < 0	≥ 0 < 5	≥ 5 < 10	≥ 10 < 15	≥ 15 < 20	≥ 20 < 25	≥ 25 < 30	≥ 30 < 35	≥ 35 < 40	≥ 40 < 45	≥ 45
3989.	873.	0.	0.	0.	0.	0.	0.	4.	38.	35.	18.	4.	0.	0.
5000.	874.	0.	0.	0.	0.	0.	0.	8.	43.	42.	7.	0.	0.	0.
6000.	874.	0.	0.	0.	0.	0.	0.	18.	58.	23.	1.	0.	0.	0.
7000.	874.	0.	0.	0.	0.	0.	2.	37.	55.	6.	0.	0.	0.	0.
8000.	877.	0.	0.	0.	0.	0.	9.	62.	29.	0.	0.	0.	0.	0.
9000.	873.	0.	0.	0.	0.	0.	31.	64.	5.	0.	0.	0.	0.	0.
10000.	873.	0.	0.	0.	0.	3.	66.	31.	0.	0.	0.	0.	0.	0.
11000.	872.	0.	0.	0.	0.	23.	73.	4.	0.	0.	0.	0.	0.	0.
12000.	873.	0.	0.	0.	1.	66.	33.	0.	0.	0.	0.	0.	0.	0.
13000.	870.	0.	0.	0.	11.	84.	5.	0.	0.	0.	0.	0.	0.	0.
14000.	868.	0.	0.	0.	60.	40.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	869.	0.	0.	3.	91.	6.	0.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -45	≥ -45 < -40	≥ -40 < -35	≥ -35 < -30	≥ -30 < -25	≥ -25 < -20	≥ -20 < -15	≥ -15 < -10	≥ -10 < -5	≥ -5 < 0	≥ 0 < 5	≥ 5 <10	≥ 10
16000.	868.	0.	0.	0.	0.	0.	0.	0.	0.	0.	38.	62.	0.	0.
18000.	864.	0.	0.	0.	0.	0.	0.	0.	0.	13.	85.	2.	0.	0.
20000.	859.	0.	0.	0.	0.	0.	0.	0.	3.	87.	10.	0.	0.	0.
25000.	854.	0.	0.	0.	0.	0.	1.	80.	19.	0.	0.	0.	0.	0.
30000.	848.	0.	0.	0.	7.	82.	10.	0.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-80	≥-80 <-75	≥-75 <-70	≥-70 <-65	≥-65 <-60	≥-60 <-55	≥-55 <-50	≥-50 <-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥-30 <-25	≥-25
35000.	839.	0.	0.	0.	0.	0.	0.	0.	0.	34.	64.	2.	0.	0.
40000.	835.	0.	0.	0.	0.	0.	1.	77.	22.	0.	0.	0.	0.	0.
45000.	821.	0.	0.	0.	5.	86.	10.	0.	0.	0.	0.	0.	0.	0.
50000.	797.	0.	1.	46.	52.	1.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	772.	0.	2.	51.	47.	1.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	741.	0.	0.	1.	54.	44.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	727.	0.	0.	0.	1.	57.	42.	0.	0.	0.	0.	0.	0.	0.
70000.	676.	0.	0.	0.	0.	1.	79.	19.	0.	0.	0.	0.	0.	0.
75000.	637.	0.	0.	0.	0.	0.	21.	78.	1.	0.	0.	0.	0.	0.
80000.	619.	0.	0.	0.	0.	0.	1.	69.	30.	0.	0.	0.	0.	0.
85000.	587.	0.	0.	0.	0.	0.	0.	17.	79.	3.	0.	0.	0.	0.
90000.	543.	0.	0.	0.	0.	0.	0.	1.	65.	34.	0.	0.	0.	0.
95000.	494.	0.	0.	0.	0.	0.	0.	1.	25.	69.	5.	0.	0.	0.
100000.	429.	0.	0.	0.	0.	0.	0.	0.	7.	60.	32.	0.	0.	0.

TABLE IX (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

AUGUST

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-10	≥-10 <-5	≥-5 <0	≥0 <5	≥5 <10	≥10 <15	≥15 <20	≥20 <25	≥25 <30	≥30 <35	≥35 <40	≥40 <45	≥45
3989.	876.	0.	0.	0.	0.	0.	0.	14.	42.	27.	13.	3.	0.	0.
5000.	875.	0.	0.	0.	0.	0.	0.	13.	51.	31.	5.	0.	0.	0.
6000.	876.	0.	0.	0.	0.	0.	1.	29.	53.	17.	0.	0.	0.	0.
7000.	876.	0.	0.	0.	0.	0.	5.	50.	41.	4.	0.	0.	0.	0.
8000.	876.	0.	0.	0.	0.	0.	19.	62.	18.	0.	0.	0.	0.	0.
9000.	875.	0.	0.	0.	0.	1.	51.	47.	2.	0.	0.	0.	0.	0.
10000.	874.	0.	0.	0.	0.	10.	72.	17.	0.	0.	0.	0.	0.	0.
11000.	873.	0.	0.	0.	0.	45.	54.	1.	0.	0.	0.	0.	0.	0.
12000.	871.	0.	0.	0.	4.	77.	19.	0.	0.	0.	0.	0.	0.	0.
13000.	869.	0.	0.	0.	35.	65.	1.	0.	0.	0.	0.	0.	0.	0.
14000.	865.	0.	0.	2.	76.	22.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	861.	0.	0.	17.	81.	3.	0.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥-30 <-25	≥-25 <-20	≥-20 <-15	≥-15 <-10	≥-10 <-5	≥-5 <0	≥0 <5	≥5 <10	≥10
16000.	860.	0.	0.	0.	0.	0.	0.	0.	0.	0.	59.	40.	0.	0.
18000.	860.	0.	0.	0.	0.	0.	0.	0.	0.	29.	70.	0.	0.	0.
20000.	858.	0.	0.	0.	0.	0.	0.	0.	8.	86.	6.	0.	0.	0.
25000.	856.	0.	0.	0.	0.	0.	7.	80.	13.	0.	0.	0.	0.	0.
30000.	851.	0.	0.	0.	19.	75.	6.	0.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

AUGUST

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-80	≥-80 <-75	≥-75 <-70	≥-70 <-65	≥-65 <-60	≥-60 <-55	≥-55 <-50	≥-50 <-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥-30 <-25	≥-25
35000.	838.	0.	0.	0.	0.	0.	0.	0.	0.	51.	48.	1.	0.	0.
40000.	829.	0.	0.	0.	0.	0.	2.	78.	20.	0.	0.	0.	0.	0.
45000.	818.	0.	0.	0.	3.	84.	12.	0.	0.	0.	0.	0.	0.	0.
50000.	799.	0.	0.	40.	57.	3.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	769.	0.	2.	37.	57.	5.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	738.	0.	0.	0.	44.	54.	1.	0.	0.	0.	0.	0.	0.	0.
65000.	711.	0.	0.	0.	0.	51.	49.	0.	0.	0.	0.	0.	0.	0.
70000.	692.	0.	0.	0.	0.	2.	86.	12.	0.	0.	0.	0.	0.	0.
75000.	675.	0.	0.	0.	0.	0.	27.	72.	1.	0.	0.	0.	0.	0.
80000.	649.	0.	0.	0.	0.	0.	1.	82.	17.	0.	0.	0.	0.	0.
85000.	620.	0.	0.	0.	0.	0.	0.	27.	71.	2.	0.	0.	0.	0.
90000.	577.	0.	0.	0.	0.	0.	0.	2.	75.	22.	0.	0.	0.	0.
95000.	526.	0.	0.	0.	0.	0.	0.	0.	37.	58.	5.	0.	0.	0.
100000.	437.	0.	0.	0.	0.	0.	0.	0.	10.	68.	22.	0.	0.	0.

TABLE IX (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SEPTEMBER

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -15	≥ -15 < -10	≥ -10 < -5	≥ -5 < 0	≥ 0 < 5	≥ 5 < 10	≥ 10 < 15	≥ 15 < 20	≥ 20 < 25	≥ 25 < 30	≥ 30 < 35	≥ 35 < 40	≥ 40
3989.	796.	0.	0.	0.	0.	0.	1.	7.	29.	36.	17.	10.	0.	0.
5000.	801.	0.	0.	0.	0.	0.	1.	5.	32.	46.	15.	1.	0.	0.
6000.	801.	0.	0.	0.	0.	0.	1.	11.	45.	38.	4.	0.	0.	0.
7000.	800.	0.	0.	0.	0.	0.	3.	20.	57.	19.	0.	0.	0.	0.
8000.	799.	0.	0.	0.	0.	1.	5.	41.	49.	3.	0.	0.	0.	0.
9000.	799.	0.	0.	0.	0.	2.	13.	63.	22.	0.	0.	0.	0.	0.
10000.	799.	0.	0.	0.	0.	3.	35.	59.	3.	0.	0.	0.	0.	0.
11000.	799.	0.	0.	0.	1.	7.	70.	23.	0.	0.	0.	0.	0.	0.
12000.	799.	0.	0.	0.	1.	24.	73.	3.	0.	0.	0.	0.	0.	0.
13000.	798.	0.	0.	0.	3.	63.	34.	0.	0.	0.	0.	0.	0.	0.
14000.	795.	0.	0.	1.	11.	85.	3.	0.	0.	0.	0.	0.	0.	0.
15000.	794.	0.	0.	2.	39.	59.	0.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -45	≥ -45 < -40	≥ -40 < -35	≥ -35 < -30	≥ -30 < -25	≥ -25 < -20	≥ -20 < -15	≥ -15 < -10	≥ -10 < -5	≥ -5 < 0	≥ 0 < 5	≥ 5 <10	≥ 10
16000.	792.	0.	0.	0.	0.	0.	0.	0.	1.	4.	78.	17.	0.	0.
18000.	792.	0.	0.	0.	0.	0.	0.	0.	2.	49.	49.	0.	0.	0.
20000.	788.	0.	0.	0.	0.	0.	0.	1.	22.	74.	2.	0.	0.	0.
25000.	781.	0.	0.	0.	1.	1.	33.	64.	1.	0.	0.	0.	0.	0.
30000.	779.	0.	1.	4.	48.	47.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-80	≥-80 <-75	≥-75 <-70	≥-70 <-65	≥-65 <-60	≥-60 <-55	≥-55 <-50	≥-50 <-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥-30 <-25	≥-25
35000.	767.	0.	0.	0.	0.	0.	0.	0.	11.	60.	29.	0.	0.	0.
40000.	760.	0.	0.	0.	0.	0.	10.	77.	13.	0.	0.	0.	0.	0.
45000.	750.	0.	0.	0.	4.	78.	18.	0.	0.	0.	0.	0.	0.	0.
50000.	736.	0.	0.	27.	65.	7.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	712.	0.	2.	44.	48.	6.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	695.	0.	0.	1.	49.	47.	3.	0.	0.	0.	0.	0.	0.	0.
65000.	674.	0.	0.	0.	1.	53.	45.	0.	0.	0.	0.	0.	0.	0.
70000.	664.	0.	0.	0.	0.	5.	84.	11.	0.	0.	0.	0.	0.	0.
75000.	644.	0.	0.	0.	0.	0.	28.	71.	1.	0.	0.	0.	0.	0.
80000.	617.	0.	0.	0.	0.	0.	2.	82.	16.	0.	0.	0.	0.	0.
85000.	592.	0.	0.	0.	0.	0.	0.	26.	71.	2.	0.	0.	0.	0.
90000.	550.	0.	0.	0.	0.	0.	0.	4.	77.	18.	0.	0.	0.	0.
95000.	508.	0.	0.	0.	0.	0.	0.	1.	44.	53.	2.	0.	0.	0.
100000.	430.	0.	0.	0.	0.	0.	0.	0.	17.	65.	18.	0.	0.	0.

TABLE IX (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

OCTOBER

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -20	≥ -20 < -15	≥ -15 < -10	≥ -10 < -5	≥ -5 < 0	≥ 0 < 5	≥ 5 < 10	≥ 10 < 15	≥ 15 < 20	≥ 20 < 25	≥ 25 < 30	≥ 30 < 35	≥ 35
3989.	904.	0.	0.	0.	0.	1.	3.	15.	29.	25.	17.	9.	1.	0.
5000.	906.	0.	0.	0.	0.	0.	1.	7.	24.	41.	24.	3.	0.	0.
6000.	905.	0.	0.	0.	0.	0.	2.	11.	31.	40.	14.	0.	0.	0.
7000.	904.	0.	0.	0.	0.	1.	4.	17.	43.	31.	4.	0.	0.	0.
8000.	904.	0.	0.	0.	0.	2.	5.	26.	50.	17.	0.	0.	0.	0.
9000.	902.	0.	0.	0.	0.	2.	10.	44.	39.	5.	0.	0.	0.	0.
10000.	901.	0.	0.	0.	1.	3.	18.	58.	21.	0.	0.	0.	0.	0.
11000.	901.	0.	0.	0.	1.	4.	36.	54.	5.	0.	0.	0.	0.	0.
12000.	901.	0.	0.	1.	1.	10.	59.	30.	0.	0.	0.	0.	0.	0.
13000.	900.	0.	0.	1.	2.	22.	66.	9.	0.	0.	0.	0.	0.	0.
14000.	899.	0.	1.	0.	5.	48.	45.	1.	0.	0.	0.	0.	0.	0.
15000.	898.	0.	1.	1.	12.	64.	22.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -45	≥ -45 < -40	≥ -40 < -35	≥ -35 < -30	≥ -30 < -25	≥ -25 < -20	≥ -20 < -15	≥ -15 < -10	≥ -10 < -5	≥ -5 < 0	≥ 0 < 5	≥ 5 < 10	≥ 10
16000.	898.	0.	0.	0.	0.	0.	0.	0.	2.	31.	59.	6.	0.	0.
18000.	894.	0.	0.	0.	0.	0.	0.	2.	19.	65.	14.	0.	0.	0.
20000.	894.	0.	0.	0.	0.	0.	1.	11.	65.	22.	0.	0.	0.	0.
25000.	887.	0.	0.	0.	2.	28.	56.	14.	0.	0.	0.	0.	0.	0.
30000.	882.	0.	4.	50.	40.	6.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -80	≥ -80 < -75	≥ -75 < -70	≥ -70 < -65	≥ -65 < -60	≥ -60 < -55	≥ -55 < -50	≥ -50 < -45	≥ -45 < -40	≥ -40 < -35	≥ -35 < -30	≥ -30 < -25	≥ -25
35000.	869.	0.	0.	0.	0.	0.	0.	11.	55.	31.	3.	0.	0.	0.
40000.	864.	0.	0.	0.	0.	6.	45.	46.	3.	0.	0.	0.	0.	0.
45000.	853.	0.	0.	0.	9.	66.	24.	1.	0.	0.	0.	0.	0.	0.
50000.	834.	0.	0.	16.	58.	24.	2.	0.	0.	0.	0.	0.	0.	0.
55000.	807.	0.	1.	33.	51.	14.	1.	0.	0.	0.	0.	0.	0.	0.
60000.	769.	0.	0.	6.	52.	40.	2.	0.	0.	0.	0.	0.	0.	0.
65000.	756.	0.	0.	0.	5.	66.	28.	1.	0.	0.	0.	0.	0.	0.
70000.	726.	0.	0.	0.	0.	16.	78.	6.	0.	0.	0.	0.	0.	0.
75000.	709.	0.	0.	0.	0.	0.	58.	42.	0.	0.	0.	0.	0.	0.
80000.	690.	0.	0.	0.	0.	0.	14.	80.	6.	0.	0.	0.	0.	0.
85000.	661.	0.	0.	0.	0.	0.	3.	61.	35.	0.	0.	0.	0.	0.
90000.	624.	0.	0.	0.	0.	0.	1.	28.	67.	5.	0.	0.	0.	0.
95000.	573.	0.	0.	0.	0.	0.	0.	14.	62.	24.	1.	0.	0.	0.
100000.	478.	0.	0.	0.	0.	0.	0.	5.	45.	44.	5.	0.	0.	0.

TABLE IX (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSO)
PERIOD OF RECORD 1961-1973

NOVEMBER

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-25	≥-25 <-20	≥-20 <-15	≥-15 <-10	≥-10 <-5	≥-5 <0	≥0 <5	≥5 <10	≥10 <15	≥15 <20	≥20 <25	≥25 <30	≥30
3989.	784.	0.	0.	0.	0.	1.	7.	20.	26.	25.	14.	6.	1.	0.
5000.	783.	0.	0.	0.	0.	0.	1.	13.	28.	34.	20.	2.	0.	0.
6000.	782.	0.	0.	0.	0.	0.	4.	18.	29.	36.	13.	0.	0.	0.
7000.	783.	0.	0.	0.	0.	1.	7.	24.	28.	35.	4.	0.	0.	0.
8000.	782.	0.	0.	0.	0.	2.	10.	27.	38.	23.	1.	0.	0.	0.
9000.	782.	0.	0.	0.	0.	4.	12.	31.	42.	11.	0.	0.	0.	0.
10000.	782.	0.	0.	0.	1.	5.	16.	36.	35.	5.	0.	0.	0.	0.
11000.	781.	0.	0.	0.	2.	7.	21.	47.	23.	1.	0.	0.	0.	0.
12000.	781.	0.	0.	0.	2.	12.	29.	46.	10.	0.	0.	0.	0.	0.
13000.	783.	0.	0.	1.	5.	14.	39.	39.	3.	0.	0.	0.	0.	0.
14000.	781.	0.	0.	1.	8.	21.	48.	23.	0.	0.	0.	0.	0.	0.
15000.	781.	0.	0.	3.	10.	32.	49.	7.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-55	≥-55 <-50	≥-50 <-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥-30 <-25	≥-25 <-20	≥-20 <-15	≥-15 <-10	≥-10 <-5	≥-5 <0	≥0
16000.	782.	0.	0.	0.	0.	0.	0.	0.	1.	5.	15.	46.	33.	0.
18000.	780.	0.	0.	0.	0.	0.	0.	1.	3.	11.	46.	37.	2.	0.
20000.	777.	0.	0.	0.	0.	0.	0.	2.	9.	38.	44.	6.	0.	0.
25000.	767.	0.	0.	0.	0.	2.	12.	48.	35.	2.	0.	0.	0.	0.
30000.	758.	0.	0.	2.	23.	52.	23.	1.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	≤-85	≥-85 <-80	≥-80 <-75	≥-75 <-70	≥-70 <-65	≥-65 <-60	≥-60 <-55	≥-55 <-50	≥-50 <-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥ -30
35000.	744.	0.	0.	0.	0.	0.	0.	1.	29.	57.	12.	0.	0.	0.
40000.	736.	0.	0.	0.	0.	0.	17.	55.	25.	3.	0.	0.	0.	0.
45000.	719.	0.	0.	0.	2.	21.	52.	23.	2.	0.	0.	0.	0.	0.
50000.	698.	0.	0.	1.	12.	50.	31.	4.	0.	0.	0.	0.	0.	0.
55000.	670.	0.	0.	1.	26.	49.	21.	3.	0.	0.	0.	0.	0.	0.
60000.	638.	0.	0.	0.	11.	52.	33.	3.	0.	0.	0.	0.	0.	0.
65000.	613.	0.	0.	0.	0.	25.	63.	11.	0.	0.	0.	0.	0.	0.
70000.	597.	0.	0.	0.	0.	1.	55.	42.	2.	0.	0.	0.	0.	0.
75000.	575.	0.	0.	0.	0.	0.	15.	67.	17.	0.	0.	0.	0.	0.
80000.	559.	0.	0.	0.	0.	0.	2.	50.	44.	4.	0.	0.	0.	0.
85000.	526.	0.	0.	0.	0.	0.	0.	25.	59.	15.	1.	0.	0.	0.
90000.	488.	0.	0.	0.	0.	0.	0.	7.	56.	33.	4.	0.	0.	0.
95000.	429.	0.	0.	0.	0.	0.	0.	2.	33.	54.	10.	1.	0.	0.
100000.	334.	0.	0.	0.	0.	0.	0.	0.	13.	58.	28.	1.	0.	0.

TABLE IX (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

DECEMBER

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -30	≥-30 <-25	≥-25 <-20	≥-20 <-15	≥-15 <-10	≥-10 < -5	≥-5 <0	≥0 <5	≥5 <10	≥10 <15	≥15 <20	≥20 <25	≥ 25
3989.	698.	0.	0.	0.	0.	1.	4.	16.	26.	23.	18.	9.	1.	0.
5000.	701.	0.	0.	0.	0.	0.	0.	7.	24.	39.	26.	4.	0.	0.
6000.	701.	0.	0.	0.	0.	0.	1.	9.	28.	41.	20.	1.	0.	0.
7000.	701.	0.	0.	0.	0.	0.	2.	13.	32.	39.	14.	0.	0.	0.
8000.	701.	0.	0.	0.	0.	0.	5.	18.	37.	33.	7.	0.	0.	0.
9000.	701.	0.	0.	0.	0.	1.	8.	25.	37.	28.	2.	0.	0.	0.
10000.	700.	0.	0.	0.	0.	2.	12.	30.	38.	17.	0.	0.	0.	0.
11000.	701.	0.	0.	0.	0.	4.	17.	34.	36.	8.	0.	0.	0.	0.
12000.	701.	0.	0.	0.	1.	6.	22.	37.	31.	3.	0.	0.	0.	0.
13000.	701.	0.	0.	0.	2.	10.	30.	41.	16.	0.	0.	0.	0.	0.
14000.	702.	0.	0.	1.	3.	16.	33.	39.	7.	0.	0.	0.	0.	0.
15000.	702.	0.	0.	2.	6.	23.	41.	27.	1.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -60	≥ -60 < -55	≥-55 <-50	≥-50 <-45	≥-45 <-40	≥-40 < -35	≥-35 <-30	≥-30 <-25	≥-25 <-20	≥-20 <-15	≥-15 < -10	≥ -10 <-5	≥-5
16000.	701.	0.	0.	0.	0.	0.	0.	0.	0.	3.	10.	32.	42.	13.
18000.	699.	0.	0.	0.	0.	0.	0.	0.	1.	8.	26.	45.	19.	0.
20000.	697.	0.	0.	0.	0.	0.	0.	1.	5.	23.	46.	24.	0.	0.
25000.	689.	0.	0.	0.	0.	0.	8.	32.	46.	14.	0.	0.	0.	0.
30000.	684.	0.	0.	0.	10.	45.	40.	5.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	<-80	≥-80 <-75	≥-75 <-70	≥-70 <-65	≥-65 <-60	≥-60 <-55	≥-55 <-50	≥-50 <-45	≥-45 <-40	≥-40 <-35	≥-35 <-30	≥-30 <-25	≥-25
35000.	675.	0.	0.	0.	0.	0.	7.	53.	33.	6.	0.	0.	0.	0.
40000.	660.	0.	0.	0.	1.	30.	40.	23.	6.	0.	0.	0.	0.	0.
45000.	641.	0.	0.	1.	10.	46.	36.	6.	0.	0.	0.	0.	0.	0.
50000.	624.	0.	0.	4.	37.	49.	9.	1.	0.	0.	0.	0.	0.	0.
55000.	602.	0.	2.	14.	46.	30.	8.	0.	0.	0.	0.	0.	0.	0.
60000.	583.	0.	3.	11.	44.	39.	6.	0.	0.	0.	0.	0.	0.	0.
65000.	559.	0.	0.	2.	23.	65.	10.	0.	0.	0.	0.	0.	0.	0.
70000.	538.	0.	0.	0.	3.	55.	41.	1.	0.	0.	0.	0.	0.	0.
75000.	518.	0.	0.	0.	0.	26.	64.	10.	0.	0.	0.	0.	0.	0.
80000.	498.	0.	0.	0.	0.	11.	56.	30.	3.	0.	0.	0.	0.	0.
85000.	470.	0.	0.	0.	0.	3.	38.	48.	9.	2.	0.	0.	0.	0.
90000.	433.	0.	0.	0.	0.	0.	20.	53.	20.	6.	0.	0.	0.	0.
95000.	387.	0.	0.	0.	0.	0.	9.	46.	30.	14.	2.	0.	0.	0.
100000.	320.	0.	0.	0.	0.	0.	3.	25.	44.	23.	4.	1.	0.	0.

TABLE X

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	2166.	25.	6.	-17.
5000.	2169.	22.	7.	-16.
6000.	2169.	19.	6.	-18.
7000.	2170.	16.	4.	-19.
8000.	2169.	15.	3.	-20.
9000.	2168.	13.	1.	-21.
10000.	2168.	12.	-0.	-20.
11000.	2169.	10.	-2.	-20.
12000.	2167.	9.	-4.	-21.
13000.	2167.	7.	-5.	-23.
14000.	2167.	5.	-7.	-24.
15000.	2167.	3.	-9.	-25.
16000.	2167.	1.	-11.	-27.
18000.	2163.	-4.	-15.	-32.
20000.	2154.	-9.	-20.	-37.
25000.	2137.	-20.	-31.	-46.
30000.	2120.	-29.	-42.	-53.
35000.	2086.	-32.	-52.	-63.
40000.	2027.	-41.	-57.	-71.
45000.	1958.	-48.	-60.	-75.
50000.	1888.	-52.	-64.	-76.
55000.	1798.	-52.	-66.	-82.
60000.	1712.	-53.	-66.	-79.
65000.	1635.	-53.	-63.	-78.
70000.	1584.	-50.	-61.	-72.
75000.	1523.	-46.	-58.	-71.
80000.	1449.	-43.	-56.	-69.
85000.	1363.	-43.	-54.	-66.
90000.	1261.	-40.	-52.	-64.
95000.	1100.	-36.	-49.	-65.
100000.	886.	-33.	-47.	-59.

TABLE X (CONT)

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SPRING

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	2576.	36.	16.	-12.
5000.	2575.	30.	15.	-8.
6000.	2575.	27.	13.	-10.
7000.	2574.	24.	11.	-12.
8000.	2575.	22.	8.	-14.
9000.	2576.	19.	6.	-16.
10000.	2574.	16.	4.	-18.
11000.	2571.	13.	2.	-20.
12000.	2572.	13.	-1.	-22.
13000.	2569.	10.	-3.	-24.
14000.	2569.	7.	-5.	-27.
15000.	2567.	5.	-7.	-29.
16000.	2564.	4.	-9.	-31.
18000.	2561.	-1.	-13.	-34.
20000.	2554.	-5.	-18.	-37.
25000.	2532.	-17.	-29.	-46.
30000.	2507.	-29.	-40.	-54.
35000.	2474.	-39.	-51.	-60.
40000.	2389.	-43.	-57.	-68.
45000.	2294.	-49.	-59.	-72.
50000.	2206.	-52.	-62.	-73.
55000.	2085.	-52.	-64.	-78.
60000.	2011.	-52.	-64.	-75.
65000.	1955.	-52.	-62.	-71.
70000.	1889.	-51.	-58.	-67.
75000.	1834.	-49.	-56.	-66.
80000.	1767.	-44.	-53.	-62.
85000.	1682.	-42.	-50.	-59.
90000.	1574.	-38.	-48.	-58.
95000.	1427.	-36.	-45.	-55.
100000.	1151.	-33.	-42.	-53.

TABLE X (CONT)

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SUMMER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3939.	2618.	41.	25.	9.
5000.	2620.	36.	24.	11.
6000.	2620.	33.	22.	3.
7000.	2621.	30.	20.	2.
8000.	2624.	29.	18.	2.
9000.	2618.	24.	15.	2.
10000.	2615.	21.	13.	1.
11000.	2613.	18.	10.	0.
12000.	2612.	15.	8.	-2.
13000.	2605.	12.	6.	-4.
14000.	2595.	11.	4.	-5.
15000.	2589.	7.	1.	-7.
16000.	2586.	5.	-1.	-10.
18000.	2580.	2.	-5.	-13.
20000.	2574.	-1.	-8.	-18.
25000.	2563.	-12.	-18.	-29.
30000.	2543.	-22.	-29.	-41.
35000.	2513.	-32.	-41.	-53.
40000.	2487.	-45.	-53.	-64.
45000.	2437.	-53.	-62.	-68.
50000.	2379.	-54.	-69.	-77.
55000.	2297.	-57.	-69.	-79.
60000.	2215.	-57.	-65.	-72.
65000.	2157.	-54.	-60.	-67.
70000.	2074.	-51.	-57.	-62.
75000.	1999.	-48.	-54.	-60.
80000.	1935.	-42.	-51.	-58.
85000.	1854.	-39.	-49.	-56.
90000.	1726.	-37.	-46.	-53.
95000.	1588.	-34.	-44.	-51.
100000.	1355.	-34.	-41.	-49.

TABLE X (CONT)

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FALL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3939.	2484.	35.	16.	-9.
5000.	2490.	31.	16.	-2.
6000.	2488.	28.	14.	-5.
7000.	2487.	25.	13.	-7.
8000.	2485.	22.	11.	-9.
9000.	2483.	19.	9.	-10.
10000.	2482.	18.	7.	-13.
11000.	2481.	18.	5.	-13.
12000.	2481.	11.	3.	-16.
13000.	2481.	8.	1.	-17.
14000.	2475.	6.	-1.	-19.
15000.	2473.	5.	-3.	-21.
16000.	2472.	3.	-5.	-23.
18000.	2466.	0.	-8.	-27.
20000.	2459.	-3.	-12.	-31.
25000.	2435.	-14.	-23.	-43.
30000.	2419.	-23.	-35.	-48.
35000.	2380.	-36.	-46.	-57.
40000.	2360.	-47.	-55.	-65.
45000.	2322.	-51.	-62.	-72.
50000.	2268.	-55.	-67.	-78.
55000.	2189.	-55.	-69.	-79.
60000.	2102.	-53.	-66.	-76.
65000.	2043.	-54.	-62.	-71.
70000.	1987.	-52.	-59.	-67.
75000.	1928.	-50.	-56.	-70.
80000.	1866.	-46.	-53.	-64.
85000.	1779.	-40.	-51.	-60.
90000.	1662.	-38.	-49.	-62.
95000.	1510.	-37.	-47.	-58.
100000.	1242.	-25.	-45.	-57.

ATMOSPHERIC STRUCTURE REPORT

WHITE SANDS DESERT SITE

SECTION I

UPPER AIR PRESSURE DATA

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By Seasons

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TABLE XI

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	759.	897.	881.	866.
5000.	759.	863.	848.	834.
6000.	759.	830.	817.	804.
7000.	759.	800.	787.	774.
8000.	758.	771.	758.	746.
9000.	757.	743.	730.	718.
10000.	757.	716.	703.	691.
11000.	757.	689.	677.	664.
12000.	756.	664.	651.	638.
13000.	756.	639.	626.	613.
14000.	755.	616.	602.	588.
15000.	755.	593.	579.	565.
16000.	756.	570.	557.	542.
18000.	754.	528.	514.	499.
20000.	749.	488.	474.	458.
25000.	744.	398.	384.	367.
30000.	740.	322.	308.	292.
35000.	723.	257.	245.	231.
40000.	693.	203.	193.	183.
45000.	674.	159.	152.	145.
50000.	643.	123.	119.	113.
55000.	614.	96.	93.	88.
60000.	582.	75.	72.	68.
65000.	555.	59.	[illegible]	53.
70000.	535.	46.0	[illegible].0	41.5
75000.	514.	36.0	34.5	32.5
80000.	488.	28.5	27.5	25.0
85000.	463.	22.5	21.5	20.0
90000.	428.	17.9	17.0	15.8
95000.	365.	14.2	13.5	12.5
100000.	283.	11.4	10.7	9.8

TABLE XI (CONT)

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	711.	893.	880.	864.
5000.	711.	860.	848.	832.
6000.	711.	828.	817.	802.
7000.	712.	798.	787.	773.
8000.	712.	768.	758.	744.
9000.	712.	740.	730.	716.
10000.	712.	712.	703.	689.
11000.	712.	686.	676.	663.
12000.	711.	660.	651.	637.
13000.	711.	636.	626.	612.
14000.	711.	612.	602.	588.
15000.	711.	590.	578.	564.
16000.	711.	567.	556.	541.
18000.	711.	524.	513.	497.
20000.	709.	485.	473.	456.
25000.	705.	396.	383.	367.
30000.	699.	320.	307.	291.
35000.	689.	257.	244.	231.
40000.	675.	205.	193.	183.
45000.	644.	162.	151.	145.
50000.	623.	126.	119.	114.
55000.	584.	97.	93.	89.
60000.	549.	75.	72.	70.
65000.	521.	58.	56.	54.
70000.	511.	46.0	44.0	42.5
75000.	493.	36.0	34.5	33.0
80000.	464.	28.5	27.5	26.0
85000.	432.	22.5	21.5	20.5
90000.	403.	17.7	17.0	16.3
95000.	351.	14.1	13.5	12.9
100000.	287.	11.3	10.8	10.2

TABLE XI (CONT)

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1951-1973

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	902.	891.	878.	853.
5000.	902.	858.	846.	823.
6000.	902.	827.	816.	794.
7000.	901.	797.	786.	766.
8000.	902.	769.	757.	738.
9000.	903.	741.	729.	711.
10000.	902.	714.	702.	686.
11000.	902.	688.	676.	660.
12000.	902.	662.	650.	634.
13000.	900.	638.	625.	609.
14000.	901.	614.	601.	585.
15000.	900.	591.	578.	561.
16000.	898.	569.	556.	538.
18000.	897.	527.	513.	495.
20000.	895.	487.	473.	454.
25000.	888.	398.	383.	365.
30000.	879.	322.	307.	291.
35000.	859.	257.	244.	231.
40000.	798.	203.	193.	183.
45000.	760.	159.	151.	145.
50000.	730.	124.	119.	114.
55000.	690.	97.	93.	89.
60000.	666.	75.	72.	69.
65000.	642.	59.	57.	54.
70000.	623.	46.0	44.5	42.0
75000.	596.	36.5	35.0	33.0
80000.	578.	28.5	27.5	26.0
85000.	552.	23.0	22.0	20.5
90000.	514.	18.2	17.3	16.1
95000.	467.	14.6	13.7	13.0
100000.	365.	11.7	11.0	10.3

TABLE XI (CONT)

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	858.	894.	878.	864.
5000.	858.	861.	846.	834.
6000.	858.	829.	816.	804.
7000.	857.	798.	787.	775.
8000.	858.	770.	758.	747.
9000.	859.	742.	731.	719.
10000.	859.	716.	704.	691.
11000.	858.	690.	678.	664.
12000.	858.	664.	653.	638.
13000.	858.	640.	628.	613.
14000.	858.	616.	605.	588.
15000.	857.	592.	582.	564.
16000.	856.	570.	559.	542.
18000.	855.	528.	517.	498.
20000.	851.	487.	477.	456.
25000.	844.	398.	387.	366.
30000.	836.	322.	312.	293.
35000.	826.	257.	248.	235.
40000.	806.	204.	196.	187.
45000.	773.	160.	154.	148.
50000.	740.	126.	121.	116.
55000.	708.	99.	94.	91.
60000.	683.	76.	74.	71.
65000.	667.	59.	57.	56.
70000.	639.	46.5	45.0	43.5
75000.	618.	37.0	35.5	34.0
80000.	590.	29.5	28.0	27.0
85000.	554.	23.5	22.0	21.0
90000.	508.	18.7	17.7	16.7
95000.	466.	15.0	14.1	13.2
100000.	379.	12.1	11.2	10.6

TABLE XI (CONT)

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	819.	891.	878.	867.
5000.	818.	859.	847.	837.
6000.	820.	828.	817.	808.
7000.	818.	798.	789.	779.
8000.	820.	769.	761.	751.
9000.	816.	741.	734.	723.
10000.	816.	715.	707.	696.
11000.	814.	689.	681.	670.
12000.	817.	664.	656.	644.
13000.	814.	640.	632.	620.
14000.	814.	617.	609.	596.
15000.	814.	593.	586.	572.
16000.	814.	571.	564.	550.
18000.	813.	529.	521.	507.
20000.	813.	489.	481.	467.
25000.	805.	401.	392.	378.
30000.	797.	325.	316.	302.
35000.	792.	261.	252.	240.
40000.	788.	208.	199.	190.
45000.	763.	163.	156.	150.
50000.	739.	128.	123.	118.
55000.	690.	99.	96.	92.
60000.	668.	77.	75.	72.
65000.	650.	60.	58.	56.
70000.	634.	47.5	46.0	44.5
75000.	625.	37.5	36.0	35.0
80000.	603.	29.5	28.5	27.5
85000.	580.	23.5	22.5	22.0
90000.	555.	18.8	18.0	17.3
95000.	498.	15.0	14.4	13.7
100000.	409.	12.0	11.5	10.9

TABLE XI (CONT)

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	871.	889.	878.	868.
5000.	872.	858.	848.	838.
6000.	872.	828.	818.	809.
7000.	871.	800.	790.	780.
8000.	873.	772.	762.	752.
9000.	870.	746.	735.	725.
10000.	870.	720.	709.	699.
11000.	869.	694.	684.	674.
12000.	871.	669.	659.	648.
13000.	867.	645.	635.	624.
14000.	865.	622.	612.	600.
15000.	862.	599.	589.	578.
16000.	861.	577.	567.	556.
18000.	859.	535.	525.	514.
20000.	859.	495.	485.	475.
25000.	855.	406.	397.	386.
30000.	847.	331.	321.	311.
35000.	839.	267.	258.	249.
40000.	826.	213.	204.	197.
45000.	802.	168.	161.	155.
50000.	785.	131.	125.	121.
55000.	758.	102.	98.	94.
60000.	737.	79.	76.	74.
65000.	720.	62.	59.	58.
70000.	707.	48.5	46.5	45.5
75000.	688.	38.5	37.0	36.0
80000.	669.	30.5	29.0	28.5
85000.	648.	24.0	23.0	22.5
90000.	608.	19.3	18.4	17.7
95000.	571.	15.5	14.7	14.1
100000.	491.	12.4	11.8	11.3

TABLE XI (CONT)

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	874.	888.	881.	872.
5000.	875.	857.	850.	843.
6000.	874.	827.	821.	814.
7000.	874.	798.	793.	786.
8000.	876.	770.	765.	759.
9000.	872.	742.	738.	733.
10000.	872.	716.	712.	707.
11000.	871.	691.	687.	682.
12000.	872.	666.	662.	657.
13000.	869.	642.	638.	633.
14000.	867.	619.	615.	610.
15000.	868.	599.	592.	587.
16000.	867.	577.	570.	566.
18000.	865.	534.	529.	524.
20000.	861.	495.	489.	484.
25000.	856.	406.	401.	396.
30000.	849.	331.	326.	321.
35000.	842.	268.	263.	257.
40000.	836.	214.	209.	205.
45000.	823.	169.	164.	161.
50000.	798.	133.	128.	125.
55000.	771.	103.	99.	97.
60000.	743.	80.	77.	75.
65000.	728.	62.	60.	59.
70000.	679.	49.0	47.5	46.0
75000.	638.	38.5	37.5	36.5
80000.	621.	30.5	29.5	28.5
85000.	586.	24.5	23.5	23.0
90000.	543.	19.4	18.7	18.0
95000.	494.	15.5	14.9	14.3
100000.	433.	12.3	11.9	11.4

TABLE XI (CONT)

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

AUGUST

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	877.	888.	881.	873.
5000.	876.	856.	850.	843.
6000.	876.	829.	821.	814.
7000.	876.	800.	792.	785.
8000.	876.	772.	765.	758.
9000.	875.	745.	738.	731.
10000.	874.	718.	712.	705.
11000.	873.	692.	686.	679.
12000.	871.	667.	661.	655.
13000.	869.	643.	637.	631.
14000.	865.	620.	614.	607.
15000.	861.	597.	591.	585.
16000.	860.	575.	569.	563.
18000.	859.	533.	527.	521.
20000.	857.	494.	488.	482.
25000.	855.	406.	400.	394.
30000.	851.	331.	325.	318.
35000.	838.	267.	261.	256.
40000.	829.	213.	208.	203.
45000.	818.	168.	164.	159.
50000.	799.	132.	128.	124.
55000.	769.	102.	99.	96.
60000.	738.	79.	77.	75.
65000.	711.	62.	60.	58.
70000.	692.	49.0	47.5	45.5
75000.	676.	38.5	37.5	36.0
80000.	649.	30.5	29.5	28.5
85000.	620.	24.5	23.5	22.5
90000.	577.	19.5	18.6	17.7
95000.	526.	15.6	14.8	14.1
100000.	437.	12.5	11.9	11.3

TABLE XI (CONT)

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	797.	889.	880.	867.
5000.	802.	857.	849.	837.
6000.	802.	826.	820.	809.
7000.	801.	797.	791.	781.
8000.	800.	769.	763.	754.
9000.	800.	742.	736.	728.
10000.	800.	716.	710.	702.
11000.	800.	690.	684.	676.
12000.	801.	666.	660.	651.
13000.	800.	642.	635.	626.
14000.	797.	618.	612.	603.
15000.	796.	596.	589.	580.
16000.	794.	573.	567.	558.
18000.	792.	531.	525.	516.
20000.	788.	492.	486.	476.
25000.	781.	403.	398.	386.
30000.	779.	328.	322.	309.
35000.	767.	265.	259.	247.
40000.	760.	211.	206.	197.
45000.	750.	167.	162.	156.
50000.	736.	130.	126.	122.
55000.	712.	101.	98.	95.
60000.	695.	78.	76.	74.
65000.	674.	61.	60.	57.
70000.	664.	48.5	47.0	45.0
75000.	644.	38.0	37.0	35.5
80000.	617.	30.5	29.0	28.0
85000.	592.	24.0	23.0	22.0
90000.	550.	19.1	18.4	17.6
95000.	508.	16.6	14.7	14.0
100000.	431.	12.3	11.7	11.1

TABLE XI (CONT)

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	904.	894.	881.	869.
5000.	905.	862.	850.	838.
6000.	901.	830.	820.	809.
7000.	903.	800.	791.	780.
8000.	900.	772.	762.	751.
9000.	901.	745.	735.	723.
10000.	897.	718.	708.	696.
11000.	900.	692.	683.	669.
12000.	897.	667.	657.	644.
13000.	900.	643.	633.	619.
14000.	896.	620.	610.	595.
15000.	895.	597.	587.	571.
16000.	894.	575.	565.	548.
18000.	893.	532.	522.	504.
20000.	893.	492.	483.	463.
25000.	886.	404.	394.	375.
30000.	880.	328.	318.	302.
35000.	866.	264.	254.	242.
40000.	861.	210.	201.	192.
45000.	849.	165.	158.	151.
50000.	830.	128.	123.	118.
55000.	803.	100.	96.	93.
60000.	765.	77.	75.	72.
65000.	752.	60.	58.	57.
70000.	722.	47.0	46.0	44.5
75000.	707.	37.5	36.0	35.0
80000.	688.	29.5	28.5	27.5
85000.	658.	23.5	22.5	21.5
90000.	622.	18.7	17.9	17.1
95000.	571.	14.9	14.2	13.5
100000.	477.	11.9	11.3	10.7

TABLE XI (CONT)

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	786.	898.	882.	865.
5000.	784.	864.	850.	833.
6000.	782.	832.	819.	803.
7000.	783.	801.	789.	774.
8000.	781.	771.	760.	745.
9000.	782.	741.	733.	716.
10000.	782.	715.	706.	689.
11000.	783.	689.	680.	662.
12000.	782.	664.	654.	636.
13000.	785.	639.	630.	612.
14000.	783.	616.	606.	588.
15000.	783.	593.	583.	565.
16000.	784.	571.	561.	542.
18000.	782.	529.	518.	499.
20000.	778.	489.	478.	459.
25000.	765.	400.	389.	372.
30000.	756.	325.	314.	297.
35000.	740.	260.	251.	236.
40000.	732.	206.	198.	188.
45000.	714.	162.	155.	149.
50000.	694.	125.	121.	116.
55000.	667.	98.	94.	91.
60000.	639.	76.	73.	70.
65000.	614.	59.	57.	55.
70000.	598.	46.0	45.0	42.5
75000.	575.	36.5	35.0	33.5
80000.	559.	29.0	27.5	26.5
85000.	525.	23.0	22.0	21.0
90000.	487.	18.2	17.3	16.4
95000.	428.	14.4	13.8	13.0
100000.	334.	11.5	11.0	10.3

TABLE XI (CONT)

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1975

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	700.	896.	880.	864.
5000.	703.	862.	848.	832.
6000.	701.	830.	817.	802.
7000.	703.	798.	787.	772.
8000.	701.	768.	758.	744.
9000.	703.	740.	730.	715.
10000.	700.	713.	703.	687.
11000.	701.	687.	677.	660.
12000.	699.	662.	651.	634.
13000.	701.	637.	626.	609.
14000.	700.	614.	603.	585.
15000.	700.	591.	579.	561.
16000.	699.	569.	557.	539.
18000.	696.	526.	514.	496.
20000.	694.	487.	474.	455.
25000.	687.	398.	385.	365.
30000.	682.	321.	310.	292.
35000.	675.	257.	247.	232.
40000.	660.	203.	195.	184.
45000.	641.	160.	153.	146.
50000.	624.	126.	119.	115.
55000.	602.	98.	93.	90.
60000.	582.	76.	72.	70.
65000.	558.	59.	57.	55.
70000.	537.	46.0	44.5	43.0
75000.	520.	36.0	35.0	33.5
80000.	499.	28.5	27.5	26.5
85000.	471.	22.5	21.5	21.0
90000.	433.	18.0	17.1	16.4
95000.	387.	14.4	13.6	12.9
100000.	320.	11.5	10.8	10.1

TABLE XII

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	2170.	897.	880.	864.
5000.	2173.	863.	848.	832.
6000.	2171.	830.	817.	802.
7000.	2174.	800.	787.	772.
8000.	2171.	771.	758.	744.
9000.	2172.	743.	730.	715.
10000.	2169.	716.	703.	687.
11000.	2170.	689.	676.	660.
12000.	2166.	664.	651.	634.
13000.	2168.	639.	626.	609.
14000.	2166.	616.	602.	585.
15000.	2166.	593.	579.	561.
16000.	2166.	570.	557.	539.
18000.	2161.	528.	514.	496.
20000.	2152.	488.	474.	455.
25000.	2136.	398.	384.	365.
30000.	2121.	322.	309.	291.
35000.	2087.	257.	245.	231.
40000.	2028.	205.	194.	183.
45000.	1959.	162.	152.	145.
50000.	1890.	126.	119.	113.
55000.	1800.	98.	93.	88.
60000.	1713.	76.	72.	68.
65000.	1634.	59.	56.	53.
70000.	1583.	46.0	44.0	41.5
75000.	1527.	36.0	34.5	32.5
[illegible]00.	1451.	28.5	27.5	25.0
[illegible]00.	1366.	22.5	21.5	20.0
90000.	1264.	18.0	17.0	15.8
95000.	1103.	14.4	13.5	12.5
100000.	890.	11.5	10.8	9.8

TABLE XII (CONT)

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SPRING

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	2579.	894.	878.	853.
5000.	2578.	861.	847.	823.
6000.	2580.	829.	816.	794.
7000.	2576.	798.	787.	766.
8000.	2580.	770.	759.	738.
9000.	2578.	742.	731.	711.
10000.	2577.	716.	704.	686.
11000.	2574.	690.	678.	660.
12000.	2577.	664.	653.	634.
13000.	2572.	640.	629.	609.
14000.	2573.	617.	605.	585.
15000.	2571.	593.	582.	561.
16000.	2568.	571.	559.	538.
18000.	2565.	529.	517.	495.
20000.	2559.	489.	477.	457.
25000.	2537.	401.	387.	365.
30000.	2512.	325.	312.	291.
35000.	2477.	261.	248.	231.
40000.	2392.	208.	196.	183.
45000.	2296.	163.	154.	145.
50000.	2209.	128.	121.	114.
55000.	2088.	99.	94.	89.
60000.	2017.	77.	74.	69.
65000.	1959.	60.	57.	54.
70000.	1896.	47.5	45.0	42.0
75000.	1839.	37.5	35.5	33.0
80000.	1771.	29.5	28.0	26.0
85000.	1686.	23.5	22.0	20.5
90000.	1577.	18.8	17.7	16.1
95000.	1431.	15.0	14.1	13.0
100000.	1153.	12.1	11.2	10.3

TABLE XII (CONT)

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SUMMER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	2622.	889.	880.	868.
5000.	2623.	858.	849.	838.
6000.	2622.	829.	820.	809.
7000.	2621.	800.	792.	780.
8000.	2625.	772.	764.	752.
9000.	2617.	746.	737.	725.
10000.	2616.	720.	711.	699.
11000.	2613.	694.	686.	674.
12000.	2614.	669.	661.	648.
13000.	2605.	645.	637.	624.
14000.	2597.	622.	614.	600.
15000.	2591.	599.	591.	578.
16000.	2588.	577.	569.	556.
18000.	2583.	535.	527.	514.
20000.	2577.	495.	488.	475.
25000.	2566.	406.	399.	386.
30000.	2547.	331.	324.	311.
35000.	2519.	268.	261.	249.
40000.	2491.	214.	207.	197.
45000.	2443.	169.	163.	155.
50000.	2382.	133.	127.	121.
55000.	2298.	103.	99.	94.
60000.	2218.	80.	77.	74.
65000.	2159.	62.	60.	58.
70000.	2078.	49.0	47.0	45.5
75000.	2002.	38.5	37.0	36.0
80000.	1939.	30.5	29.5	28.5
85000.	1854.	24.5	23.5	22.5
90000.	1728.	19.5	18.6	17.7
95000.	1591.	15.6	14.8	14.1
100000.	1361.	12.5	11.8	11.3

TABLE XII (CONT)

MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FALL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	2487.	898.	881.	865.
5000.	2491.	864.	850.	833.
6000.	2485.	832.	820.	803.
7000.	2487.	801.	790.	774.
8000.	2481.	772.	762.	745.
9000.	2483.	745.	735.	716.
10000.	2479.	718.	708.	689.
11000.	2483.	692.	682.	662.
12000.	2480.	667.	657.	636.
13000.	2485.	643.	633.	612.
14000.	2476.	620.	609.	588.
15000.	2474.	597.	586.	565.
16000.	2472.	575.	564.	542.
18000.	2467.	532.	522.	499.
20000.	2459.	492.	482.	459.
25000.	2432.	404.	394.	372.
30000.	2415.	328.	318.	297.
35000.	2373.	265.	255.	236.
40000.	2353.	211.	202.	188.
45000.	2313.	167.	159.	149.
50000.	2260.	130.	124.	116.
55000.	2182.	101.	96.	91.
60000.	2099.	78.	75.	70.
65000.	2040.	61.	58.	55.
70000.	1984.	48.5	46.0	42.5
75000.	1926.	38.0	36.0	33.5
80000.	1864.	30.5	28.5	26.5
85000.	1775.	24.0	22.5	21.0
90000.	1659.	19.1	17.9	16.4
95000.	1507.	16.6	14.2	13.0
100000.	1242.	12.3	11.4	10.3

ATMOSPHERIC STRUCTURE REPORT

WHITE SANDS DESERT SITE

SECTION I

UPPER AIR DENSITY DATA

By Months

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By Seasons

Table XIV. Mean and Extreme Upper Air Densities (Grams/Cubic Meter) at Selected Levels ---------- 133

TABLE XIII

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	757.	1215.	1101.	1028.
5000.	757.	1165.	1055.	1003.
6000.	757.	1129.	1021.	975.
7000.	757.	1086.	988.	943.
8000.	756.	1049.	957.	919.
9000.	755.	1012.	927.	892.
10000.	756.	965.	897.	866.
11000.	756.	924.	869.	839.
12000.	755.	892.	841.	810.
13000.	755.	863.	815.	785.
14000.	754.	828.	789.	762.
15000.	754.	796.	764.	739.
16000.	755.	770.	740.	713.
18000.	753.	717.	695.	672.
20000.	747.	672.	651.	632.
25000.	736.	568.	553.	539.
30000.	712.	477.	466.	442.
35000.	616.	400.	387.	354.
40000.	588.	334.	312.	284.
45000.	571.	273.	246.	230.
50000.	540.	215.	197.	184.
55000.	518.	169.	156.	145.
60000.	496.	130.	121.	113.
65000.	476.	99.	94.	89.
70000.	458.	76.	72.	69.
75000.	440.	59.	56.	51.
80000.	417.	46.	44.	41.
85000.	396.	35.	34.	32.
90000.	372.	28.	27.	25.
95000.	313.	22.	21.	20.
100000.	241.	17.	16.	15.

TABLE XIII (CONT)

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5989.	711.	1176.	1090.	1022.
5000.	711.	1126.	1050.	996.
6000.	711.	1089.	1018.	972.
7000.	712.	1054.	987.	948.
8000.	712.	1017.	957.	924.
9000.	711.	971.	928.	898.
10000.	712.	938.	899.	872.
11000.	712.	908.	871.	841.
12000.	711.	880.	844.	813.
13000.	710.	854.	817.	787.
14000.	711.	826.	791.	766.
15000.	711.	797.	766.	744.
16000.	711.	771.	742.	723.
18000.	711.	722.	696.	677.
20000.	709.	675.	653.	634.
25000.	704.	569.	553.	535.
30000.	668.	477.	465.	437.
35000.	599.	399.	385.	353.
40000.	580.	332.	309.	285.
45000.	550.	267.	246.	228.
50000.	530.	216.	197.	181.
55000.	495.	176.	155.	143.
60000.	473.	131.	121.	113.
65000.	454.	99.	93.	89.
70000.	447.	76.	72.	68.
75000.	430.	58.	56.	53.
80000.	403.	45.	44.	41.
85000.	373.	36.	34.	33.
90000.	347.	28.	27.	25.
95000.	306.	22.	21.	20.
100000.	246.	17.	16.	16.

TABLE XIII (CONT)

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	901.	1176.	1077.	1003.
5000.	901.	1109.	1039.	981.
6000.	901.	1078.	1009.	957.
7000.	900.	1044.	980.	933.
8000.	901.	1011.	951.	909.
9000.	902.	978.	923.	886.
10000.	901.	946.	896.	864.
11000.	900.	916.	869.	840.
12000.	899.	888.	842.	815.
13000.	897.	860.	816.	790.
14000.	899.	832.	791.	766.
15000.	898.	803.	766.	743.
16000.	897.	776.	742.	721.
18000.	896.	726.	696.	678.
20000.	894.	677.	655.	635.
25000.	884.	567.	553.	532.
30000.	838.	476.	465.	437.
35000.	741.	401.	385.	350.
40000.	683.	333.	310.	283.
45000.	647.	270.	246.	229.
50000.	619.	213.	196.	180.
55000.	581.	165.	155.	144.
60000.	559.	128.	120.	113.
65000.	538.	98.	93.	89.
70000.	525.	76.	72.	68.
75000.	503.	58.	56.	53.
80000.	488.	46.	44.	41.
85000.	465.	36.	34.	33.
90000.	433.	28.	27.	25.
95000.	398.	22.	21.	20.
100000.	308.	17.	17.	16.

TABLE XIII (CONT)

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	857.	1135.	1057.	996.
5000.	856.	1085.	1019.	973.
6000.	856.	1053.	991.	950.
7000.	855.	1020.	964.	927.
8000.	857.	991.	937.	905.
9000.	858.	961.	911.	880.
10000.	858.	932.	885.	857.
11000.	857.	901.	859.	834.
12000.	857.	871	834.	811.
13000.	857.	844.	809.	789.
14000.	857.	818.	784.	766.
15000.	856.	791.	760.	742.
16000.	855.	766.	737.	720.
18000.	854.	716.	692.	676.
20000.	850.	671.	649.	633.
25000.	843.	566.	552.	535.
30000.	815.	477.	466.	431.
35000.	731.	400.	389.	349.
40000.	707.	332.	317.	285.
45000.	673.	270.	251.	233.
50000.	641.	212.	199.	186.
55000.	613.	168.	157.	148.
60000.	591.	131.	123.	117.
65000.	576.	98.	95.	91.
70000.	549.	77.	73.	70.
75000.	531.	59.	57.	55.
80000.	506.	46.	44.	42.
85000.	480.	36.	35.	33.
90000.	440.	29.	27.	26.
95000.	401.	23.	21.	20.
100000.	328.	18.	17.	16.

TABLE XIII (CONT)

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5989.	819.	1132.	1036.	983.
5000.	818.	1060.	1004.	966.
6000.	818.	1029.	976.	944.
7000.	818.	998.	950.	921.
8000.	818.	972.	924.	898.
9000.	816.	947.	898.	873.
10000.	814.	913.	874.	850.
11000.	814.	887.	849.	828.
12000.	814.	861.	825.	803.
13000.	813.	835.	802.	780.
14000.	812.	810.	779.	758.
15000.	812.	785.	756.	737.
16000.	812.	761.	734.	715.
18000.	811.	708.	690.	672.
20000.	811.	662.	648.	632.
25000.	803.	561.	552.	536.
30000.	791.	475.	467.	454.
35000.	703.	401.	392.	364.
40000.	665.	333.	322.	294.
45000.	639.	275.	257.	238.
50000.	620.	215.	203.	188.
55000.	576.	170.	160.	150.
60000.	554.	132.	125.	117.
65000.	541.	101.	96.	91.
70000.	525.	77.	74.	71.
75000.	517.	60.	58.	55.
80000.	500.	47.	45.	44.
85000.	480.	38.	35.	34.
90000.	458.	29.	28.	27.
95000.	412.	23.	22.	21.
100000.	337.	18.	17.	17.

TABLE XIII (CONT)

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	870.	1083.	1021.	965.
5000.	871.	1043.	990.	945.
6000.	869.	1012.	964.	922.
7000.	870.	981.	938.	901.
8000.	870.	953.	912.	880.
9000.	869.	925.	888.	859.
10000.	867.	896.	864.	839.
11000.	867.	872.	840.	819.
12000.	867.	844.	817.	798.
13000.	865.	816.	794.	777.
14000.	861.	792.	771.	751.
15000.	858.	769.	749.	730.
16000.	857.	744.	728.	707.
18000.	854.	699.	685.	663.
20000.	855.	657.	643.	625.
25000.	851.	562.	548.	535.
30000.	841.	475.	465.	456.
35000.	772.	400.	392.	378.
40000.	692.	334.	325.	307.
45000.	670.	276.	264.	249.
50000.	656.	223.	211.	197.
55000.	631.	175.	166.	155.
60000.	620.	134.	127.	121.
65000.	607.	103.	97.	93.
70000.	595.	79.	75.	73.
75000.	578.	61.	59.	57.
80000.	564.	48.	46.	44.
85000.	548.	38.	36.	35.
90000.	512.	29.	28.	27.
95000.	476.	23.	22.	21.
100000.	411.	19.	18.	17.

TABLE XIII (CONT)

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (.SD)
PERIOD OF RECORD 1951-1973

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	871.	1055.	1018.	970.
5000.	871.	1023.	989.	951.
6000.	871.	994.	962.	928.
7000.	871.	965.	936.	907.
8000.	875.	937.	910.	886.
9000.	871.	908.	886.	866.
10000.	871.	882.	862.	844.
11000.	870.	856.	838.	822.
12000.	871.	834.	815.	800.
13000.	868.	809.	792.	777.
14000.	866.	781.	769.	755.
15000.	867.	758.	747.	734.
16000.	866.	735.	725.	713.
18000.	863.	694.	682.	671.
20000.	858.	654.	640.	632.
25000.	853.	555.	544.	537.
30000.	846.	481.	463.	457.
35000.	828.	397.	392.	361.
40000.	735.	334.	329.	323.
45000.	708.	278.	272.	264.
50000.	687.	229.	220.	212.
55000.	664.	181.	171.	164.
60000.	637.	137.	129.	125.
65000.	628.	103.	99.	96.
70000.	586.	79.	76.	74.
75000.	549.	61.	59.	58.
80000.	533.	48.	46.	45.
85000.	512.	38.	36.	35.
90000.	473.	30.	29.	28.
95000.	428.	24.	23.	22.
100000.	374.	19.	18.	17.

TABLE XIII (CONT)

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

AUGUST

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	872.	1063.	1023.	979.
5000.	871.	1023.	992.	955.
6000.	872.	998.	965.	933.
7000.	872.	972.	939.	911.
8000.	873.	951.	913.	889.
9000.	872.	923.	889.	868.
10000.	871.	893.	864.	845.
11000.	870.	862.	841.	824.
12000.	868.	838.	817.	802.
13000.	866.	811.	794.	782.
14000.	861.	786.	771.	757.
15000.	859.	763.	749.	738.
16000.	858.	740.	726.	716.
18000.	857.	694.	683.	672.
20000.	854.	651.	640.	628.
25000.	852.	555.	545.	534.
30000.	851.	471.	463.	454.
35000.	814.	398.	391.	384.
40000.	702.	335.	328.	321.
45000.	683.	277.	270.	261.
50000.	666.	227.	218.	207.
55000.	635.	179.	169.	160.
60000.	611.	134.	129.	124.
65000.	590.	103.	98.	95.
70000.	573.	79.	76.	74.
75000.	563.	61.	59.	58.
80000.	541.	48.	46.	45.
85000.	516.	38.	36.	35.
90000.	482.	30.	29.	28.
95000.	440.	23.	23.	22.
100000.	375.	19.	18.	17.

TABLE XIII (CONT)

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (.SD)
PERIOD OF RECORD 1961-1973

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	796.	1095.	1035.	965.
5000.	801.	1065.	1002.	966.
6000.	801.	1030.	973.	941.
7000.	800.	997.	946.	918.
8000.	799.	966.	920.	895.
9000.	799.	935.	895.	873.
10000.	799.	906.	870.	851.
11000.	799.	879.	845.	828.
12000.	799.	846.	821.	803.
13000.	798.	820.	797.	782.
14000.	795.	796.	774.	761.
15000.	794.	773.	750.	735.
16000.	791.	748.	727.	713.
18000.	790.	702.	684.	669.
20000.	787.	660.	640.	630.
25000.	779.	563.	546.	533.
30000.	776.	472.	463.	451.
35000.	730.	398.	390.	373.
40000.	674.	332.	325.	304.
45000.	657.	275.	267.	248.
50000.	646.	224.	215.	201.
55000.	628.	176.	168.	158.
60000.	613.	133.	127.	122.
65000.	595.	103.	97.	94.
70000.	587.	80.	75.	73.
75000.	571.	63.	59.	57.
80000.	546.	49.	46.	44.
85000.	525.	38.	36.	35.
90000.	488.	29.	28.	27.
95000.	452.	23.	22.	22.
100000.	380.	18.	18.	17.

TABLE XIII (CONT)

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (.SD)
PERIOD OF RECORD 1961-1973

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5989.	903.	1146.	1060.	992.
5000.	904.	1074.	1019.	975.
6000.	903.	1042.	989.	949.
7000.	902.	1011.	960.	924.
8000.	902.	980.	933.	901.
9000.	900.	952.	906.	878.
10000.	899.	926.	879.	856.
11000.	899.	898.	853.	833.
12000.	899.	870.	828.	808.
13000.	898.	844.	803.	784.
14000.	897.	817.	779.	761.
15000.	896.	790.	755.	738.
16000.	896.	765.	731.	714.
18000.	893.	713.	687.	671.
20000.	892.	663.	645.	631.
25000.	885.	560.	550.	525.
30000.	876.	475.	466.	445.
35000.	800.	400.	391.	369.
40000.	753.	338.	324.	305.
45000.	739.	273.	261.	243.
50000.	725.	220.	208.	193.
55000.	703.	174.	163.	153.
60000.	675.	133.	125.	119.
65000.	669.	99.	96.	92.
70000.	648.	77.	74.	72.
75000.	633.	60.	58.	55.
80000.	617.	47.	45.	44.
85000.	590.	38.	35.	34.
90000.	558.	29.	28.	27.
95000.	515.	23.	22.	21.
100000.	430.	18.	17.	16.

TABLE XIII (CONT)

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (.SD)
PERIOD OF RECORD 1961-1973

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	784.	1171.	1087.	1019.
5000.	783.	1090.	1041.	994.
6000.	782.	1067.	1004.	972.
7000.	782.	1033.	978.	945.
8000.	781.	1003.	947.	916.
9000.	781.	973.	918.	891.
10000.	782.	944.	889.	858.
11000.	781.	906.	861.	831.
12000.	781.	877.	834.	808.
13000.	783.	842.	806.	765.
14000.	781.	814.	783.	763.
15000.	781.	787.	758.	739.
16000.	782.	761.	735.	715.
18000.	780.	713.	693.	673.
20000.	777.	665.	647.	628.
25000.	765.	564.	550.	527.
30000.	740.	479.	465.	445.
35000.	648.	400.	389.	365.
40000.	618.	333.	320.	295.
45000.	603.	274.	257.	238.
50000.	583.	221.	204.	191.
55000.	560.	180.	161.	149.
60000.	535.	130.	124.	115.
65000.	521.	99.	95.	91.
70000.	509.	76.	73.	70.
75000.	492.	60.	57.	54.
80000.	480.	46.	44.	42.
85000.	452.	36.	35.	33.
90000.	420.	28.	27.	26.
95000.	367.	22.	21.	21.
100000.	290.	18.	17.	16.

TABLE XIII (CONT)

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	695.	1186.	1100.	1027.
5000.	698.	1117.	1052.	1004.
6000.	698.	1078.	1018.	978.
7000.	698.	1036.	986.	953.
8000.	698.	1001.	959.	922.
9000.	698.	968.	924.	893.
10000.	698.	938.	895.	866.
11000.	699.	905.	866.	838.
12000.	699.	878.	839.	812.
13000.	699.	849.	812.	788.
14000.	701.	821.	786.	765.
15000.	701.	794.	761.	738.
16000.	700.	766.	737.	716.
18000.	698.	717.	692.	671.
20000.	697.	672.	649.	624.
25000.	687.	563.	551.	529.
30000.	668.	476.	465.	441.
35000.	601.	400.	386.	356.
40000.	574.	333.	315.	285.
45000.	559.	272.	251.	230.
50000.	546.	214.	199.	184.
55000.	527.	167.	157.	146.
60000.	517.	130.	122.	114.
65000.	499.	99.	94.	88.
70000.	483.	76.	73.	69.
75000.	466.	59.	56.	54.
80000.	446.	46.	44.	42.
85000.	422.	36.	34.	32.
90000.	392.	28.	27.	25.
95000.	352.	22.	21.	20.
100000.	298.	17.	17.	16.

TABLE XIV

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5989.	2163.	1215.	1097.	1022.
5000.	2166.	1165.	1052.	996.
6000.	2166.	1129.	1019.	972.
7000.	2167.	1086.	987.	943.
8000.	2166.	1049.	956.	919.
9000.	2164.	1012.	926.	892.
10000.	2166.	965.	897.	866.
11000.	2167.	924.	869.	838.
12000.	2165.	893.	841.	810.
13000.	2164.	863.	814.	785.
14000.	2166.	828.	789.	762.
15000.	2166.	797.	764.	738.
16000.	2166.	771.	740.	713.
18000.	2162.	722.	696.	671.
20000.	2153.	675.	651.	624.
25000.	2127.	569.	553.	529.
30000.	2048.	477.	465.	437.
35000.	1816.	400.	386.	353.
40000.	1742.	334.	312.	284.
45000.	1680.	273.	248.	228.
50000.	1616.	216.	198.	181.
55000.	1540.	176.	156.	143.
60000.	1486.	131.	121.	113.
65000.	1429.	99.	94.	88.
70000.	1388.	76.	72.	68.
75000.	1336.	59.	56.	51.
80000.	1266.	46.	44.	41.
85000.	1191.	36.	34.	32.
90000.	1111.	28.	27.	25.
95000.	971.	22.	21.	20.
100000.	785.	17.	17.	15.

TABLE XIV (CONT)

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SPRING

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	2577.	1176.	1056.	984.
5000.	2575.	1109.	1021.	966.
6000.	2575.	1079.	994.	944.
7000.	2573.	1044.	965.	921.
8000.	2576.	1011.	938.	898.
9000.	2576.	978.	911.	873.
10000.	2573.	946.	885.	850.
11000.	2571.	916.	859.	828.
12000.	2570.	888.	834.	803.
13000.	2567.	860.	809.	780.
14000.	2568.	832.	785.	758.
15000.	2566.	803.	761.	737.
16000.	2564.	776.	738.	715.
18000.	2561.	726.	694.	672.
20000.	2555.	677.	650.	632.
25000.	2530.	567.	552.	532.
30000.	2444.	477.	466.	431.
35000.	2175.	401.	389.	349.
40000.	2055.	333.	316.	283.
45000.	1959.	275.	251.	229.
50000.	1880.	215.	200.	180.
55000.	1770.	170.	157.	144.
60000.	1704.	132.	123.	113.
65000.	1655.	101.	95.	89.
70000.	1599.	77.	73.	68.
75000.	1551.	60.	57.	53.
80000.	1494.	47.	44.	41.
85000.	1425.	38.	35.	33.
90000.	1331.	29.	27.	25.
95000.	1211.	23.	21.	20.
100000.	973.	18.	17.	16.

TABLE XIV (CONT)

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SUMMER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3969.	2613.	1083.	1021.	965.
5000.	2613.	1043.	991.	945.
6000.	2612.	1012.	963.	922.
7000.	2613.	981.	937.	901.
8000.	2618.	953.	912.	880.
9000.	2612.	925.	887.	859.
10000.	2609.	896.	863.	839.
11000.	2607.	872.	840.	818.
12000.	2606.	844.	816.	798.
13000.	2599.	816.	793.	777.
14000.	2588.	792.	771.	751.
15000.	2584.	769.	748.	730.
16000.	2581.	744.	726.	707.
18000.	2574.	699.	683.	663.
20000.	2567.	657.	641.	625.
25000.	2556.	562.	546.	534.
30000.	2538.	481.	463.	454.
35000.	2414.	400.	391.	378.
40000.	2129.	335.	327.	307.
45000.	2061.	278.	269.	249.
50000.	2009.	229.	217.	197.
55000.	1930.	181.	168.	155.
60000.	1868.	137.	128.	121.
65000.	1825.	103.	98.	93.
70000.	1754.	79.	76.	73.
75000.	1690.	61.	59.	57.
80000.	1638.	48.	46.	44.
85000.	1576.	38.	36.	35.
90000.	1467.	30.	28.	27.
95000.	1344.	24.	22.	21.
100000.	1160.	19.	18.	17.

TABLE XIV (CONT)

MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FALL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	2483.	1171.	1060.	985.
5000.	2488.	1090.	1020.	966.
6000.	2486.	1067.	990.	941.
7000.	2484.	1033.	962.	918.
8000.	2482.	1003.	933.	895.
9000.	2480.	973.	906.	873.
10000.	2480.	944.	879.	851.
11000.	2479.	906.	853.	828.
12000.	2479.	877.	828.	803.
13000.	2479.	844.	803.	782.
14000.	2473.	817.	778.	761.
15000.	2471.	790.	754.	735.
16000.	2469.	765.	731.	713.
18000.	2463.	713.	686.	669.
20000.	2456.	665.	644.	628.
25000.	2429.	564.	549.	525.
30000.	2392.	479.	465.	445.
35000.	2178.	400.	390.	365.
40000.	2045.	334.	322.	295.
45000.	1999.	275.	262.	238.
50000.	1954.	224.	210.	191.
55000.	1891.	176.	164.	149.
60000.	1823.	133.	125.	115.
65000.	1785.	103.	96.	91.
70000.	1744.	80.	74.	70.
75000.	1696.	63.	58.	54.
80000.	1643.	48.	45.	42.
85000.	1567.	38.	35.	33.
90000.	1466.	29.	28.	26.
95000.	1334.	23.	22.	21.
100000.	1100.	18.	17.	16.

ATMOSPHERIC STRUCTURE REPORT

WHITE SANDS DESERT SITE

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UPPER AIR MOISTURE DATA

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TABLE XV

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4000.	732.	8.543	2.945	.322
5000.	755.	8.929	2.854	.385
6000.	755.	8.158	2.684	.440
7000.	753.	7.499	2.508	.534
8000.	753.	7.455	2.308	.294
9000.	750.	6.692	2.092	.044
10000.	749.	6.317	1.881	.050
11000.	743.	6.941	1.655	.063
12000.	735.	5.141	1.465	.041
13000.	730.	4.491	1.295	.041
14000.	724.	4.922	1.146	.025
15000.	722.	4.366	1.022	.025
16000.	716.	3.832	.907	.067
18000.	705.	2.971	.712	.020
20000.	696.	2.301	.547	.020
22000.	681.	1.759	.414	.017
24000.	656.	1.295	.309	.007
26000.	629.	1.083	.218	.004
28000.	574.	.722	.149	.002
30000.	493.	.453	.090	.002
32000.	322.	.226	.056	.001
34000.	210.	.146	.029	.001
36000.	108.	.096	.016	.000
38000.	43.	.101	.012	.001
40000.	11.	.096	.019	.000
42000.	4.	.082	.034	.003
44000.	3.	.018	.011	.002
46000.	1.	.009	.009	.009
48000.	1.	.004	.004	.004
50000.	0.	.000	.000	.000

TABLE XV (CONT)

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4000.	669.	9.330	3.063	.625
5000.	709.	7.622	2.769	.498
6000.	709.	6.944	2.588	.160
7000.	710.	7.022	2.409	.268
8000.	710.	6.374	2.231	.405
9000.	708.	5.816	2.031	.232
10000.	704.	5.653	1.828	.062
11000.	698.	5.460	1.594	.069
12000.	690.	5.269	1.389	.056
13000.	683.	5.009	1.219	.064
14000.	683.	4.513	1.055	.059
15000.	681.	4.027	.926	.030
16000.	678.	3.850	.820	.071
18000.	668.	3.279	.649	.023
20000.	663.	2.000	.510	.015
22000.	655.	1.651	.394	.012
24000.	630.	1.052	.290	.004
26000.	599.	.866	.208	.003
28000.	532.	.649	.140	.002
30000.	420.	.479	.090	.001
32000.	252.	.361	.062	.001
34000.	143.	.211	.031	.001
36000.	50.	.099	.015	.001
38000.	13.	.029	.011	.000
40000.	5.	.010	.006	.003
42000.	4.	.002	.001	.000
44000.	1.	.000	.000	.000
46000.	0.	.000	.000	.000
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE XV (CONT)

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4000.	768.	9.940	2.947	.671
5000.	897.	8.018	2.754	.086
6000.	896.	7.767	2.575	.128
7000.	893.	7.678	2.401	.141
8000.	894.	7.020	2.213	.355
9000.	895.	5.841	2.004	.170
10000.	891.	5.332	1.795	.136
11000.	884.	4.730	1.608	.135
12000.	879.	4.392	1.417	.041
13000.	873.	4.248	1.231	.107
14000.	871.	4.024	1.062	.033
15000.	866.	3.689	.930	.017
16000.	860.	3.165	.823	.025
18000.	849.	2.608	.631	.025
20000.	840.	2.100	.486	.005
22000.	829.	2.217	.376	.007
24000.	805.	1.583	.283	.002
26000.	754.	.966	.199	.005
28000.	653.	.637	.138	.001
30000.	496.	.437	.090	.002
32000.	303.	.241	.059	.001
34000.	175.	.147	.029	.001
36000.	78.	.070	.013	.001
38000.	25.	.028	.006	.001
40000.	4.	.006	.004	.002
42000.	0.	.000	.000	.000
44000.	0.	.000	.000	.000
46000.	0.	.000	.000	.000
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE XV (CONT)

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4000.	702.	9.216	3.150	.737
5000.	838.	8.892	3.167	.119
6000.	834.	7.743	2.949	.111
7000.	830.	7.160	2.751	.080
8000.	830.	6.841	2.540	.179
9000.	829.	6.871	2.322	.100
10000.	824.	6.369	2.104	.101
11000.	823.	5.748	1.889	.158
12000.	819.	6.004	1.687	.116
13000.	813.	6.331	1.518	.185
14000.	810.	4.661	1.338	.037
15000.	804.	4.450	1.171	.080
16000.	799.	3.985	1.007	.031
18000.	792.	3.110	.769	.029
20000.	779.	2.554	.587	.021
22000.	771.	2.146	.446	.017
24000.	761.	1.497	.334	.009
26000.	744.	1.003	.241	.004
28000.	700.	.772	.166	.003
30000.	597.	.594	.104	.002
32000.	418.	.298	.066	.002
34000.	264.	.190	.037	.001
36000.	142.	.085	.018	.000
38000.	63.	.048	.009	.001
40000.	11.	.029	.007	.001
42000.	1.	.001	.001	.001
44000.	0.	.000	.000	.000
46000.	0.	.000	.000	.000
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE XV (CONT)

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS BY MONTHS

WHITE SANDS DESERT SITE (WSD)

PERIOD OF RECORD 1961-1973

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4000.	730.	13.463	4.547	.572
5000.	803.	10.339	4.413	.190
6000.	798.	9.860	4.156	.149
7000.	797.	10.244	3.821	.102
8000.	798.	9.881	3.477	.124
9000.	799.	9.091	3.154	.160
10000.	796.	9.139	2.859	.122
11000.	792.	8.941	2.606	.150
12000.	791.	8.593	2.378	.121
13000.	792.	8.023	2.155	.051
14000.	787.	7.484	1.949	.032
15000.	783.	6.923	1.748	.055
16000.	783.	6.490	1.537	.144
18000.	779.	6.300	1.150	.022
20000.	777.	4.656	.822	.032
22000.	769.	3.369	.593	.057
24000.	761.	2.384	.436	.016
26000.	754.	1.660	.315	.003
28000.	734.	1.116	.215	.004
30000.	675.	.741	.137	.003
32000.	510.	.486	.089	.002
34000.	360.	.301	.049	.001
36000.	185.	.179	.029	.001
38000.	79.	.075	.018	.001
40000.	26.	.030	.010	.001
42000.	7.	.010	.004	.001
44000.	1.	.000	.000	.000
46000.	0.	.000	.000	.000
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE XV (CONT)

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4000.	764.	16.142	6.932	1.258
5000.	867.	17.013	6.540	.232
6000.	861.	15.106	6.092	.233
7000.	860.	13.872	5.668	.215
8000.	863.	13.532	5.196	.138
9000.	861.	11.337	4.776	.162
10000.	860.	11.821	4.390	.138
11000.	859.	10.597	4.018	.387
12000.	858.	9.543	3.684	.164
13000.	857.	8.572	3.348	.091
14000.	851.	7.690	3.038	.068
15000.	845.	7.220	2.708	.065
16000.	840.	6.772	2.408	.053
18000.	829.	6.364	1.793	.043
20000.	818.	4.667	1.195	.062
22000.	794.	3.784	.839	.022
24000.	777.	2.946	.600	.014
26000.	755.	2.165	.438	.076
28000.	751.	1.568	.312	.017
30000.	727.	1.075	.214	.013
32000.	631.	.733	.144	.004
34000.	525.	.467	.083	.002
36000.	317.	.285	.043	.001
38000.	174.	.149	.023	.001
40000.	77.	.036	.010	.001
42000.	22.	.015	.005	.001
44000.	4.	.006	.004	.002
46000.	1.	.002	.002	.002
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE XV (CONT)

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4000.	680.	17.021	11.458	2.772
5000.	872.	16.866	9.735	1.559
6000.	872.	15.805	9.099	1.292
7000.	872.	14.756	8.533	.230
8000.	875.	14.553	8.011	.994
9000.	871.	13.929	7.508	1.870
10000.	871.	13.752	6.988	2.315
11000.	870.	12.616	6.444	1.288
12000.	871.	11.245	5.928	.929
13000.	868.	10.112	5.388	.727
14000.	865.	9.295	4.860	.559
15000.	867.	8.531	4.315	.332
16000.	865.	7.848	3.785	.221
18000.	855.	6.932	2.900	.231
20000.	846.	5.492	2.101	.090
22000.	830.	4.595	1.526	.040
24000.	829.	3.516	1.038	.029
26000.	813.	2.678	.753	.047
28000.	812.	2.001	.531	.015
30000.	799.	1.381	.369	.024
32000.	771.	.922	.248	.008
34000.	735.	.594	.155	.004
36000.	623.	.382	.084	.003
38000.	440.	.246	.045	.002
40000.	272.	.118	.019	.001
42000.	114.	.041	.008	.001
44000.	31.	.015	.003	.001
46000.	5.	.006	.002	.000
48000.	1.	.001	.001	.001
50000.	0.	.000	.000	.000

TABLE XV (CONT)

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

AUGUST

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4000.	821.	17.585	11.048	3.060
5000.	872.	16.141	9.368	.311
6000.	874.	14.897	8.721	.244
7000.	874.	12.997	8.192	.653
8000.	875.	12.528	7.681	.705
9000.	874.	12.067	7.165	.830
10000.	873.	11.439	6.642	1.317
11000.	871.	11.005	6.113	.283
12000.	869.	11.041	5.591	.515
13000.	867.	10.291	5.030	.881
14000.	863.	10.111	4.509	.706
15000.	859.	8.620	3.960	.653
16000.	858.	7.929	3.440	.160
18000.	856.	6.806	2.563	.102
20000.	842.	6.447	1.829	.091
22000.	836.	4.424	1.280	.058
24000.	827.	3.174	.939	.025
26000.	811.	2.354	.687	.038
28000.	807.	1.722	.495	.015
30000.	799.	1.229	.351	.009
32000.	748.	.851	.244	.005
34000.	701.	.556	.152	.004
36000.	526.	.340	.089	.003
38000.	387.	.206	.045	.002
40000.	236.	.083	.020	.001
42000.	90.	.035	.010	.001
44000.	31.	.015	.005	.001
46000.	9.	.010	.003	.000
48000.	1.	.001	.001	.001
50000.	0.	.000	.000	.000

TABLE XV (CONT)

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4000.	722.	15.837	9.467	2.836
5000.	801.	15.177	8.280	2.627
6000.	801.	13.827	7.730	2.516
7000.	800.	12.906	7.241	2.209
8000.	799.	11.903	6.764	1.855
9000.	799.	11.217	6.297	1.404
10000.	799.	10.525	5.774	1.240
11000.	799.	10.242	5.233	.773
12000.	798.	9.257	4.665	.185
13000.	797.	8.629	4.067	.085
14000.	794.	7.551	3.512	.076
15000.	787.	8.558	3.026	.058
16000.	780.	6.628	2.577	.109
18000.	772.	5.786	1.825	.044
20000.	751.	4.527	1.300	.038
22000.	738.	3.516	.918	.032
24000.	726.	2.756	.691	.025
26000.	725.	2.117	.532	.016
28000.	720.	1.488	.388	.007
30000.	702.	1.049	.275	.008
32000.	603.	.677	.191	.004
34000.	522.	.423	.118	.003
36000.	352.	.251	.074	.002
38000.	243.	.136	.039	.001
40000.	154.	.074	.019	.001
42000.	79.	.038	.010	.001
44000.	32.	.014	.005	.001
46000.	9.	.012	.003	.000
48000.	1.	.004	.004	.004
50000.	0.	.000	.000	.000

TABLE XV (CONT)

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4000.	769.	12.763	5.322	1.078
5000.	903.	12.334	4.969	.223
6000.	899.	11.573	4.674	.588
7000.	896.	11.066	4.411	.168
8000.	894.	10.234	4.115	.129
9000.	891.	9.406	3.773	.641
10000.	890.	8.896	3.390	.224
11000.	887.	8.607	3.006	.112
12000.	884.	8.200	2.611	.080
13000.	870.	7.036	2.293	.085
14000.	864.	6.497	1.979	.076
15000.	855.	5.904	1.657	.072
16000.	850.	5.590	1.370	.048
18000.	840.	4.834	.994	.036
20000.	837.	4.069	.764	.023
22000.	830.	3.229	.601	.021
24000.	828.	2.556	.460	.037
26000.	822.	1.906	.349	.012
28000.	810.	1.282	.245	.005
30000.	783.	.949	.165	.003
32000.	610.	.614	.112	.002
34000.	451.	.446	.064	.002
36000.	228.	.252	.038	.001
38000.	117.	.132	.023	.001
40000.	55.	.047	.010	.001
42000.	16.	.020	.005	.001
44000.	5.	.006	.003	.001
46000.	2.	.001	.001	.000
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE XV (CONT)

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4000.	685.	9.031	3.801	.807
5000.	782.	9.810	3.724	.743
6000.	781.	8.627	3.506	.672
7000.	781.	8.061	3.266	.602
8000.	780.	7.599	3.016	.451
9000.	780.	6.883	2.695	.143
10000.	778.	7.088	2.392	.068
11000.	774.	7.196	2.114	.084
12000.	766.	6.228	1.825	.134
13000.	759.	6.772	1.582	.122
14000.	757.	5.201	1.377	.058
15000.	754.	4.877	1.217	.040
16000.	755.	4.513	1.069	.035
18000.	751.	3.662	.857	.029
20000.	746.	2.981	.680	.043
22000.	738.	2.218	.533	.014
24000.	727.	2.375	.411	.016
26000.	711.	1.424	.307	.011
28000.	688.	.917	.222	.006
30000.	632.	.675	.149	.003
32000.	461.	.377	.101	.002
34000.	326.	.237	.058	.001
36000.	167.	.109	.030	.001
38000.	80.	.066	.020	.001
40000.	41.	.041	.010	.000
42000.	13.	.023	.006	.001
44000.	4.	.012	.005	.001
46000.	2.	.003	.002	.001
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE XV (CONT)

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4000.	646.	8.168	3.247	.263
5000.	700.	8.628	3.170	.589
6000.	700.	8.002	2.980	.538
7000.	700.	8.091	2.823	.254
8000.	699.	7.780	2.616	.173
9000.	696.	7.219	2.377	.164
10000.	689.	6.688	2.115	.090
11000.	685.	6.254	1.877	.047
12000.	683.	5.825	1.661	.111
13000.	678.	5.725	1.480	.095
14000.	679.	5.116	1.300	.039
15000.	675.	4.513	1.148	.044
16000.	670.	4.015	1.017	.045
18000.	660.	3.400	.793	.093
20000.	658.	2.693	.611	.035
22000.	653.	2.147	.470	.019
24000.	633.	1.665	.352	.010
26000.	611.	1.134	.258	.009
28000.	582.	.720	.178	.003
30000.	495.	.473	.117	.002
32000.	330.	.359	.084	.001
34000.	218.	.320	.045	.001
36000.	101.	.240	.025	.001
38000.	38.	.141	.015	.001
40000.	12.	.012	.005	.000
42000.	2.	.002	.001	.001
44000.	0.	.000	.000	.000
46000.	0.	.000	.000	.000
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE XVI

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.- 6000.	753.	.493	.178	.036
6000.- 8000.	752.	.429	.147	.032
8000.- 10000.	748.	.375	.116	.019
10000.- 12000.	735.	.294	.087	.010
12000.- 14000.	723.	.217	.064	.009
14000.- 16000.	713.	.199	.047	.007
16000.- 18000.	704.	.143	.035	.003
18000.- 20000.	695.	.105	.025	.002
20000.- 22000.	680.	.075	.018	.002
22000.- 24000.	656.	.053	.013	.001
24000.- 26000.	628.	.035	.009	.001
26000.- 28000.	574.	.028	.006	.001
28000.- 30000.	493.	.016	.004	.000
30000.- 32000.	322.	.008	.002	.000
32000.- 34000.	210.	.005	.001	.000
34000.- 36000.	108.	.002	.001	.000
36000.- 38000.	43.	.002	.000	.000
38000.- 40000.	11.	.002	.000	.000
40000.- 42000.	4.	.001	.001	.000
42000.- 44000.	3.	.001	.000	.000
44000.- 46000.	1.	.000	.000	.000
46000.- 48000.	1.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XVI (CONT)

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.- 6000.	708.	.514	.177	.039
6000.- 8000.	709.	.391	.142	.027
8000.- 10000.	704.	.321	.112	.018
10000.- 12000.	690.	.282	.084	.007
12000.- 14000.	683.	.237	.060	.005
14000.- 16000.	676.	.184	.043	.006
16000.- 18000.	668.	.150	.032	.002
18000.- 20000.	662.	.105	.023	.003
20000.- 22000.	654.	.068	.017	.001
22000.- 24000.	630.	.044	.012	.001
24000.- 26000.	599.	.031	.008	.000
26000.- 28000.	532.	.023	.006	.001
28000.- 30000.	420.	.016	.004	.000
30000.- 32000.	252.	.011	.003	.000
32000.- 34000.	143.	.007	.002	.000
34000.- 36000.	50.	.004	.001	.000
36000.- 38000.	13.	.001	.000	.000
38000.- 40000.	5.	.000	.000	.000
40000.- 42000.	4.	.000	.000	.000
42000.- 44000.	1.	.000	.000	.000
44000.- 46000.	0.	.000	.000	.000
46000.- 48000.	0.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XVI (CONT)

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN SELECTED LEVELS BY MONTHS

WHITE SANDS DESERT SITE (WSD)

PERIOD OF RECORD 1961-1973

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.- 6000.	895.	.480	.173	.046
6000.- 8000.	892.	.430	.140	.015
8000.- 10000.	888.	.313	.110	.020
10000.- 12000.	878.	.243	.083	.009
12000.- 14000.	868.	.198	.060	.005
14000.- 16000.	858.	.163	.043	.004
16000.- 18000.	849.	.115	.031	.003
18000.- 20000.	839.	.089	.022	.002
20000.- 22000.	825.	.078	.016	.002
22000.- 24000.	805.	.066	.012	.001
24000.- 26000.	752.	.042	.008	.001
26000.- 28000.	652.	.023	.006	.001
28000.- 30000.	496.	.015	.004	.000
30000.- 32000.	303.	.009	.002	.000
32000.- 34000.	175.	.005	.001	.000
34000.- 36000.	78.	.003	.001	.000
36000.- 38000.	25.	.001	.000	.000
38000.- 40000.	4.	.000	.000	.000
40000.- 42000.	0.	.000	.000	.000
42000.- 44000.	0.	.000	.000	.000
44000.- 46000.	0.	.000	.000	.000
46000.- 48000.	0.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XVI (CONT)

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.- 6000.	832.	.517	.191	.044
6000.- 8000.	829.	.412	.159	.032
8000.- 10000.	820.	.358	.127	.014
10000.- 12000.	818.	.295	.097	.028
12000.- 14000.	810.	.235	.073	.010
14000.- 16000.	796.	.196	.054	.008
16000.- 18000.	784.	.151	.038	.005
18000.- 20000.	775.	.109	.027	.003
20000.- 22000.	768.	.085	.019	.002
22000.- 24000.	759.	.061	.014	.002
24000.- 26000.	741.	.040	.010	.001
26000.- 28000.	698.	.025	.006	.001
28000.- 30000.	595.	.018	.004	.000
30000.- 32000.	416.	.012	.003	.000
32000.- 34000.	264.	.006	.002	.000
34000.- 36000.	142.	.003	.001	.000
36000.- 38000.	63.	.001	.000	.000
38000.- 40000.	11.	.001	.000	.000
40000.- 42000.	1.	.000	.000	.000
42000.- 44000.	0.	.000	.000	.000
44000.- 46000.	0.	.000	.000	.000
46000.- 48000.	0.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XVI (CONT)

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.- 6000.	798.	.695	.266	.063
6000.- 8000.	794.	.680	.218	.021
8000.- 10000.	793.	.484	.170	.020
10000.- 12000.	788.	.446	.133	.013
12000.- 14000.	784.	.380	.104	.007
14000.- 16000.	781.	.310	.079	.013
16000.- 18000.	776.	.265	.057	.004
18000.- 20000.	773.	.213	.039	.005
20000.- 22000.	768.	.147	.027	.004
22000.- 24000.	761.	.099	.018	.002
24000.- 26000.	754.	.066	.012	.001
26000.- 28000.	734.	.042	.008	.001
28000.- 30000.	675.	.027	.005	.000
30000.- 32000.	510.	.016	.003	.000
32000.- 34000.	360.	.010	.002	.000
34000.- 36000.	184.	.006	.001	.000
36000.- 38000.	79.	.002	.001	.000
38000.- 40000.	26.	.001	.000	.000
40000.- 42000.	7.	.000	.000	.000
42000.- 44000.	1.	.000	.000	.000
44000.- 46000.	0.	.000	.000	.000
46000.- 48000.	0.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XVI (CONT)

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.- 6000.	859.	.907	.394	.101
6000.- 8000.	857.	.727	.318	.031
8000.- 10000.	856.	.601	.255	.017
10000.- 12000.	856.	.539	.203	.021
12000.- 14000.	848.	.403	.159	.016
14000.- 16000.	840.	.318	.122	.009
16000.- 18000.	825.	.255	.089	.014
18000.- 20000.	814.	.201	.059	.005
20000.- 22000.	792.	.155	.038	.003
22000.- 24000.	776.	.114	.025	.002
24000.- 26000.	753.	.083	.017	.004
26000.- 28000.	751.	.056	.011	.002
28000.- 30000.	726.	.038	.008	.001
30000.- 32000.	631.	.024	.005	.000
32000.- 34000.	525.	.014	.003	.000
34000.- 36000.	317.	.009	.002	.000
36000.- 38000.	174.	.005	.001	.000
38000.- 40000.	77.	.002	.000	.000
40000.- 42000.	22.	.000	.000	.000
42000.- 44000.	4.	.000	.000	.000
44000.- 46000.	1.	.000	.000	.000
46000.- 48000.	0.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XVI (CONT)

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.- 6000.	868.	1.048	.611	.178
6000.- 8000.	872.	.833	.479	.063
8000.- 10000.	871.	.743	.396	.095
10000.- 12000.	871.	.629	.323	.091
12000.- 14000.	865.	.477	.255	.035
14000.- 16000.	863.	.377	.192	.017
16000.- 18000.	854.	.295	.141	.023
18000.- 20000.	845.	.233	.099	.010
20000.- 22000.	828.	.181	.067	.010
22000.- 24000.	825.	.139	.044	.004
24000.- 26000.	811.	.099	.029	.006
26000.- 28000.	806.	.070	.020	.004
28000.- 30000.	796.	.050	.013	.001
30000.- 32000.	770.	.031	.008	.001
32000.- 34000.	733.	.019	.005	.000
34000.- 36000.	621.	.011	.003	.000
36000.- 38000.	439.	.007	.002	.000
38000.- 40000.	272.	.004	.001	.000
40000.- 42000.	112.	.002	.000	.000
42000.- 44000.	31.	.000	.000	.000
44000.- 46000.	5.	.000	.000	.000
46000.- 48000.	1.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XVI (CONT)

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

AUGUST

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.- 6000.	873.	.917	.589	.138
6000.- 8000.	874.	.723	.461	.041
8000.- 10000.	873.	.629	.380	.063
10000.- 12000.	869.	.548	.307	.065
12000.- 14000.	862.	.455	.239	.040
14000.- 16000.	858.	.378	.177	.029
16000.- 18000.	855.	.290	.126	.009
18000.- 20000.	842.	.257	.087	.013
20000.- 22000.	832.	.184	.058	.006
22000.- 24000.	827.	.126	.039	.003
24000.- 26000.	809.	.089	.027	.003
26000.- 28000.	806.	.061	.018	.002
28000.- 30000.	799.	.041	.012	.001
30000.- 32000.	748.	.028	.008	.000
32000.- 34000.	701.	.017	.005	.000
34000.- 36000.	525.	.010	.003	.000
36000.- 38000.	387.	.006	.002	.000
38000.- 40000.	236.	.003	.001	.000
40000.- 42000.	90.	.001	.000	.000
42000.- 44000.	31.	.000	.000	.000
44000.- 46000.	9.	.000	.000	.000
46000.- 48000.	1.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XVI (CONT)

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.- 6000.	796.	.859	.522	.167
6000.- 8000.	799.	.710	.410	.127
8000.- 10000.	799.	.592	.334	.092
10000.- 12000.	797.	.474	.263	.060
12000.- 14000.	794.	.404	.194	.010
14000.- 16000.	779.	.312	.137	.006
16000.- 18000.	771.	.255	.093	.005
18000.- 20000.	750.	.201	.062	.006
20000.- 22000.	737.	.147	.041	.004
22000.- 24000.	725.	.107	.028	.004
24000.- 26000.	718.	.077	.020	.001
26000.- 28000.	719.	.052	.014	.001
28000.- 30000.	700.	.036	.010	.002
30000.- 32000.	602.	.023	.007	.001
32000.- 34000.	521.	.014	.004	.000
34000.- 36000.	352.	.008	.003	.000
36000.- 38000.	243.	.004	.001	.000
38000.- 40000.	154.	.002	.001	.000
40000.- 42000.	79.	.001	.000	.000
42000.- 44000.	32.	.000	.000	.000
44000.- 46000.	9.	.000	.000	.000
46000.- 48000.	1.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XVI (CONT)

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.- 6000.	897.	.706	.309	.097
6000.- 8000.	894.	.625	.252	.037
8000.- 10000.	890.	.501	.202	.045
10000.- 12000.	884.	.425	.153	.017
12000.- 14000.	864.	.328	.111	.016
14000.- 16000.	846.	.261	.076	.008
16000.- 18000.	834.	.207	.050	.005
18000.- 20000.	828.	.176	.035	.003
20000.- 22000.	825.	.136	.026	.002
22000.- 24000.	823.	.099	.019	.002
24000.- 26000.	817.	.072	.013	.003
26000.- 28000.	809.	.048	.009	.001
28000.- 30000.	781.	.032	.006	.000
30000.- 32000.	610.	.020	.004	.000
32000.- 34000.	450.	.013	.002	.000
34000.- 36000.	228.	.007	.001	.000
36000.- 38000.	117.	.004	.001	.000
38000.- 40000.	55.	.002	.000	.000
40000.- 42000.	16.	.001	.000	.000
42000.- 44000.	5.	.000	.000	.000
44000.- 46000.	2.	.000	.000	.000
46000.- 48000.	0.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XVI (CONT)

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.- 6000.	779.	.520	.232	.065
6000.- 8000.	780.	.462	.190	.036
8000.- 10000.	775.	.366	.148	.014
10000.- 12000.	765.	.322	.109	.018
12000.- 14000.	756.	.269	.078	.010
14000.- 16000.	754.	.216	.055	.006
16000.- 18000.	748.	.171	.041	.004
18000.- 20000.	744.	.126	.031	.002
20000.- 22000.	737.	.097	.023	.002
22000.- 24000.	726.	.069	.017	.002
24000.- 26000.	709.	.063	.012	.001
26000.- 28000.	688.	.034	.008	.001
28000.- 30000.	632.	.021	.005	.000
30000.- 32000.	459.	.014	.004	.000
32000.- 34000.	326.	.007	.002	.000
34000.- 36000.	166.	.004	.001	.000
36000.- 38000.	80.	.002	.001	.000
38000.- 40000.	41.	.001	.000	.000
40000.- 42000.	13.	.001	.000	.000
42000.- 44000.	4.	.000	.000	.000
44000.- 46000.	2.	.000	.000	.000
46000.- 48000.	0.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XVI (CONT)

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.- 6000.	697.	.509	.199	.051
6000.- 8000.	699.	.440	.165	.027
8000.- 10000.	689.	.394	.131	.007
10000.- 12000.	682.	.316	.098	.008
12000.- 14000.	676.	.263	.072	.007
14000.- 16000.	670.	.205	.053	.005
16000.- 18000.	658.	.155	.039	.007
18000.- 20000.	657.	.121	.028	.003
20000.- 22000.	652.	.090	.020	.002
22000.- 24000.	631.	.066	.014	.002
24000.- 26000.	610.	.045	.010	.001
26000.- 28000.	580.	.027	.007	.000
28000.- 30000.	495.	.017	.004	.000
30000.- 32000.	330.	.010	.003	.000
32000.- 34000.	218.	.008	.002	.000
34000.- 36000.	101.	.006	.001	.000
36000.- 38000.	38.	.004	.001	.000
38000.- 40000.	12.	.001	.000	.000
40000.- 42000.	2.	.000	.000	.000
42000.- 44000.	0.	.000	.000	.000
44000.- 46000.	0.	.000	.000	.000
46000.- 48000.	0.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XVII

MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3999.	758.	100.	48.	10.
5000.	757.	100.	39.	6.
6000.	756.	100.	39.	8.
7000.	755.	100.	39.	10.
8000.	754.	100.	39.	5.
9000.	752.	100.	38.	1.
10000.	749.	100.	37.	1.
11000.	744.	100.	35.	3.
12000.	735.	100.	34.	1.
13000.	731.	100.	33.	1.
14000.	724.	100.	32.	1.
15000.	723.	100.	31.	1.
16000.	716.	100.	31.	1.
18000.	707.	99.	31.	1.
20000.	698.	99.	32.	1.
22000.	683.	99.	32.	1.
24000.	658.	99.	33.	1.
26000.	631.	99.	32.	1.
28000.	576.	96.	30.	1.
30000.	494.	85.	26.	1.
32000.	322.	70.	23.	1.
34000.	210.	68.	17.	1.
36000.	108.	52.	13.	1.
38000.	43.	32.	10.	1.
40000.	11.	32.	11.	1.
42000.	4.	32.	16.	9.
44000.	3.	10.	6.	2.
46000.	1.	7.	7.	7.
48000.	1.	4.	4.	4.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)

MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	710.	98.	43.	8.
5000.	709.	99.	36.	5.
6000.	709.	100.	37.	2.
7000.	710.	100.	38.	4.
8000.	710.	100.	38.	9.
9000.	708.	100.	38.	5.
10000.	704.	100.	38.	1.
11000.	698.	100.	36.	1.
12000.	690.	100.	35.	1.
13000.	683.	100.	33.	3.
14000.	683.	100.	32.	2.
15000.	681.	100.	31.	1.
16000.	678.	100.	30.	2.
18000.	668.	100.	31.	3.
20000.	663.	99.	32.	1.
22000.	655.	96.	33.	1.
24000.	630.	93.	32.	1.
26000.	599.	97.	31.	1.
28000.	532.	91.	29.	1.
30000.	420.	85.	25.	1.
32000.	252.	81.	24.	1.
34000.	143.	71.	18.	1.
36000.	50.	51.	13.	1.
38000.	13.	33.	15.	1.
40000.	5.	20.	15.	5.
42000.	4.	10.	6.	2.
44000.	1.	1.	1.	1.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)

MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS.	MAXIMUM	MEAN	MINIMUM
3989.	902.	98.	35.	5.
5000.	897.	100.	31.	1.
6000.	896.	100.	33.	1.
7000.	893.	100.	34.	1.
8000.	894.	100.	35.	3.
9000.	895.	100.	36.	2.
10000.	892.	100.	36.	2.
11000.	886.	100.	36.	3.
12000.	881.	100.	35.	1.
13000.	875.	100.	34.	5.
14000.	871.	100.	32.	1.
15000.	866.	100.	31.	1.
16000.	860.	100.	31.	1.
18000.	849.	100.	30.	2.
20000.	840.	99.	30.	1.
22000.	829.	100.	31.	1.
24000.	805.	100.	31.	1.
26000.	754.	99.	30.	1.
28000.	653.	97.	28.	1.
30000.	496.	84.	25.	1.
32000.	303.	74.	22.	1.
34000.	175.	59.	16.	1.
36000.	78.	42.	11.	1.
38000.	25.	27.	7.	1.
40000.	4.	12.	8.	4.
42000.	0.	0.	0.	0.
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)

MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	858.	93.	26.	3.
5000.	838.	89.	26.	1.
6000.	834.	96.	27.	1.
7000.	831.	97.	28.	1.
8000.	830.	98.	29.	2.
9000.	829.	100.	30.	1.
10000.	824.	99.	31.	1.
11000.	823.	100.	31.	3.
12000.	819.	99.	31.	2.
13000.	813.	100.	31.	3.
14000.	810.	100.	31.	1.
15000.	804.	100.	30.	2.
16000.	799.	100.	29.	1.
18000.	792.	99.	29.	1.
20000.	780.	100.	28.	1.
22000.	772.	100.	29.	1.
24000.	762.	100.	29.	1.
26000.	745.	99.	29.	1.
28000.	701.	93.	28.	1.
30000.	597.	95.	24.	1.
32000.	418.	78.	22.	1.
34000.	264.	76.	18.	1.
36000.	142.	58.	13.	1.
38000.	63.	33.	8.	1.
40000.	11.	14.	6.	2.
42000.	1.	1.	1.	1.
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)

MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	819.	100.	27.	4.
5000.	803.	81.	27.	1.
6000.	798.	94.	28.	1.
7000.	797.	99.	28.	1.
8000.	798.	99.	29.	1.
9000.	799.	99.	29.	1.
10000.	797.	99.	30.	2.
11000.	792.	99.	31.	2.
12000.	791.	100.	32.	2.
13000.	792.	100.	33.	1.
14000.	787.	100.	34.	1.
15000.	783.	100.	35.	1.
16000.	783.	100.	35.	3.
18000.	779.	100.	34.	1.
20000.	777.	99.	31.	1.
22000.	769.	100.	30.	3.
24000.	761.	100.	30.	1.
26000.	754.	99.	30.	1.
28000.	734.	91.	29.	1.
30000.	675.	80.	26.	1.
32000.	510.	75.	24.	1.
34000.	360.	74.	19.	1.
36000.	185.	62.	16.	1.
38000.	79.	41.	13.	1.
40000.	26.	28.	10.	1.
42000.	7.	14.	5.	1.
44000.	1.	1.	1.	1.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)

MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	870.	100.	33.	5.
5000.	867.	99.	31.	1.
6000.	862.	100.	32.	1.
7000.	861.	100.	33.	1.
8000.	864.	99.	34.	1.
9000.	862.	97.	35.	1.
10000.	860.	99.	36.	1.
11000.	860.	97.	37.	4.
12000.	859.	99.	38.	2.
13000.	858.	99.	39.	1.
14000.	852.	100.	40.	1.
15000.	846.	100.	41.	1.
16000.	841.	100.	41.	1.
18000.	831.	100.	40.	1.
20000.	819.	100.	34.	2.
22000.	795.	100.	30.	1.
24000.	778.	99.	28.	1.
26000.	756.	99.	28.	5.
28000.	752.	96.	27.	2.
30000.	728.	87.	26.	2.
32000.	632.	83.	25.	1.
34000.	526.	75.	21.	1.
36000.	318.	66.	16.	1.
38000.	174.	57.	12.	1.
40000.	77.	22.	7.	1.
42000.	22.	15.	5.	1.
44000.	4.	10.	5.	2.
46000.	1.	5.	5.	5.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)

MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	873.	99.	49.	9.
5000.	873.	99.	44.	5.
6000.	873.	98.	45.	5.
7000.	873.	98.	46.	1.
8000.	876.	99.	48.	5.
9000.	872.	99.	50.	10.
10000.	872.	99.	52.	14.
11000.	871.	100.	54.	10.
12000.	872.	100.	55.	8.
13000.	869.	100.	57.	7.
14000.	866.	100.	57.	6.
15000.	868.	100.	57.	4.
16000.	866.	100.	56.	3.
18000.	855.	100.	53.	4.
20000.	847.	100.	47.	2.
22000.	832.	100.	42.	1.
24000.	832.	100.	35.	1.
26000.	817.	97.	33.	2.
28000.	813.	91.	31.	1.
30000.	801.	93.	30.	3.
32000.	774.	84.	29.	1.
34000.	737.	80.	26.	1.
36000.	623.	73.	21.	1.
38000.	440.	67.	18.	1.
40000.	274.	56.	11.	1.
42000.	114.	34.	7.	1.
44000.	31.	17.	5.	1.
46000.	5.	11.	4.	1.
48000.	1.	5.	5.	5.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)

MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

AUGUST

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	877.	96.	52.	8.
5000.	873.	98.	45.	1.
6000.	875.	95.	46.	1.
7000.	875.	95.	47.	3.
8000.	876.	99.	49.	3.
9000.	875.	97.	51.	6.
10000.	874.	97.	53.	9.
11000.	872.	100.	55.	2.
12000.	870.	100.	56.	4.
13000.	868.	100.	57.	8.
14000.	864.	100.	57.	10.
15000.	860.	100.	56.	10.
16000.	859.	100.	54.	2.
18000.	857.	100.	50.	2.
20000.	843.	100.	43.	2.
22000.	837.	100.	36.	2.
24000.	828.	99.	34.	1.
26000.	811.	99.	32.	2.
28000.	807.	100.	31.	1.
30000.	799.	96.	31.	1.
32000.	749.	79.	30.	1.
34000.	702.	78.	28.	1.
36000.	526.	75.	24.	1.
38000.	387.	63.	18.	1.
40000.	236.	44.	12.	1.
42000.	90.	33.	9.	1.
44000.	31.	20.	7.	1.
46000.	9.	18.	5.	1.
48000.	1.	3.	3.	3.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)

MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	796.	100.	54.	12.
5000.	800.	97.	46.	10.
6000.	800.	100.	47.	12.
7000.	799.	100.	49.	11.
8000.	799.	100.	50.	15.
9000.	799.	100.	52.	15.
10000.	799.	100.	53.	13.
11000.	799.	100.	53.	8.
12000.	799.	100.	53.	2.
13000.	798.	100.	51.	1.
14000.	795.	100.	49.	1.
15000.	788.	100.	47.	1.
16000.	781.	100.	44.	2.
18000.	773.	100.	38.	1.
20000.	752.	100.	33.	1.
22000.	739.	100.	29.	1.
24000.	727.	99.	28.	1.
26000.	726.	97.	29.	1.
28000.	721.	96.	29.	2.
30000.	703.	94.	28.	1.
32000.	604.	84.	27.	1.
34000.	523.	79.	24.	1.
36000.	353.	73.	22.	1.
38000.	243.	54.	17.	1.
40000.	154.	44.	13.	1.
42000.	79.	25.	9.	1.
44000.	32.	22.	7.	1.
46000.	9.	23.	5.	1.
48000.	1.	7.	7.	7.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)

MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	904.	100.	44.	10.
5000.	904.	99.	37.	1.
6000.	900.	100.	37.	3.
7000.	897.	100.	38.	1.
8000.	895.	100.	39.	1.
9000.	892.	100.	39.	5.
10000.	891.	99.	39.	2.
11000.	888.	99.	38.	1.
12000.	885.	99.	37.	1.
13000.	872.	99.	36.	1.
14000.	866.	99.	34.	1.
15000.	857.	99.	32.	1.
16000.	851.	99.	29.	1.
18000.	841.	99.	26.	1.
20000.	838.	99.	25.	1.
22000.	831.	99.	26.	1.
24000.	829.	99.	27.	2.
26000.	823.	96.	28.	1.
28000.	811.	98.	28.	1.
30000.	784.	93.	26.	1.
32000.	610.	85.	25.	1.
34000.	451.	72.	20.	1.
36000.	228.	64.	16.	1.
38000.	117.	52.	14.	1.
40000.	55.	39.	9.	1.
42000.	16.	25.	7.	1.
44000.	5.	11.	7.	3.
46000.	2.	3.	2.	1.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)

MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	785.	100.	49.	10.
5000.	782.	100.	41.	10.
6000.	781.	100.	41.	10.
7000.	782.	100.	41.	8.
8000.	781.	100.	41.	5.
9000.	781.	100.	40.	2.
10000.	778.	100.	38.	1.
11000.	775.	100.	36.	1.
12000.	767.	100.	34.	2.
13000.	760.	100.	32.	2.
14000.	759.	100.	30.	1.
15000.	756.	100.	29.	1.
16000.	757.	100.	29.	1.
18000.	753.	100.	28.	1.
20000.	747.	99.	29.	2.
22000.	739.	99.	29.	2.
24000.	728.	100.	30.	1.
26000.	711.	99.	31.	1.
28000.	688.	100.	31.	1.
30000.	632.	95.	29.	1.
32000.	461.	89.	28.	1.
34000.	326.	79.	22.	1.
36000.	167.	58.	16.	1.
38000.	80.	39.	14.	1.
40000.	41.	21.	8.	1.
42000.	13.	11.	5.	2.
44000.	4.	7.	4.	2.
46000.	2.	2.	1.	1.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)

MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	697.	100.	53.	13.
5000.	700.	100.	43.	9.
6000.	700.	99.	43.	6.
7000.	700.	99.	43.	3.
8000.	699.	100.	43.	2.
9000.	696.	100.	43.	2.
10000.	689.	100.	41.	1.
11000.	685.	100.	39.	1.
12000.	683.	100.	38.	2.
13000.	678.	100.	36.	2.
14000.	679.	100.	34.	1.
15000.	675.	100.	33.	1.
16000.	670.	100.	32.	1.
18000.	660.	100.	32.	3.
20000.	658.	99.	32.	2.
22000.	654.	100.	32.	1.
24000.	634.	100.	32.	1.
26000.	612.	100.	32.	1.
28000.	582.	89.	31.	1.
30000.	495.	95.	28.	1.
32000.	330.	81.	28.	1.
34000.	218.	77.	21.	1.
36000.	101.	53.	16.	1.
38000.	38.	29.	11.	1.
40000.	12.	14.	6.	1.
42000.	2.	3.	2.	1.
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XVIII

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4000.	2047.	9.330	3.079	.263
5000.	2164.	8.929	2.929	.385
6000.	2164.	8.158	2.748	.160
7000.	2163.	8.091	2.577	.254
8000.	2162.	7.780	2.382	.173
9000.	2154.	7.219	2.164	.044
10000.	2142.	6.688	1.939	.050
11000.	2126.	6.941	1.706	.047
12000.	2108.	5.825	1.504	.041
13000.	2091.	5.725	1.330	.041
14000.	2086.	5.116	1.166	.025
15000.	2078.	4.513	1.031	.025
16000.	2064.	4.015	.914	.045
18000.	2033.	3.400	.718	.020
20000.	2017.	2.693	.556	.015
22000.	1989.	2.147	.426	.012
24000.	1919.	1.665	.317	.004
26000.	1839.	1.134	.228	.003
28000.	1688.	.722	.156	.002
30000.	1408.	.479	.099	.001
32000.	904.	.361	.068	.001
34000.	571.	.320	.036	.001
36000.	259.	.240	.019	.000
38000.	94.	.141	.013	.000
40000.	28.	.096	.010	.000
42000.	10.	.082	.014	.000
44000.	4.	.018	.008	.000
46000.	1.	.009	.009	.009
48000.	1.	.004	.004	.004
50000.	0.	.000	.000	.000

TABLE XVIII (CONT)

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SPRING

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4000.	2200.	13.463	3.543	.572
5000.	2538.	10.339	3.415	.086
6000.	2528.	9.860	3.197	.111
7000.	2520.	10.244	2.966	.080
8000.	2522.	9.381	2.721	.124
9000.	2523.	9.091	2.473	.100
10000.	2511.	9.139	2.234	.101
11000.	2499.	8.941	2.017	.135
12000.	2489.	8.593	1.811	.041
13000.	2478.	8.023	1.620	.051
14000.	2468.	7.484	1.435	.032
15000.	2453.	6.923	1.270	.017
16000.	2442.	.490	1.112	.025
18000.	2420.	.300	.843	.022
20000.	2396.	4.656	.628	.005
22000.	2369.	3.369	.469	.007
24000.	2327.	2.384	.350	.002
26000.	2252.	1.660	.252	.003
28000.	2087.	1.116	.174	.001
30000.	1768.	.741	.112	.002
32000.	1231.	.486	.073	.001
34000.	799.	.301	.041	.001
36000.	405.	.179	.022	.000
38000.	167.	.075	.013	.001
40000.	41.	.030	.008	.001
42000.	8.	.010	.003	.001
44000.	1.	.000	.000	.000
46000.	0.	.000	.000	.000
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE XVIII (CONT)

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SUMMER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4000.	2265.	17.585	9.783	1.258
5000.	2611.	17.013	8.551	.232
6000.	2607.	15.805	7.979	.233
7000.	2606.	14.756	7.473	.215
8000.	2613.	14.553	6.971	.138
9000.	2606.	13.929	6.490	.162
10000.	2604.	13.752	6.014	.138
11000.	2600.	12.616	5.532	.283
12000.	2598.	11.245	5.074	.164
13000.	2592.	10.291	4.594	.091
14000.	2579.	10.111	4.141	.068
15000.	2571.	8.620	3.669	.065
16000.	2563.	7.929	3.218	.053
18000.	2540.	6.932	2.425	.043
20000.	2506.	6.447	1.714	.062
22000.	2466.	4.595	1.220	.022
24000.	2433.	3.516	.864	.014
26000.	2379.	2.678	.631	.038
28000.	2370.	2.001	.449	.015
30000.	2325.	1.381	.314	.009
32000.	2150.	.922	.216	.004
34000.	1961.	.594	.134	.002
36000.	1466.	.382	.077	.001
38000.	1001.	.246	.041	.001
40000.	585.	.118	.018	.001
42000.	226.	.041	.008	.001
44000.	66.	.015	.004	.001
46000.	15.	.010	.002	.000
48000.	2.	.001	.001	.001
50000.	0.	.000	.000	.000

TABLE XVIII (CONT)

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS BY SEASONS

WHITE SANDS DESERT SITE (WSD)

PERIOD OF RECORD 1961-1973

FALL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4000.	2174.	15.847	6.221	.807
5000.	2486.	15.177	5.644	.223
6000.	2481.	13.827	5.293	.588
7000.	2477.	12.906	4.964	.168
8000.	2473.	11.903	4.624	.129
9000.	2470.	11.217	4.249	.143
10000.	2467.	10.525	3.847	.068
11000.	2460.	10.242	3.449	.084
12000.	2448.	9.257	3.035	.080
13000.	2426.	8.629	2.653	.085
14000.	2415.	7.551	2.294	.058
15000.	2396.	8.558	1.968	.040
16000.	2385.	6.628	1.669	.035
18000.	2363.	5.786	1.222	.029
20000.	2334.	4.527	.910	.023
22000.	2306.	3.516	.681	.014
24000.	2281.	2.756	.518	.016
26000.	2258.	2.117	.395	.011
28000.	2218.	1.488	.284	.005
30000.	2117.	1.049	.197	.003
32000.	1674.	.677	.137	.002
34000.	1299.	.446	.085	.001
36000.	747.	.252	.053	.001
38000.	440.	.136	.031	.001
40000.	250.	.074	.016	.000
42000.	108.	.038	.009	.001
44000.	41.	.014	.005	.001
46000.	13.	.012	.002	.000
48000.	1.	.004	.004	.004
50000.	0.	.000	.000	.000

TABLE XIX

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.- 6000.	2158.	.514	.185	.036
6000.- 8000.	2160.	.440	.151	.027
8000.- 10000.	2141.	.394	.119	.007
10000.- 12000.	2107.	.316	.090	.007
12000.- 14000.	2082.	.263	.065	.005
14000.- 16000.	2059.	.205	.048	.005
16000.- 18000.	2030.	.155	.035	.002
18000.- 20000.	2014.	.121	.026	.002
20000.- 22000.	1986.	.090	.019	.001
22000.- 24000.	1917.	.066	.013	.001
24000.- 26000.	1837.	.045	.009	.000
26000.- 28000.	1686.	.028	.006	.000
28000.- 30000.	1408.	.017	.004	.000
30000.- 32000.	904.	.011	.003	.000
32000.- 34000.	571.	.008	.002	.000
34000.- 36000.	259.	.006	.001	.000
36000.- 38000.	94.	.004	.001	.000
38000.- 40000.	28.	.002	.000	.000
40000.- 42000.	10.	.001	.000	.000
42000.- 44000.	4.	.001	.000	.000
44000.- 46000.	1.	.000	.000	.000
46000.- 48000.	1.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XIX (CONT)

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SPRING

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.- 6000.	2525.	.695	.208	.044
6000.- 8000.	2515.	.680	.171	.015
8000.- 10000.	2501.	.484	.134	.014
10000.- 12000.	2484.	.446	.104	.009
12000.- 14000.	2462.	.380	.078	.005
14000.- 16000.	2435.	.310	.058	.004
16000.- 18000.	2409.	.265	.042	.003
18000.- 20000.	2387.	.213	.030	.002
20000.- 22000.	2361.	.147	.021	.002
22000.- 24000.	2325.	.099	.014	.001
24000.- 26000.	2247.	.066	.010	.001
26000.- 28000.	2084.	.042	.007	.001
28000.- 30000.	1766.	.027	.004	.000
30000.- 32000.	1229.	.016	.003	.000
32000.- 34000.	799.	.010	.002	.000
34000.- 36000.	404.	.006	.001	.000
36000.- 38000.	167.	.002	.001	.000
38000.- 40000.	41.	.001	.000	.000
40000.- 42000.	8.	.000	.000	.000
42000.- 44000.	1.	.000	.000	.000
44000.- 46000.	0.	.000	.000	.000
46000.- 48000.	0.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XIX (CONT)

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SUMMER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.- 6000.	2600.	1.048	.532	.101
6000.- 8000.	2603.	.833	.420	.031
8000.- 10000.	2600.	.743	.344	.017
10000.- 12000.	2596.	.629	.278	.021
12000.- 14000.	2575.	.477	.218	.016
14000.- 16000.	2561.	.378	.164	.009
16000.- 18000.	2534.	.295	.119	.009
18000.- 20000.	2501.	.257	.082	.005
20000.- 22000.	2452.	.184	.055	.003
22000.- 24000.	2428.	.139	.036	.002
24000.- 26000.	2373.	.099	.025	.003
26000.- 28000.	2363.	.070	.016	.002
28000.- 30000.	2321.	.050	.011	.001
30000.- 32000.	2149.	.031	.007	.000
32000.- 34000.	1959.	.019	.005	.000
34000.- 36000.	1463.	.011	.003	.000
36000.- 38000.	1000.	.007	.002	.000
38000.- 40000.	585.	.004	.001	.000
40000.- 42000.	224.	.002	.000	.000
42000.- 44000.	66.	.000	.000	.000
44000.- 46000.	15.	.000	.000	.000
46000.- 48000.	2.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XIX (CONT)

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FALL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.- 6000.	2472.	.859	.353	.065
6000.- 8000.	2473.	.710	.284	.036
8000.- 10000.	2464.	.592	.225	.014
10000.- 12000.	2446.	.474	.175	.017
12000.- 14000.	2414.	.404	.128	.010
14000.- 16000.	2379.	.312	.090	.006
16000.- 18000.	2353.	.255	.061	.004
18000.- 20000.	2322.	.201	.043	.002
20000.- 22000.	2299.	.147	.030	.002
22000.- 24000.	2274.	.107	.021	.002
24000.- 26000.	2244.	.077	.015	.001
26000.- 28000.	2216.	.052	.010	.001
28000.- 30000.	2113.	.036	.007	.000
30000.- 32000.	1671.	.023	.005	.000
32000.- 34000.	1297.	.014	.003	.000
34000.- 36000.	746.	.008	.002	.000
36000.- 38000.	440.	.004	.001	.000
38000.- 40000.	250.	.002	.001	.000
40000.- 42000.	108.	.001	.000	.000
42000.- 44000.	41.	.000	.000	.000
44000.- 46000.	13.	.000	.000	.000
46000.- 48000.	1.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XX

MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	2165.	100.	48.	8.
5000.	2166.	100.	40.	5.
6000.	2165.	100.	40.	2.
7000.	2165.	100.	40.	3.
8000.	2163.	100.	40.	2.
9000.	2156.	100.	40.	1.
10000.	2142.	100.	39.	1.
11000.	2127.	100.	37.	1.
12000.	2108.	100.	35.	1.
13000.	2092.	100.	34.	1.
14000.	2086.	100.	33.	1.
15000.	2079.	100.	32.	1.
16000.	2064.	100.	31.	1.
18000.	2035.	100.	31.	1.
20000.	2019.	99.	32.	1.
22000.	1992.	100.	32.	1.
24000.	1922.	100.	32.	1.
26000.	1842.	100.	32.	1.
28000.	1690.	96.	30.	1.
30000.	1409.	95.	26.	1.
32000.	904.	81.	25.	1.
34000.	571.	77.	19.	1.
36000.	259.	53.	14.	1.
38000.	94.	33.	11.	1.
40000.	28.	32.	9.	1.
42000.	10.	32.	9.	1.
44000.	4.	10.	5.	1.
46000.	1.	7.	7.	7.
48000.	1.	4.	4.	4.
50000.	0.	0.	0.	0.

TABLE XX (CONT)

MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SPRING

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	2579.	100.	29.	3.
5000.	2538.	100.	28.	1.
6000.	2528.	100.	29.	1.
7000.	2521.	100.	30.	1.
8000.	2522.	100.	31.	1.
9000.	2523.	100.	32.	1.
10000.	2513.	100.	32.	1.
11000.	2501.	100.	33.	2.
12000.	2491.	100.	33.	1.
13000.	2480.	100.	33.	1.
14000.	2468.	100.	32.	1.
15000.	2453.	100.	32.	1.
16000.	2442.	100.	32.	1.
18000.	2420.	100.	31.	1.
20000.	2397.	100.	30.	1.
22000.	2370.	100.	30.	1.
24000.	2328.	100.	30.	1.
26000.	2253.	99.	29.	1.
28000.	2088.	97.	28.	1.
30000.	1768.	95.	25.	1.
32000.	1231.	78.	23.	1.
34000.	799.	76.	18.	1.
36000.	405.	62.	14.	1.
38000.	167.	41.	10.	1.
40000.	41.	28.	9.	1.
42000.	8.	14.	5.	1.
44000.	1.	1.	1.	1.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XX (CONT)

MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SUMMER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	2620.	100.	45.	5.
5000.	2613.	99.	40.	1.
6000.	2610.	100.	41.	1.
7000.	2609.	100.	42.	1.
8000.	2616.	99.	44.	1.
9000.	2609.	99.	45.	1.
10000.	2606.	99.	47.	1.
11000.	2603.	100.	48.	2.
12000.	2601.	100.	50.	2.
13000.	2595.	100.	51.	1.
14000.	2582.	100.	52.	1.
15000.	2574.	100.	51.	1.
16000.	2566.	100.	51.	1.
18000.	2543.	100.	48.	1.
20000.	2509.	100.	41.	2.
22000.	2464.	100.	36.	1.
24000.	2438.	100.	32.	1.
26000.	2384.	99.	31.	2.
28000.	2372.	100.	30.	1.
30000.	2328.	96.	29.	1.
32000.	2155.	84.	28.	1.
34000.	1965.	80.	25.	1.
36000.	1467.	75.	21.	1.
38000.	1001.	67.	17.	1.
40000.	587.	56.	11.	1.
42000.	226.	34.	8.	1.
44000.	66.	20.	6.	1.
46000.	15.	18.	5.	1.
48000.	2.	5.	4.	3.
50000.	0.	0.	0.	0.

TABLE XX (CONT)

MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FALL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
3989.	2485.	100.	49.	10.
5000.	2486.	100.	41.	1.
6000.	2481.	100.	42.	3.
7000.	2478.	100.	43.	1.
8000.	2475.	100.	43.	1.
9000.	2472.	100.	43.	2.
10000.	2468.	100.	43.	1.
11000.	2462.	100.	42.	1.
12000.	2451.	100.	41.	1.
13000.	2430.	100.	40.	1.
14000.	2420.	100.	38.	1.
15000.	2401.	100.	36.	1.
16000.	2389.	100.	34.	1.
18000.	2367.	100.	30.	1.
20000.	2337.	100.	29.	1.
22000.	2309.	100.	28.	1.
24000.	2284.	100.	28.	1.
26000.	2260.	99.	29.	1.
28000.	2220.	100.	29.	1.
30000.	2119.	95.	28.	1.
32000.	1675.	89.	26.	1.
34000.	1300.	79.	22.	1.
36000.	748.	73.	19.	1.
38000.	440.	54.	16.	1.
40000.	250.	44.	11.	1.
42000.	108.	25.	8.	1.
44000.	41.	22.	6.	1.
46000.	13.	23.	4.	1.
48000.	1.	7.	7.	7.
50000.	0.	0.	0.	0.

ATMOSPHERIC STRUCTURE REPORT

WHITE SANDS DESERT SITE

SECTION I

UPPER AIR INDEX OF REFRACTION DATA

By Months

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By Seasons

Table XXII. Mean and Extreme Upper Air Indexes of Refraction at Selected Levels ---------- 199

TABLE XXI

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
3989.	758.	1.000293	1.000263	.000000	1.000243
5000.	758.	1.000281	1.000251	-.000012	1.000235
6000.	758.	1.000274	1.000242	-.000009	1.000225
7000.	758.	1.000261	1.000234	-.000009	1.000218
8000.	757.	1.000254	1.000225	-.000009	1.000211
9000.	756.	1.000243	1.000216	-.000008	1.000203
10000.	756.	1.000233	1.000208	-.000008	1.000198
11000.	756.	1.000224	1.000200	-.000008	1.000190
12000.	755.	1.000213	1.000193	-.000007	1.000184
13000.	755.	1.000204	1.000186	-.000007	1.000179
14000.	754.	1.000198	1.000179	-.000007	1.000174
15000.	754.	1.000189	1.000173	-.000006	1.000168
16000.	755.	1.000181	1.000167	-.000005	1.000161
18000.	753.	1.000167	1.000155	-.000012	1.000151
20000.	748.	1.000154	1.000146	-.000010	1.000142
25000.	737.	1.000128	1.000122	-.000023	1.000120
30000.	713.	1.000106	1.000102	-.000021	1.000098
35000.	617.	1.000089	1.000084	-.000017	1.000078
40000.	589.	1.000074	1.000068	-.000016	1.000063
45000.	571.	1.000060	1.000053	-.000015	1.000051
50000.	540.	1.000048	1.000043	-.000011	1.000040
55000.	518.	1.000038	1.000033	-.000009	1.000032
60000.	495.	1.000029	1.000026	-.000007	1.000025
65000.	475.	1.000022	1.000020	-.000006	1.000019
70000.	458.	1.000017	1.000015	-.000004	1.000015
75000.	440.	1.000013	1.000012	-.000004	1.000011
80000.	417.	1.000010	1.000008	-.000003	1.000009
85000.	396.	1.000008	1.000007	-.000001	1.000007
90000.	372.	1.000006	1.000005	-.000002	1.000005
95000.	313.	1.000005	1.000004	-.000001	1.000004
100000.	241.	1.000004	1.000004	-.000000	1.000003

TABLE XXI (CONT)

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
3989.	711.	1.000299	1.000261	.000000	1.000239
5000.	711.	1.000280	1.000250	-.000012	1.000228
6000.	711.	1.000269	1.000241	-.000009	1.000222
7000.	712.	1.000261	1.000233	-.000008	1.000216
8000.	712.	1.000250	1.000225	-.000008	1.000209
9000.	712.	1.000240	1.000216	-.000008	1.000203
10000.	712.	1.000232	1.000209	-.000008	1.000195
11000.	712.	1.000223	1.000201	-.000008	1.000189
12000.	711.	1.000215	1.000193	-.000007	1.000184
13000.	711.	1.000206	1.000186	-.000007	1.000178
14000.	711.	1.000197	1.000179	-.000007	1.000173
15000.	711.	1.000189	1.000173	-.000006	1.000168
16000.	711.	1.000181	1.000167	-.000006	1.000163
18000.	711.	1.000167	1.000156	-.000012	1.000153
20000.	709.	1.000153	1.000146	-.000010	1.000143
25000.	704.	1.000127	1.000122	-.000023	1.000120
30000.	668.	1.000106	1.000102	-.000020	1.000097
35000.	599.	1.000089	1.000084	-.000018	1.000078
40000.	580.	1.000074	1.000067	-.000017	1.000063
45000.	550.	1.000059	1.000053	-.000014	1.000050
50000.	530.	1.000048	1.000042	-.000011	1.000040
55000.	495.	1.000039	1.000033	-.000009	1.000031
60000.	473.	1.000029	1.000026	-.000007	1.000025
65000.	454.	1.000022	1.000020	-.000006	1.000019
70000.	447.	1.000017	1.000015	-.000004	1.000015
75000.	429.	1.000013	1.000012	-.000004	1.000011
80000.	403.	1.000010	1.000008	-.000003	1.000009
85000.	373.	1.000008	1.000007	-.000001	1.000007
90000.	347.	1.000006	1.000005	-.000002	1.000005
95000.	306.	1.000005	1.000004	-.000001	1.000004
100000.	246.	1.000004	1.000003	-.000000	1.000003

TABLE XXI (CONT)

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
3989.	901.	1.000298	1.000257	.000000	1.000235
5000.	900.	1.000281	1.000246	-.000010	1.000227
6000.	901.	1.000273	1.000238	-.000008	1.000217
7000.	900.	1.000263	1.000230	-.000008	1.000211
8000.	900.	1.000251	1.000222	-.000008	1.000207
9000.	901.	1.000236	1.000215	-.000008	1.000201
10000.	901.	1.000228	1.000207	-.000007	1.000195
11000.	899.	1.000218	1.000200	-.000007	1.000190
12000.	899.	1.000210	1.000193	-.000007	1.000183
13000.	898.	1.000203	1.000186	-.000007	1.000179
14000.	899.	1.000196	1.000179	-.000007	1.000173
15000.	899.	1.000188	1.000172	-.000006	1.000168
16000.	896.	1.000179	1.000167	-.000005	1.000163
18000.	897.	1.000166	1.000155	-.000012	1.000152
20000.	895.	1.000153	1.000146	-.000009	1.000141
25000.	885.	1.000127	1.000122	-.000024	1.000119
30000.	839.	1.000106	1.000101	-.000021	1.000097
35000.	741.	1.000089	1.000084	-.000017	1.000078
40000.	683.	1.000074	1.000067	-.000017	1.000063
45000.	645.	1.000060	1.000053	-.000014	1.000050
50000.	619.	1.000047	1.000042	-.000011	1.000040
55000.	581.	1.000037	1.000032	-.000010	1.000032
60000.	560.	1.000029	1.000025	-.000007	1.000025
65000.	538.	1.000022	1.000019	-.000006	1.000019
70000.	526.	1.000017	1.000015	-.000004	1.000015
75000.	502.	1.000013	1.000012	-.000003	1.000011
80000.	488.	1.000010	1.000008	-.000003	1.000009
85000.	465.	1.000008	1.000007	-.000001	1.000007
90000.	433.	1.000006	1.000005	-.000002	1.000005
95000.	398.	1.000005	1.000004	-.000001	1.000004
100000.	308.	1.000004	1.000003	-.000000	1.000003

TABLE XXI (CONT)

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
3989.	858.	1.000295	1.000253	.000000	1.000229
5000.	857.	1.000282	1.000244	-.000009	1.000220
6000.	857.	1.000268	1.000236	-.000008	1.000213
7000.	856.	1.000259	1.000228	-.000008	1.000209
8000.	857.	1.000251	1.000220	-.000008	1.000204
9000.	858.	1.000241	1.000213	-.000007	1.000198
10000.	858.	1.000231	1.000206	-.000007	1.000192
11000.	857.	1.000222	1.000199	-.000007	1.000187
12000.	857.	1.000213	1.000192	-.000007	1.000182
13000.	856.	1.000207	1.000185	-.000007	1.000177
14000.	857.	1.000198	1.000179	-.000007	1.000172
15000.	854.	1.000190	1.000172	-.000006	1.000167
16000.	854.	1.000183	1.000166	-.000006	1.000162
18000.	853.	1.000168	1.000155	-.000011	1.000151
20000.	849.	1.000155	1.000145	-.000010	1.000142
25000.	842.	1.000127	1.000122	-.000023	1.000119
30000.	814.	1.000107	1.000102	-.000020	1.000096
35000.	729.	1.000089	1.000085	-.000017	1.000078
40000.	707.	1.000074	1.000069	-.000016	1.000063
45000.	672.	1.000060	1.000054	-.000015	1.000052
50000.	641.	1.000047	1.000042	-.000012	1.000041
55000.	613.	1.000037	1.000033	-.000009	1.000032
60000.	591.	1.000029	1.000026	-.000007	1.000026
65000.	576.	1.000022	1.000019	-.000007	1.000020
70000.	549.	1.000017	1.000015	-.000004	1.000015
75000.	531.	1.000013	1.000011	-.000004	1.000012
80000.	506.	1.000010	1.000008	-.000003	1.000009
85000.	480.	1.000008	1.000007	-.000001	1.000007
90000.	440.	1.000006	1.000005	-.000002	1.000005
95000.	401.	1.000005	1.000004	-.000001	1.000004
100000.	328.	1.000004	1.000003	-.000001	1.000003

TABLE XXI (CONT)

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
3989.	819.	1.000317	1.000257	.000000	1.000230
5000.	818.	1.000288	1.000247	-.000010	1.000219
6000.	818.	1.000280	1.000239	-.000008	1.000213
7000.	818.	1.000274	1.000231	-.000008	1.000207
8000.	818.	1.000260	1.000222	-.000008	1.000202
9000.	816.	1.000249	1.000215	-.000008	1.000196
10000.	814.	1.000242	1.000208	-.000007	1.000191
11000.	814.	1.000235	1.000200	-.000007	1.000186
12000.	815.	1.000226	1.000194	-.000007	1.000181
13000.	814.	1.000217	1.000187	-.000007	1.000176
14000.	812.	1.000208	1.000180	-.000007	1.000171
15000.	812.	1.000199	1.000174	-.000006	1.000166
16000.	812.	1.000190	1.000168	-.000006	1.000161
18000.	811.	1.000177	1.000156	-.000012	1.000151
20000.	811.	1.000160	1.000146	-.000010	1.000141
25000.	803.	1.000129	1.000122	-.000023	1.000119
30000.	791.	1.000106	1.000102	-.000021	1.000101
35000.	705.	1.000089	1.000085	-.000016	1.000081
40000.	667.	1.000074	1.000070	-.000016	1.000065
45000.	642.	1.000061	1.000055	-.000015	1.000053
50000.	620.	1.000048	1.000043	-.000012	1.000042
55000.	576.	1.000038	1.000034	-.000009	1.000033
60000.	554.	1.000029	1.000027	-.000007	1.000026
65000.	541.	1.000022	1.000020	-.000007	1.000020
70000.	525.	1.000017	1.000015	-.000004	1.000015
75000.	517.	1.000013	1.000012	-.000004	1.000012
80000.	500.	1.000010	1.000008	-.000003	1.000009
85000.	480.	1.000008	1.000007	-.000001	1.000007
90000.	458.	1.000006	1.000005	-.000002	1.000005
95000.	412.	1.000005	1.000004	-.000001	1.000004
100000.	337.	1.000004	1.000003	-.000000	1.000003

TABLE XXI (CONT)

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
3989.	868.	1.000330	1.000267	.000000	1.000231
5000.	869.	1.000314	1.000256	-.000011	1.000215
6000.	867.	1.000301	1.000247	-.000010	1.000210
7000.	868.	1.000289	1.000238	-.000009	1.000205
8000.	868.	1.000271	1.000229	-.000009	1.000200
9000.	867.	1.000261	1.000221	-.000008	1.000195
10000.	864.	1.000247	1.000213	-.000008	1.000190
11000.	864.	1.000236	1.000205	-.000008	1.000185
12000.	864.	1.000226	1.000198	-.000007	1.000179
13000.	862.	1.000217	1.000191	-.000007	1.000174
14000.	859.	1.000208	1.000184	-.000007	1.000169
15000.	856.	1.000199	1.000177	-.000007	1.000164
16000.	855.	1.000191	1.000171	-.000006	1.000159
18000.	853.	1.000175	1.000158	-.000013	1.000150
20000.	854.	1.000160	1.000146	-.000012	1.000141
25000.	850.	1.000130	1.000122	-.000024	1.000120
30000.	843.	1.000107	1.000102	-.000020	1.000102
35000.	772.	1.000089	1.000085	-.000017	1.000084
40000.	692.	1.000074	1.000070	-.000015	1.000068
45000.	670.	1.000061	1.000056	-.000014	1.000055
50000.	656.	1.000050	1.000045	-.000011	1.000044
55000.	631.	1.000039	1.000034	-.000011	1.000034
60000.	620.	1.000030	1.000026	-.000008	1.000027
65000.	607.	1.000023	1.000019	-.000007	1.000021
70000.	595.	1.000017	1.000015	-.000004	1.000016
75000.	578.	1.000014	1.000011	-.000004	1.000012
80000.	564.	1.000011	1.000008	-.000003	1.000009
85000.	548.	1.000008	1.000007	-.000001	1.000007
90000.	512.	1.000007	1.000005	-.000003	1.000006
95000.	476.	1.000005	1.000004	-.000001	1.000004
100000.	411.	1.000004	1.000003	-.000001	1.000003

TABLE XXI (CONT)

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
3989.	872.	1.000359	1.000292	.000000	1.000243
5000.	872.	1.000320	1.000274	-.000018	1.000225
6000.	872.	1.000303	1.000263	-.000011	1.000220
7000.	872.	1.000292	1.000253	-.000010	1.000208
8000.	875.	1.000283	1.000244	-.000009	1.000207
9000.	871.	1.000271	1.000235	-.000009	1.000205
10000.	871.	1.000261	1.000226	-.000009	1.000203
11000.	870.	1.000249	1.000217	-.000009	1.000193
12000.	871.	1.000236	1.000209	-.000008	1.000186
13000.	868.	1.000224	1.000201	-.000008	1.000180
14000.	866.	1.000213	1.000192	-.000008	1.000174
15000.	867.	1.000203	1.000184	-.000008	1.000168
16000.	866.	1.000194	1.000177	-.000008	1.000160
18000.	863.	1.000179	1.000162	-.000015	1.000150
20000.	858.	1.000163	1.000149	-.000013	1.000141
25000.	853.	1.000131	1.000122	-.000027	1.000121
30000.	846.	1.000108	1.000102	-.000021	1.000102
35000.	828.	1.000089	1.000085	-.000016	1.000085
40000.	736.	1.000075	1.000071	-.000014	1.000072
45000.	708.	1.000062	1.000057	-.000014	1.000058
50000.	687.	1.000051	1.000047	-.000010	1.000047
55000.	664.	1.000040	1.000035	-.000012	1.000036
60000.	637.	1.000030	1.000026	-.000009	1.000027
65000.	628.	1.000023	1.000019	-.000007	1.000021
70000.	586.	1.000017	1.000015	-.000004	1.000016
75000.	550.	1.000014	1.000011	-.000004	1.000012
80000.	533.	1.000011	1.000009	-.000003	1.000010
85000.	511.	1.000008	1.000008	-.000001	1.000007
90000.	472.	1.000007	1.000005	-.000003	1.000006
95000.	427.	1.000005	1.000004	-.000001	1.000004
100000.	374.	1.000004	1.000004	-.000000	1.000003

TABLE XXI (CONT)

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

AUGUST

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
3989.	874.	1.000334	1.000291	.000000	1.000240
5000.	872.	1.000314	1.000273	-.000018	1.000216
6000.	874.	1.000296	1.000262	-.000011	1.000210
7000.	874.	1.000285	1.000253	-.000010	1.000206
8000.	874.	1.000273	1.000243	-.000009	1.000202
9000.	873.	1.000263	1.000234	-.000009	1.000197
10000.	872.	1.000253	1.000225	-.000009	1.000192
11000.	871.	1.000242	1.000216	-.000009	1.000185
12000.	869.	1.000236	1.000208	-.000008	1.000180
13000.	867.	1.000226	1.000200	-.000009	1.000175
14000.	863.	1.000216	1.000191	-.000008	1.000170
15000.	859.	1.000205	1.000183	-.000008	1.000165
16000.	858.	1.000196	1.000175	-.000008	1.000160
18000.	857.	1.000179	1.000161	-.000014	1.000151
20000.	854.	1.000166	1.000148	-.000013	1.000142
25000.	853.	1.000131	1.000122	-.000026	1.000120
30000.	851.	1.000107	1.000102	-.000020	1.000102
35000.	814.	1.000089	1.000085	-.000016	1.000085
40000.	701.	1.000074	1.000071	-.000014	1.000071
45000.	683.	1.000062	1.000057	-.000014	1.000058
50000.	666.	1.000051	1.000047	-.000010	1.000046
55000.	635.	1.000040	1.000035	-.000012	1.000036
60000.	611.	1.000030	1.000026	-.000008	1.000027
65000.	590.	1.000023	1.000020	-.000007	1.000021
70000.	573.	1.000018	1.000015	-.000004	1.000016
75000.	563.	1.000014	1.000011	-.000004	1.000012
80000.	541.	1.000011	1.000009	-.000003	1.000010
85000.	516.	1.000008	1.000008	-.000001	1.000007
90000.	482.	1.000007	1.000005	-.000003	1.000006
95000.	440.	1.000005	1.000004	-.000001	1.000004
100000.	375.	1.000004	1.000004	-.000000	1.000003

TABLE XXI (CONT)

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
3989.	794.	1.000327	1.000286	.000000	1.000246
5000.	799.	1.000308	1.000270	-.000016	1.000234
6000.	799.	1.000298	1.000259	-.000011	1.000230
7000.	798.	1.000287	1.000250	-.000010	1.000220
8000.	798.	1.000273	1.000240	-.000009	1.000217
9000.	798.	1.000260	1.000231	-.000009	1.000209
10000.	798.	1.000249	1.000222	-.000009	1.000201
11000.	798.	1.000241	1.000213	-.000009	1.000191
12000.	799.	1.000230	1.000205	-.000009	1.000183
13000.	798.	1.000219	1.000196	-.000009	1.000178
14000.	796.	1.000209	1.000187	-.000008	1.000171
15000.	795.	1.000203	1.000179	-.000008	1.000166
16000.	793.	1.000191	1.000171	-.000008	1.000160
18000.	792.	1.000176	1.000158	-.000014	1.000150
20000.	788.	1.000161	1.000146	-.000012	1.000140
25000.	781.	1.000130	1.000122	-.000024	1.000120
30000.	776.	1.000106	1.000102	-.000020	1.000101
35000.	730.	1.000089	1.000085	-.000017	1.000083
40000.	674.	1.000074	1.000070	-.000015	1.000067
45000.	656.	1.000061	1.000057	-.000014	1.000055
50000.	645.	1.000050	1.000046	-.000010	1.000044
55000.	627.	1.000039	1.000035	-.000012	1.000035
60000.	613.	1.000030	1.000026	-.000008	1.000027
65000.	595.	1.000022	1.000019	-.000007	1.000020
70000.	587.	1.000017	1.000015	-.000004	1.000016
75000.	571.	1.000013	1.000011	-.000004	1.000012
80000.	546.	1.000011	1.000008	-.000003	1.000009
85000.	525.	1.000008	1.000007	-.000001	1.000007
90000.	488.	1.000007	1.000005	-.000003	1.000006
95000.	452.	1.000005	1.000004	-.000001	1.000004
100000.	380.	1.000004	1.000004	-.000000	1.000003

TABLE XXI (CONT)

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
3989.	904.	1.000314	1.000268	.000000	1.000241
5000.	905.	1.000299	1.000255	-.000013	1.000222
6000.	904.	1.000290	1.000246	-.000009	1.000212
7000.	902.	1.000277	1.000237	-.000009	1.000207
8000.	903.	1.000265	1.000229	-.000008	1.000202
9000.	901.	1.000254	1.000220	-.000009	1.000197
10000.	900.	1.000242	1.000212	-.000008	1.000192
11000.	898.	1.000232	1.000203	-.000008	1.000186
12000.	900.	1.000223	1.000195	-.000008	1.000181
13000.	899.	1.000213	1.000188	-.000008	1.000176
14000.	898.	1.000205	1.000180	-.000007	1.000171
15000.	897.	1.000196	1.000173	-.000007	1.000165
16000.	896.	1.000188	1.000166	-.000007	1.000160
18000.	894.	1.000173	1.000155	-.000012	1.000151
20000.	892.	1.000160	1.000145	-.000010	1.000141
25000.	885.	1.000130	1.000122	-.000023	1.000118
30000.	877.	1.000107	1.000102	-.000020	1.000099
35000.	799.	1.000089	1.000085	-.000016	1.000082
40000.	752.	1.000074	1.000070	-.000015	1.000068
45000.	740.	1.000061	1.000056	-.000014	1.000054
50000.	725.	1.000049	1.000045	-.000011	1.000043
55000.	704.	1.000039	1.000034	-.000011	1.000034
60000.	675.	1.000029	1.000026	-.000008	1.000026
65000.	669.	1.000022	1.000019	-.000007	1.000020
70000.	648.	1.000017	1.000015	-.000004	1.000016
75000.	633.	1.000013	1.000011	-.000004	1.000012
80000.	617.	1.000010	1.000008	-.000003	1.000009
85000.	590.	1.000008	1.000007	-.000001	1.000007
90000.	558.	1.000006	1.000004	-.000003	1.000005
95000.	515.	1.000005	1.000004	-.000001	1.000004
100000.	431.	1.000004	1.000003	-.000000	1.000003

TABLE XXI (CONT)

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
3989.	784.	1.000295	1.000266	.000000	1.000241
5000.	783.	1.000289	1.000253	-.000012	1.000231
6000.	782.	1.000276	1.000244	-.000009	1.000225
7000.	782.	1.000267	1.000236	-.000009	1.000219
8000.	781.	1.000255	1.000227	-.000009	1.000211
9000.	781.	1.000244	1.000218	-.000009	1.000204
10000.	782.	1.000237	1.000209	-.000009	1.000196
11000.	781.	1.000228	1.000201	-.000008	1.000190
12000.	782.	1.000218	1.000193	-.000008	1.000183
13000.	784.	1.000212	1.000186	-.000007	1.000175
14000.	782.	1.000199	1.000179	-.000007	1.000170
15000.	782.	1.000190	1.000172	-.000006	1.000166
16000.	783.	1.000183	1.000166	-.000006	1.000161
18000.	781.	1.000168	1.000155	-.000012	1.000152
20000.	777.	1.000156	1.000145	-.000009	1.000141
25000.	764.	1.000127	1.000122	-.000023	1.000118
30000.	740.	1.000107	1.000102	-.000020	1.000099
35000.	647.	1.000089	1.000085	-.000017	1.000081
40000.	618.	1.000074	1.000069	-.000015	1.000066
45000.	603.	1.000061	1.000055	-.000014	1.000052
50000.	583.	1.000049	1.000044	-.000011	1.000042
55000.	561.	1.000038	1.000034	-.000010	1.000033
60000.	534.	1.000029	1.000026	-.000007	1.000026
65000.	520.	1.000022	1.000020	-.000007	1.000020
70000.	508.	1.000017	1.000015	-.000005	1.000015
75000.	491.	1.000013	1.000012	-.000004	1.000012
80000.	479.	1.000010	1.000008	-.000003	1.000009
85000.	452.	1.000008	1.000007	-.000001	1.000007
90000.	420.	1.000006	1.000005	-.000002	1.000005
95000.	367.	1.000005	1.000004	-.000001	1.000004
100000.	290.	1.000004	1.000004	-.000000	1.000003

TABLE XXI (CONT)

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
3989.	697.	1.000295	1.000266	.000000	1.000245
5000.	700.	1.000285	1.000253	-.000013	1.000237
6000.	700.	1.000272	1.000244	-.000010	1.000228
7000.	700.	1.000265	1.000235	-.000009	1.000219
8000.	701.	1.000254	1.000226	-.000009	1.000210
9000.	701.	1.000244	1.000218	-.000009	1.000201
10000.	700.	1.000234	1.000209	-.000008	1.000195
11000.	701.	1.000224	1.000201	-.000008	1.000190
12000.	701.	1.000215	1.000194	-.000008	1.000184
13000.	701.	1.000207	1.000187	-.000007	1.000178
14000.	702.	1.000198	1.000179	-.000007	1.000172
15000.	702.	1.000191	1.000173	-.000007	1.000167
16000.	700.	1.000181	1.000167	-.000006	1.000161
18000.	699.	1.000170	1.000155	-.000012	1.000152
20000.	697.	1.000155	1.000146	-.000010	1.000141
25000.	686.	1.000126	1.000122	-.000023	1.000119
30000.	670.	1.000106	1.000102	-.000020	1.000097
35000.	602.	1.000089	1.000085	-.000017	1.000079
40000.	575.	1.000074	1.000069	-.000016	1.000063
45000.	559.	1.000061	1.000054	-.000014	1.000051
50000.	546.	1.000048	1.000043	-.000011	1.000041
55000.	527.	1.000037	1.000033	-.000010	1.000032
60000.	517.	1.000029	1.000026	-.000007	1.000025
65000.	499.	1.000022	1.000020	-.000006	1.000020
70000.	483.	1.000017	1.000015	-.000005	1.000015
75000.	466.	1.000013	1.000012	-.000004	1.000011
80000.	446.	1.000010	1.000008	-.000003	1.000009
85000.	422.	1.000008	1.000007	-.000001	1.000007
90000.	392.	1.000006	1.000005	-.000002	1.000005
95000.	352.	1.000005	1.000004	-.000001	1.000004
100000.	298.	1.000004	1.000004	-.000000	1.000003

TABLE XXII

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
3989.	2166.	1.000299	1.000263	.000000	1.000239
5000.	2169.	1.000285	1.000251	-.000012	1.000228
6000.	2169.	1.000274	1.000242	-.000009	1.000222
7000.	2162.	1.000265	1.000234	.003693	1.000216
8000.	2170.	1.000254	1.000225	-.003710	1.000209
9000.	2169.	1.000244	1.000217	-.000008	1.000201
10000.	2168.	1.000234	1.000209	-.000008	1.000195
11000.	2169.	1.000224	1.000201	-.000008	1.000189
12000.	2167.	1.000215	1.000193	-.000007	1.000184
13000.	2167.	1.000207	1.000186	-.000007	1.000178
14000.	2167.	1.000198	1.000179	-.000007	1.000172
15000.	2167.	1.000191	1.000173	-.000006	1.000167
16000.	2166.	1.000181	1.000167	-.000006	1.000161
18000.	2163.	1.000170	1.000155	-.000012	1.000151
20000.	2154.	1.000155	1.000146	-.000010	1.000141
25000.	2129.	1.000128	1.000122	-.000023	1.000119
30000.	2051.	1.000106	1.000102	-.000020	1.000097
35000.	1818.	1.000089	1.000084	-.000017	1.000078
40000.	1744.	1.000074	1.000068	-.000016	1.000063
45000.	1680.	1.000061	1.000054	-.000014	1.000050
50000.	1616.	1.000048	1.000043	-.000011	1.000040
55000.	1540.	1.000039	1.000033	-.000009	1.000031
60000.	1485.	1.000029	1.000026	-.000007	1.000025
65000.	1428.	1.000022	1.000020	-.000006	1.000019
70000.	1388.	1.000017	1.000015	-.000004	1.000015
75000.	1335.	1.000013	1.000012	-.000004	1.000011
80000.	1266.	1.000010	1.000008	-.000003	1.000009
85000.	1191.	1.000008	1.000007	-.000001	1.000007
90000.	1111.	1.000006	1.000005	-.000002	1.000005
95000.	971.	1.000005	1.000004	-.000001	1.000004
100000.	785.	1.000004	1.000004	-.000000	1.000003

TABLE XXII (CONT)

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SPRING

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
5989.	2578.	1.000317	1.000256	.000000	1.000229
5000.	2575.	1.000288	1.000246	-.000010	1.000219
6000.	2576.	1.000280	1.000236	-.000008	1.000213
7000.	2574.	1.000274	1.000230	-.000008	1.000207
8000.	2575.	1.000260	1.000222	-.000008	1.000202
9000.	2575.	1.000249	1.000214	-.000008	1.000196
10000.	2573.	1.000242	1.000207	-.000007	1.000191
11000.	2570.	1.000235	1.000200	-.000007	1.000186
[illegible]	[illegible]	[illegible]	1.000193	-.000007	1.000181
13000.	2568.	1.000217	1.000186	-.000007	1.000176
14000.	2568.	1.000208	1.000179	-.000007	1.000171
15000.	2565.	1.000199	1.000173	-.000006	1.000166
16000.	2562.	1.000190	1.000167	-.000006	1.000161
18000.	2561.	1.000177	1.000155	-.000012	1.000151
20000.	2555.	1.000160	1.000146	-.000010	1.000141
25000.	2530.	1.000129	1.000122	-.000023	1.000119
30000.	2444.	1.000107	1.000102	-.000021	1.000096
35000.	2175.	1.000089	1.000085	-.000017	1.000078
40000.	2057.	1.000074	1.000068	-.000016	1.000063
45000.	1959.	1.000061	1.000054	-.000015	1.000050
50000.	1880.	1.000048	1.000042	-.000012	1.000040
55000.	1770.	1.000038	1.000033	-.000009	1.000032
60000.	1705.	1.000029	1.000026	-.000007	1.000025
65000.	1655.	1.000022	1.000019	-.000007	1.000019
70000.	1600.	1.000017	1.000015	-.000004	1.000015
75000.	1550.	1.000013	1.000012	-.000004	1.000011
80000.	1494.	1.000010	1.000008	-.000003	1.000009
85000.	1425.	1.000008	1.000007	-.000001	1.000007
90000.	1331.	1.000006	1.000005	-.000002	1.000005
95000.	1211.	1.000005	1.000004	-.000001	1.000004
100000.	973.	1.000004	1.000003	-.000000	1.000003

TABLE XXII (CONT)

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

SUMMER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
3989.	2614.	1.000359	1.000283	.000000	1.000231
5000.	2613.	1.000320	1.000268	-.000016	1.000215
6000.	2613.	1.000303	1.000257	-.000010	1.000210
7000.	2614.	1.000292	1.000248	-.000010	1.000205
8000.	2617.	1.000283	1.000239	-.000009	1.000200
9000.	2611.	1.000271	1.000230	-.000009	1.000195
10000.	2607.	1.000261	1.000222	-.000008	1.000190
11000.	2605.	1.000249	1.000213	-.000008	1.000185
12000.	2604.	1.000236	1.000205	-.000008	1.000179
13000.	2597.	1.000226	1.000197	-.000008	1.000174
14000.	2588.	1.000216	1.000189	-.000008	1.000169
15000.	2582.	1.000205	1.000182	-.000008	1.000164
16000.	2579.	1.000196	1.000174	-.000007	1.000159
18000.	2573.	1.000179	1.000160	-.000014	1.000150
20000.	2566.	1.000166	1.000148	-.000013	1.000141
25000.	2556.	1.000131	1.000122	-.000026	1.000120
30000.	2540.	1.000108	1.000102	-.000020	1.000102
35000.	2414.	1.000089	1.000085	-.000016	1.000084
40000.	2129.	1.000075	1.000071	-.000014	1.000068
45000.	2061.	1.000062	1.000057	-.000014	1.000055
50000.	2009.	1.000051	1.000046	-.000010	1.000044
55000.	1930.	1.000040	1.000035	-.000012	1.000034
60000.	1868.	1.000030	1.000026	-.000008	1.000027
65000.	1825.	1.000023	1.000019	-.000007	1.000021
70000.	1754.	1.000018	1.000015	-.000004	1.000016
75000.	1691.	1.000014	1.000011	-.000004	1.000012
80000.	1638.	1.000011	1.000008	-.000003	1.000009
85000.	1575.	1.000008	1.000008	-.000001	1.000007
90000.	1466.	1.000007	1.000005	-.000003	1.000006
95000.	1343.	1.000005	1.000004	-.000001	1.000004
100000.	1160.	1.000004	1.000004	-.000000	1.000003

TABLE XXII (CONT)

MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY SEASONS
WHITE SANDS DESERT SITE (WSD)
PERIOD OF RECORD 1961-1973

FALL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
3989.	2482.	1.000327	1.000273	.000000	1.000241
5000.	2487.	1.000308	1.000259	-.000014	1.000222
6000.	2485.	1.000298	1.000250	-.000010	1.000212
7000.	2482.	1.000287	1.000241	-.000009	1.000207
8000.	2482.	1.000273	1.000232	-.000009	1.000202
9000.	2480.	1.000260	1.000223	-.000009	1.000197
10000.	2480.	1.000249	1.000214	-.000009	1.000192
11000.	2477.	1.000241	1.000206	-.000008	1.000186
12000.	2481.	1.000230	1.000198	-.000008	1.000181
13000.	2481.	1.000219	1.000190	-.000008	1.000175
14000.	2476.	1.000209	1.000182	-.000008	1.000170
15000.	2474.	1.000203	1.000175	-.000007	1.000165
16000.	2472.	1.000191	1.000168	-.000007	1.000160
18000.	2467.	1.000176	1.000156	-.000012	1.000150
20000.	2457.	1.000161	1.000145	-.000010	1.000140
25000.	2430.	1.000130	1.000122	-.000023	1.000118
30000.	2393.	1.000107	1.000102	-.000020	1.000099
35000.	2176.	1.000089	1.000085	-.000017	1.000081
40000.	2044.	1.000074	1.000070	-.000015	1.000066
45000.	1999.	1.000061	1.000056	-.000014	1.000052
50000.	1953.	1.000050	1.000045	-.000011	1.000042
55000.	1892.	1.000039	1.000034	-.000011	1.000033
60000.	1822.	1.000030	1.000026	-.000008	1.000026
65000.	1784.	1.000022	1.000019	-.000007	1.000020
70000.	1743.	1.000017	1.000015	-.000004	1.000015
75000.	1695.	1.000013	1.000011	-.000004	1.000012
80000.	1642.	1.000011	1.000008	-.000003	1.000009
85000.	1567.	1.000008	1.000007	-.000001	1.000007
90000.	1466.	1.000007	1.000005	-.000003	1.000005
95000.	1334.	1.000005	1.000004	-.000001	1.000004
100000.	1101.	1.000004	1.000004	-.000000	1.000003

ATMOSPHERIC STRUCTURE REPORT

WHITE SANDS DESERT SITE

SECTION I

UPPER AIR FREEZING LEVEL DATA

By Months and By Seasons

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FREEZING LEVEL

For this report the freezing level is defined as any altitude at which the temperature is 0° centigrade. Multiple freezing levels may occur on a single rawinsonde observation. The data presented is based on all freezing level occurrences.

TABLE XXIII

MEAN AND EXTREME HEIGHTS (FEET MSL) OF THE FREEZING LEVEL BY MONTHS AND BY SEASONS

WHITE SANDS DESERT SITE (WSD)

PERIOD OF RECORD1961-1973

MONTH	TOTAL RAWINSONDE ASCENSIONS	MAXIMUM	MEAN	MINIMUM
JANUARY	761	16200	9000	4000
FEBRUARY	714	15300	8900	4000
MARCH	904	16100	9600	4000
APRIL	863	15900	11600	4000
MAY	821	17600	13400	4100
JUNE	874	18000	15100	11000
JULY	877	20700	16200	14500
AUGUST	878	18200	15700	13000
SEPTEMBER	804	18500	15000	9800
OCTOBER	906	17100	13400	4000
NOVEMBER	789	16600	11000	4000
DECEMBER	700	15600	9200	4000
SEASON				
WINTER	2175	16200	9000	4000
SPRING	2588	17600	11400	4000
SUMMER	2629	20700	15700	11000
FALL	2499	18500	13000	4000

TABLE XXIV

RELATIVE FREQUENCY DISTRIBUTION OF THE FREEZING LEVEL BY MONTHS AND BY SEASONS (IN PERCENT)

WHITE SANDS DESERT SITE (WSD)

PERIOD OF RECORD1961-1973

MONTH	TOTAL RAWINSONDE ASCENSIONS	GEOMETRIC ALTITUDE MSL FEET ≥4K <5K	≥5K <6K	≥6K <7K	≥7K <8K	≥8K <9K	≥9K <10K	≥10K <11K	≥11K <12K	≥12K <13K	≥13K <14K	≥14K <15K	≥15K <16K	≥16K <17K	≥17K <18K	≥18K <19K	≥19K
JANUARY	761	19	4	6	6	10	11	13	14	11	4	1	1	0	0	0	0
FEBRUARY	714	13	4	8	10	13	12	12	14	8	4	1	0	0	0	0	0
MARCH	904	8	4	7	9	12	11	11	16	14	6	2	0	0	0	0	0
APRIL	863	1	1	1	2	4	7	14	23	24	15	7	1	0	0	0	0
MAY	821	0	0	0	0	1	1	4	8	19	25	29	11	2	0	0	0
JUNE	874	0	0	0	0	0	0	0	1	3	11	24	41	19	2	0	0
JULY	877	0	0	0	0	0	0	0	0	0	0	3	38	48	10	1	0
AUGUST	878	0	0	0	0	0	0	0	0	0	2	17	44	29	7	0	0
SEPTEMBER	804	0	0	0	0	0	0	0	1	2	10	31	41	12	2	0	0
OCTOBER	906	1	0	1	1	1	2	3	6	15	28	24	14	5	0	0	0
NOVEMBER	789	8	2	4	5	6	7	8	12	13	16	13	4	0	0	0	0
DECEMBER	700	19	4	5	7	9	11	10	10	13	7	4	1	0	0	0	0
SEASON																	
WINTER	2175	17	4	6	8	10	11	12	13	11	5	2	1	0	0	0	0
SPRING	2588	3	2	3	4	6	7	10	16	19	14	12	4	1	0	0	0
SUMMER	2629	0	0	0	0	0	0	0	0	1	4	15	41	32	6	1	0
FALL	2499	3	1	2	2	2	3	4	7	10	18	22	19	6	1	0	0

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SECTION II

SURFACE DATA

By Months and By Years

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TABLE XXV

MONTHLY AND ANNUAL TEMPERATURE MEANS AND EXTREMES (°FAHRENHEIT) AT SEVEN WSMR SITES

WSD* SITE — Elevation 3,989 FT MSL — Period of Record 1960-1973

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean Max	57	61	69	78	87	94	95	92	87	78	66	57	77
Mean Min	25	29	36	46	53	62	67	64	58	45	33	27	45
Abs Max	78	81	89	97	100	108	108	104	99	94	83	75	108
Abs Min	-14	5	6	19	26	41	57	51	37	22	12	5	-14

JALLEN SITE — Elevation 4,051 FT MSL — Period of Record 1963-1973

Mean Max	55	59	67	76	86	92	95	91	85	77	64	56	75
Mean Min	25	29	35	44	52	61	67	65	57	46	34	27	45
Abs Max	76	81	89	98	98	108	106	106	98	92	84	76	108
Abs Min	-2	5	7	22	30	43	58	50	37	28	16	7	-2

APACHE SITE — Elevation 3,956 FT MSL — Period of Record 1963-1973

Mean Max	51	60	68	77	86	92	95	92	86	79	65	56	76
Mean Min	24	27	35	44	52	61	66	63	57	44	33	26	44
Abs Max	78	80	89	97	100	108	107	103	99	93	82	75	108
Abs Min	-2	7	7	20	28	42	59	53	37	21	13	2	-2

"A" SITE — Elevation 4,238 FT MSL — Period of Record 1950-1973

Mean Max	56	60	66	75	84	93	93	91	86	76	64	56	75
Mean Min	34	38	43	52	60	69	70	69	63	53	41	35	52
Abs Max	76	81	86	94	103	106	107	103	98	92	84	77	107
Abs Min	-6	8	16	29	38	50	59	55	46	33	22	8	-6

HMN* SITE [17] — Elevation 4,090 FT MSL — Period of Record 1942-1973

Mean Max	55	60	66	76	85	94	94	93	87	77	64	56	75
Mean Min	27	31	37	45	54	63	68	66	59	48	34	28	47
Abs Max	79	80	87	96	103	107	107	106	103	93	81	75	107
Abs Min	-11	0	9	22	27	42	54	53	38	24	12	2	-11

SMR* SITE — Elevation 3,999 FT MSL — Period of Record 1963-1973

Mean Max	56	60	68	77	86	93	95	91	86	77	65	56	76
Mean Min	27	31	39	48	56	64	68	65	60	47	37	29	48
Abs Max	78	83	87	96	100	106	108	103	98	93	82	74	108
Abs Min	4	7	9	22	32	42	59	57	42	23	16	6	4

STALLION SITE — Elevation 4,940 FT MSL — Period of Record 1962-1973

Mean Max	51	56	63	72	82	90	92	89	82	74	61	51	72
Mean Min	21	26	31	39	48	57	64	61	50	43	32	23	41
Abs Max	72	77	85	93	97	101	104	101	95	90	79	71	104
Abs Min	-12	2	6	17	30	40	54	47	35	20	14	2	-12

*White Sands Desert
*Holloman
*Small Missile Range

TABLE XXVI

MONTHLY AND ANNUAL MEAN PRECIPITATION (INCHES) AT SEVEN WSMR SITES

Site	White Sands Desert	Jallen	"A"	Holloman* [17]	Small Missile Range	Apache	Stallion
Elevation	3,989	4,051	4,238	4,070	3,999	3,956	4,940
Period of Record	1963-73	1966-73	1950-73	1942-73	1964-73	1964-73	1963-73
Jan	0.29	0.26	0.48	0.41	0.29	0.29	0.12
Feb	0.40	0.34	0.57	0.40	0.39	0.18	0.19
Mar	0.25	0.14	0.52	0.53	0.26	0.17	0.29
Apr	0.14	0.07	0.22	0.12	0.13	0.12	0.10
May	0.15	0.37	0.23	0.30	0.16	0.15	0.30
Jun	1.39	0.77	0.89	0.98	1.04	0.96	0.97
Jul	1.94	1.82	2.29	1.86	1.89	1.35	1.71
Aug	2.06	1.50	1.36	1.95	2.48	2.13	2.13
Sep	1.39	1.07	1.29	1.32	1.15	1.21	1.27
Oct	0.75	0.98	1.06	1.04	0.77	0.63	0.96
Nov	0.37	0.44	0.42	0.34	0.35	0.35	0.25
Dec	0.47	0.55	0.76	0.62	0.64	0.58	0.52
Annual	10.20	8.27	10.59	8.76	9.55	7.87	8.80

*Precipitation records from Holloman Air Force Base were used for the period 1942-64; records from Holloman Rawinsonde Site were used for the years 1965-73.

TABLE XXVII

ANNUAL RAINFALL (INCHES)
BY YEARS AT WHITE SANDS DESERT SITE
1963-1973

Year	Rainfall
1963	7.79
1964	6.12
1965	8.77
1966	11.12
1967	8.26
1968	8.98
1969	9.68
1970	9.77
1971	6.72
1972	17.00
1973	7.90

TABLE XXVIII

MONTHLY AND ANNUAL MEAN AND MAXIMUM
SNOWFALL (INCHES) AT "A" STATION
1950-1973

Month	Mean Snowfall	Maximum Snowfall	Date
Jan	1.3	6.9	1972
Feb	1.5	8.6	1952
Mar	0.5	3.5	1958
Apr	0.0	T	1971*
May	0.0	0.0	
Jun	0.0	0.0	
Jul	0.0	0.0	
Aug	0.0	0.0	
Sep	0.0	0.0	
Oct	0.0	T	1972*
Nov	0.8	6.2	1961
Dec	2.4	14.9	1967
Annual	6.5	18.5	1960

*Also occurred on prior dates

NOTE: "A" Station snowfall records have been presented since this data is not available from White Sands Desert Site.

TABLE XXIX

SURFACE WIND DATA BY MONTH AND BY HOUR
WSD SITE, WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1966-1973

JANUARY

HR	RESULTANT WIND DIR (DEG)	RESULTANT WIND SPD (KT)	PRVL DIR**	SCALAR MEAN SPD (KT)	PEAK GUST DIR (DEG)	PEAK GUST SPD (KT)	PEAK GUST DAY	PEAK GUST YR	TOTAL OBSNS
1	290	.7	NNE	3.5	290	37	3	1971	241
2	319	.7	NNE	3.3	290	33	3	1971*	241
3	317	.9	W	3.2	270	30	13	1972*	240
4	321	.9	NNE	3.4	200	35	3	1971	240
5	333	1.1	N	3.5	290	37	3	1971	240
6	348	.9	NNE	3.2	290	35	3	1971	241
7	329	.5	S	2.9	290	35	3	1971	241
8	301	.3	S	3.0	290	36	6	1967	241
9	359	.8	NNE	3.6	290	35	3	1971	240
10	8	1.1	NNE	4.6	290	32	22	1969	241
11	358	1.2	NNE	5.1	270	33	8	1969	241
12	326	1.2	NNE	5.6	260	40	8	1969	240
13	304	1.4	NNE	5.7	270	39	8	1969	241
14	288	1.8	W	5.9	220	40	2	1971	241
15	277	2.0	W	6.0	230	45	2	1971	241
16	287	2.1	W	6.1	240	45	2	1971	241
17	287	1.9	W	5.5	260	44	19	1973	240
18	284	1.3	W	4.6	280	41	25	1967	240
19	290	1.4	W	4.3	-10	33	1	1966	240
20	285	1.4	W	4.1	-10	35	1	1966	240
21	284	1.0	S	4.0	-10	33	1	1966	239
22	280	1.1	WNW	4.0	270	36	2	1971	239
23	276	1.1	S	3.9	240	37	12	1972	239
24	281	.8	S	3.7	260	40	2	1971	239
FOR THE MONTH	303	1.0	NNE	4.3		45			5767

*ALSO OCCURRED ON PRIOR DATES
-10 INDICATES A MISSING DIRECTION
**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)

SURFACE WIND DATA BY MONTH AND BY HOUR
WSO SITE, WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1966-1973

FEBRUARY

HR	RESULTANT WIND DIR (DEG)	RESULTANT WIND SPD (KT)	PRVL DIR**	SCALAR MEAN SPD (KT)	PEAK GUST DIR (DEG)	PEAK GUST SPD (KT)	PEAK GUST DAY	PEAK GUST YR	TOTAL OBSNS
1	285	1.1	S	4.0	280	33	4	1971	224
2	300	1.0	W	4.2	290	37	4	1971	224
3	307	1.3	N	4.1	280	33	4	1971	224
4	320	1.0	W	4.2	290	31	23	1969*	224
5	317	1.0	NNE	3.9	280	33	23	1969	224
6	352	.9	NE	3.8	310	37	4	1971	224
7	337	.8	N	3.7	320	35	23	1969	224
8	337	.9	N	3.8	280	34	7	1969	224
9	359	1.3	NNE	4.7	280	40	18	1971	224
10	357	1.8	NNE	5.6	300	42	12	1973	224
11	345	1.7	NNE	6.2	300	38	12	1973	224
12	320	1.5	NNE	6.6	280	44	18	1971	224
13	307	1.9	NNE	6.8	250	49	3	1971	224
14	282	2.1	W	7.0	240	44	3	1971	224
15	266	2.3	W	7.2	250	42	3	1971	224
16	262	2.6	W	7.5	250	48	3	1971	223
17	260	2.1	W	7.1	280	45	3	1971	223
18	262	1.9	W	5.8	270	46	25	1971	223
19	260	1.4	W	5.2	260	40	25	1971	223
20	258	1.9	W	5.0	270	40	25	1971	223
21	259	1.7	W	4.9	280	42	18	1971	223
22	265	1.7	S	4.9	290	42	18	1971	223
23	268	1.6	S	4.9	240	41	25	1971	223
24	277	1.3	S	4.5	280	35	3	1971	223
FOR THE MONTH	291	1.3	W	5.2		49			5367

*ALSO OCCURRED ON PRIOR DATES
-10 INDICATES A MISSING DIRECTION
**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)

SURFACE WIND DATA BY MONTH AND BY HOUR
WSO SITE, WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1966-1973

MARCH

HR	RESULTANT WIND DIR (DEG)	RESULTANT WIND SPD (KT)	PRVL DIR**	SCALAR MEAN SPD (KT)	PEAK GUST DIR (DEG)	PEAK GUST SPD (KT)	PEAK GUST DAY	PEAK GUST YR	TOTAL OBSNS
1	274	1.8	S	5.0	290	39	3	1966	242
2	288	1.8	W	5.0	300	34	13	1973*	242
3	290	1.7	S	4.9	290	39	3	1966	242
4	293	1.3	WNW	4.7	120	50	7	1973	242
5	299	1.2	WNW	4.4	280	29	2	1969	243
6	297	1.1	WNW	4.0	260	32	2	1966	243
7	295	1.2	WNW	3.9	260	30	2	1966	242
8	309	1.2	NNE	4.6	250	37	13	1973	243
9	313	1.5	NNE	6.1	270	37	27	1973	242
10	305	1.8	NNE	6.9	290	44	27	1973	243
11	276	2.4	S	7.6	260	48	5	1971	243
12	267	2.9	W	8.1	290	44	27	1973	243
13	266	4.1	W	8.6	270	45	5	1971	243
14	264	4.4	W	8.7	240	50	2	1966	242
15	265	4.6	W	8.9	280	50	5	1971	243
16	264	5.0	W	9.0	240	48	2	1966	243
17	266	4.7	W	8.5	240	53	2	1966	241
18	264	3.9	W	7.5	240	45	2	1966	241
19	267	2.9	W	6.2	300	40	5	1971	241
20	273	3.2	W	6.1	270	45	26	1972	241
21	276	3.0	W	5.7	260	39	26	1972	241
22	271	2.4	W	5.4	280	40	17	1971	241
23	265	2.3	S	5.4	270	40	17	1971	240
24	267	1.8	S	5.3	290	45	2	1966	240
	FOR THE MONTH								
	274	2.5	W	6.3		53			5807

*ALSO OCCURRED ON PRIOR DATES
-10 INDICATES A MISSING DIRECTION
**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)

SURFACE WIND DATA BY MONTH AND BY HOUR
WSL SITE, WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1966-1973

APRIL

HR	RESULTANT WIND DIR (DEG)	RESULTANT WIND SPD (KT)	PRVL DIR**	SCALAR MEAN SPD (KT)	PEAK GUST DIR (DEG)	PEAK GUST SPD (KT)	PEAK GUST DAY	PEAK GUST YR	TOTAL OBSNS
1	281	1.8	S	5.4	280	34	19	1973	230
2	283	1.7	WNW	5.1	300	40	19	1973	231
3	289	1.7	S	5.0	300	43	19	1973	231
4	295	2.0	W	5.1	290	38	19	1973	231
5	289	1.4	W	4.8	10	31	4	1971	231
6	288	1.2	W	4.4	300	34	19	1973	232
7	301	1.0	WNW	4.4	300	43	19	1973	231
8	298	1.2	WNW	5.8	10	34	4	1971	231
9	290	1.8	WNW	7.2	290	36	19	1973	231
10	276	2.9	WNW	7.9	290	47	19	1973	231
11	265	4.3	W	8.3	270	39	11	1966	230
12	257	5.5	W	8.9	270	41	19	1973	231
13	256	6.7	W	9.5	260	45	6	1968	231
14	257	7.2	W	10.1	260	45	18	1972	231
15	259	7.6	W	10.4	290	42	15	1973*	230
16	259	7.8	W	10.6	280	47	19	1973	230
17	261	7.4	W	10.6	260	43	18	1966	228
18	261	6.2	W	9.8	280	39	18	1973	227
19	264	4.6	W	8.1	250	44	13	1972	227
20	266	3.7	W	6.9	240	37	13	1972*	228
21	267	3.6	W	6.3	250	37	19	1966	226
22	270	3.5	W	6.2	250	39	21	1970	227
23	267	3.2	W	5.9	250	36	21	1970	226
24	272	2.5	WNW	5.4	300	40	14	1973	226
FOR THE MONTH									
	266	3.7	W	7.2		47			5508

*ALSO OCCURRED ON PRIOR DATES
-10 INDICATES A MISSING DIRECTION
**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)

SURFACE WIND DATA BY MONTH AND BY HOUR
WSO SITE, WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1966-1973

MAY

HR	RESULTANT WIND DIR (DEG)	RESULTANT WIND SPD (KT)	PRVL DIR**	SCALAR MEAN SPD (KT)	PEAK GUST DIR (DEG)	PEAK GUST SPD (KT)	PEAK GUST DAY	PEAK GUST YR	TOTAL OBSNS
1	261	1.5	W	4.4	100	33	14	1972	241
2	266	1.4	S	4.3	280	28	17	1971	242
3	261	1.1	SSE	4.2	290	35	18	1971	242
4	262	.9	S	4.0	280	30	17	1971	241
5	269	.7	W	3.7	290	32	18	1971	241
6	309	.5	W	3.5	300	27	22	1971*	242
7	316	.5	NNE	4.0	280	26	17	1971	242
8	313	.6	S	5.1	310	28	6	1973*	241
9	270	.7	S	5.8	290	32	6	1973	242
10	252	1.4	S	6.3	-10	32	26	1973	242
11	244	2.1	W	6.9	260	37	4	1971	242
12	243	3.3	W	7.3	250	37	4	1971	242
13	240	4.5	W	7.9	250	45	4	1971	242
14	241	5.3	W	8.6	260	43	4	1971	242
15	242	5.6	W	8.9	190	41	4	1972	242
16	247	5.7	W	9.3	180	49	28	1969	242
17	251	5.7	W	9.4	190	49	28	1969	240
18	250	4.6	W	8.8	250	39	17	1971	240
19	251	3.2	W	7.4	240	37	22	1966	240
20	249	2.5	W	5.8	260	38	10	1966	240
21	260	2.2	W	5.3	-10	31	26	1973	240
22	259	1.8	WNW	5.0	360	30	31	1970	239
23	254	1.5	W	4.6	280	27	17	1971	239
24	261	1.3	W	4.9	100	33	13	1972	240
FOR THE MONTH	251	2.4	W	6.1		49			5786

*ALSO OCCURRED ON PRIOR DATES
-10 INDICATES A MISSING DIRECTION
**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)

SURFACE WIND DATA BY MONTH AND BY HOUR
ASD SITE, WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1966-1973

JUNE

HR	RESULTANT WIND DIR (DEG)	RESULTANT WIND SPD (KT)	PRVL DIR**	SCALAR MEAN SPD (KT)	PEAK GUST DIR (DEG)	PEAK GUST SPD (KT)	PEAK GUST DAY	PEAK GUST YR	TOTAL OBSNS
1	244	1.6	S	4.4	310	27	10	1971	237
2	247	1.3	W	4.4	290	24	22	1972*	237
3	228	.8	S	3.9	290	27	10	1971	237
4	196	.5	S	3.6	300	27	17	1969	236
5	187	.4	S	3.3	290	29	10	1971	237
6	217	.3	S	3.0	280	26	11	1970*	238
7	100	.1	S	3.0	320	27	25	1969	238
8	169	.2	S	4.2	320	27	24	1969	237
9	246	.3	S	5.1	300	27	7	1968	236
10	249	.7	S	5.9	320	29	24	1969	235
11	229	1.8	S	6.3	250	33	15	1973	235
12	234	2.5	S	6.8	270	29	3	1966	235
13	229	3.2	S	7.4	290	43	5	1968	235
14	226	3.6	W	7.8	240	32	18	1971	236
15	226	3.8	W	8.4	260	34	8	1968	235
16	236	3.9	W	8.6	270	43	15	1968	236
17	230	3.7	W	8.6	190	40	13	1973	236
18	233	3.3	W	8.4	190	41	1	1966	236
19	222	2.4	W	7.4	200	47	23	1972	236
20	214	1.8	W	6.1	360	44	20	1966	236
21	235	1.7	W	5.9	20	35	16	1972*	236
22	253	1.6	W	5.2	270	40	19	1968	236
23	245	1.6	WNW	5.0	210	35	19	1968	236
24	239	1.6	S	4.8	300	29	28	1968	236
	FOR THE MONTH								
	231	1.7	S	5.7		47			5668

*ALSO OCCURRED ON PRIOR DATES
-10 INDICATES A MISSING DIRECTION
**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)

SURFACE WIND DATA BY MONTH AND BY HOUR
ASD SITE, WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1966-1973

JULY

HR	RESULTANT WIND DIR (DEG)	RESULTANT WIND SPD (KT)	PRVL DIR**	SCALAR MEAN SPD (KT)	PEAK GUST DIR (DEG)	PEAK GUST SPD (KT)	PEAK GUST DAY	PEAK GUST YR	TOTAL OBSNS
1	168	.9	S	3.4	30	22	26	1967	242
2	145	.8	S	3.2	-10	27	6	1971	242
3	149	.8	S	3.0	-10	33	6	1971	243
4	134	.9	S	2.9	30	29	26	1973	243
5	129	.6	S	2.6	10	27	26	1973*	243
6	118	.7	S	2.3	-10	25	6	1971	243
7	121	.6	S	2.5	270	25	6	1971	244
8	109	1.0	S	3.5	170	20	30	1971	244
9	132	1.2	S	4.1	210	22	12	1968	242
10	147	1.6	S	4.4	120	24	2	1968	242
11	162	1.8	S	4.6	120	27	2	1968	242
12	170	2.0	S	5.1	150	30	16	1971	242
13	175	2.2	S	5.4	70	29	18	1972	240
14	167	2.6	S	5.8	170	33	27	1973	240
15	159	2.5	S	6.2	130	31	19	1971	241
16	155	3.1	S	6.6	150	40	18	1968	241
17	147	2.8	S	6.5	360	34	30	1970	238
18	158	3.0	ESE	6.4	210	37	30	1970	238
19	151	2.9	S	6.0	280	45	31	1971	238
20	157	1.9	S	5.0	30	40	31	1971	238
21	160	1.4	S	4.7	320	29	25	1973	238
22	160	1.2	S	4.4	210	29	18	1969	238
23	166	.9	S	4.0	60	29	4	1967	238
24	163	.8	S	3.9	120	34	24	1970	238
FOR THE MONTH									
	154	1.5	S	4.4		45			5778

*ALSO OCCURRED ON PRIOR DATES
-10 INDICATES A MISSING DIRECTION
**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)

SURFACE WIND DATA BY MONTH AND BY HOUR
USE SITE, WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1966-1973

AUGUST

HR	RESULTANT WIND DIR (DEG)	RESULTANT WIND SPD (KT)	PRVL DIR**	SCALAR MEAN SPD (KT)	PEAK GUST DIR (DEG)	PEAK GUST SPD (KT)	PEAK GUST DAY	PEAK GUST YR	TOTAL OBSNS
1	129	.7	S	3.4	30	22	3	1969*	246
2	113	.9	S	3.1	20	26	2	1967	247
3	119	.7	ESE	2.7	10	21	2	1967*	247
4	116	.7	ESE	2.4	130	30	3	1968	247
5	87	.4	S	2.3	80	21	5	1970	247
6	71	.5	E	2.1	30	21	2	1966	247
7	69	.5	S	2.0	360	24	2	1966	247
8	82	.7	S	3.0	360	24	2	1966	247
9	108	1.1	S	3.8	360	26	2	1966	246
10	145	1.4	S	4.3	130	25	10	1973	246
11	170	1.7	S	4.6	160	30	5	1970	246
12	179	2.3	S	5.1	180	30	5	1970	246
13	189	2.4	S	5.5	110	29	14	1971*	246
14	178	3.0	S	6.2	60	31	5	1972	246
15	168	3.1	S	6.6	150	28	14	1971	246
16	161	3.2	S	7.1	150	33	7	1969	246
17	155	3.3	SSE	7.0	360	37	1	1972	245
18	155	3.4	SSE	6.7	60	37	1	1972	245
19	159	2.7	S	5.8	120	52	24	1971	245
20	149	1.8	S	5.0	100	37	4	1970	245
21	162	1.6	S	4.8	30	33	4	1969	245
22	160	1.3	S	4.4	280	67	8	1971	244
23	160	.5	S	4.1	30	35	8	1971	244
24	143	.5	S	3.5	10	24	1	1967	244
	FOR THE MONTH								
	156	1.4	S	4.4		67			5900

*ALSO OCCURRED ON PRIOR DATES
-10 INDICATES A MISSING DIRECTION
**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)

SURFACE WIND DATA BY MONTH AND BY HOUR
ASO SITE, WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1966-1975

SEPTEMBER

HR	RESULTANT WIND DIR (DEG)	RESULTANT WIND SPD (KT)	PRVL DIR**	SCALAR MEAN SPD (KT)	PEAK GUST DIR (DEG)	PEAK GUST SPD (KT)	PEAK GUST DAY	PEAK GUST YR	TOTAL OBSNS
1	168	.7	S	.2	290	27	16	1968	235
2	154	.7	S	.1	290	29	16	1968	235
3	135	.4	S	.0	30	24	26	1970	235
4	118	.2	S	.0	20	25	10	1970	235
5	73	.5	SE	.1	10	25	26	1970	235
6	57	.4	N	.0	10	24	26	1970*	235
7	56	.5	NNE	.0	290	24	22	1970	235
8	76	.8	NNE	.0	290	27	22	1970	235
9	71	1.0	NNE	4.1	290	32	22	1970	237
10	92	.7	S	4.6	300	29	22	1970	237
11	133	.5	S	5.0	290	30	26	1971	237
12	192	1.1	S	5.2	110	29	21	1972	237
13	215	1.5	S	5.8	110	28	21	1972	237
14	214	1.9	W	6.1	130	29	21	1972	237
15	212	1.9	S	6.2	150	32	18	1970	237
16	202	1.9	S	6.2	270	32	15	1968	237
17	200	1.6	S	6.3	320	42	17	1971	236
18	187	1.4	S	6.0	360	40	4	1966	236
19	156	.9	S	5.1	270	36	17	1971	236
20	186	1.0	S	4.9	40	37	17	1971	236
21	226	1.1	S	4.2	300	25	16	1968	236
22	221	1.2	S	4.3	20	29	4	1969	236
23	203	1.1	S	4.1	10	27	26	1973	236
24	198	1.1	S	3.7	230	37	5	1970	236
	FOR THE MONTH								
	185	.7	S	3.4		42			5664

*ALSO OCCURRED ON PRIOR DATES
-10 INDICATES A MISSING DIRECTION
**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)

SURFACE WIND DATA BY MONTH AND BY HOUR
*SL SITE, WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1966-1973

OCTOBER

HR	RESULTANT WIND DIR (DEG)	RESULTANT WIND SPD (KT)	PRVL DIR**	SCALAR MEAN SPD (KT)	PEAK GUST DIR (DEG)	PEAK GUST SPD (KT)	PEAK GUST DAY	PEAK GUST YR	TOTAL OBSNS
1	231	.7	S	3.4	310	33	27	1971	241
2	241	.9	S	3.1	280	33	7	1970	241
3	264	.4	S	3.0	160	28	29	1971	241
4	284	.4	S	2.9	290	28	18	1971	241
5	325	.2	VNE	3.0	330	30	7	1970	242
6	13	.3	VNE	2.9	270	26	29	1967	242
7	21	.4	NE	2.6	270	28	29	1967	242
8	14	.6	VNE	3.3	290	30	26	1970	242
9	13	.9	VNE	4.4	290	34	26	1970	243
10	9	.8	VNE	5.1	30	32	29	1967	243
11	287	.5	S	5.4	290	35	26	1970	243
12	236	1.0	S	5.7	220	29	30	1972*	242
13	227	1.6	S	6.1	240	35	17	1971	242
14	232	1.9	S	6.4	260	35	7	1970	242
15	233	2.1	W	6.6	260	41	7	1970	242
16	233	2.0	W	6.5	210	38	29	1971	242
17	226	1.7	S	6.0	260	37	7	1970	239
18	210	1.2	S	4.7	250	36	7	1970	239
19	215	1.1	S	4.3	230	39	29	1971	239
20	223	1.3	S	3.9	260	39	7	1970	239
21	240	1.5	S	3.8	230	42	7	1970	238
22	252	1.4	S	3.8	340	40	7	1970	236
23	221	1.2	S	3.7	360	36	7	1970	238
24	235	1.1	S	3.6	320	30	26	1971	239
FOR THE MONTH	238	.8	S	4.4		42			5780

*ALSO OCCURRED ON PRIOR DATES
-10 INDICATES A MISSING DIRECTION
**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)

SURFACE WIND DATA BY MONTH AND BY HOUR
WSO SITE, WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1966-1973

NOVEMBER

HR	RESULTANT WIND DIR (DEG)	RESULTANT WIND SPD (KT)	PRVL DIR**	SCALAR MEAN SPD (KT)	PEAK GUST DIR (DEG)	PEAK GUST SPD (KT)	PEAK GUST DAY	PEAK GUST YR	TOTAL OBSNS
1	287	1.1	S	3.4	290	32	19	1970	236
2	288	.9	S	3.5	290	35	19	1970	236
3	302	.8	NNE	3.4	290	37	26	1970	236
4	288	.9	S	3.3	300	36	26	1973	236
5	306	.8	S	3.2	280	29	1	1971	237
6	315	.9	NNE	3.2	280	31	26	1970	237
7	308	.8	NNE	3.0	300	32	26	1973*	237
8	320	.7	NNE	3.1	310	34	19	1973	236
9	343	1.0	NNE	4.0	290	36	27	1972	236
10	350	1.1	NNE	4.8	300	34	8	1970	238
11	326	.9	NNE	5.3	280	40	19	1973	238
12	287	1.3	S	5.6	280	31	19	1973*	236
13	272	1.6	S	5.8	290	33	19	1973*	237
14	262	1.8	S	5.8	270	37	19	1973*	237
15	264	2.2	W	6.0	280	43	12	1972	237
16	257	2.1	W	6.0	280	38	12	1972	237
17	254	1.6	W	4.7	280	38	12	1972	236
18	254	1.1	WNW	4.2	290	39	12	1972	234
19	259	1.4	WNW	3.8	290	36	12	1972	235
20	274	1.3	W	3.6	280	35	19	1973	234
21	258	1.1	S	3.4	270	40	26	1973	235
22	270	1.0	S	3.5	310	35	26	1973	233
23	280	.9	S	3.4	280	35	27	1971	233
24	290	.9	S	3.5	280	33	27	1971*	234
	FOR THE MONTH								
	282	1.1	S	4.1		43			5663

*ALSO OCCURRED ON PRIOR DATES
-10 INDICATES A MISSING DIRECTION
**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)

SURFACE WIND DATA BY MONTH AND BY HOUR
WSO SITE, WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1966-1973

DECEMBER

HR	RESULTANT WIND DIR (DEG)	RESULTANT WIND SPD (KT)	PRVL DIR**	SCALAR MEAN SPD (KT)	PEAK GUST DIR (DEG)	PEAK GUST SPD (KT)	PEAK GUST DAY	PEAK GUST YR	TOTAL OBSNS
1	293	1.2	S	4.2	280	38	15	1970	237
2	302	1.0	NNE	4.0	-10	60	12	1971	237
3	320	.9	N	3.8	240	47	5	1972	237
4	310	1.0	S	3.8	180	31	5	1972*	237
5	316	1.1	NNE	3.8	240	41	5	1972	238
6	306	.8	S	3.7	240	44	5	1972	236
7	302	.7	NNE	3.5	10	60	15	1973	237
8	289	.6	S	3.5	240	51	5	1972	239
9	300	.7	NNE	4.3	250	51	5	1972	238
10	330	1.0	NNE	5.2	260	47	5	1972	237
11	326	1.2	NNE	5.8	270	47	5	1972	237
12	295	1.3	NNE	6.2	270	42	5	1972	237
13	279	1.7	S	6.5	270	44	5	1972	237
14	273	2.1	W	6.5	290	41	18	1973	237
15	276	2.3	W	6.5	300	43	18	1973	237
16	275	2.5	W	6.3	270	38	29	1972	237
17	279	2.0	W	5.2	270	44	29	1972	235
18	282	1.9	W	4.7	270	43	29	1972	235
19	280	2.0	WNW	4.8	270	43	29	1972	234
20	280	1.6	S	4.5	270	43	29	1972	233
21	287	1.4	WNW	4.2	270	40	29	1972*	232
22	294	1.1	NNE	4.2	270	35	5	1966	232
23	284	1.0	S	4.2	270	38	5	1966	231
24	286	1.0	S	4.0	280	40	14	1970	231
	FOR THE MONTH								
	290	1.3	NNE	4.7		60			5658

*ALSO OCCURRED ON PRIOR DATES
-10 INDICATES A MISSING DIRECTION
**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

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