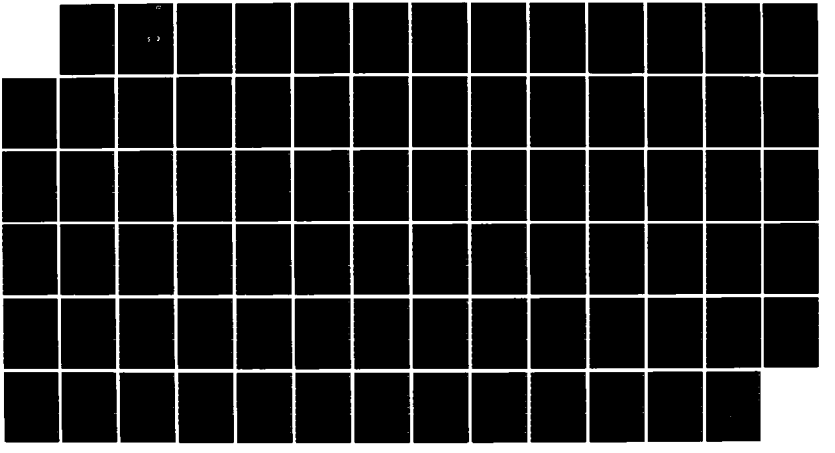
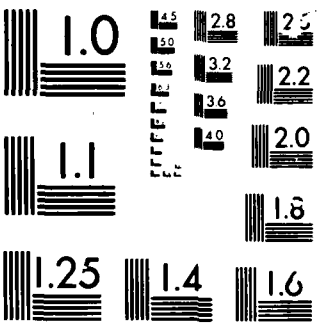
AD-A167 427 COMPARISON OF WINTER CLIMATIC DATA FOR THREE NEW HAMPSHIRE SITES(U) COLD REGIONS RESEARCH AND ENGINEERING LAB HANOVER NH J M GOVONI ET AL. MAR 86 1/1

UNCLASSIFIED CRREL-SR-86-5 F/G 4/2 NL





MICROCOPY CHART

Special Report 86-5

March 1986

US Army Corps
of Engineers
Cold Regions Research &
Engineering Laboratory

(12)

Comparison of winter climatic data for three New Hampshire sites

John W. Govoni and Sandra J. Smith

Prepared for
OFFICE OF THE CHIEF OF ENGINEERS

Approved for public release; distribution is unlimited.

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER Special Report 86-5	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) COMPARISON OF WINTER CLIMATIC DATA FOR THREE NEW HAMPSHIRE SITES		5. TYPE OF REPORT & PERIOD COVERED 6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) John W. Govoni and Sandra J. Smith		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS U.S. Army Cold Regions Research and Engineering Laboratory Hanover, New Hampshire 03755-1290		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 6.27.30A 4A762730AT42-SS-002
11. CONTROLLING OFFICE NAME AND ADDRESS Office of the Chief of Engineers Washington, D.C. 20314-1000		12. REPORT DATE March 1986 13. NUMBER OF PAGES 82
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS (of this report) Unclassified 15a. DECLASSIFICATION DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution is unlimited.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Atmospheric icing
Cold regions
Meteorological data

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This data report contains climatological measurements for the winters of 1980-81 and 1981-82 made at three sites in New Hampshire situated at elevations of 155 m, 870 m and 1910 m above sea level. Parameters measured included wind speed and direction, precipitation, temperature, humidity, and duration of icing events. Comparison of the data provides the opportunity to examine the influence of elevation on atmospheric icing occurrence and intensity. In New Hampshire, icing appears to occur only at elevations above about 900 m.

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

PREFACE

This report was prepared by John W. Govoni, Physical Science Technician, Snow and Ice Branch, Research Division, and Sandra J. Smith, Editorial Assistant, Technical Information Branch, Technical Services Division. The work was performed as part of DA Project 4A762730AT42, Design, Construction and Operations Technology for Cold Regions, Task Area SS, Work Unit 002, Mechanical Design for Icing Environments.

The authors thank Stephen Ackley and Walter Tucker for technical review of the report, Stephen Bowen and Edmund Wright for editorial review, and Edward Perkins and William Bates for illustration.

CONTENTS

ILLUSTRATIONS

COMPARISON OF WINTER CLIMATIC DATA FOR THREE NEW HAMPSHIRE SITES

John W. Govoni and Sandra J. Smith

INTRODUCTION

Over the past several years there has been growing interest in icing conditions at high elevations, especially on high-power transmission lines in the Northeast. Extensive damage has been caused by ice buildup on power lines and towers, and occasionally complete collapse of transmission systems has occurred. There is thus a need for basic meteorological data that can be related to icing rates and conditions in icing-susceptible regions. This information is necessary for the design and location of proposed power line systems (Howe 1982-1983), wind power generation facilities, ski area lift facilities and microwave relay towers.

During the months of October 1980 through April 1982, we measured wind speed and direction, temperature, precipitation and humidity while monitoring icing events near the summit of Loon Mountain, New Hampshire. The same data were collected at the Cold Regions Research and Engineering Laboratory (Hanover, N.H.) and at the summit of Mt. Washington, N.H. In this report we compare the meteorological and icing parameters at these three locations.

Loon Mountain is located in Lincoln (44° 07' N, 71° 30' W), and has an elevation of 934 m. The data collection site is located at the top of the Loon Mountain Ski Area at an elevation of about 870 m. The site's exposure is roughly 270° from southwest to southeast. The site is a fairly level knoll with vegetation consisting mainly of spruce, balsam, and yellow birch, all under 8 m high. The various sensors were located so that there was minimal interference from buildings or trees.

The site was chosen for several reasons. Its elevation is approximately the maximum reached by existing or proposed power line corridors. Information obtained from earlier studies* shows that 2800 to 3000 ft (850 to 900 m) is the minimum elevation for atmospheric icing on mountains in the Northeast. In addition, this site is accessible by a gondola lift that

*C. Ryerson, University of Vermont, personal communication, 1985.

operates year-round, and the heated ski patrol building on the summit provides an ideal location for instruments that must be kept warm.

The second location, the Cold Regions Research and Engineering Laboratory (CRREL), is located in Hanover (43° 43' N, 72° 16' W). The instrumentation site is in an open field (elevation 155 m) west of the main building and adjacent to several test cells constructed in 1972 to study the effects of wastewater on a variety of vegetation and soil types. The meteorological site was established to collect climatic information for the study, and since that time has been in continuous operation.

The third site is on the summit of Mount Washington (44° 16' N, 71° 18' W), about 1,910 m above sea level. The Mt. Washington Observatory, located at the summit, is a first-order National Weather Service Observation Station. The observatory is in the clouds more than half the time and has prevailing winds from the west and west-northwest. The most severe storm winds, however, are usually from the southeast, and quite often exceed 160 km/hr.

Minimum temperatures at the summit are not as extreme as those in the surrounding lowlands. However, the observatory experiences very rapid temperature changes, and below-freezing temperatures are recorded every month of the year. This combination of year-round low temperatures and the presence of liquid water droplets in the air makes it an ideal outdoor laboratory for studying atmospheric icing on structures (Govoni and Ackley 1983, 1984).

The CRREL and Mt. Washington sites were chosen because their elevations are about 700 m below and 1100 m above the elevation of Loon. This data set thus provides an opportunity to examine the influence of elevation on icing intensity and other meteorological parameters. In addition, the Mt. Washington site is used for basic studies relating icing rate to in-cloud parameters and for testing a variety of icing sensors.

An explanation of the parameters measured and equipment used at all three sites is given in Appendix A.

DISCUSSION

Wind Speed and Direction

To rapidly establish the prevailing wind speed and direction, wind rose diagrams for each month were plotted using a computer program. Each wind rose (App. B, Fig. B1-B6) shows the distribution of wind direction and

magnitude. The vectors give the directional percentage of wind occurrence (length of the thin line) and wind speed (length of the thick line) as described by Bates (1981). Appendix B (Table B1) also contains the monthly wind data for the three sites. Daily average wind speed and direction, peak gust and direction, and the time (LST) when the gusts occurred are included in this table. Figure 1 is a log-log plot of the average wind speed vs elevation for the three sites. A reasonable power law relationship appears to exist between wind speed and elevation.

The GMQ11 wind set at Loon was mounted on a metal pole approximately 3.5 m above the roof of a 10-m-high wooden observation tower. This provided a 360° unobstructed view for obtaining wind speed and direction. During the 14 months of study at Loon, the lowest average monthly wind speed (1.8 m/s) was recorded in October 1981 and the highest (8.9 m/s) in February 1981. Wind gusts of 20.1 m/s or greater occurred during every month. The highest observed wind speed occurred on 25 October 1981 when a peak gust of 43.4 m/s was measured. The wind direction during these events was predominantly north-northwest. Wind data for Loon are given in Table B1 and Figures B1 and B2.

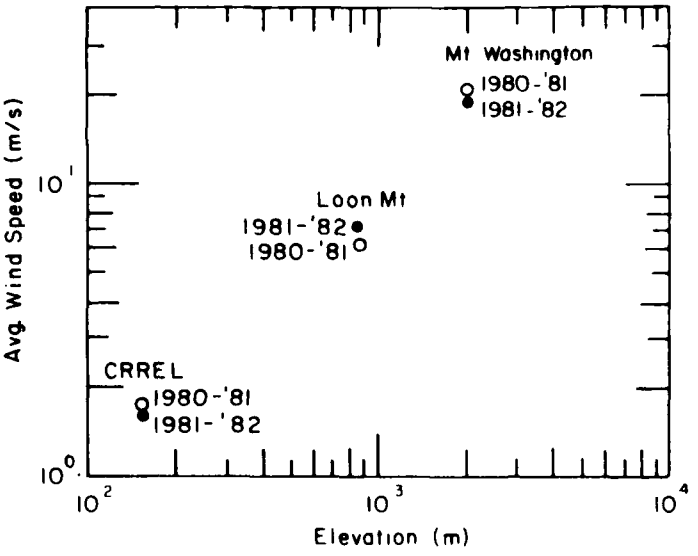


Figure 1. Average wind speed versus elevation for the three sites.

Wind speed and direction at CRREL were also recorded by a GMQ11 wind set mounted roughly 4 m above the ground on an instrument shelter. Wind roses were also drawn for the CRREL data for the same time period as for the Loon data (see App. B, Fig. B3 and B4). The lowest average monthly wind speed at CRREL (1.0 m/s) was recorded in October 1981 and the highest (2.5 m/s) was recorded in April 1982. During the same 14-month period, peak hourly gusts of 6 m/s occurred every month. The predominant wind direction, as on Loon Mountain, was from the north-northwest.

Data collection was different on Mt. Washington than on the other two sites, mainly because of strong winds and continuous icing conditions.

Wind speed was measured by a heated, vaned pitot-static tube. The direction of the wind, however, was obtained from a separate vaned indicator. Both instruments were mounted on metal poles 1.5 m above the observatory's 10-m tower. To collect continuous data at the observatory, sensors must be heated and have as few moving parts as possible, because of the extreme icing conditions on the summit. The lowest average monthly wind speed for the 14-month period was recorded in October 1981. The highest peak gust occurred on 4 December 1981. Peak gusts of 18 m/s or greater occurred almost every month. Prevailing winds were from the west and west-northwest.

Precipitation

A 20.3-cm weighing-recording rain gage was used both at Loon Mountain and the CRREL site for measuring precipitation. At the Mt. Washington site a 20.3-cm-diameter, 91.4-cm-long non-recording rain gage was used. Daily precipitation amounts are included in Table B1. At the Loon Mountain and Mt. Washington sites all the precipitation is in water or water equivalent units. At CRREL, however, in addition to water equivalent data, actual snowfall amounts were measured and recorded as snow depth on the ground. Appendix C shows accumulated precipitation amounts in water equivalent for the three sites.

The precipitation totals for the three sites were as follows:

Site	Precipitation (mm)
Loon Mt., 1980-81	645
Loon Mt., 1981-82	439.6*
CRREL, 1980-81	390.9
CRREL, 1981-82	445.5
Mt. Washington, 1980-81	1,382.9
Mt. Washington, 1981-82	1,214.5

Temperature and humidity

Different instruments were used at the three sites for measuring air temperature and humidity. At Loon Mountain, a recording hygrothermograph set in a Thomson shelter 1.3 m above the ground made a continuous record of the air temperature and humidity. Air temperature and humidity were measured by two different methods at CRREL. The first method used a General Eastern 650/611A (lithium chloride) probe located 10 m above the ground surface. The second method used a General Eastern 1200 (Frost Mirrors)

*Approximately 27 days of data missing.

probe located 2 m above the ground surface. On Mt. Washington, air temperature was obtained with a Bourdon tube that recorded on a Foxboro thermograph. Humidity readings were recorded every three hours with a sling psychrometer. A summary of the monthly temperatures for the three sites from October 1980 to April 1981 and October 1981 to April 1982 is given in Table B1.

The average temperatures for the three sites were as follows:

Site	Temperature (°C)
Loon Mt., 1980-81	-4.0
Loon Mt., 1981-82	-5.0
CRREL, 1980-81	-1.0
CRREL, 1981-82	-1.8
Mt. Washington, 1980-81	-10.5
Mt. Washington, 1981-82	-10.6

Appendix D contains plots of cumulative freezing-degree-day records and running daily maximum and minimum air temperatures at the three sites for the two winter seasons. It is clear that the fastest growth in the freezing-degree-day curves corresponds to the lowest temperature in the air temperature curves.

Icing

One icing event during the winter of 1980-81 and two events during the winter of 1981-82 were observed at the Loon Mountain site by the ski patrol personnel. Because of problems associated with visiting a semi-remote site, actual physical measurements were not made by CRREL personnel. However, on 1 October 1984 a Rosemount ice detector was installed at the Loon site to monitor and measure icing rates and intensities.

During the 1980-81 and 1981-82 winter months no detectable icing was recorded at the CRREL weather station.

The summit of Mount Washington is known for the heavy icing it receives during the winter months. Appendix E is a list of icing events that occurred during the winters of 1980-81 and 1981-82. The type of ice was not recorded for each icing event, but 90% of them produced rime icing.

CONCLUSIONS AND RECOMMENDATIONS

We are currently establishing another site, on the summit of Cannon Mountain, New Hampshire, which has an elevation of 1231 m above sea level.

We expect Cannon to have more icing events than Loon, but fewer than Mt. Washington, based solely upon the elevation differences. Preliminary investigation seems to indicate that light to moderate icing in the White Mountains starts at or around the 900 m elevation mark.

There are significant problems associated with collecting meteorological data from unmanned remote mountaintop sites. Equipment malfunctions and power losses are two major causes for loss of data. With conventional equipment, these problems are not usually detected until the weekly visit to the site is made.

For future studies, state-of-the-art data loggers and sensors will be used to collect data at our remote sites. Coupled with telephone modems and back-up tape recorders, this equipment should minimize loss of data. By way of direct telephone line from the data logger at the site to the CRREL computer, we can receive the data each day in a variety of formats. Also, the sensors at the site can be interrogated at any time from any computer terminal at CRREL. Sensors and other electronic equipment that are not functioning properly can be rapidly detected and repaired with minimal loss of data. In addition, if our ice detectors indicate significant icing, immediate on-site visits can be made to measure the amount and type of ice.

LITERATURE CITED

Bates, R. (1981) Meteorological measurements at Camp Ethan Allen Training Center, Vermont. In Proceedings of Snow Symposium I, USA Cold Regions Research and Engineering Laboratory, pp. 77-112.

Govoni, J.W. and S.F. Ackley (1983) Field measurements of combined icing and wind loads on wires. In Proceedings of 1st International Workshop On Atmospheric Icing of Structures, USA Cold Regions Research and Engineering Laboratory, Special Report 83-17, pp. 205-215.

Govoni, J.W. and S.F. Ackley (1984) Combined icing and wind loads on a simulated power line test span. In Proceedings of 2nd International Workshop, Atmospheric Icing of Structures, Trondheim, Norway, in press.

Howe, J. (1982, 1983) Measurements and analysis of icing and wind loads on wires. Data reports to CRREL, Mt. Washington Observatory (unpublished).

Ryerson, C. (1982) Rime ice climatology and acidity with elevation in the northern Green Mountains, Vermont. Research proposal, University of Vermont, Burlington (unpublished).

Table A1. Explanation of meteorological parameters measured at Loon Mountain.

Parameter	Abbreviation	Explanation	Sensor	Unit of measure
Precipitation	PRECIP	Amount of liquid precipitation, evaluated for an hourly total.	Weighing type 8-in. recording rain gage	Millimeters (to nearest 0.01 mm)
Dry bulb temperature	DB TEMP	Ambient temperature, evaluated on the hour.	Recording hygrothermograph	Degrees C (to nearest 0.5 degree)
Relative humidity	RH	Relative humidity of ambient temperature, evaluated on the hour.	Recording hygrothermograph	Percent
Wind speed	WS	Wind speed and direction measured approximately 20 meters above surface, evaluated for an hourly average, peak gusts with time and direction on a daily and monthly basis, and prevailing wind direction for the day.	GMQ11 wind set	Degrees with reference to true north (to nearest 10 degrees)
Wind direction	WD		GMQ11 wind set	Miles per hour (mph)

Table A2. Explanation of meteorological parameters measured at CRREL.

Parameter	Abbreviation	Explanation	Sensor	Unit of measure
Station pressure	STA PRESS	Atmospheric pressure at site, evaluated as max and min for the day.	Recording microbarograph	Millibars (to nearest 0.1 mb)
Precipitation	PRECIP	Amount of liquid precipitation, evaluated for a daily total.	Weighing type 8-in. recording rain gage	Millimeters (to nearest 0.1 mm)
Dry bulb temperature	DB TEMP	Ambient temperature, evaluated as daily max, min and mean.	General Eastern 650/611 & 1200 m/s	Degrees C (to nearest 0.1 degree)
Relative humidity	RH	Relative humidity of ambient temperature, evaluated as daily max, min and mean.	General Eastern 650/611 & 120 m/s	Percent
Snow depth	SNOW DEP	Amount of snow accumulation, measured when site was visited.	Snow measuring stake	Centimeters (to nearest 0.5 cm)
Wind speed	WS	Wind speed and direction measured 4 meters above surface, evaluated for an hourly average, peak gusts with time and direction on a daily and monthly basis, and prevailing wind direction for the day.	GMQ11 wind set WS101 Hot crosswire 200	Miles per hour (mph) Meters per second (m/s) Meters per second (m/s)
Wind direction	WD		GMQ11 wind set	In degrees with reference to true north (to nearest 10 degrees) except peak wind when WS101 and 200 were used.
Vertical Eppley radiation	VERT	Total incoming solar radiation falling on a horizontal plane, evaluated for an hourly average.	Eppley pyrheliometer	W hr/m^2
Inverted Eppley radiation	INV	Reflected incoming solar radiation falling on a horizontal plane, evaluated for an hourly average	Eppley pyrheliometer	W hr/m^2

Table A3. Explanation of meteorological parameters measured at Mt. Washington.

Parameter	Abbreviation	Explanation	Sensor	Unit of measure
Precipitation	PRECIP	Amount of liquid precipitation, evaluated at 3-hr intervals.	8-inch-diameter, 3-foot-long nonrecording rain gage	Inches (to nearest 0.01 in.)
Temperature	TEMP	Ambient temperature, evaluated on the hour.	Foxboro thermograph	Degrees F (±2 degrees)
Relative humidity	RH	Relative humidity of ambient temperature, evaluated every 3 hr.	Sling psychrometer	Percent
Snow depth	SNOW DEP	Amount of snow accumulation.	Estimated	Inches (to nearest inch)
Wind speed	WS	Wind speed and direction measured approximately 10 meters above surface, evaluated for an hourly average, peak gusts with time and direction on a daily and monthly basis, and prevailing wind direction for the day.	Heated vaned pitot static tube	Miles per hour (mph)
Wind direction	WD		Separate heated wind vane	Degrees with reference to true north (±5 degrees)

Table B1. Monthly meteorological summaries.

OCTOBER 1980

LOON

Date	Temperature (°C) Max	Min	Mean	Rel. Hum. % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	14.5	8.0	12.5	98	77	88	10.5	I*	I	I	I	I	
2	11.0	6.5	8.5	100	92	100	8.5	I	I	I	I	I	12.0
3	11.5	6.5	9.0	100	95	100	9.0	I	I	I	I	I	10.5
4	8.0	3.5	5.5	100	100	100	5.5	I	I	I	I	I	15.0
5	9.0	3.5	6.0	100	73	87	4.0	I	I	I	I	I	
6	10.0	2.0	6.0	100	57	83	3.5	I	I	I	I	I	
7	8.0	2.0	5.0	100	71	85	2.5	8.5	190	14.5	180	2215	
8	11.0	3.0	7.0	100	71	87	5.0	16.5	190	35.0	210	2328	
9	7.0	- 3.5	2.0	92	62	77	- 1.5	14.0	330	38.0	230	0011	
10	10.0	- 3.5	3.0	82	35	56	- 5.6	9.0	300	24.0	360	0223	
11	8.0	3.5	6.0	100	49	96	5.5	8.5	180	27.0	180	0854	10.2
12	6.5	0.0	3.0	100	100	100	3.0	9.5	300	30.0	330	1932	6.50
13	0.0	- 3.0	- 1.5	100	84	95	- 2.5	14.0	300	34.0	300	0251	
14	- 0.5	- 4.0	- 2.0	100	68	84	- 4.5	17.0	330	42.0	330	0841	
15	6.5	- 3.5	1.5	90	46	66	- 4.0	7.0	270	28.0	010	0243	
16	7.5	1.0	4.0	100	60	82	1.5	10.5	180	19.0	180	1147	
17	13.0	5.5	9.0	100	100	100	9.0	9.5	180	30.0	180	2309	
18	14.0	9.5	11.5	100	100	100	11.5	16.0	200	34.0	190	0217	16.6
19	9.5	3.0	6.0	100	64	85	3.5	I	I	I	I	I	
20	5.0	- 3.5	1.0	100	71	96	0.5	13.0	270	35.0	240	1643	.8
21	1.5	- 4.0	- 1.5	100	100	100	- 1.5	12.5	220	23.0	210	2222	
22	2.0	- 4.5	- 1.5	100	60	80	- 4.5	13.5	320	36.0	300	0605	
23	- 2.0	- 5.0	- 4.0	98	77	85	- 5.0	13.0	350	44.0	350	0738	
24	6.0	- 4.0	1.0	100	55	73	- 3.5	11.0	180	21.0	320	0105	
25	8.0	- 2.0	3.0	100	82	94	2.0	19.5	090	97.0	050	1942	43.0
26	7.0	- 2.5	2.5	I	I	I	I	26.0	240	60.0	220	0837	8.9
27	- 1.0	- 6.5	- 4.0	100	87	97	- 4.5	14.5	270	38.0	300	0030	
28	- 1.5	- 7.5	- 4.5	90	61	78	- 8.0	10.5	210	28.0	330	2353	
29	- 2.0	- 5.5	- 4.0	93	74	85	- 6.0	13.5	320	59.0	310	0920	
30	3.0	- 4.0	- 0.5	86	56	70	- 5.5	10.0	330	32.0	320	0105	
31	0.0	- 4.5	- 2.5	100	62	84	- 5.0	14.5	230	40.0	230	1947	
Monthly Ave =			2.8			87	1.0	13.0	290		[illegible]	[illegible]	123.5 Total
Max =	14.5		12.5	100						97.0	050	1942	
Min =		-7.5	- 4.5		35								

† - Conversion mph to m/s, mph x .447
I* - Incomplete data

Table B1 (cont'd).

NOVEMBER 1980

LOON

Date	Temperature (°C) Max	Min	Mean	Rel. Hum. % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	- 4.5	- 9.0	- 7.0	100	64	82	-10.5	13.5	300	34.0	330	0307	
2	I*	I	I	I	I	I	I	14.0	320	35.0	340	1918	
3	I	I	I	I	I	I	I	7.0	340	19.0	360	0007	
4	4.0	- 2.0	2.0	100	78	64	- 6.0	**	**	**	**	**	
5	3.0	- 8.0	- 2.5	100	I	I	I	**	**	**	**	**	
6	- 2.5	- 9.5	- 6.0	98	I	I	I	**	**	**	**	**	
7	2.0	- 3.0	- 0.5	100	84	98	- 1.0	**	**	**	**	**	4.50
8	3.0	- 9.0	- 3.0	100	60	84	- 5.5	**	**	**	**	**	5.70
9	1.5	- 9.0	- 4.0	100	20	68	- 9.0	**	**	**	**	**	3.50
10	1.0	- 8.0	- 3.5	100	91	96	- 4.0	**	**	**	**	**	5.30
11	- 7.0	- 8.0	- 7.5	100	100	100	- 7.5	**	**	**	**	**	
12	- 6.0	- 7.5	- 7.0	100	100	100	- 7.0	**	**	**	**	**	Total
13	- 1.5	- 6.0	- 4.0	100	46	90	- 5.5	**	**	**	**	**	precip
14	0.5	- 5.5	- 2.5	100	76	92	- 3.5	**	**	**	**	**	from
15	- 3.5	- 8.5	- 6.0	96	61	76	- 9.5	**	**	**	**	**	11-19 Nov
16	- 8.0	-11.5	-10.0	93	70	86	-12.0	**	**	**	**	**	22.8
17	- 1.0	-11.5	- 6.5	100	37	65	-11.5	**	**	**	**	**	
18	- 3.0	- 7.5	- 5.0	100	94	99	- 5.0	**	**	**	**	**	
19	- 7.0	-10.0	- 8.5	100	70	92	- 9.5	**	**	**	**	**	
20	- 0.5	- 6.5	- 3.5	100	69	86	- 5.5	**	**	**	**	**	
21	- 1.5	- 4.0	- 3.0	100	62	81	- 6.1	**	**	**	**	**	
22	- 2.0	- 4.5	- 3.0	100	40	87	- 5.0	**	**	**	**	**	
23	6.0	- 2.0	2.0	42	13	24	-16.5	**	**	**	**	**	
24	4.0	0.0	2.0	100	20	73	- 2.5	**	**	**	**	**	31.0
25	4.0	- 6.0	- 1.0	100	100	100	- 1.0	**	**	**	**	**	11.0
26	5.0	-10.0	- 7.5	100	38	74	-11.5	**	**	**	**	**	
27	3.0	-10.5	- 4.0	80	12	33	-18.0	**	**	**	**	**	
28	3.0	- 4.5	- 1.0	100	23	82	- 3.5	**	**	**	**	**	22.30
29	3.0	- 4.0	- 0.5	100	78	86	- 2.5	**	**	**	**	**	
30	- 3.0	- 5.5	- 4.0	98	76	88	- 5.5	**	**	**	**	**	
31													
Monthly Ave =			- 4.0			81	- 7.0						106.10 Total
Max =	6.0		2.0	100									
Min =		-11.5	-10.0		12								

† - Conversion mph to m/s, mph x .447
I* - Incomplete data
** - Data missing due to damaged wind sensor

Table B1 (cont'd).

DECEMBER 1980 LOON

Date	Temperature (°C) Max	Min	Mean	Rel. Hum. % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	2.0	- 3.5	- 1.0	96	68	78	- 4.5	**	**	**	**	**	
2	4.5	- 0.5	2.0	100	72	85	- 0.5	**	**	**	**	**	
3	2.0	-15.5	- 7.0	100	90	97	- 7.5	**	**	**	**	**	
4	-12.5	-18.0	-15.5	90	58	70	-20.0	**	**	**	**	**	
5	- 8.5	-17.0	-13.0	90	66	82	-15.0	**	**	**	**	**	
6	0.0	-11.5	- 6.0	100	73	85	- 8.0	**	**	**	**	**	1.50
7	4.5	- 2.5	1.0	97	22	51	- 8.0	**	**	**	**	**	.80
8	5.5	0.0	3.0	100	74	92	2.0	**	**	**	**	**	
9	0.0	- 8.0	- 4.0	100	70	82	- 6.5	**	**	**	**	**	.70
10	- 3.5	-10.0	- 7.0	100	81	93	- 8.0	10.5	300	36.0	280	2354	
11	-10.0	-21.5	-16.0	95	54	69	-20.5	12.0	360	46.0	360	0034	
12	-10.0	-16.0	-13.0	98	66	87	-15.0	11.0	240	23.0	210	2112	3.70
13	- 3.0	-17.0	-10.0	100	80	87	-12.0	13.0	360	32.0	290	0647	.50
14	-11.5	-23.5	-17.5	92	62	82	-20.0	13.0	330	46.0	330	2005	2.40
15	-12.5	-25.5	-19.0	100	70	81	-21.5	8.5	210	32.0	340	0037	.30
16	- 3.5	-12.5	- 8.0	100	98	99	- 8.0	7.5	120	22.0	110	1730	7.70
17	- 7.0	-17.5	-12.5	100	26	70	-17.0	9.0	320	28.0	010	1118	
18	- 6.5	-14.5	-10.5	100	34	76	-14.0	13.5	340	38.0	010	2323	
19	- 6.0	-24.0	-15.0	100	70	84	-17.0	12.0	360	37.0	020	0057	3.70
20	-18.5	-24.0	-21.5	76	66	63	-25.0	10.0	320	24.0	020	1232	1.10
21	-14.0	-21.5	-17.5	82	66	75	-21.0	11.0	330	32.0	310	1050	
22	- 9.0	-19.0	-14.0	100	61	80	-17.0	9.5	300	24.0	300	0910	
23	- 5.0	-12.0	- 8.5	100	90	99	- 8.5	10.5	210	24.0	210	0812	
24	- 3.0	-20.0	-11.5	100	68	88	-13.0	8.0	240	24.0	320	2348	5.20
25	-20.0	-34.5	-27.0	87	70	75	-30.0	17.0	020	44.0	360	0757	.50
26	-12.0	-27.0	-19.5	89	58	79	-22.5	9.5	220	26.0	210	1635	
27	- 7.0	-14.5	-11.0	88	61	75	-14.5	5.0	170	10.0	210	1947	
28	0.0	-12.0	- 6.0	100	57	91	- 7.5	12.0	220	26.0	210	1537	.80
29	4.0	0.0	2.0	100	100	100	2.0	12.0	240	27.0	250	0227	
30	2.0	-18.0	- 8.0	100	71	86	-10.0	14.5	040	39.0	060	0911	
31	- 8.0	-20.0	-14.0	80	45	68	-18.5	14.0	020	47.0	010	0517	
Monthly Ave =			-10.5			82	-13.0	11.4	330				28.9 Total
Max =	5.5		3.0	100						47.0	010	0517	
Min =		-34.5	-27.0		22								

† - Conversion mph to m/s, mph x .447

** - Data missing due to damaged wind sensor

Table B1 (cont'd).

JANUARY 1981 LOON

Date	Temperature (°C) Max	Min	Mean	Rel. Hum. % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)+ Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	- 6.5	-10.5	- 8.5	99	44	76	-12.0	8.5	210	19.0	220	1134	
2	- 4.5	-24.5	-14.5	98	70	88	-16.0	9.0	340	36.0	010	2137	2.30
3	-18.5	-27.5	-24.5	79	54	64	-29.5	10.0	350	33.0	330	0204	
4	-23.0	-29.0	-26.0	80	65	70	-30.0	14.0	330	55.0	360	2244	
5	-12.0	-26.0	-19.0	80	55	73	-22.5	15.5	360	49.0	010	1127	
6	- 9.0	-17.0	-13.0	96	48	69	-17.5	10.5	210	18.0	I*	2218	.50
7	- 4.9	-18.5	-11.5	100	70	94	-12.0	11.5	300	30.0	310	2240	6.40
8	-18.5	-24.0	-21.0	85	69	77	-24.0	13.5	350	39.0	340	0841	
9	-14.5	-22.0	-18.5	78	58	71	-22.5	8.0	230	25.0	360	0201	
10	-11.0	-25.0	-18.0	88	61	69	-20.5	9.5	030	40.0	020	2335	
11	-21.0	-27.0	-24.0	80	66	76	-27.0	15.5	320	46.0	010	0028	
12	I	I	I	I	I	I	I	7.5	360	24.0	010	0434	
13	-12.5	-19.5	-16.0	68	33	47	-25.0	12.0	030	26.0	060	0949	
14	-10.0	-19.5	-15.0	62	35	50	-23.0	10.0	330	25.0	360	0445	
15	- 5.0	-14.5	-10.0	78	52	64	-15.5	10.0	310	16.0	200	0717	
16	- 5.5	-11.5	- 8.5	100	57	76	-12.0	9.0	230	16.0	230	1304	.30
17	-10.0	-20.0	-15.0	100	80	92	-16.0	11.0	030	31.0	010	1855	.90
18	- 9.5	-20.0	-15.0	100	74	87	-16.5	19.0	010	65.0	360	2255	.90
19	- 3.0	- 9.0	- 6.0	100	62	83	- 8.5	23.0	360	60.0	360	0602	.90
20	- 4.0	-16.5	-10.0	99	44	66	-15.0	17.5	020	60.0	010	0211	
21	- 5.5	-14.5	-10.0	48	20	37	-22.0	6.0	310	23.0	210	2257	
22	- 2.7	- 8.0	- 5.0	100	26	64	-11.0	14.0	220	33.0	210	0321	
23	- 5.5	- 9.5	- 7.5	100	74	90	- 9.0	16.0	020	36.0	020	1107	
24	- 5.0	-11.5	- 8.0	100	65	86	-10.0	13.0	360	28.0	010	2231	
25	- 3.5	-13.0	- 8.0	98	44	70	-12.5	14.0	230	39.0	020	0353	
26	2.0	- 5.0	- 1.5	88	56	68	- 6.5	17.5	240	34.0	240	2342	
27	1.0	- 4.0	- 1.5	86	74	87	- 3.5	17.0	270	34.0	270	1754	
28	- 4.0	-11.5	- 7.5	100	44	64	-13.0	11.0	320	29.0	300	0247	
29	- 8.5	-15.5	-12.0	96	43	73	-16.0	14.0	030	45.0	020	2022	
30	-15.0	-19.5	-17.5	94	70	82	-20.0	19.0	330	46.0	010	0820	
31	- 2.5	-18.0	-10.0	78	14	38	-22.0	13.5	360	34.0	040	0853	
Monthly Ave =			13.0			72	-17.0	13.0	010				12.20 Total
Max =	2.0		- 1.5	100						65.0	360	2255	
Min =		-29.0	-26.0		14								

+ - Conversion mph to m/s, mph x .447
I* - Incomplete data

Table B1 (cont'd).

LOON

FEBRUARY 1981

Date	Temperature (°C) Max	Min	Mean	Rel. Hum. % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	- 0.5	- 4.0	- 2.0	100	14	44	-13.0	21.0	230	51.0	220	1822	5.00
2	I*	I	I	I	I	I	I	29.0	220	84.0	210	1439	57.00
3	6.0	-13.0	- 3.5	100	68	86	- 5.5	14.0	320	34.0	300	0215	
4	-11.0	-19.5	-15.0	82	58	72	-19.0	9.0	260	20.0	270	1328	
5	-13.5	-19.0	-16.0	83	58	75	-19.5	11.0	330	29.0	310	1512	
6	-12.0	-18.0	-15.0	72	36	58	-21.5	17.0	240	30.0	220	1504	
7	- 5.0	-12.0	- 8.5	97	62	83	-11.0	15.0	260	36.0	220	2124	
8	- 2.0	- 7.0	- 4.5	100	52	78	- 8.0	11.0	150	29.0	110	1132	
9	- 2.0	-12.0	- 7.0	100	80	94	- 8.0	19.0	320	50.0	330	0258	
10	- 4.0	-12.5	- 8.0	90	53	74	-12.0	16.0	220	30.0	230	1217	
11	9.5	- 6.5	1.5	100	76	99	1.5	28.0	200	90.0	200	1733	56.20
12	2.0	-18.5	- 8.5	100	40	61	-15.0	17.0	350	I*	I	I	.40
13	- 7.5	-19.0	-13.5	64	34	51	-21.5	13.0	200	25.0	230	1804	
14	- 3.0	-13.0	- 5.0	87	36	51	-13.5	15.0	260	40.0	010	1852	
15	- 3.0	-11.5	- 7.0	88	39	64	-18.5	16.0	180	27.0	230	1948	
16	5.5	- 5.0	0.0	75	40	52	- 8.5	19.0	220	42.0	250	2353	
17	7.5	2.5	5.0	100	54	82	2.0	20.0	260	48.0	250	0026	
18	10.0	3.0	6.5	100	50	80	3.5	15.0	270	25.0	230	2123	
19	9.0	4.5	7.0	100	74	88	5.0	14.0	200	31.0	210	2333	
20	7.0	5.5	6.0	100	100	100	6.0	20.0	160	57.0	140	2037	28.00
21	7.5	4.0	5.5	100	100	100	5.5	17.0	140	55.0	130	0031	7.00
22	11.0	- 1.0	5.0	100	42	86	3.0	10.0	140	22.0	180	0128	
23	11.0	- 1.0	5.0	100	16	33	-10.0	13.0	180	36.0	150	1023	
24	I	I	I	I	I	I	I	19.0	130	49.0	150	0654	28.20
25	I	I	I	I	I	I	I	20.0	080	46.0	080	0955	25.70
26	I	I	I	I	I	I	I	20.0	070	41.0	070	2351	4.70
27	I	I	I	I	I	I	I	17.0	060	40.0	050	0648	
28	- 1.0	- 4.5	- 2.5	100	56	84	- 5.0	16.0	190	38.0	210	1430	3.60
29													
30													
31													
													215.80 Total
Monthly Ave =			- 3.0			74	- 8.0	17.0	210				
Max =	11.0		7.0	100						90.0	200	1733	
Min =		-19.5	-16.0		14								

† - Conversion mph to m/s, mph x .447

I* - Incomplete data

Table B1 (cont'd).

MARCH 1981 LOON

Date	Temperature (°C) Max	Min	Mean	Rel. Hum. % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)+ Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	- 2.0	- 3.5	- 2.5	100	86	94	- 3.5	21.0	350	48.0	360	1017	2.00
2	1.0	- 5.5	- 2.5	100	70	88	- 4.5	15.0	300	29.0	250	1604	
3	- 5.5	-13.5	- 9.5	94	76	83	-12.0	21.0	360	46.0	010	1103	
4	- 4.5	-13.5	- 9.0	82	61	73	-13.0	15.0	330	48.0	020	0032	
5	- 1.5	-10.5	- 5.0	77	56	66	-11.5	14.0	060	30.0	350	0005	
6	- 1.5	- 5.4	- 4.0	100	67	89	- 5.5	14.0	050	28.0	060	0254	1.00
7	- 0.5	- 3.0	- 2.0	100	42	97	- 2.5	13.0	060	24.0	060	0715	2.80
8	- 2.0	- 4.5	- 3.0	92	84	88	- 4.5	12.0	020	29.0	050	2304	
9	I*	I	I	I	I	I	I	12.0	020	30.0	360	2336	
10	- 2.0	- 6.0	- 4.0	96	79	90	- 5.5	17.0	340	33.0	350	1819	.30
11	- 2.0	- 5.5	- 4.0	100	78	87	- 6.0	9.0	330	26.0	350	2204	1.20
12	- 2.0	- 7.0	- 4.5	88	66	80	- 7.5	13.0	290	25.0	200	2254	
13	- 0.5	- 7.5	- 4.0	100	66	85	- 6.0	18.0	250	43.0	270	0218	.50
14	0.0	-11.0	- 5.5	100	68	77	- 9.0	24.0	300	73.0	340	1950	
15	- 1.0	-13.5	- 7.0	93	68	79	-10.0	22.0	240	61.0	330	0001	
16	1.0	- 5.0	- 2.0	100	59	73	- 6.0	18.0	260	39.0	270	1157	
17	- 6.0	-14.0	-10.0	78	45	57	-17.0	22.0	290	52.0	290	1427	
18	- 6.5	-14.5	-10.5	78	43	64	-17.0	24.0	270	57.0	270	0811	
19	- 3.0	-13.5	- 8.0	74	41	58	-15.0	12.0	310	30.0	290	0121	
20	- 5.0	- 8.5	- 7.0	100	54	78	-10.0	7.0	020	26.0	200	0821	5.00
21	- 1.5	- 5.5	- 3.5	99	62	86	- 5.5	13.0	340	32.0	330	1123	1.50
22	0.5	- 5.0	- 2.5	69	46	57	-10.0	14.0	190	21.0	260	1728	
23	3.0	- 5.0	- 1.0	64	40	55	- 9.0	13.0	300	22.0	360	0036	
24	1.0	- 1.5	0.0	87	54	68	- 5.0	14.0	350	26.0	330	0653	
25	1.5	- 3.5	- 1.0	90	60	76	- 5.0	14.0	170	25.0	150	1203	
26	4.5	- 3.5	0.5	92	32	51	- 8.5	13.0	I	25.0	I	2237	
27	0.5	- 4.0	- 1.5	100	50	80	- 4.5	17.0	300	51.0	290	1850	14.00
28	3.0	- 5.0	- 1.0	70	35	46	-11.0	20.0	280	32.0	140	2034	
29	13.0	2.5	8.0	94	36	53	- 1.0	21.0	180	54.0	180	0857	
30	13.0	8.0	10.5	84	46	68	5.0	21.0	130	40.0	140	1414	
31	8.0	1.0	4.5	100	90	98	4.5	16.0	300	52.0	340	0957	2.50
Monthly													30.80 Total
Ave =			- 3.0			75	- 7.0	16.0	350				
Max =	13.0		10.5	100						73.0	340	1950	
Min =		-14.5	-10.5		32								

+ - Conversion mph to m/s, mph x .447
I* - Incomplete data

Table B1 (cont'd).

APRIL 1981

LOON

Date	Temperature (°C) Max	Min	Mean	Rel. Hum. % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)+ Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	5.5	0.5	3.0	100	72	93	2.0	13.0	150	35.0	130	0856	6.30
2	2.0	- 0.5	0.5	100	68	87	- 1.5	24.0	I*	56.0	I	0834	6.00
3	17.0	- 1.0	8.0	70	32	46	- 3.0	20.0	140	47.0	I	0017	
4	13.5	9.5	12.0	92	36	56	3.5	22.0	140	40.0	150	0727	
5	10.0	3.0	6.5	100	84	97	6.0	19.0	150	32.0	140	1005	19.90
6	3.0	- 4.5	- 0.5	93	52	77	- 4.0	18.0	270	53.0	270	2238	
7	I	I	I	I	I	I	I	20.0	**	58.0	**	0429	
8	I	I	I	I	I	I	I	17.0	150	34.0	160	1600	3.70
9	12.5	- 0.5	6.0	100	64	84	3.5	18.0	150	46.0	160	1713	
10	11.0	- 2.0	4.5	92	30	51	- 5.0	14.0	**	51.0	**	0200	12.40
11	6.0	- 2.0	2.0	100	52	88	0.0	14.0	**	43.0	**	2152	
12	6.0	- 5.0	0.5	92	38	56	- 7.5	11.0	**	34.0	**	0734	
13	9.0	- 4.5	2.0	70	35	47	- 8.0	10.0	**	27.0	**	2051	21.60
14	2.0	- 8.0	- 3.0	100	46	87	- 4.5	15.0	**	69.0	**	2252	
15	- 3.5	-12.0	- 7.5	87	44	64	-13.0	16.0	**	47.0	**	1755	
16	3.0	-12.0	- 4.5	95	58	66	-10.0	8.0	**	23.0	**	0932	1.90
17	8.0	1.0	4.5	100	46	74	1.0	14.0	**	26.0	**	2007	10.90
18	9.0	- 3.0	3.0	100	71	97	2.5	14.0	**	47.0	**	1034	
19	9.0	- 6.0	1.5	98	33	53	- 7.0	10.0	**	52.0	**	0114	3.70
20	3.5	- 7.5	- 2.0	100	48	82	- 5.0	7.0	**	38.0	**	1653	0.60
21	- 5.5	-12.0	- 9.0	99	61	75	-12.5	16.0	**	42.0	**	0809	
22	3.0	-12.0	- 4.5	64	40	51	-13.0	16.0	**	46.0	**	0344	
23	10.0	- 4.0	3.0	100	30	58	- 4.5	6.0	**	31.0	**	0004	10.90
24	4.0	1.5	3.0	100	100	100	3.0	7.0	**	30.0	**	1515	5.50
25	1.5	0.0	0.5	100	100	100	0.5	6.0	**	16.0	**	1229	3.30
26	12.5	0.5	6.5	100	48	74	2.0	11.0	**	22.0	**	2341	
27	15.5	2.0	8.5	96	41	66	2.5	10.0	**	32.0	**	0757	
28	15.5	4.0	9.5	87	42	61	2.5	3.0	**	20.0	**	0254	
29	13.0	4.0	8.5	100	83	96	8.0	6.0	**	26.0	**	2057	16.50
30	14.0	2.5	8.0	99	42	67	2.5		**	17.0	**	1948	
31													
Monthly													123.20 Total
Ave =			2.5			73	- 2.0	13.0	**				
Max =	17.0		12.0	100						69.0	**	2252	
Min =		-12.0	- 9.0		30								

+ - Conversion mph to m/s, mph x .447
I* - Incomplete data
** - Wind dir missing due to recorder malfunction

Table B1 (cont'd).

OCTOBER 1981

LOON

Date	Temperature (°C) Max	Min	Mean	Rel. Hum. % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	6.5	- 2.0	2.0	92	52	72	- 2.5	3.5	180	12.4	330	0035	
2	11.0	1.5	6.5	100	55	87	4.5	2.5	180	6.2	180	1425	3.0
3	3.0	1.5	2.0	100	98	99	2.0	4.5	320	12.4	360	0710	4.0
4	6.5	1.0	3.5	100	64	87	1.5	4.5	270	13.4	340	0050	2.0
5	9.0	2.0	5.5	98	53	77	1.5	3.5	270	8.2	360	1930	
6	7.0	2.0	4.5	100	40	82	1.5	2.5	180	8.2	240	2325	9.0
7	4.0	0.0	2.0	99	82	93	1.0	4.5	240	14.4	350	2245	1.0
8	1.5	0.0	1.0	99	98	98	0.5	6.0	360	18.4	330	0435	3.5
9	2.0	- 1.0	0.5	100	88	93	- 0.5	4.6	360	12.4	360	0137	1.0
10	4.5	- 1.5	1.5	94	55	77	- 2.0	3.0	360	8.8	330	1045	0.5
11	4.5	- 2.5	1.0	92	56	75	- 3.0	2.3	360	7.2	360	1155	
12	7.0	- 2.5	2.5	86	44	66	- 3.0	2.0	080	6.2	090	0205	
13	11.0	1.0	6.0	66	34	49	- 4.0	C	C	5.7	060	1912	
14	13.0	3.0	8.0	62	29	45	- 3.0	3.0	170	6.7	190	1330	
15	13.0	4.0	8.5	84	31	53	- 0.5	4.0	180	9.8	180	1815	
16	8.0	1.0	4.5	100	56	83	2.0	3.5	360	14.9	360	1755	
17	8.0	- 1.0	3.5	100	44	66	- 2.5	4.0	030	11.3	020	0532	
18	5.0	2.0	3.5	100	56	85	1.0	6.5	170	15.4	180	0830	45.5
19	3.5	- 3.5	0.0	100	63	82	- 2.5	5.0	210	13.4	200	0515	3.5
20	3.5	- 4.5	- 0.5	94	52	66	- 6.0	4.5	180	13.9	200	2355	
21	8.0	3.0	5.5	77	46	61	- 1.5	6.0	180	15.9	210	0125	
22	8.5	3.5	6.0	95	53	70	1.0	6.0	180	15.9	180	2135	
23	7.5	- 2.0	3.0	96	95	95	2.5	6.0	180	15.4	180	0212	37.0
24	0.0	- 4.0	- 2.0	96	55	76	- 5.5	2.0	350	12.4	290	0045	3.5
25	0.0	- 4.0	- 2.0	96	64	81	- 5.0	2.8	150	8.2	140	0355	
26	I*	I	I	I	I	I	I	2.5	180	10.8	180	1645	
27	I	I	I	I	I	I	I	4.0	170	10.3	180	1515	
28	9.0	0.5	5.0	99	92	97	4.5	5.4	020	16.4	340	1313	
29	5.0	- 0.5	2.5	100	70	90	1.0	2.5	050	8.2	050	0105	
30	8.0	- 1.0	3.5	92	36	61	- 3.5	1.5	120	6.2	090	2045	
31	9.5	0.5	5.0	99	33	60	- 2.0	5.5	180	8.2	170	1930	
													113.5 Total
Monthly Ave =			3.0			77	- 1.0	4.0	180				
Max =	13.0		8.5	100						18.4	330	0435	
Min =		- 4.5	- 2.0		29								

† = Conversion mph to m/s, mph x .447

I* - Incomplete data

Table B1 (cont'd).

LOON

NOVEMBER 1981

Date	Temperature (°C) Max	Min	Mean	Rel. Hum. % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	9.0	2.0	5.5	99	56	83	3.0	8.5	180	26	340	2132	
2	13.5	2.0	8.0	97	51	76	7.5	12.0	340	42	340	2135	
3	4.0	- 1.0	1.5	79	35	54	- 6.5	11.5	340	42	350	0018	
4	6.0	- 2.0	2.0	70	37	55	- 6.0	8.5	320	26	300	0150	
5	9.0	- 1.0	4.0	82	39	61	- 3.0	8.0	180	18	170	2000	
6	5.5	0.5	3.0	100	72	92	2.0	8.0	180	26	200	1248	12.0
7	0.5	- 5.5	- 2.5	96	78	90	- 4.0	9.0	350	30	350	1652	5.0
8	3.0	- 5.5	- 1.5	96	33	69	- 6.5	8.0	330	29	300	0400	6.0
9	5.5	- 9.5	- 2.0	99	59	76	- 5.5	8.0	240	26	340	1810	
10	- 0.5	- 9.0	- 5.0	100	40	72	- 9.5	7.5	190	20	050	0328	
11	- 2.0	- 7.0	- 4.5	100	77	94	- 5.5	10.0	190	25	340	2150	
12	- 4.5	- 8.5	- 6.5	86	33	66	-12.0	9.0	360	30	020	0245	
13	6.0	- 8.0	- 1.0	59	14	28	-17.0	7.5	050	16	340	1225	
14	8.5	- 0.5	4.0	70	40	54	- 4.5	5.0	070	24	050	2316	
15	7.0	4.0	5.5	100	43	68	0.0	13.0	060	32	050	0921	
16	7.5	4.0	6.0	98	93	96	5.5	7.5	050	25	050	0138	0.5
17	5.5	1.0	3.5	98	92	97	3.0	5.5	180	16	180	1105	17.0
18	1.0	- 3.5	- 1.5	96	92	95	- 2.0	7.0	330	24	330	1540	3.5
19	- 3.0	- 4.0	- 3.5	96	92	95	- 4.5	6.5	340	28	330	0630	2.5
20	- 1.5	- 4.5	- 3.0	96	88	92	- 4.0	10.0	080	36	090	1425	5.5
21	- 1.5	- 5.0	- 3.5	97	91	95	- 4.5	7.5	280	31	280	1445	13.0
22	- 5.0	- 7.0	- 6.5	92	80	86	- 8.5	8.5	310	28	210	0025	2.5
23	- 6.0	- 9.5	- 8.0	90	81	87	-10.0	5.5	330	16	340	2115	1.5
24	- 3.0	-10.0	- 6.5	90	57	79	- 9.5	5.0	330	14	050	2158	
25	- 5.5	-10.5	- 8.0	83	58	77	-11.5	6.5	050	24	050	1644	
26	- 1.0	-11.0	- 6.0	81	40	62	-12.0	4.5	050	21	190	2346	
27	- 1.5	- 5.0	- 3.5	86	64	77	- 7.0	6.5	180	30	330	1706	3.5
28	- 3.0	- 8.5	- 6.0	82	64	73	-10.0	9.5	260	32	340	2152	1.5
29	- 7.0	- 9.5	- 8.5	80	72	77	-12.0	12.0	340	38	340	1100	3.0
30	- 6.5	-10.5	- 8.5	78	56	71	-13.0	11.0	360	36	360	0100	2.0
31													
													79.0 Total
Monthly Ave =			- 2.0			77	- 5.5	8.0	340				
Max =	13.5		8.0	100						42	*	**	
Min =		-11.0	- 8.5		14								

- Conversion mph to m/s, mph x .447

* = 340° 350°

** = 02/2135, 03/0018

Table B1 (cont'd).

DECEMBER 1981

LOON

Date	Temperature (°C) Max	Min	Mean	Rel. Hum. % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	- 3.0	-10.0	- 6.5	100	42	75	-10.0	6.0	180	28.0	050	0205	3.0
2	2.0	- 3.0	- 0.5	100	78	99	- 0.5	3.0	270	14.0	190	1322	11.0
3	- 1.0	- 4.0	- 2.5	100	88	99	- 2.5	4.0	360	24.0	360	1905	
4	- 1.0	- 6.0	- 3.5	100	58	83	- 6.0	5.0	240	24.0	325	0032	
5	- 2.5	- 6.0	- 4.5	100	64	83	- 7.0	7.5	040	36.0	050	2128	
6	- 5.5	- 9.5	- 7.5	100	86	99	- 7.5	15.0	350	50.0	360	1705	8.5
7	- 4.0	- 9.5	- 7.0	100	86	88	- 8.5	11.5	330	38.0	340	0242	14.0
8	- 1.5	- 9.5	- 5.5	100	52	86	- 7.5	4.0	040	12.0	040	1945	
9	- 7.5	-10.0	- 9.0	100	87	98	- 9.0	10.0	330	32.0	330	2112	1.5
10	- 6.0	-11.0	- 8.5	100	77	97	- 9.0	8.0	330	27.0	330	0412	
11	- 3.0	- 8.0	- 5.5	100	78	94	- 6.5	7.5	030	29.0	030	1715	
12	- 4.0	-11.0	- 7.5	100	72	95	- 8.0	6.0	030	20.0	030	1025	
13	- 2.5	-12.0	- 7.5	100	44	77	-11.0	5.5	050	20.0	340	2153	
14	- 3.5	-10.0	- 7.0	100	67	95	- 7.5	3.5	330	24.0	340	0227	1.0
15	- 0.5	- 6.5	- 3.5	100	86	97	- 4.0	5.0	060	24.0	050	2347	11.0
16	- 2.5	- 9.0	- 5.0	100	76	93	- 7.0	12.0	360	46.0	360	1238	15.0
17	- 5.0	-11.0	- 8.5	88	58	74	-12.5	4.5	270	27.0	300	0628	
18	- 9.0	-12.0	-10.5	99	77	93	-11.5	5.0	060	15.0	050	2338	4.5
19	-11.0	-16.5	-14.0	94	71	90	-15.5	5.5	340	21.0	340	1033	1.5
20	-13.0	-17.0	-15.0	92	74	86	-17.0	8.0	340	28.0	360	1145	0.5
21	I*	I	I	I	I	I	I	8.0	180	24.0	350	0430	
22	I	I	I	100	92	98	I	6.5	180	20.0	180	0310	
23	- 2.5	- 6.0	- 4.5	100	86	98	- 4.5	7.0	360	32.0	350	1942	17.5
24	- 2.0	- 6.0	- 4.0	90	60	76	- 7.5	8.5	360	28.0	030	0100	
25	- 5.5	- 8.0	- 7.0	90	62	77	-10.5	7.0	240	22.0	240	2140	
26	- 5.0	- 7.0	- 6.0	89	72	80	- 9.0	4.5	090	21.0	240	0145	
27	- 6.0	- 8.0	- 7.0	100	84	96	- 7.5	11.5	080	34.0	090	1720	4.5
28	- 2.5	- 6.5	- 4.5	100	88	99	- 4.5	3.0	180	16.0	080	0125	2.5
29	- 4.0	-11.0	- 7.5	100	90	97	- 8.0	8.5	330	38.0	330	1905	7.5
30	- 8.5	-13.0	-11.0	90	62	79	-14.0	9.0	330	26.0	330	0305	I
31	- 4.5	- 9.5	- 7.0	92	65	83	- 9.5	3.5	I	22.0	I	2323	I
													103.5 Total
Monthly Ave =			- 7.0			89	- 9.0	7.0	360				
Max =	2.0		- 0.5	100						50.0	360	1705	
Min =		-17.0	-15.0		42								

†Conversion mph to m/s, mph x .447
I* - Incomplete data

Table B1 (cont'd).

JANUARY 1982

LOON

Date	Temperature (°C) Max	Min	Mean	Rel. Hum. % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)+ Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	- 3.0	- 8.0	- 5.5	100	84	98	- 6.0	4.0	I*	22.0	I	0840	I
2	- 8.5	-15.0	-12.0	95	42	68	-17.0	14.0	I	50.0	I	1155	I
3	- 5.0	-12.0	- 8.5	82	34	45	-18.5	5.0	I	22.0	I	1755	I
4	2.0	- 8.0	- 3.0	100	72	100	- 3.0	7.5	I	34.0	I	2135	I
5	- 1.0	-14.0	- 7.5	100	70	88	- 9.0	11.5	330	34.0	310	1410	I
6	- 3.5	-14.0	- 9.0	100	51	82	-11.5	8.0	190	26.0	310	0250	I
7	- 3.5	-14.0	- 9.0	100	79	96	- 9.5	5.5	190	26.0	360	1700	I
8	-14.0	-21.0	-17.5	100	72	86	-19.5	6.5	330	28.0	330	0410	
9	-12.0	-20.5	-16.5	100	69	92	-17.5	6.0	340	28.0	I	0228	
10	I	I	I	100	I	I	I	5.5	320	22.0	210	2030	1.0
11	I	I	I	I	I	I	I	7.0	180	20.0	180	0120	0.5
12	-16.5	I	I	I	I	I	I	8.5	330	34.0	330	1620	
13	-11.0	-19.0	-15.0	100	40	60	-21.0	3.0	050	12.0	060	0115	3.0
14	- 6.0	-13.5	-10.0	100	100	100	-10.0	8.0	050	28.0	070	0932	1.0
15	-11.0	-18.0	-14.5	100	84	96	-15.0	9.0	330	32.0	350	0838	1.5
16	-10.5	-18.0	-14.5	100	58	89	-16.0	6.5	180	32.0	290	2345	2.5
17	-14.5	-27.5	-21.0	100	72	86	-22.5	10.0	340	34.0	310	1335	2.0
18	-18.5	-27.0	-23.0	96	70	85	-25.0	7.5	330	40.0	350	2348	
19	-11.0	-20.5	-15.0	96	39	64	-21.0	10.0	350	36.0	340	0300	0.5
20	- 7.0	-21.5	-14.5	100	75	94	-15.5	8.5	290	20.0	I	2015	2.0
21	-14.5	-24.0	-19.5	96	51	74	-23.0	6.0	030	20.0	050	0521	
22	-15.0	-25.0	-20.0	86	40	55	-26.5	4.5	040	22.0	090	1641	
23	- 5.0	-17.5	-11.5	100	31	79	-14.5	4.5	090	27.0	360	0611	14.5
24	- 4.0	-17.5	-11.0	100	68	89	-12.5	7.5	250	27.0	230	1822	3.0
25	-16.5	-23.0	-20.0	100	64	83	-22.0	7.0	280	29.0	280	1614	1.5
26	-17.0	-24.0	-20.5	94	46	70	-24.5	7.5	340	25.0	340	1737	
27	-10.5	-24.5	-17.5	63	28	46	-26.5	4.5	040	14.0	050	0420	
28	- 6.0	-13.0	- 9.5	77	20	43	-20.0	11.0	170	32.0	220	1943	
29	- 6.0	-15.0	-10.5	73	47	58	-17.5	10.0	280	40.0	360	1305	
30	- 4.0	-13.5	- 9.0	83	33	60	-15.5	9.0	190	33.0	180	1207	I
31	- 4.0	-12.0	- 8.0	82	38	68	-13.0	8.0	080	28.0	070	1738	I
Monthly													33.0** Total
Ave =			-13.5			77	-17.0	8.0	340				
Max =	2.0		- 3.0	100						50.0	I	1155	
Min =		-27.5	-23.0		20								

+ - Conversion mph to m/s, mph x .447
I* - Incomplete data
** - Precip total based on 22 days of available data

Table B1 (cont'd).

FEBRUARY 1982

LOON

Date	Temperature (°C) Max	Min	Mean	Rel. Hum. % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	- 3.5	-15.0	- 9.5	82	66	76	-13.0	9.5	080	36	330	1857	I
2	- 2.0	-14.0	- 8.5	100	28	81	-11.0	4.0	050	16	050	0148	
3	- 0.5	- 8.0	- 4.5	100	100	100	- 4.5	I*	I	I	I	I	31.0
4	2.0	-13.0	- 5.5	100	70	96	- 6.0	4.0	180	I	I	I	I
5	- 8.0	-14.0	-11.0	100	51	89	-12.5	8.0	300	36	270	0815	
6	- 7.0	-16.0	-11.5	100	100	100	-11.5	12.0	230	33	210	1135	I
7	-10.0	-18.5	-14.5	100	71	93	-15.5	8.0	240	22	260	0315	I
8	- 9.5	-12.0	-11.0	100	97	100	-11.0	6.0	280	27	280	1008	I
9	- 8.5	-12.0	-10.5	100	100	100	-10.5	5.5	180	16	180	1751	I
10	- 8.5	-17.0	-13.0	100	97	100	-13.0	9.5	300	29	270	1652	2.0
11	-10.5	-19.0	-15.0	100	88	98	-15.5	6.5	250	21	270	2301	
12	- 8.0	-15.0	-11.5	100	95	100	-11.5	4.0	340	16	330	0830	
13	- 9.0	-15.5	-12.5	100	100	100	-12.5	4.0	340	26	330	2303	1.0
14	-10.5	-16.0	-13.5	100	100	100	-13.5	7.0	310	27	350	0236	1.0
15	0.0	-13.5	- 7.0	100	100	100	- 7.0	8.5	180	27	180	0752	
16	0.0	-12.5	- 6.5	100	86	97	- 7.0	9.0	350	36	340	0703	
17	- 5.0	-14.5	-10.0	100	I	86	-12.0	5.0	040	24	030	0020	
18	- 3.5	-15.0	- 9.5	97	62	76	-13.0	4.0	160	19	080	0258	
19	- 5.0	-13.0	- 9.5	98	68	94	-10.5	8.0	180	21	180	0710	7.4
20	0.0	- 7.5	- 4.0	98	97	97	- 4.5	7.5	040	24	040	0625	
21	1.5	- 7.0	- 3.0	98	93	98	- 3.5	4.5	050	14	040	1921	0.5
22	- 6.0	-10.0	- 8.0	100	98	98	- 8.5	5.5	040	17	070	2343	1.4
23	- 4.0	-10.5	- 7.5	100	58	91	- 8.5	7.5	050	44	350	2240	
24	- 9.0	-18.5	-14.0	98	34	67	-19.0	9.5	340	37	020	0730	
25	-15.5	-22.5	-19.0	85	52	66	-24.0	14.5	330	49	330	2248	
26	-12.0	-22.5	-17.5	93	48	65	-22.5	12.0	350	45	350	0159	
27	- 7.0	-15.0	-11.0	100	50	81	-13.5	8.0	310	30	330	1127	
28	- 9.0	-21.5	-15.5	100	51	70	-20.0	8.0	350	26	330	1537	
29													
30													
31													
Monthly Ave =			-10.5			90	-12.0	7.5	340				44.3** Total
Max =	2.0		- 3.0	100						49	330	2248	
Min =		-22.5	-19.0		28								

† - Conversion mph to m/s, mph x .447

I* - Incomplete data

** - Precip total based on 22 days of data

Table B1 (cont'd).

MARCH 1982

LOON

Date	Temperature (°C) Max	Min	Mean	Rel. Hum. % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	-10.5	-21.0	-16.0	100	42	65	-21.0	7.0	180	23	180	1530	4.0
2	- 7.5	-15.0	-11.0	100	64	87	-13.5	9.0	290	29	250	1239	1.0
3	-10.5	-19.0	-15.0	100	54	72	-19.0	10.0	340	33	320	0250	
4	- 8.5	-19.0	-14.0	100	38	64	-19.0	5.0	190	20	170	1720	5.1
5	- 3.0	-10.5	- 7.0	100	68	90	- 8.5	I*	I	I	I	I	3.8
6	- 3.0	-13.0	- 8.0	100	54	78	-11.0	6.0	I	14	I	1218	I
7	- 2.0	- 7.0	- 4.5	100	100	100	- 4.5	3.5	I	13	I	1107	I
8	- 6.5	-17.0	-12.0	100	76	90	-13.5	I	I	I	I	I	I
9	-11.0	-17.5	-14.5	100	77	91	-15.5	4.5	I	17.9	I	1136	I
10	- 4.0	-12.5	- 8.5	100	76	94	- 9.5	6.7	I	17.9	I	1910	I
11	0.0	- 8.0	- 4.0	100	100	100	- 4.0	12.3	I	25.7	I	1503	I
12	1.0	- 0.5	0.5	100	94	100	0.5	5.6	050	17.9	I	0033	I
13	- 0.5	- 3.0	- 2.0	100	68	96	- 2.5	7.8	180	28.0	260	2158	I
14	- 2.5	- 8.0	- 5.5	100	54	84	- 8.0	13.4	340	38.0	330	2356	I
15	- 3.0	-11.0	- 7.0	72	41	56	-14.5	12.3	340	35.8	330	0106	I
16	5.0	-11.0	- 3.0	100	38	53	-11.0	7.8	340	28.0	330	1316	
17	0.5	- 5.5	- 2.5	100	70	93	- 3.5	5.6	030	16.8	020	2259	2.6
18	7.0	- 6.0	0.5	100	38	63	- 5.5	3.4	060	13.4	070	0137	0.9
19	3.0	- 4.5	- 1.0	100	68	87	- 3.0	2.2	060	15.7	050	2134	1.0
20	4.5	- 6.5	- 1.0	100	53	82	- 3.5	3.4	360	15.7	360	1101	
21	0.0	- 5.5	- 3.0	100	76	94	- 4.0	3.4	180	21.3	090	1519	10.8
22	- 3.0	- 7.0	- 5.0	100	100	100	- 5.0	6.7	310	29.1	310	0436	4.7
23	0.5	- 7.0	- 4.0	100	58	80	- 7.0	5.6	300	20.1	300	1423	
24	4.0	- 8.0	- 2.0	100	51	70	- 6.5	6.7	170	25.7	170	2221	
25	8.0	- 4.0	2.0	100	58	84	- 0.5	7.8	190	21.3	180	2309	
26	1.5	-10.0	- 4.5	100	100	100	- 4.5	9.0	260	30.2	130	0932	16.6
27	-10.0	-20.0	-15.0	100	69	92	-16.0	10.1	290	39.2	290	1701	2.0
28	- 9.5	-21.5	-15.5	78	40	56	-22.5	12.3	310	34.7	320	0118	0.1
29	2.0	-12.5	- 5.5	93	39	59	-12.0	4.5	290	23.5	280	1103	
30	8.5	- 5.0	2.0	64	24	45	- 8.5	3.4	200	12.3	180	1832	
31	3.5	- 1.5	1.0	100	55	98	0.5	9.0	180	28.0	220	2250	13.7
													66.3** Total
Monthly Ave =			- 6.0			81	- 9.0	7.3	180				
Max =	8.5		2.0	100						39.2	290	1701	
Min =		-21.5	-16.0		24								

† - Conversion mph to m/s, mph x .447
I* - Incomplete data
** - Precip monthly total based on 21 days of data

Table B1 (cont'd).

APRIL 1982

LOON

Date	Temperature (°C) Max	Min	Mean	Rel. Hum. % Max	Min	Mean	Dew Point (°C) Mean	Wind Speed (mph)†	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	1.0	- 7.0	- 3.0	100	64	97	- 3.5	12.3	270	25.7	270	0438	3.0
2	- 2.0	-13.5	- 8.0	100	49	82	-10.5	11.2	320	40.3	320	1006	0.8
3	0.0	- 8.0	- 4.0	100	36	74	- 8.0	6.7	150	30.2	110	1849	9.7
4	- 2.0	-13.5	- 8.0	100	100	100	- 8.0	6.7	270	29.1	280	0800	3.8
5	- 7.0	-18.5	-13.0	100	100	100	-13.5	10.1	340	39.2	360	0845	0.8
6	- 9.0	-15.5	-12.5	100	100	100	-12.5	9.0	040	40.3	360	2315	12.1
7	-14.0	-19.0	-16.5	100	100	100	-16.5	20.1	340	51.5	340	2115	12.6
8	- 9.0	-16.0	-12.5	100	74	93	-13.5	14.5	320	42.5	310	1139	1.7
9	1.5	-11.0	- 5.0	78	51	66	-10.5	10.1	330	31.3	330	0831	
10	0.5	- 9.5	- 4.5	99	65	80	- 7.5	9.0	310	33.6	290	0943	
11	6.5	- 5.0	1.0	100	61	86	- 1.0	6.7	200	23.5	340	2339	2.0
12	0.5	- 4.5	- 2.0	100	I*	I	I	6.7	330	20.1	300	0916	8.2
13	1.0	- 4.5	- 2.0	I	I	I	I	10.1	170	33.6	230	2154	5.1
14	2.5	- 4.5	- 1.0	I	I	I	I	I	310	I	I	I	1.3
15	9.0	- 5.0	2.0	I	I	I	I	6.7	350	15.7	170	2225	
16	14.0	1.0	7.5	I	I	I	I	11.2	180	24.6	200	2259	
17	10.0	6.5	8.5	I	I	I	I	13.4	190	31.3	I	2225	0.3
18	9.0	- 3.0	3.0	I	I	I	I	I	I	34.7	I	1643	13.7
19	10.0	- 4.0	3.0	I	I	I	I	7.8	I	23.5	210	1628	
20	13.0	3.5	8.5	I	48	61	1.5	10.1	160	31.3	170	2133	I
21	4.5	- 7.0	- 1.5	I	I	I	I	7.8	160	29.1	250	1549	I
22	- 3.5	- 7.5	- 5.5	I	I	I	I	9.0	I	25.7	280	0908	I
23	8.0	- 6.0	1.0	I	I	I	I	5.6	I	25.7	I	2155	I
24	9.0	0.0	4.5	I	I	I	I	4.5	I	25.7	I	0014	I
25	17.5	6.0	12.0	I	I	I	I	6.7	I	17.9	I	1830	I
26	13.0	6.0	9.5	I	I	I	I	9.0	I	28.0	I	1315	I
27	12.0	0.0	6.0	I	I	I	I	4.5	330	24.6	I	0010	I
28	8.0	- 1.0	3.5	I	I	I	I	11.2	020	28.0	340	1957	I
29	10.5	- 1.0	5.0	I	I	I	I	9.0	010	28.0	360	0915	I
30	13.0	1.0	7.0	I	I	I	I	18.1	340	33.6	290	1439	I
31													
Monthly													75.0 Total
Ave =			- 0.5			87	9.0	9.3	237				
Max =	17.5		12.0	100							340	2115	
Min =		-19.0	-16.5		36					51.5			

† - Conversion mph to m/s, mph x .447
I* - Incomplete data
- All missing data due to equipment failure at site

Table B1 (cont'd).

OCTOBER 1980 **CRREL**

Date	Temperature (°C) Max	Min	Avg	Rel. Hum. % Max	Min	Mean	Mean Dew Point	Wind Avg. Speed	Dir	Max Hrly	Precipitation Amt (mm)	Snow Depth
1	24.0	8.5	16.0	100	50	82	13.5	1.0	240	3.0		
2	21.5	7.5	14.5	100	75	90	13.0	1.5	270	5.0		
3	17.5	12.0	14.5	100	71	93	13.5	1.0	090	2.0		
4	17.0	6.5	12.0	100	61	83	9.0	1.5	270	3.5		
5	17.0	6.0	11.5	100	45	80	8.0	0.5	VAR	1.5		
6	15.0	4.0	9.5	100	56	86	7.0	0.5	VAR	2.0		
7	15.0	4.0	9.5	100	54	87	7.5	0.5	VAR	1.0		
8	19.0	3.5	11.0	100	54	76	7.0	1.5	250	3.5		
9	12.0	-1.5	5.0	100	45	64	0.5	1.5	030	4.5		
10	15.0	-2.5	6.0	100	40	77	2.5	0.5	VAR	1.5		
11	11.5	4.5	8.0	100	94	99	8.0	C	C	1.0	7.20	
12	13.0	5.0	9.0	100	68	95	8.5	1.0	260	2.0	0.80	
13	7.0	1.5	4.0	81	51	65	-2.0	1.5	360	4.0		
14	8.0	-3.0	2.5	100	46	66	-3.0	2.5	010	5.5		
15	12.0	-3.5	4.0	100	45	92	3.0	C	C	1.5		
16	11.5	-0.5	5.5	100	69	89	4.0	C	C	1.0	1.10	
17	18.0	7.0	12.5	100	74	90	11.0	1.5	180	4.0		
18	18.5	9.5	13.5	100	100	100	13.5	1.0	270	2.5	7.00	
19	16.0	6.5	11.0	100	45	71	6.0	1.5	270	3.5		
20	11.0	-2.0	4.5	100	48	76	0.5	1.5	270	4.0		
21	9.0	-2.0	3.5	100	70	89	2.0	0.5	VAR	2.5		
22	8.5	-2.0	3.0	100	44	65	-3.0	1.5	020	4.0		
23	6.0	-1.0	2.5	94	54	67	-3.0	2.0	020	5.0		
24	12.0	-4.0	4.0	100	48	52	-5.0	1.0	VAR	2.0		
25	12.0	-2.0	5.0	100	81	95	4.0	2.5	090	6.0	19.10	
26	13.5	5.5	9.5	100	62	77	5.5	3.5	270	6.0	1.20	
27	7.0	2.0	4.5	85	56	71	-2.0	1.5	270	3.5		
28	5.0	2.0	3.5	100	86	91	0.5	1.5	130	3.5		
29	8.5	-2.5	3.0	100	50	71	-2.0	1.0	360	3.0		
30	8.0	-3.0	2.5	100	56	81	-1.5	1.0	VAR	2.5		
31	11.5	0.0	6.0	99	54	79	8.0	1.5	270	4.0		
AVG	12.9	2.1	7.5	100	40	81	4.3	1.2	VAR	6.0	36.40	
											(Total)	

Monthly Max = 24°C
Monthly Min = -4°C
Peak Gust = 17 MPS on 26 Oct

Table B1 (cont'd).

NOVEMBER 1980 **CRREL**

Date	Temperature (°C) Max	Min	Avg	Rel. Hum. % Max	Min	Mean	Mean Dew Point	Wind Avg. Speed	Dir	Max Hrly	Precipitation Amt (mm)	Snow Depth (cm)
1	6.5	1.5	4.0	100	56	76	0.0	1.5	285	4.0	0.2	
2	3.5	-4.5	-0.5	92	54	65	-6.0	2.0	360	6.0		
3	4.5	-8.0	-2.0	100	60	81	-4.0	M	M	M		
4	13.0	5.0	9.0	90	70	75	5.0	2.5	240	7.0	0.2	
5	10.5	-1.5	4.5	93	52	68	-1.0	2.0	360	4.5		
6	5.5	-6.0	-0.5	89	56	68	-5.5	2.0	250	4.0		
7	11.5	4.5	8.0	98	73	87	6.0	1.0	VAR	2.0	2.3	
8	8.5	-5.0	1.5	98	45	80	-1.0	2.0	050	5.0	2.5	
9	2.0	-7.0	-2.5	99	77	92	-3.5	1.0	VAR	3.0	5.6	
10	5.5	-2.0	1.5	100	66	87	-4.0	2.5	030	4.5	0.2	
11	0.5	-1.5	-0.5	76	65	71	-5.0	4.0	030	6.0		
12	2.0	-1.5	0.5	75	66	71	-5.0	7.5	030	6.5		
13	5.5	-2.0	1.5	88	53	88	-0.5	1.5	030	3.0		
14	7.5	1.5	4.5	90	70	82	1.5	2.5	045	5.0		
15	5.0	-3.5	0.5	86	50	66	-5.0	2.0	350	3.5		
16	1.0	-5.0	-2.0	83	52	67	-7.5	2.5	015	6.0		
17	0.5	-7.5	-3.5	100	56	88	-5.0	1.5	060	2.5	5.0	20
18	0.0	-3.0	-1.5	100	86	97	-2.0	2.5	075	5.0		
19	0.5	-9.0	-4.0	99	63	77	-7.5	3.0	045	4.5	7.3	
20	8.0	-8.0	0.0	100	58	88	-1.5	0.5	VAR	0.5	0.7	
21	5.0	-8.5	-1.5	100	70	96	-2.0	1.0	VAR	0.5	2.8	
22	4.0	-6.5	-1.0	100	67	88	-2.5	2.0	025	5.4		
23	1.0	-6.5	-2.5	100	86	98	-3.0	1.0	VAR	0.5	22.5	
24	3.5	-2.0	1.0	M	M	M	M	0.5	VAR	0.5	2.8	
25	4.0	+1.0	2.5	M	M	M	M	2.0	360	3.5		
26	5.5	-2.5	1.5	81	32	57	-6.0	3.0	035	6.0		
27	1.0	-6.5	-2.5	99	34	67	-7.5	1.0	090	2.0	21.0	
28	6.0	-3.0	1.5	98	64	89	0.0	1.5	240	3.0		
29	4.5	-0.5	2.0	97	48	73	-2.5	2.5	250	4.0		
30	5.5	-1.5	2.0	98	46	62	-4.5	1.5	280	4.5	____	
AVG	4.7	-3.3	0.7	100	32	79	-2.8	2.1	VAR	7.0	73.1	
											(Total)	

Monthly Max = 13.0°C
Monthly Min = -9.0°C
Peak Gust = 28.0 MPS on 11 Nov

Table B1 (cont'd).

DECEMBER 1980 **CRREL**

Date	Temperature (°C) Max	Min	Avg	Rel. Hum. % Max	Min	Mean	Mean Dew Point	Wind Avg. Speed	Dir	Max Hrly	Precipitation Amt (mm)	Snow Depth
1	10.5	0.0	5.0	98	46	71	0.0	0.5	270	4.5		
2	10.5	-2.0	4.0	99	50	60	-3.0	3.1	180	6.5	5.5	
3	5.5	-9.0	-1.5	97	37	65	-7.5	4.0	220	7.0	6.0	
4	-4.0	-9.5	-6.5	52	32	39	-18.5	5.0	015	10.0		
5	-2.0	-11.5	-6.5	70	40	54	-14.5	2.5	030	5.5		
6	-1.0	-10.0	-5.5	88	44	74	-9.5	2.5	060	5.0		
7	4.5	-9.5	-2.5	99	36	80	-5.5	1.5	VAR	1.5	0.7	
8	10.0	-1.0	4.5	99	71	92	-6.0	1.5	270	3.0	1.5	
9	10.0	-3.0	3.5	100	84	84	1.0	2.5	060	5.5	0.8	
10	1.0	-5.0	-2.0	99	58	80	-5.5	1.5	245	5.0		
11	-5.0	-17.0	-11.0	100	72	91	-12.5	2.5	360	9.0		
12	-4.0	-18.0	-11.0	100	46	68	-16.0	1.5	230	3.5	2.8	
13	3.5	-12.0	-4.0	100	66	94	-5.0	2.0	050	4.5		
14	-3.0	-16.5	-9.5	100	74	94	-10.5	2.0	360	5.0	0.7	
15	-6.5	-22.0	-14.0	100	54	84	-16.0	0.5	VAR	1.0	0.2	
16	-3.0	-8.0	-5.5	100	59	84	-8.0	1.0	VAR	2.5	4.5	
17	-6.5	-20.5	-13.5	100	100	100	-13.5	1.5	060	4.5	0.5	4.25
18	-4.5	-20.0	-12	100	63	88	-13.5	1.0	VAR	1.5	0.1	
19	-0.5	-22.0	-11.0	98	36	69	-15.5	2.0	360	5.5	2.0	
20	-10.0	-27.0	-18.5	99	38	68	-23.0	1.0	VAR	1.5		
21	-6.0	-29.0	-17.5	100	48	87	-19.0	1.5	360	4.0		
22	-9.5	-23.5	-16.5	99	43	71	-20.5	1.0	VAR	1.5		
23	-2.5	-13.5	-8.0	100	88	90	-9.5	1.0	VAR	0.5		
24	-2.0	-15.5	-8.5	100	70	98	-9.0	2.0	030	8.0	2.2	
25	-14.5	-31.0	-22.5	M	M	M	M	4.0	015	8.0		
26	-15.0	-31.5	-23.0	M	M	M	M	1.0	070	4.0		
27	-2.0	-18.5	-10.0	100	62	96	-10.5	3.0	090	2.5		
28	-1.0	-20.0	-10.5	100	96	98	-11.0	1.0	VAR	1.5		
29	2.5	- 1.0	0.5	100	99	99	0.5	1.5	080	1.5		
30	0.0	-16.0	-8.0	99	70	82	-10.5	4.0	030	7.5		
31	4.5	-19.5	-12.0	94	46	66	-17.0	2.0	090	4.5		
AVG	-1.6	-14.9	-8.2	100	32	80	-10.6	2.0	VAR	10.0	27.5 (Total)	4.25

Monthly Max = 10.0°C
Monthly Min = -31.0°C
Peak Gust = 35 MPS on 4 Dec

Table B1 (cont'd).

JANUARY 1981 **CRREL**

Date	Temperature (°C) Max	Min	Avg	Rel. Hum. % Max	Min	Mean	Mean Dew Point	Wind Avg. Speed	Dir	Max Hrly	Precipitation Amt (mm)	Snow Depth
1	-9.0	-20.5	-14.5	94	47	74	-18.0	C	C	1.5		
2	-3.0	-18.0	-10.5	96	31	67	-14.5	2.0		5.5	1.5	
3	6.0*	-15.0*	- 4.5*	M	M	M	-17.0*	1.5	060	2.5		
4	-5.0*	-25.0*	-15.0*	M	M	M	-15.5*	2.0	045	6.5		
5	-10.5	-29.5	-20.0	100	59	87	-21.5	1.0	090	3.0		
6	- 4.0	-21.5	-12.5	97	66	85	-14.5	0.5	VAR	3.5		
7	- 0.5	-14.5	- 7.5	98	55	88	- 9.0	2.0	295	5.5		
8	-12.0	-25.0	-18.5	98	54	68	-23.0	1.5	260	4.5		
9	- 9.0	-27.0	-18.0	99	58	90	-19.5	C	C	1.5		
10	- 8.5	-20.5	-14.5	99	70	87	-16.0	2.0	045	5.5		
11	-16.0	-27.0	-21.5	100	56	74	-25.0	1.5	290	5.5		
12	-13.5	-31.5	-22.5	100	57	88	-24.0	0.5	VAR	3.0		
13	-11.0	-32.0	-21.5	100	47	83	-23.5	0.5	VAR	4.5		
14	-11.5	-29.0	-20.0	100	58	86	-22.0	0.5	VAR	1.5		
15	- 8.0	-22.5	-15.0	99	58	89	-16.5	1.5	070	2.5		
16	- 8.5	-21.0	-14.5	99	86	92	-15.0	1.0	065	2.5		
17	- 8.0	-23.0	-15.5	99	53	73	-19.5	2.0	025	4.5	4.5	10
18	- 5.5	-27.0	-16.0	82	46	66	-21.0	C	C	3.0		
19	5.5	-12.0	- 3.0	86	42	67	- 8.5	1.0	255	3.5		
20	2.5	-18.5	- 8.0	69	35	49	-17.0	3.0	030	5.5		
21	- 5.0	-25.0	-15.0	80	36	64	-20.5	0.5	VAR	2.5		
22	2.5	-14.0	- 5.5	84	37	77	- 9.0	0.5	VAR	2.0		
23	2.0	- 7.0	- 2.5	89	48	67	- 8.0	1.0	VAR	4.0		
24	- 0.0	-13.0	- 6.5	89	44	68	-11.5	1.0	040	4.5	1.0	
25	1.5	-20.0	- 9.0	85	40	68	-14.0	C	C	1.5		
26	5.5	- 7.0	- 0.5	89	54	76	- 4.5	1.0	270	4.5		
27	5.0	- 2.0	1.5	80	48	55	- 6.5	2.0	260	4.0		
28	1.0	-10.0	- 4.5	72	30	49	-13.5	2.0	305	4.0		
29	- 6.5	-18.5	-12.5	84	52	66	-17.5	2.5	070	6.0	5.2	
30	- 9.0	-21.5	-15.0	86	34	57	-21.5	3.0	030	6.0		
31	- 5.0	-27.0	-16.0	88	40	67	-21.0	1.5	080	5.0	—	—
AVG..	- 4.4	-20.2	-12.3	100	30	73	-16.4	1.3	VAR	7.0	12.2 (Total)	

* Data from another collecting source.

Monthly Max = 6°C
Monthly Min = 32.0°C
Peak Gust = 28 MPS on 7 Jan

Table B1 (cont'd).

FEBRUARY 1981 **CRREL**

Date	Temperature (°C) Max	Min	Avg	Rel. Hum. % Max	Min	Mean	Mean Dew Point	Wind Avg. Speed	Dir	Max Hrly	Precipitation Amt (mm)	Snow Depth
1	2.5	-23.0	-10.0	91	32	66	-15.0	2.0	250	6.0	4.0	
2	11.0	- 9.0	1.0	98	48	83	- 1.5	3.5	260	6.5	23.3	
3	- 7.0	-15.0	- 8.5	87	40	72	-12.5	2.5	270	6.0		
4	-10.0	-18.0	-14.0	76	40	59	-20.5	2.5	270	4.0		
5	- 9.0	-19.0	-14.0	81	28	59	-20.5	1.0	VAR	4.0		
6	- 3.0	-19.0	-11.0	84	39	69	-15.5	1.5	250	6.5		
7	2.0	-13.0	- 5.5	82	38	60	-12.0	1.0	VAR	3.5		
8	3.0	- 4.0	- 0.5	88	64	75	- 4.5	0.5	VAR	0.5	15.2	16
9	- 0.5	-13.0	- 6.5	86	40	53	-14.5	2.5	250	5.0		
10	1.0	-20.5	- 9.5	80	44	59	-16.0	2.0	210	6.0		
11	14.5	- 1.0	6.5	83	46	74	2.0	3.5	240	9.5	29.0	
12	2.0	-16.0	- 7.0	78	31	40	-18.5	3.0	310	9.0	1.0	
13	- 3.0	-18.5	- 7.5	79	29	56	-15.0	1.0	VAR	3.0		
14	1.5	-15.0	- 6.5	79	28	53	-14.5	0.5	VAR	3.0		
15	2.5	- 9.0	- 3.0	75	36	54	-11.0	1.0	255	3.5		
16	10.0	- 6.5	1.5	84	50	66	- 4.0	1.5	260	4.5		
17	12.0	- 1.0	5.5	100	60	83	3.0	1.5	260	5.0		
18	15.5	- 2.5	6.5	100	56	87	4.5	0.5	VAR	5.0		
19	12.5	- 1.5	5.5	100	76	93	4.5	0.5	VAR	2.5		
20	13.5	6.5	10.0	100	82	97	9.5	2.0	170	7.0	11.3	
21	11.5	7.5	9.5	100	88	96	9.0	1.0	150	3.0		
22	9.0	4.0	6.5	100	92	97	6.0	2.0	180	4.0		
23	11.0	0.0	5.5	100	64	93	4.5	1.5	200	5.5		
24	7.0	2.0	4.5	100	88	97	4.0	1.0	VAR	2.5	36.0	
25	2.0	- 0.5	0.5	100	93	99	0.5	0.5	VAR	6.5	53.1	12
26	2.0	0.0	1.0	100	76	93	0.0	3.0	040	5.5	4.6	
27	2.0	- 7.5	- 2.5	99	62	76	- 6.0	4.0	030	7.5		
28	1.0	- 8.5	- 3.5	99	72	89	- 5.0	1.0	VAR	3.0	0.1	—
AVG	4.2	- 7.9	- 1.8	100	28	75	- 5.7	1.7	SSW	9.5	177.6 (Total)	

Monthly Max = 16°C
Monthly Min = -23°C
Peak Gust = 15 MPS on 12 Feb

Table B1 (cont'd).

MARCH 1981 **CRREL**

Date	Temperature (°C) Max	Min	Avg	Rel. Hum. % Max	Min	Mean	Mean Dew Point	Wind Avg. Speed	Dir	Max Hrly	Precipitation Amt (mm)	Snow Depth
1	4.5	- 0.5	2.0	99	61	80	- 1.0	1.5	360	5.0		13.0
2	4.5	- 1.5	1.5	100	58	75	- 2.5	1.5	270	4.5		
3	-1.5	-11.5	-6.5	95	53	64	-12.0	3.0	020	5.0		
4	1.0	-14.5	-6.5	98	46	72	-10.5	1.0	350	2.5		
5	2.0	-14.0	-6.0	98	48	76	- 9.5	1.5	090	3.5		
6	2.5	- 9.5	-3.5	98	72	83	- 6.0	1.0	030	3.5	0.1	
7	3.5	- 1.0	1.0	98	76	94	0.0	0.5	060	3.5	0.4	6.0
8	4.0	- 0.5	1.5	100	76	88	- 0.5	1.5	030	4.0		
9	4.0	- 1.0	1.5	98	71	87	- 0.5	0.5	VAR	1.0		
10	4.0	- 2.0	1.0	98	55	73	- 4.5	1.5	360	4.0		
11	2.5	- 6.5	-2.0	98	72	90	- 3.5	1.0	220	2.5		
12	1.5	- 9.0	-3.5	98	53	72	- 7.5	1.0	270	3.5		
13	7.5	- 3.5	2.0	98	54	80	- 1.0	1.5	270	5.0	0.5	
14	-1.0	- 8.0	-4.5	72	44	55	-12.0	3.5	010	5.5		
15	8.5	- 9.5	-0.5	95	44	71	- 5.0	1.5	270	4.5		
16	4.0	- 9.5	-2.5	98	50	67	-14.5	3.5	030	5.5		
17	-0.5	-11.5	-6.0	72	43	54	-14.0	3.5	010	5.5		
18	-1.0	-11.5	-6.0	89	41	56	-13.5	2.5	300	4.5		
19	0.5	-14.5	-7.0	98	46	70	-11.5	1.0	030	3.5		
20	1.0	- 7.0	-3.0	98	56	85	- 5.0	0.5	VAR	3.0		
21	5.0	- 2.0	1.5	98	61	75	- 2.5	1.5	030	5.0	0.7	
22	6.0	- 4.5	0.5	100	55	76	- 3.5	1.0	330	2.5		
23	10.5	- 6.5	2.0	100	46	77	- 1.5	0.5	VAR	1.5		
24	9.0	- 3.0	3.0	99	58	88	1.0	1.0	090	2.5	0.8	
25	8.0	- 3.0	2.5	98	56	80	- 0.5	0.5	VAR	2.0		
26	12.5	- 5.0	3.5	98	40	75	- 0.5	1.0	270	3.0		
27	7.5	- 3.0	2.0	98	68	88	0.5	1.0	010	3.5	7.1	
28	12.5	- 5.5	3.5	98	31	62	- 3.0	0.5	VAR	2.0		
29	26.0	2.5	14.0	87	39	59	6.0	1.5	270	5.0		
30	20.0	4.0	12.0	100	60	86	9.5	1.5	240	4.5	2.5	
31	15.5	5.0	10.0	98	74	83	7.5	2.0	060	4.0	—	
AVG	5.9	5.4	0.3	100	31	76	-3.9	1.4	VAR	5.5	12.1 (Total)	

Monthly Max = 26°C
Monthly Min = -14°C
Peak Gust = 17.5 MPS on 14 Mar

Table B1 (cont'd).

APRIL 1981 **CRREL**

Date	Temperature (°C) Max	Min	Avg	Rel. Hum. % Max	Min	Mean	Mean Dew Point	Wind Avg. Speed	Dir	Max Hrly	Precipitation Amt (mm)	Snow Depth
1	16.5	3.8	10.0	100	62	84	7.5	2.5	200	5.0	6.6	
2	10.0	-3.0	3.5	100	60	85	1.5	2.5	010	5.5	1.5	
3	26.0	-4.5	10.5	100	41	68	5.0	2.0	250	5.0		
4	21.5	11.0	16.5	100	53	78	12.5	2.0	250	4.5		
5	14.5	8.0	11.0	100	78	98	10.5	2.0	250	3.5	6.6	
6	8.0	-3.0	2.5	100	58	71	-2.0	2.0	330	4.0		
7	15.5	-1.5	7.0	99	31	52	-2.0	2.0	330	5.5		
8	24.0	-4.5	10.0	100	38	63	3.5	1.5	240	3.5		
9	20.0	7.0	13.5	100	68	84	11.0	2.5	260	4.0	0.8	
10	18.5	-1.0	9.0	100	34	61	2.0	2.0	360	5.0		
11	14.0	1.0	17.5	100	66	87	15.5	0.5	VAR	2.5	0.5	
12	11.0	-2.0	4.5	100	46	72	0.0	2.5	070	4.5		
13	15.0	-6.0	4.0	100	36	70	-1.0	2.0	210	4.0		
14	10.0	-1.5	4.0	100	62	82	1.0	2.5	270	5.0	9.1	
15	3.0	-6.5	-1.5	76	44	60	-3.0	4.0	010	6.0		
16	16.5	-8.0	4.0	100	46	78	0.5	1.5	270	4.0		
17	12.0	-4.0	4.0	100	66	93	3.0	0.5	VAR	2.5	1.8	
18	20.5	4.5	12.5	100	58	86	10.0	2.0	020	4.5	5.8	
19	14.0	-0.5	6.5	99	34	68	1.0	2.5	020	4.5		
20	8.0	-1.5	3.0	100	54	80	0.0	2.5	020	4.5		
21	2.0	-6.5	-2.0	98	46	70	-6.5	3.5	010	5.5		
22	10.5	-7.0	1.5	96	32	62	-5.0	2.0	360	4.5		
23	10.5	-6.0	2.0	100	46	80	-1.0	0.5	VAR	2.0	7.4	
24	10.0	3.5	6.5	100	94	98	6.0	1.0	160	3.0	4.3	
25	6.5	4.5	5.5	100	86	94	4.5	1.0	360	2.5	2.5	
26	17.0	3.0	10.0	100	54	78	6.5	1.5	350	4.0		
27	18.5	-0.5	9.0	100	48	72	4.0	1.5	360	4.0		
28	19.0	2.0	10.5	100	53	82	7.5	0.5	VAR	1.5	0.3	
29	22.5	9.0	15.5	100	60	88	13.5	2.0	270	4.0	4.8	
30	18.5	7.5	13.0	100	47	78	9.0	1.5	330	3.5		
AVG	14.4	-0.1	7.2	100	31	77	3.8	1.9	N	6.0	52.0 (Total)	

Monthly Max = 26°C
Monthly Min = -7°C
Peak Gust = 19 MPS on 2 Apr

Table B1 (cont'd).

OCTOBER 1981 **CRREL**

Date	Temperature (°C) Max	Min	Avg	Rel. Hum. % Max	Min	Mean	Mean Dew Point	Wind Avg. Speed	Dir	Max Hrly	Precipitation Amt (mm)	Snow Depth
1	8.5	0.5	4.0	100	56	78	0.5	1.0	270	1.5	2.9	
2	15.0	5.0	10.0	100	58	79	6.5	0.5	VAR	4.0	8.1	
3	10.0	5.5	8.0	100	68	85	5.5	1.5	360	3.0	5.6	
4	15.0	3.5	9.0	100	49	75	5.0	1.0	270	2.5		
5	15.0	3.5	9.0	100	55	76	5.0	0.5	VAR	1.0		
6	10.0	3.0	6.5	100	88	93	5.5	0.5	VAR	2.0	7.0	
7	10.5	5.5	8.0	100	62	83	5.5	1.0	270	4.0	0.6	
8	10.5	5.5	8.0	100	66	86	5.5	2.0	030	4.0	0.4	
9	9.0	3.0	6.0	100	58	81	3.0	2.5	010	4.5		
10	11.0	-0.5	5.0	100	42	73	0.5	1.0	VAR	4.0		
11	10.0	-1.5	5.5	100	50	69	0.5	1.0	090	3.5		
12	13.5	-3.0	5.0	100	40	72	0.5	0.5	VAR	1.5		
13	16.5	-2.0	7.0	100	37	67	1.5	0.5	VAR	1.0		
14	20.0	0.0	10.0	100	24	66	4.0	0.5	VAR	1.0		
15	17.0	-1.0	8.0	100	40	72	3.5	C	C	1.0	0.3	
16	15.0	3.0	9.0	100	62	84	6.5	1.5	360	4.5		
17	15.0	0.0	7.5	100	49	77	3.5	2.0	360	4.5		
18	11.0	0.0	5.5	100	68	86	3.5	1.0	180	5.0	20.5	
19	11.0	2.5	7.0	100	50	76	3.0	1.5	240	3.5		
20	13.0	-1.0	6.0	100	44	71	1.0	3.0	210	4.0	0.3	
21	13.0	2.5	8.0	100	53	77	4.5	2.0	210	3.0		
22	16.0	5.5	11.0	100	61	82	8.0	0.5	VAR	3.0		
23	16.0	3.5	10.0	100	82	90	8.5	2.0	210	4.5	15.5	
24	8.0	-3.0	2.5	100	39	71	-2.0	2.0	310	4.0	2.9	
25	9.5	-4.0	3.0	100	62	83	0.5	1.0	150	4.0	0.3	
26	9.5	7.0	8.0	100	89	95	7.5	0.5	VAR	2.5	11.5	
27	12.5	8.0	10.0	100	96	98	9.5	C	C	1.0	22.4	
28	13.0	3.5	8.0	98	68	84	5.5	4.0	360	6.0	19.4	
29	6.5	-0.5	3.0	100	68	83	0.5	0.5	VAR	2.0		
30	10.0	-1.5	4.0	100	56	76	0.0	0.5	VAR	2.5		
31	11.5	-1.5	5.0	100	55	79	1.5	0.5	VAR	1.5		
AVG	12.0	1.7	7.0	100	24	80	4.0	1.0	VAR	6.0	117.6 (Total)	

Monthly Max = 20°C

Monthly Min = -4°C

Peak Gust = 16 MPS on 28 Oct

Table B1 (cont'd).

CRREL

NOVEMBER 1981

Date	Temperature (°C) Max	Min	Avg	Rel. Hum. % Max	Min	Mean	Mean Dew Point	Wind Avg. Speed	Dir	Max Hrly	Precipitation Amt (mm)	Snow Depth (cm)
1	12.0	0.0	6.0	100	68	84	3.5	0.5	VAR	2.5		
2	17.0	1.5	9.0	100	42	71	4.0	2.0	300	4.5		
3	10.5	-2.5	4.0	99	30	62	-2.5	2.5	330	4.5		
4	12.0	-3.0	4.5	99	32	65	-1.5	1.5	360	5.5		
5	14.5	-4.5	5.5	99	40	72	1.0	0.5	VAR	2.5		
6	10.0	3.0	6.5	100	67	84	4.0	1.0	VAR	3.5	8.0	
7	4.0	0.5	2.0	100	60	79	-1.5	3.0	340	4.5		
8	12.0	-3.0	4.5	100	20	62	-2.0	1.5	060	3.5		
9	11.0	-3.0	4.0	100	60	81	1.0	2.0	360	5.0		
10	4.5	-6.0	-1.0	100	40	71	-5.5	2.0	180	5.0		
11	8.0	0.0	4.0	100	53	75	0.0	1.5	270	4.0		
12	2.0	-7.0	-2.5	100	26	62	-8.5	2.5	360	4.5		
13	7.5	-8.5	-1.0	100	26	63	-7.0	0.5	VAR	2.0	1.0	
14	10.0	-6.0	2.0	100	38	68	-3.5	0.5	VAR	2.0	4.0	
15	8.0	-1.0	3.5	100	69	84	1.0	0.5	VAR	2.0	8.0	
16	14.0	7.0	10.5	100	71	86	8.5	0.5	VAR	2.0	7.0	
17	10.0	7.0	8.5	100	86	93	7.5	C	C	0.5		
18	7.0	2.0	4.5	98	76	87	2.5	1.0	350	3.0	9.0	
19	5.0	2.0	3.5	100	68	85	1.0	1.0	VAR	2.5	8.0	
20	3.0	2.0	2.5	100	81	90	1.0	1.0	VAR	2.5		
21	4.0	1.5	3.0	100	64	80	0.0	1.5	240	4.0		
22	3.5	-1.0	1.5	69	50	56	-6.5	2.0	270	4.5		
23	2.5	-4.0	-1.0	87	44	70	-6.0	1.5	270	3.0		
24	0.5	-7.5	-3.5	100	53	77	-7.0	1.0	360	3.0		
25	-1.0	-7.5	-4.0	100	64	80	-7.0	4.0	030	7.0		
26	0.5	-4.0	-1.5	88	60	72	-6.0	3.5	010	5.5		
27	4.0	-2.0	1.0	100	60	79	-2.0	0.5	VAR	1.5	2.0	
28	4.0	-2.5	1.0	100	53	76	-3.0	2.5	270	4.5		
29	0.0	-2.5	-1.5	96	58	76	-5.0	3.0	360	4.5		
30	0.0	-7.0	-3.5	100	54	75	-2.9	2.5	360	4.0	___	
AVG	6.7	-1.9	2.4	100	20	76	-1.5	1.5	VAR	7.0	47.0	
											(Total)	

Monthly Max = 17°C
Monthly Min = -8°C
Peak Gust = 13 MPS on 2 Nov

Table B1 (cont'd).

DECEMBER 1981 **CRREL**

Date	Temperature (°C) Max	Min	Avg	Rel. Hum. % Max	Min	Mean	Mean Dew Point	Wind Avg. Speed	Dir	Max Hrly	Precipitation Amt (mm)	Snow Depth (cm)
1	-2.0	- 9.5	- 5.5	100	78	89	- 7.0	1.0	200	3.0	6.0	
2	3.0	- 2.0	0.5	100	66	82	- 2.5	1.0	VAR	2.5	0	
3	1.0	- 1.0	0.0	100	94	96	- 1.5	0.5	VAR	2.5	0	
4	5.5	- 4.0	1.0	100	52	75	- 3.0	0.5	VAR	2.5	0	
5	1.0	- 4.0	- 1.5	99	68	82	- 4.5	2.0	360	5.5	0	
6	-1.0	- 5.0	- 3.0	98	65	81	- 6.0	6.0	360	7.5	0	
7	-1.0	- 8.5	- 5.0	100	71	85	- 7.0	2.5	360	4.0	1.5	6.0
8	-3.0	- 9.5	- 6.5	100	80	89	- 8.0	1.5	030	3.5	2.3	5.5
9	-3.0	- 5.0	- 4.0	100	70	83	- 6.5	3.0	360	4.5	1.0	11.5
10	-3.0	- 5.5	- 4.0	88	59	72	- 8.5	3.5	360	5.5	0	12.0
11	1.0	- 6.0	- 2.5	99	64	81	- 5.5	1.5	360	3.0	0.3	12.0
12	0.5	- 3.0	- 1.5	97	58	76	- 5.5	2.5	360	4.5	0	12.0
13	-2.0	- 7.5	- 4.5	100	62	78	- 8.0	2.0	030	4.0	0	12.0
14	-1.0	-11.0	- 6.0	100	64	81	- 9.0	C	C	1.0	1.9	9.0
15	1.5	- 3.0	- 1.0	100	78	87	- 3.0	C	C	2.0	2.1	16.0
16	1.0	- 5.0	- 2.0	100	53	76	- 5.5	3.0	300	4.0	10.7	33.0
17	-1.0	-11.0	- 6.0	100	41	68	-11.0	0.5	VAR	3.0	0.1	28.0
18	-5.5	- 9.0	- 7.5	100	88	92	- 8.5	2.0	030	3.0	3.0	
19	-6.0	-17.0	-11.5	100	53	75	-15.0	1.0	300	3.0	0	
20	-7.5	-25.0	-16.0	100	51	69	-20.5	1.0	300	3.5	0	
21	-5.0	-26.0	-15.5	99	53	70	-20.0	0.5	VAR	2.5	0	29.0
22	1.5	- 9.5	- 5.5	100	67	83	- 8.0	0.5	VAR	3.0	1.1	36.0
23	2.0	- 9.0	- 3.5	100	70	86	- 5.5	1.5	270	4.0	4.0	
24	3.5	- 4.5	- 0.5	100	54	73	- 5.0	1.0	210	3.0	0	
25	0.5	- 6.0	- 3.0	99	52	76	- 7.0	0.5	VAR	2.5	0	
26	-1.5	- 9.5	- 5.5	100	63	82	- 8.0	M	M	M	0	
27	-1.5	-10.5	- 6.0	100	71	87	- 8.0	M	M	M	4.2	
28	2.0	- 4.5	- 3.0	100	74	95	- 3.5	C	C	1.5	1.5	35.0
29	1.0	-17.0	- 8.0	100	59	94	- 9.0	2.0	360	4.5	6.0	42.0
30	-1.0	-16.5	- 9.0	100	48	84	-11.0	0.5	VAR	2.0	0	
31	-4.0	-10.0	- 7.0	96	58	80	-10.0	0.5	VAR	2.5	0	____
AVG	- .8	- 9.2	- 5.0	100	41	82	-11.0	1.5	N	7.5	45.7 (Total)	

Monthly Max = 6°C
Monthly Min = -26°C
Peak Gust = 17 MPS on 6 Dec

Table B1 (cont'd).

JANUARY 1982 **CRREL**

Date	Temperature (°C) Max	Min	Avg	Rel. Hum. % Max	Min	Mean	Mean Dew Point	Wind Avg. Speed	Dir	Max Hrly	Precipitation Amt (mm)	Snow Depth (cm)
1	0.0	- 3.0	- 1.5	100	69	93	-2.5	1.5	270	3.5	9.5	
2	- 1.0	-18.0	- 9.5	100	30	61	-15.5	2.5	360	4.5	0.5	
3	- 5.5	-19.0	-12.0	100	53	82	-14.5	0.5	VAR	1.5	0	
4	3.5	- 5.5	- 1.0	100	88	94	-2.0	1.5	180	4.5	24.7	45.0
5	3.5	-13.0	- 5.0	100	49	64	-11.0	4.0	270	7.0	0	39.0
6	- 5.0	-16.0	-10.5	100	68	93	-11.5	C	C	1.0	0	38.0
7	- 1.0	- 6.5	- 4.0	100	56	81	-8.5	1.5	010	3.5	0	39.0
8	- 6.5	-16.5	-11.5	93	40	66	-16.5	1.5	300	4.0	0	38.0
9	- 7.0	-17.5	-12.5	100	67	94	-13.5	0.5	VAR	2.0	0	38.0
10	-15.0	-23.0	-19.0	95	44	71	-23.0	1.5	270	4.5	0	38.0
11	-14.5	-23.5	-19.0	96	53	69	-23.5	2.0	210	4.0	T	38.0
12	-13.5	-28.0	-22.0	98	39	77	-25.0	1.5	010	5.0	T	43.0
13	-13.5	-25.5	-19.5	100	50	88	-21.0	1.0	040	2.0	2.2	
14	- 9.0	-14.5	-12.0	100	86	96	-12.5	0.5	VAR	2.0	1.0	43.0
15	- 5.5	-18.0	-12.0	91	46	77	-15.5	2.0	330	4.0	T	42.0
16	- 6.5	-24.5	-15.5	100	48	91	-16.5	0.5	VAR	5.5	0	
17	-10.5	-21.0	-16.0	84	44	58	-22.5	3.5	300	6.0	0	
18	-11.5	-30.0	-21.0	100	44	77	-24.0	1.0	240	3.0	T	37.0
19	-11.0	-28.5	-20.0	100	44	78	-23.0	0.5	VAR	3.0	T	38.0
20	- 2.5	-16.0	- 9.5	100	48	75	-13.0	2.0	360	4.5	0.3	38.0
21	-11.5	-26.0	-19.0	100	48	67	-23.5	1.5	030	3.5	0	38.0
22	-14.5	-31.0	-23.0	100	41	74	-26.5	1.0	070	3.5	0	37.0
23	- 6.0	-26.0	-16.0	100	78	95	-16.5	1.5	220	4.0	10.3	
24	- 6.0	-11.5	- 9.0	100	53	70	-13.5	3.0	240	5.0	0.6	
25	-11.0	-23.5	-17.0	97	44	62	-22.5	2.5	270	4.5	0	49.0
26	-12.5	-34.0	-23.0	100	48	76	-26.0	1.5	020	3.5	0	49.0
27	-10.0	-32.0	-21.0	100	50	82	-23.5	1.0	050	2.5	0	48.0
28	- 2.5	-20.0	-11.5	100	56	85	-13.5	1.0	240	4.0	0	48.0
29	1.0	-14.0	- 6.5	100	45	55	-14.0	3.5	300	6.0	0	46.0
30	- 1.5	-18.0	-10.0	100	59	95	-10.5	1.0	210	5.5	0	
31	1.5	- 7.0	- 3.0	100	48	80	-6.0	3.0	020	4.5	19.5	___
AVG	- 6.6	-19.7	-13.3	100	30	78	-16.5	1.5	NNW	7.0	68.6 (Total)	

Monthly Max = 3.5°C
Monthly Min = -34°C
Peak Gust = 16.5 MPS on 5 Jan

Table B1 (cont'd).

FEBRUARY 1982 **CRREL**

Date	Temperature (°C) Max	Min	Avg	Rel. Hum. % Max	Min	Mean	Mean Dew Point	Wind Avg. Speed	Dir	Max Hrly	Precipitation Amt (mm)	Snow Depth (cm)
1	0.0	-11.5	- 6.0	100	57	83	- 8.5	2.5	280	6.0	4.3	52
2	-2.0	-20.0	-11.0	100	53	82	-13.5	M	M	M	T	51
3	1.0	- 2.0	- 0.5	100	89	99	- 0.5	M	M	M	26.8	50
4	6.5	- 8.5	- 1.0	100	48	69	- 6.0	3.0	360	5.0	0	47
5	-6.0	-14.0	-10.0	100	52	76	-13.5	1.0	030	2.5	1.2	46
6	-0.5	- 8.5	- 4.5	100	42	65	-10.0	2.5	270	5.5	0.9	46
7	-3.0	-14.5	- 9.0	84	34	53	-17.0	2.5	220	6.0	0	52
8	-1.0	- 9.5	-10.5	94	48	62	-16.5	2.5	250	4.5	0	46
9	-3.0	-10.0	-11.5	100	91	97	-12.0	C	C	0.5	6.6	52
10	-3.5	-19.5	-11.5	100	39	73	-15.5	1.5	320	5.0	0.7	59
11	-3.5	-25.5	-14.5	100	44	78	-17.5	0.5	VAR	2.5	0	54
12	-0.5	-23.5	-12.0	100	41	77	-15.5	1.0	320	2.5	0	54
13	-3.5	-11.5	- 7.5	95	60	86	- 9.5	1.5	030	2.5	0	
14	-1.5	-18.5	-10.0	100	40	77	-13.5	1.0	290	3.5	0	
15	4.0	-18.5	- 7.0	100	72	91	- 8.5	1.0	220	4.0	0	
16	5.0	- 6.0	- 0.5	100	35	58	- 7.5	3.0	360	5.5	0	51
17	-2.5	-13.0	- 8.0	93	39	62	-14.0	1.5	050	3.5	0	49
18	2.0	-17.0	- 7.5	100	27	66	-13.0	1.0	270	2.0	0	49
19	-1.0	-14.5	- 8.0	100	82	99	- 8.0	0.5	VAR	1.5	11.1	49
20	3.5	- 5.0	- 1.0	100	70	90	- 2.5	1.5	060	4.0	0.2	53
21	5.0	- 3.0	1.0	100	54	72	- 3.5	2.0	030	4.0	0	53
22	0.5	- 4.5	- 2.0	90	62	75	- 6.0	3.5	020	4.5	0	53
23	1.5	- 9.0	- 4.0	100	57	77	- 7.5	1.0	340	4.5	T	53
24	0.5	-12.5	- 6.0	68	44	55	-13.5	2.5	030	5.5	0	53
25	-8.0	-17.0	-12.5	60	34	46	-21.5	4.0	340	8.0	0	53
26	-4.5	-19.0	-12.0	79	34	49	-20.5	2.5	340	5.0	0	53
27	1.0	-18.5	- 9.0	100	38	70	-13.5	1.5	300	4.0	0	
28	-5.0	-17.5	-11.5	100	31	61	-17.5	2.5	010	6.0	0	—
AVG	-0.7	-13.3	- 7.4	100	27	73	-11.5	2.0	VAR	8.0	51.8 (Total)	

Monthly Max = 6°C
Monthly Min = -26°C
Peak Gust = 16.5 MPS on 1 Feb

Table B1 (cont'd).

MARCH 1982

CRREL

Date	Temperature °C Max	Min	Mean	Rel. Hum. % Max	Min	Mean	Mean Dew Point	Wind Avg. Speed	Wind Dir	Wind Max Hrly	Precipitation Amt (mm)	Precipitation Snow Depth
1						77	-16.0	1.5	210	4.5	1.1	52
2						71	- 8.5	2.0	260	6.0	2.1	58
3						65	-17.0	2.0	360	4.0	0	52
4						82	-17.0	1.0	220	2.5	4.3	52
5							- 4.5	2.0	270	4.5	2.2	55
6							- 8.0	1.5	160	3.0	0	
7						98	0.0	0.5	VAR	2.0	20.0	
8							-11.5	2.5	300	4.5	1.8	62
9						88	-12.0	0.5	VAR	3.0	1.5	60
10						84	- 6.5	1.0	210	3.5	0.7	62
11						89	1.5	1.0	240	2.5	0	61
12						98	4.0	C	C	1.5	1.4	55
13						98	1.5	1.5	210	3.5	5.5	52
14						59	- 5.0	4.0	290	7.0	0.3	50
15						40	-12.5	3.0	340	5.0	0	47
16						61	- 6.5	0.5	VAR	2.5	0.2	45
17						93	- 0.5	0.5	VAR	2.0	2.8	45
18						74	- 1.0	0.5	VAR	1.5	0	44
19						74	0.5	1.0	060	2.5	0	42
20						73	- 1.0	0.5	VAR	2.5	0	41
21						92	- 3.0	1.0	190	3.0	6.3	40
22						71	- 2.0	1.5	300	3.5	0.8	38
23						69	- 3.5	1.5	300	4.0	T	37
24						67	- 2.5	1.0	220	3.5	0	35
25						74	3.0	1.0	240	3.5	0	31
26						91	.5	2.5	220	4.0	11.0	19
27		- 8		84	36	48	-15.5	4.5	300	6.5	0	18
28				82	24	46	-16.5	3.0	310	6.5	0	17
29		-12.0		100	31	67	- 7.0	1.0	270	3.0	0	16
30		- 6.0	5.0	100	23	67	- 0.5	0.5	VAR	2.0	0	12
31	8.0	- 1.0	3.5	100	77	87	3.0	0.5	VAR	3.0	7.3	2
AVG	4.3	- 7.4	- 1.0	100	23	75	- 5.5	1.5	VAR	7.0	69.3 (Total)	

Monthly Max = 16°C
Monthly Min = -14°C
Peak Gust = 16 MPS on 28 Mar

Table B1 (cont'd).

APRIL 1982 **CRREL**

Date	Temperature (°C) Max	Min	Avg	Rel. Hum. % Max	Min	Mean	Mean Dew Point	Wind Avg. Speed	Dir	Max Hrly	Precipitation Amt (mm)	Snow Depth (cm)
1	9.5	0.0	5.0	98	44	60	- 2.0	4.0	260	5.5	0.4	0
2	5.0	- 4.0	0.5	97	36	59	- 6.5	3.5	360	7.0	0	
3	6.0	- 6.0	0.0	100	44	85	- 2.5	2.0	180	4.5	8.9	
4	3.0	- 5.5	-1.0	100	50	67	- 6.5	3.0	270	6.0	1.5	
5	2.0	- 9.0	-3.5	73	34	49	-13.0	3.5	350	6.0	.5	
6	-6.5	- 9.5	-8.0	100	51	80	-11.0	4.0	020	7.0	5.9	
7	-5.5	-12.0	-9.0	78	52	63	-15.0	6.0	340	8.0	.6	28
8	1.5	- 7.5	-3.0	58	34	47	-13.0	4.0	300	7.0	T	25
9	8.0	- 9.0	-0.5	85	30	47	-10.5	1.5	330	3.0	0	22
10	8.5	- 6.0	3.0	100	37	62	- 3.5	2.0	290	5.0	0	
11	12.0	- 4.0	4.0	100	36	73	- 0.5	1.5	260	2.5	.9	
12	8.0	- 3.0	2.5	100	50	81	- 0.5	1.0	330	3.0	2.7	5
13	8.0	- 3.0	2.5	100	63	89	1.0	1.5	240	4.5	2.0	0
14	10.0	- 1.5	4.5	87	30	52	- 4.5	3.0	330	5.5	0.1	
15	15.0	- 4.0	5.5	100	24	64	- 0.5	0.5	VAR	3.0	0	
16	20.0	3.0	11.5	100	30	65	5.0	1.5	220	4.0	0	
17	16.0	1.0	8.5	100	74	91	7.0	2.0	220	5.0	6.1	
18	13.0	0.0	6.5	100	41	56	- 1.5	4.0	270	6.5	5.7	
19	16.5	- 4.0	6.5	99	30	59	- 1.0	1.5	240	4.0	0	
20	21.0	- 0.5	10.5	100	32	53	1.5	3.0	310	6.0	0	
21	12.0	0.5	6.5	100	32	58	- 1.0	3.5	270	6.5	0.4	
22	4.0	- 4.5	-0.5	100	42	58	- 7.5	2.0	310	4.0	0	
23	17.0	- 6.0	5.5	100	30	54	- 3.0	2.5	240	4.5	0	
24	20.0	3.5	12.0	100	38	68	6.5	1.0	040	3.0	0	
25	24.5	- 1.0	12.0	100	24	59	4.5	1.5	240	4.0	0	
26	20.0	4.0	12.0	100	52	85	9.5	1.5	210	4.0	5.3	
27	20.5	8.0	14.5	100	57	81	11.0	2.0	360	5.5	4.0	
28	13.0	1.0	7.0	84	31	54	- 1.5	5.0	010	7.5	0	
29	16.5	- 2.5	7.0	100	29	61	0.0	2.0	350	5.5	0	
30	20.5	- 1.5	9.5	100	23	55	1.0	2.0	350	6.0	0	—
AVG	11.3	- 2.8	4.5	100	23	65	- 2.0	2.5	NNW	7.5	45.5 (Total)	

Monthly Max = 24°C
Monthly Min = -12°C
Peak Gust = 21.5 MPS on 7 Apr.

Table B1 (cont'd).

OCTOBER 1980

MT. WASHINGTON

Day	Temperature (°C)			Relative Humidity %			Dew Point (°C)	Wind (mph)†				Time	Precipitation (mm)
	Max	Min	Mean	Max	Min	Mean	Mean	Speed	Dir.	Peak	Dir.		Amount
1	6.1	3.9	5.0	100	79	90	3.33	13.5	SW	35	SW	2000	0.0
2	6.7	2.2	4.4	100	96	98	6.11	27.7	S	58	SW	1750	21.1
3	3.9	1.1	2.5	100	86	93	2.22	13.1	W	55	W	0105	15.7
4	3.9	-2.2	0.8	100	100	100	1.11	23.7	W	56	W	1505	24.4
5	-0.6	-2.8	-1.7	100	83	91.5	-2.22	9.5	W	25	W	0010	0.0
6	0.0	-3.9	-1.9	100	81	90.5	-3.33	5.8	W	21	W	1400	0.0
7	-1.7	-4.4	-3.1	100	77	88.5	-3.89	10.9	W	35	W	2345	0.3
8	4.4	-3.9	0.3	100	66	83	-2.22	46.9	W	108	W	2205	0.3
9	3.3	-9.4	-3.1	100	100	100	-5.56	61.7	W	106	W	0440	0.3
10	1.7	-10.6	-4.4	100	16	58	-17.22	34.4	W	83	NW	0335	0.8
11	5.6	-0.6	2.5	100	100	100	2.78	36.3	SW	78	W	0530	17.5
12	0.6	-6.7	-3.1	100	16	58	-2.78	36.6	W	93	W	1955	15.5
13	-6.1	-10.0	-8.1	100	100	100	-8.33	64.1	NW	109	NW	2020	7.1
14	-8.9	-12.2	-10.6	100	100	100	-10.56	67.3	NW	102	NW	0040	0.8
15	-4.4	-11.1	-7.8	100	27	63.5	-8.33	25.0	W	53	W	0005	0.0
16	0.6	-6.1	-2.8	100	23	61.5	-6.67	37.1	W	56	W	1600	0.0
17	7.2	-0.6	3.3	100	27	63.5	3.33	38.8	W	71	S	2340	0.0
18	7.8	1.7	4.7	100	100	100	4.44	55.4	W	85	SW	0355	25.7
19	2.8	-5.6	-1.4	100	94	97	-1.11	45.4	W	70	W	1055	2.5
20	-5.6	-10.6	-8.1	100	73	86.5	-6.67	40.8	W	74	W	1355	10.7
21	-5.0	-10.6	-7.8	100	100	100	-8.33	36.9	W	66	W	2000	3.0
22	-5.6	-12.2	-8.9	100	100	100	-8.89	56.0	W	85	SW	2305	6.1
23	-7.2	-13.3	-10.3	100	100	100	-11.67	56.4	W	87	W	0310	0.8
24	1.1	-8.9	-3.9	100	14	57	-15.00	16.3	N	41	SE	2305	0.0
25	2.2	-5.6	-1.7	100	27	63.5	-15.00	62.8	E	123	E	1615	24.1
26	1.7	-10.6	-4.4	100	31	65.5	-4.44	84.5	W	128	W	1240	25.1
27	-8.9	-12.8	-10.8	100	100	100	-10.56	73.1	W	128	W	0025	3.6
28	-6.1	-13.9	-10.0	100	100	100	-8.89	39.9	W	81	W	2105	5.8
29	-10.6	-14.4	-12.5	100	100	100	-12.78	58.2	W	94	W	0440	1.8
30	-5.6	-11.7	-8.6	100	81	90.5	-10.00	29.9	W	52	W	0020	0.0
31	-5.6	-8.3	-6.9	100	45	72.5	-10.56	49.4	W	75	W	1910	0.8
Monthly				100	14	86.1	-5.5	40.5		128		1240	Total
Ave =			-3.8										213.8
Max =	7.8		5.0										
Min =		-14.4	-12.5										

† - Conversion mph to m/s, mph x .447

Table B1 (cont'd).

NOVEMBER 1980 **MT. WASHINGTON**

Day	Temperature (°C) Max	Min	Mean	Relative Humidity % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	-7.2	-12.2	-9.7	100	100	100	-9.44	61.1	W	99	W	1855	15.0
2	-11.7	-16.1	-13.9	100	100	100	-13.33	60.4	W	101	W	0435	11.4
3	0.6	-15.6	-7.5	100	16	58	-17.78	35.8	W	61	SW	2235	0.0
4	1.7	-2.2	-0.3	100	55	77.5	-2.78	45.8	SW	83	SW	1225	0.5
5	-0.6	-16.7	-8.6	100	100	100	-6.11	60.8	W	98	W	1915	2.8
6	-7.2	-17.2	-12.2	100	59	79.5	-13.33	53.6	W	87	W	0002	0.0
7	0.6	-8.3	-3.9	100	100	100	-4.44	47.5	W	79	SW	2152	15.2
8	1.1	-17.2	-8.1	100	33	66.5	-6.11	64.8	W	106	W	1928	7.9
9	0.0	-8.3	-4.2	100	33	66.5	-9.44	45.8	SW	94	SW	1445	0.8
10	-2.8	-16.7	-9.7	100	100	100	-8.33	44.4	W	78	W	1807	9.7
11	-8.3	-16.7	-12.5	100	100	100	-15.00	63.9	W	102	W	1322	8.6
12	-3.3	-13.3	-8.3	100	100	100	-7.78	62.4	NW	91	NW	1310	4.3
13	-2.2	-10.6	-6.4	100	38	69	-12.22	61.3	W	106	W	0435	0.0
14	-3.3	-13.9	-8.6	100	100	100	-6.67	58.3	W	93	W	0500	5.1
15	-10.3	-15.6	-12.8	100	33	66.5	-16.67	45.2	W	79	W	2130	3.6
16	-8.9	-18.9	-13.9	100	67	83.5	-17.22	62.0	NW	107	NW	1750	3.3
17	-5.0	-10.6	-7.8	84	33	58.5	-15.00	19.5	SW	81	NW	0015	1.8
18	-8.9	-16.1	-12.5	100	100	100	-10.56	26.4	N	76	N	1940	30.5
19	-13.9	-17.8	-15.8	100	68	84	-17.22	49.3	NW	76	NW	2215	3.6
20	-7.2	-14.4	-10.8	100	56	78	-12.78	40.4	NW	76	NW	0440	3.0
21	-6.7	-11.1	-8.9	100	46	73	-13.89	25.1	SW	59	SW	1045	0.0
22	-5.0	-11.1	-8.1	100	24	62	-12.22	56.3	NW	102	NW	0825	2.5
23	0.6	-5.6	-2.5	60	25	42.5	-16.11	40.8	W	61	W	0430	0.1
24	1.1	-3.3	-1.1	100	56	78	-1.67	44.5	SW	72	SW	1350	24.4
25	1.1	-14.4	-6.7	100	92	96	-2.22	29.9	W	93	W	2335	8.6
26	-11.1	-16.1	-13.6	100	47	73.5	-18.33	89.0	NW	146	NW	0810	5.1
27	0.6	-14.4	-6.9	48	2	25	-25.56	33.3	N	93	NW	0030	0.0
28	-1.7	-7.2	-4.4	100	10	55	-16.67	48.8	SE	92	SE	2020	100.8
29	-2.2	-12.2	-7.2	100	100	100	-8.33	50.4	W	81	W	1055	11.4
30	-10.6	-14.4	-12.5	100	100	100	-12.22	65.9	W	104	W	0435	13.5
31													
				100	2	79.8	-11.6	49.8		146		0810	

Monthly

Ave =			-8.6
Max =	1.7		-0.3
Min =		-18.9	-15.8

Total

293.5

† - Conversion mph to m/s, mph x .447

Table B1 (cont'd).

DECEMBER 1980 — **MT. WASHINGTON**

Day	Temperature (°C) Max	Min	Mean	Relative Humidity % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	-6.1	-11.7	-8.9	100	100	100	-8.33	51.8	W	90	W	1140	0.0
2	-1.7	-7.8	-4.7	100	40	70	-7.22	35.6	S	87	S	2240	2.5
3	-1.7	-23.3	-12.5	100	100	100	-11.67	59.6	W	151	NW	1125	36.8
4	-17.2	-23.9	-20.6	100	79	89.5	-21.67		NW	178	NW	0435	0.1
5	-7.2	-17.2	-12.2	100	51	75.5	-13.89	69.9	NW	106	NW	0210	0.3
6	0.6	-7.8	-3.6	100	46	73	-15.56	28.7	N	75	N	0010	0.0
7	3.3	-2.2	0.6	73	17	45	-15.00	16.5	N	36	N	0150	0.1
8	2.8	-3.3	-0.3	100	24	62	0.56	46.2	W	136	W	2110	15.2
9	-3.3	-16.7	-10.0	100	43	71.5	-14.44	59.3	N	146	N	0150	2.3
10	-11.1	-17.8	-14.4	100	87	93.5	-13.89	43.6	W	91	W	2340	2.5
11	-17.8	-30.6	-24.2	100	19	59.5	-26.67	64.1	W	104	W	0205	2.0
12	-12.2	-25.0	-18.6	100	100	100	-22.22	44.0	W	81	SW	2210	6.3
13	-9.4	-22.2	-15.8	100	100	100	-12.78	58.6	W	86	W	0840	8.1
14	-18.3	-34.4	-26.4	100	30	65	-25.00	60.6	W	130	W	2200	2.8
15	-17.8	-35.6	-26.7	100	100	100	-28.33	62.7	W	118	W	0000	0.8
16	-8.9	-18.3	-13.6	100	100	100	-12.78	28.6	SE	58	S	0315	9.4
17	-10.6	-22.8	-16.7	100	24	62	-26.67	42.4	W	75	W	1525	0.0
18	-11.1	-16.1	-13.6	100	6	53	-23.89	81.3	W	98	SW	0505	6.3
19	-12.2	-32.8	-22.5	100	6	53	-20.00	69.2	W	114	W	1610	4.8
20	-26.1	-31.1	-28.6	100	66	83	-31.11	63.0	NW	92	W	2350	0.0
21	-26.1	-30.6	-28.3	100	100	100	-28.89	83.0	W	130	W	0825	0.0
22	-18.3	-27.2	-22.8	100	59	79.5	-23.89	49.9	W	76	W	0040	0.5
23	-8.9	-18.9	-13.9	100	92	96	-16.11	51.0	W	78	SW	0422	0.0
24	-6.7	-25.6	-16.1	100	27	63.5	-13.33	43.4	W	68	W	2028	7.1
25	-24.4	-38.3	-31.4	100	91	95.5	-33.89	84.1	NW	135	NW	1306	0.0
16	-20.0	-31.1	-25.6	100	61	80.5	-25.56	49.5	W	81	NW	0339	0.8
27	-11.7	-21.7	-16.7	100	22	61	-28.33	20.9	W	46	W	0555	0.1
28	-3.9	-14.4	-9.2	100	10	55	-19.44	53.4	SW	94	SW	1746	0.8
29	0.0	-5.6	-2.8	100	9	54.5	-4.44	37.2	W	81	W	0324	0.1
30	-4.4	-24.4	-14.4	100	16	58	-18.89	43.3	NW	99	NW	2207	0.0
31	-10.0	-24.4	-17.2	100	55	77.5	-28.89	54.8	NW	112	NW	0220	0.0
Monthly				100	6	76.7	-19.1	51.9		178		0435	Total 109.7
Ave =	3.3		-15.9										
Max =			0.6										
Min =		-38.3	-31.4										

† - Conversion mph to m/s, mph x .447

Table B1 (cont'd).

JANUARY 1981 — **MT. WASHINGTON**

Day	Temperature (°C) Max	Min	Mean	Relative Humidity % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	-9.4	-15.6	-12.5	100	2	51	-30.56	17.0	W	33	SW	1925	0.5
2	-12.2	-35.6	-23.9	100	100	100	-15.56	39.0	W	109	W	2225	3.6
3	-31.1	-39.4	-35.3	100	18	59	-37.22	77.0	W	123	W	0220	0.0
4	-21.7	-38.9	-30.3	100	17	58.5	-41.67	56.0	W	105	NW	2050	0.1
5	-15.0	-26.1	-20.6	100	36	68	-23.89	66.3	NW	113	NW	0145	1.5
6	-10.6	-20.0	-15.3	100	62	81	-20.56	36.6	SW	68	SW	2225	2.3
7	-11.7	-28.9	-20.3	100	100	100	-14.44	40.3	W	71	SW	0030	5.3
8	-26.7	-34.4	-30.6	100	100	100	-30.00	73.9	W	115	W	0315	1.0
9	-18.9	-27.2	-23.1	67	28	47.5	-29.44	21.7	W	59	W	0010	0.0
10	-19.4	-31.7	-25.6	100	82	91	-23.89	27.3	NW	66	NW	2355	0.3
11	-29.4	-33.9	-31.7	100	100	100	-31.67	58.4	NW	85	W	0505	1.0
12	-19.4	-31.7	-25.6	100	35	67.5	-28.89	18.5	W	58	W	0010	0.0
13	-15.6	-22.2	-18.9	61	34	47.5	-28.33	13.0	NW	28	N	0845	0.0
14	-16.7	-23.3	-20.0	100	32	66	-24.44	31.9	W	58	NW	0330	0.1
15	-13.9	-18.9	-16.4	100	38	69	-18.33	31.4	W	53	W	0650	0.0
16	-12.2	-15.0	-13.6	100	28	64	-21.67	14.8	W	26	W	0530	1.0
17	-13.9	-22.8	-18.3	100	61	80.5	-18.89	19.6	NW	58	N	2135	1.0
18	-16.1	-22.2	-19.2	100	34	67	-21.11	64.8	NW	100	NW	2105	0.8
19	-12.2	-18.9	-15.6	100	100	100	-16.11	76.5	W	121	W	2235	2.5
20	-11.7	-22.2	-16.9	100	20	60	-22.78	67.5	W	147	W	0340	0.5
21	-10.0	-16.7	-13.3	51	20	35.5	-26.11	42.6	NW	70	NW	0625	0.0
22	-9.4	-16.1	-12.8	100	8	54	-21.11	40.3	W	75	W	0840	2.5
23	-15.0	-17.8	-16.4	100	85	92.5	-16.11	28.2	NW	55	NW	0745	1.0
24	-15.6	-20.0	-17.8	100	83	91.5	-18.33	16.6	NW	35	W	2340	0.1
25	-5.6	-21.1	-13.3	100	>1%	50	-28.33	44.8	W	71	NW	0405	0.1
26	-0.6	-7.8	-4.2	100	35	67.5	-9.44	60.0	W	99	W	2230	0.0
27	-6.1	-12.8	-9.4	100	100	100	-8.89	60.5	W	101	W	0035	4.3
28	-12.8	-20.0	-16.4	100	57	78.5	-19.44	52.7	W	76	W	0558	1.3
29	-13.3	-25.0	-19.2	100	42	72	-16.67	32.2	NW	78	NW	2146	0.3
30	-18.3	-27.8	-23.1	100	28	55	-27.78	56.6	NW	93	NW	0417	2.0
31	-8.9	-22.2	-15.6	36	13	24.5	-29.44	54.7	NW	87	NW	0625	0.0
				100	2	70.0	-23.3	44.7		147		0340	Total
Monthly													33.1
Ave =			-20.4										
Max =	-0.6		- 4.2										
Min =		-39.4	-35.3										

† - Conversion mph to m/s, mph x .447

Table B1 (cont'd).

FEBRUARY 1981 — **MT. WASHINGTON**

Day	Temperature (°C) Max	Min	Mean	Relative Humidity % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	-5.0	-10.6	-7.8	100	31	65.5	-21.67	44.9	SW	106	S	1948	8.1
2	0.6	-17.2	-8.3	100	100	100	-3.33	56.4	SW	113	SW	1403	41.7
3	-16.7	-28.3	-22.5	100	100	100	-22.22	54.9	W	93	W	0005	2.3
4	-20.6	-28.9	-24.7	100	71	85.5	-27.78	24.5	W	74	W	0010	3.6
5	-20.6	-27.8	-24.2	100	72	86	-27.78	35.8	W	64	W	1515	0.5
6	-16.7	-22.2	-19.4	100	33	66.5	-23.33	52.4	SW	81	SW	1415	1.0
7	-12.8	-18.9	-15.8	100	44	72	-17.78	36.5	W	72	W	0155	6.1
8	-5.0	-13.3	-9.2	100	87	93.5	-10.00	25.1	SW	62	S	0750	10.9
9	-10.6	-21.1	-15.8	100	100	100	-16.11	62.7	W	106	W	0455	7.6
10	-6.1	-21.1	-13.6	100	20	60	-22.78	48.5	W	109	S	2205	0.1
11	6.1	-14.4	-4.2	100	100	100	-3.33	71.5	SE	122	S	1740	85.3
12	0.0	-27.2	-13.6	100	43	71.5	-19.44	78.5	W	146	W	0755	1.3
13	-13.9	-26.7	-20.3	63	27	45	-21.67	35.7	W	66	W	1715	0.0
14	-11.7	-18.9	-15.3	100	23	61.5	-22.22	54.0	W	87	W	1335	0.5
15	-5.0	-17.2	-11.1	76	2	39	-31.67	35.2	W	60	W	0005	0.0
16	-0.6	-6.1	-3.3	66	33	49.5	-13.33	53.0	W	89	SW	2350	0.1
17	-2.2	-5.0	-3.6	100	100	100	-3.89	57.1	W	90	SW	0033	0.3
18	-2.8	-4.4	-0.8	100	29	64.5	-6.67	42.2	W	75	W	0340	0.5
19	2.8	-1.7	0.6	100	84	92	0.00	26.8	SW	52	SW	1425	1.3
20	2.2	0.0	1.1	100	100	100	1.11	58.8	SE	100	SE	1320	125.0
21	2.2	-0.6	0.8	100	100	100	0.56	53.8	SE	99	E	0225	84.1
22	2.8	-1.7	0.6	100	9	54.5	-7.78	21.3	SE	58	SE	0020	2.5
23	1.7	-2.2	-0.3	100	4	52	-24.44	42.4	S	79	SE	1840	2.3
24	0.0	-8.3	-4.2	100	100	100	-2.78	51.8	SE	82	SE	0545	71.6
25	-3.9	-8.3	-6.1	100	100	100	-6.67	51.3	E	91	NE	0856	38.9
26	-0.6	-6.7	-3.6	100	100	100	-3.33	35.8	N	63	NE	0020	4.1
27	-3.9	-10.0	-6.9	100	21	60.5	-10.56	38.5	N	78	N	1710	0.0
28	-1.7	-8.9	-5.3	100	40	70	-11.67	27.5	N	66	W	2350	3.8
29													
30													
31													
				100	2	78.2	-13.6	45.6		146		0755	

Monthly				Total
Ave =			-9.2	
Max =	6.1		1.1	
Min =		-28.9	-24.7	503.5

† - Conversion mph to m/s, mph x .447

Table B1 (cont'd).

MARCH 1981 **MT. WASHINGTON**

Day	Temperature (°C) Max	Min	Mean	Relative Humidity % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	-7.2	-12.8	-10.0	100	100	100	-10.00	62.8	W	91	W	1545	8.4
2	-9.4	-15.6	-12.5	100	100	100	-12.22	35.3	W	63	NW	0010	5.6
3	-14.4	-24.4	-19.4	100	100	100	-18.89	44.5	W	125	W	2310	0.5
4	-14.4	-23.9	-19.2	100	43	71.5	-21.67	39.5	NW	68	W	0045	0.1
5	-10.0	-18.3	-14.2	84	24	54	-22.78	23.0	N	52	NW	0210	0.1
6	-7.8	-11.7	-9.7	100	100	100	-25.56	32.8	NE	53	NE	2350	2.5
7	-6.7	-10.6	-8.6	100	84	92	-26.11	33.9	NE	66	NE	1130	1.3
8	-4.4	-11.7	-8.1	46	26	36	-18.33	9.1	N	20	N	0240	0.0
9	-8.3	-13.9	-11.1	100	69	84.5	-11.11	35.8	NW	64	NW	2330	1.8
10	-11.1	-15.0	-13.1	100	100	100	-13.33	51.3	W	81	NW	0845	4.8
11	-7.2	-16.1	-11.7	100	100	100	-12.22	28.2	W	52	W	2305	4.6
12	-10.0	-16.7	-13.3	100	88	94	-15.00	27.1	W	49	W	2248	3.6
13	-7.8	-12.2	-10.0	100	100	100	-10.56	44.6	W	77	W	1443	4.6
14	-12.2	-23.3	-17.8	100	100	100	-17.78	61.9	W	115	NW	1827	5.8
15	-7.2	-23.3	-15.3	100	23	61.5	-20.00	67.8	W	117	W	0005	1.3
16	-6.7	-20.0	-13.3	100	33	66.5	-14.44	38.9	W	75	W	0248	4.8
17	-17.8	-22.2	-20.0	100	22	61	-26.67	71.5	NW	120	W	2335	0.0
18	-17.8	-23.9	-20.8	100	100	100	-21.11	78.1	W	122	W	0015	3.3
19	-12.8	-22.8	-17.8	100	81	90.5	-18.33	17.6	SE	56	NW	0030	1.5
20	-11.7	-17.2	-14.4	100	53	76.5	-16.67	18.8	SE	43	E	2010	5.6
21	-9.4	-13.3	-11.4	100	100	100	-11.67	31.5	NE	58	NE	0200	3.3
22	-8.3	-13.3	-10.8	90	19	54.5	-16.11	9.6	N	23	W	1525	0.0
23	-5.6	-11.7	-8.6	84	10	47	-17.22	6.3	N	15	N	0155	0.0
24	-5.6	-11.1	-8.3	100	80	90	-11.11	10.3	N	29	NE	2215	1.8
25	-7.8	-11.7	-9.7	100	54	77	-11.67	20.8	W	51	W	1746	0.1
26	-5.6	-11.1	-8.3	79	7	43	-14.44	19.0	W	40	SW	2310	0.0
27	-5.6	-11.7	-8.6	100	78	89	-7.78	33.6	NW	71	N	1650	11.7
28	-4.4	-11.7	-8.1	61	21	41	-20.56	47.0	W	84	W	2250	0.1
29	3.9	-4.4	-0.3	100	62	81	-4.44	79.6	W	108	W	1315	3.0
30	6.1	1.1	3.6	100	66	83	1.67	45.0	W	78	W	0100	14.7
31	1.7	-5.0	-1.7	100	74	87	-2.22	48.5	W	101	W	0850	0.0
Monthly				100	7	80.0	-15.1	37.9		125		2310	Total
Ave =			-11.6										93.9
Max =	6.1		3.6										
Min =		24.4	-20.8										

† - Conversion mph to m/s, mph x .447

Table B1 (cont'd).

APRIL 1981 **MT. WASHINGTON**

Day	Temperature (°C)			Relative Humidity %			Dew Point (°C)	Wind (mph)†				Time	Precipitation (mm)
	Max	Min	Mean	Max	Min	Mean	Mean	Speed	Dir.	Peak	Dir.		Amount
1	0.0	-4.4	-2.2	100	100	100	-2.22	34.6	W	74	W	1910	7.6
2	-0.6	-8.9	-4.7	100	100	100	-4.44	65.7	NW	128	NW	1420	14.7
3	5.6	-9.4	-1.9	100	48	74	-6.11	57.7	W	87	NW	0100	0.0
4	8.3	3.9	6.1	97	38	67.5	-0.56	56.9	SW	91	W	0545	0.5
5	6.7	-3.3	1.7	100	87	93.5	4.44	51.4	SW	81	SW	0720	16.5
6	-2.8	-13.9	-8.3	100	100	100	-8.89	54.4	W	112	NW	1930	2.3
7	-3.3	-14.4	-8.9	100	40	70	-13.89	70.8	W	118	NW	1030	0.0
8	5.0	-3.9	0.6	54	33	43.5	-11.11	43.0	W	67	W	0100	0.0
9	6.7	-5.0	0.8	100	62	81	-2.78	56.3	W	112	NW	2215	3.3
10	-1.7	-7.8	-4.7	100	46	73	-8.33	62.5	W	123	NW	0205	0.0
11	2.2	-8.3	-3.1	49	52	76	-3.89	59.0	W	98	W	2120	11.9
12	-5.0	-10.0	-7.5	46	6	27.5	-19.44	37.2	NW	99	NW	0220	0.0
13	0.0	-8.3	-4.2	100	8	27	-22.78	11.1	NE	35	S	2350	0.0
14	0.0	-13.3	-6.7	100	4	52	-21.11	60.0	SW	133	W	2210	9.9
15	-13.3	-19.4	-16.4	100	89	94.5	-16.67	71.1	W	104	W	0810	0.8
16	-3.9	-20.0	-11.9	100	75	87.5	-13.33	56.8	W	81	W	1505	1.0
17	2.8	-5.6	-1.4	100	40	70	-5.56	44.0	W	71	W	1525	16.8
18	3.3	-9.4	-3.1	100	100	100	1.11	56.5	NW	102	NW	1705	14.7
19	-4.4	-11.7	-8.1	100	17	58.8	-18.89	48.1	NW	123	NW	0435	0.0
20	-5.0	-15.6	-10.3	100	33	66.5	-12.22	24.1	NW	74	N	1935	9.7
21	-15.6	-19.4	-17.5	100	100	100	-17.22	63.4	NW	98	W	1845	2.5
22	-9.4	-19.4	-14.4	100	40	70	-15.56	70.7	W	117	NW	0720	0.0
23	2.2	-11.1	-4.4	100	15	57.5	-14.44	27.8	W	79	NW	0047	1.0
24	1.7	-3.3	-0.8	100	100	100	-0.56	19.0	W	38	W	1628	9.9
25	-2.8	-6.7	-4.7	100	100	100	-4.44	23.2	NW	69	NW	2350	3.0
26	-2.8	-6.1	-4.4	100	80	90	-4.44	56.7	W	83	NW	0835	0.5
27	-1.1	-6.1	-3.6	100	73	86.5	-5.00	46.6	W	74	W	0227	0.8
28	1.7	-4.4	-1.4	100	62	81	-5.00	22.8	W	49	W	0058	0.0
29	5.0	-1.7	1.7	100	98	99	2.22	45.7	S	91	S	0818	9.9
30	-1.7	-5.6	-3.6	100	79	89.5	-3.89	34.0	W	77	W	0658	0.1
				100	4	75.3	-8.2	46.2		133		2210	

Monthly				Total
Ave =			-4.4	
Max =	8.3		6.1	135.4
Min =		-20.0	-17.5	

† - Conversion mph to m/s, mph x .447

Table B1 (cont'd).

OCTOBER 1981 **MT. WASHINGTON**

Day	Temperature (°C)			Relative Humidity %			Dew Point (°C)	Wind (mph)†				Time	Precipitation (mm)
	Max	Min	Mean	Max	Min	Mean	Mean	Speed	Dir.	Peak	Dir.		Amount
1	4.4	-8.9	-2.2	100	20	60	-6.11	40.8	W	93	NW	0155	2.5
2	2.8	-2.2	0.3	100	79	89.5	0.00	17.2	W	53	W	0010	0.1
3	-1.1	-4.4	-2.8	100	100	100	-2.78	47.5	W	94	W	2035	8.6
4	-3.3	-6.7	-5.0	100	100	100	-3.89	59.1	W	90	W	0135	7.1
5	1.7	-5.0	-1.7	100	43	71.5	-5.56	36.5	W	63	W	0410	0.0
6	5.0	-2.8	1.1	100	14	57	-6.67	24.8	S	60	S	1720	9.4
7	1.1	-5.6	-2.2	100	100	100	-2.22	40.4	W	85	W	2354	7.6
8	-4.4	-6.7	-5.6	100	100	100	-5.00	56.8	NW	99	W	0728	7.6
9	-4.4	-7.8	-6.1	100	100	100	-6.11	37.0	NW	70	NW	0238	0.8
10	-5.6	-8.3	-6.9	100	88	94	-7.22	19.6	NW	40	NW	0910	0.0
11	-2.8	-9.4	-6.1	92	19	55.5	-13.33	16.5	N	44	N	0616	0.0
12	4.4	-3.9	0.3	35	14	24.5	-19.44	14.0	NE	26	NE	0832	0.0
13	5.6	1.7	3.6	26	7	16.5	-23.89	13.0	N	22	N	2000	0.0
14	7.8	4.4	6.1	45	7	26	-19.44	5.9	N	14	SW	2315	0.0
15	6.7	2.2	4.4	30	19	24.5	-12.22	21.5	SW	35	SW	1910	0.0
16	2.8	-4.4	-0.8	100	31	65.5	-3.33	33.6	NW	71	NW	1930	7.6
17	4.4	-6.7	-1.1	100	8	54	-14.44	24.1	NW	60	NW	0230	0.0
18	2.8	-3.9	-0.6	100	11	55.5	-12.22	38.8	S	72	S	1815	36.1
19	-1.1	-10.0	-5.6	100	100	100	-5.00	55.1	W	102	W	2015	7.1
20	-1.7	-12.2	-6.9	100	70	85	-8.89	53.1	W	87	W	0220	0.5
21	1.7	-2.2	-0.3	100	83	91.5	-2.22	49.3	W	89	W	0100	0.1
22	3.3	0.0	1.7	100	67	83.5	-1.11	37.7	S	71	S	0207	0.0
23	5.0	-5.0	-0.0	100	100	100	2.78	36.6	S	83	SW	1232	48.0
24	-5.0	-12.8	-8.9	100	19	59.5	-8.89	45.8	W	94	W	1225	12.4
25	-0.6	-9.4	-5.0	100	40	70	-15.00	26.1	SW	46	SW	1800	0.0
26	7.2	-1.7	2.8	100	100	100	2.22	33.7	SW	58	S	1322	15.5
27	9.4	6.1	7.8	100	100	100	8.33	47.2	SW	87	SW	0316	39.1
28	8.3	-5.0	1.7	100	14	57	2.78	25.0	NW	66	NW	1240	33.5
29	1.7	-2.2	-0.3	30	11	20.5	-21.11	13.6	N	35	N	0005	0.0
30	1.7	-1.1	0.3	34	15	24.5	-18.89	6.7	SE	18	SE	2110	0.0
31	3.3	-1.7	0.8	55	11	33	-18.89	12.5	SW	35	SW	2305	0.0
				100	7	68.3	-8.0	31.9		102		2015	

Monthly

Ave =			-1.2
Max =	9.4		7.8
Min =		12.8	-8.9

Total 243.6

† - Conversion mph to m/s, mph x .447

Table B1 (cont'd).

NOVEMBER 1981 — **MT. WASHINGTON**

Day	Temperature (°C) Max	Min	Mean	Relative Humidity % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	5.6	-0.6	2.5	100	13	56.5	-11.67	41.8	W	74	NW	1750	3.8
2	3.9	-8.3	-2.2	100	66	83	-1.67	57.8	W	121	W	2030	0.1
3	-6.7	-11.1	-8.9	100	34	67	-11.67	66.3	W	101	NW	0825	0.0
4	-2.8	-8.3	-5.6	100	11	55.5	-11.67	55.9	W	86	W	0140	0.0
5	3.9	-4.4	-0.3	67	9	38	-22.22	31.5	W	49	NW	0101	0.0
6	3.9	-3.3	0.3	100	76	88	0.56	36.4	W	61	W	1520	11.7
7	-2.8	-11.7	-7.2	100	100	100	-6.67	28.0	W	79	NW	2026	0.5
8	-1.1	-8.9	-5.0	100	24	62	-10.56	52.7	NW	94	NW	0146	0.0
9	-1.7	-15.0	-8.3	100	38	69	-6.11	53.5	W	78	W	1643	0.0
10	-3.9	-11.7	-7.8	100	5	52.5	-31.67	25.5	SW	71	SW	2325	0.0
11	-5.0	-13.9	-9.4	100	100	100	-6.67	50.5	SW	75	NW	2340	4.3
12	-3.9	-16.7	-10.3	100	< 1%	50	-23.89	40.2	NW	81	NW	0823	1.3
13	3.9	-5.6	-0.8	70	7	38.5	-17.22	35.5	NW	60	NW	1140	0.0
14	4.4	1.1	2.8	50	29	39.5	-9.44	29.5	N	51	E	2245	0.0
15	3.9	0.6	2.2	100	51	75.5	-1.67	46.3	E	78	E	1040	10.2
16	5.6	1.7	3.6	100	100	100	3.89	37.8	E	61	E	0325	28.7
17	4.4	1.1	2.8	100	100	100	3.89	14.0	NE	32	NE	1035	17.5
18	2.8	-8.9	-3.1	100	86	93	-1.67	18.8	W	64	W	2050	2.0
19	-5.0	-9.4	-7.2	100	100	100	-8.33	51.0	NW	91	NW	0917	0.8
20	0.0	-7.8	-3.9	100	69	84.5	-5.00	22.2	S	49	SE	1431	4.1
21	-0.6	-11.1	-5.8	100	100	100	-5.56	46.0	W	104	W	2216	12.7
22	-10.6	-14.4	-12.5	100	100	100	-12.22	57.5	W	91	W	0516	3.0
23	-12.8	-16.7	-14.7	100	100	100	-14.44	41.5	W	71	NW	0001	1.5
24	-10.0	-15.0	-12.5	100	59	79.5	-15.56	26.9	NW	53	NW	0155	0.0
25	-10.0	-13.9	-11.9	90	70	80	-13.89	29.3	N	53	N	1645	0.0
26	-3.3	-11.7	-7.5	66	24	45	-18.89	21.6	N	52	N	0215	0.1
27	-2.8	-8.9	-5.8	100	23	61.5	-8.89	48.5	W	93	W	1800	7.4
28	-8.9	-16.1	-12.5	100	100	100	-11.67	61.9	W	102	W	1740	21.8
29	-13.9	-18.3	-16.1	100	100	100	-15.00	60.9	W	95	NW	0310	13.0
30	-9.4	-18.3	-13.9	100	49	74.5	-18.33	43.2	NW	63	NW	0400	1.0
31													
				100	5		-10.5	41.1		121		2030	

Monthly

				Total
Ave =			-9.0	
Max =	5.6		3.6	
Min =		-18.3	-16.1	145.5

† - Conversion mph to m/s, mph x .447

Table B1 (cont'd).

DECEMBER 1981 — **MT. WASHINGTON**

Day	Temperature (°C)			Relative Humidity %			Dew Point (°C)	Wind (mph)†				Time	Precipitation (mm)
	Max	Min	Mean	Max	Min	Mean	Mean	Speed	Dir.	Peak	Dir.		Amount
1	-1.1	-12.8	-6.9	100	6	53	-23.33	25.2	S	68	S	2245	7.4
2	1.1	-8.3	-3.6	100	100	100	-3.89	41.5	W	76	S	0331	5.8
3	-4.4	-9.4	-6.9	100	88	94	-6.11	20.7	NW	66	NW	2051	2.8
4	-7.8	-12.2	-10.0	100	84	92	-10.56	19.2	W	64	W	0002	0.5
5	-11.1	-12.8	-11.9	100	86	93	-12.22	21.9	N	81	N	2352	4.1
6	-8.9	-16.7	-12.8	100	100	100	-13.33	56.7	N	109	N	1005	21.6
7	-4.4	-15.0	-9.7	100	100	100	-7.78	44.8	NW	75	NW	1638	1.3
8	-3.3	-11.7	-7.5	100	35	67.5	-12.22	15.6	N	51	NW	0413	0.5
9	-7.2	-16.7	-11.9	100	100	100	-10.00	24.9	N	58	W	1945	4.6
10	-7.2	-13.3	-10.3	100	100	100	-10.00	20.9	N	51	N	1825	2.5
11	-10.0	-13.9	-11.9	100	100	100	-12.22	31.5	N	59	N	0500	2.5
12	-8.9	-13.3	-11.1	100	13	56.5	-10.00	23.1	N	51	N	1445	0.8
13	-5.6	-14.4	-10.0	19	6	12.5	-2.78	16.7	W	49	W	2355	0.0
14	-7.8	-15.0	-11.4	100	49	74.5	-15.56	23.6	W	58	NW	0330	1.3
15	-1.1	-9.4	-5.3	100	65	82.5	-6.67	11.4	S	58	S	0240	10.9
16	-2.8	-16.7	-9.7	100	100	100	-8.89	64.0	W	141	W	1815	27.4
17	-12.2	-18.3	-15.3	100	37	68.5	-18.33	51.2	W	106	W	0157	6.3
18	-10.6	-15.0	-12.8	100	100	100	-12.78	20.1	SW	39	SW	0253	6.9
19	-14.4	-25.6	-20.0	100	100	100	-18.89	31.2	NW	71	W	1829	4.3
20	-17.2	-26.1	-21.7	100	49	74.5	-25.00	44.5	NW	69	NW	0428	1.8
21	-8.3	-19.4	-13.9	70	26	48	-27.78	36.9	W	87	W	2338	0.0
22	-5.6	-13.3	-9.4	100	69	84.5	-11.11	43.6	W	77	W	0135	3.6
23	-3.3	-11.7	-7.5	100	100	100	-6.67	41.0	W	101	W	1752	20.6
24	-9.4	-13.9	-11.7	100	100	100	-11.67	44.6	W	67	W	2107	0.0
25	-13.3	-16.1	-14.7	100	100	100	-14.44	57.6	W	81	W	0517	1.5
26	-10.6	-14.4	-12.5	100	13	56.5	-15.00	34.8	W	79	W	0510	1.5
27	-10.6	-13.3	-11.9	100	40	70	-16.67	20.4	E	56	SE	2055	10.7
28	-8.9	-12.2	-10.6	100	90	95	-10.00	18.3	W	41	S	2145	2.5
29	-10.0	-17.8	-13.9	100	100	100	-12.22	51.6	W	105	NW	1755	23.4
30	-16.1	-20.0	-18.1	100	72	86	-19.44	59.8	NW	109	NW	0230	3.0
31	-9.4	-17.2	-13.3	100	29	64.5	-23.33	30.1	W	54	NW	0130	0.0
				100	6	83.0	-13.2	33.8		141		1815	

Monthly

Ave =			-11.2
Max =	1.1		-3.6
Min =		-26.1	-21.7

Total 180.2

† - Conversion mph to m/s, mph x .447

Table B1 (cont'd).

JANUARY 1982 — **MT. WASHINGTON**

Day	Temperature (°C) Max	Min	Mean	Relative Humidity % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	-5.6	-12.8	-9.2	100	100	100	-11.11	42.8	S	87	NW	2325	30.2
2	-12.2	-21.1	-16.7	100	25	62.5	-18.89	80.0	NW	123	NW	1040	7.1
3	-1.7	-14.4	-8.1	100	7	53.5	-16.67	22.5	W	51	S	1417	0.1
4	1.7	-10.6	-4.4	100	100	100	-4.44	50.6	S	95	S	2022	39.1
5	-5.6	-24.4	-15.0	100	100	100	-14.44	84.3	W	139	W	1355	5.1
6	-8.9	-22.8	-15.8	100	35	67.5	-18.89	57.4	W	94	W	0030	2.8
7	-8.9	-23.3	-16.1	100	100	100	12.78	50.8	W	102	W	2325	2.8
8	-22.8	-30.0	-26.4	100	100	100	-27.22	69.2	W	102	W	0325	4.8
9	-21.7	-27.2	-24.4	100	80	90	-24.44	36.8	W	79	W	0330	1.0
10	-26.7	-35.6	-31.1	100	100	100	-31.11	38.3	W	87	W	1905	1.3
11	-26.1	-33.3	-29.7	100	76	88	-32.22	28.6	W	51	W	0140	0.8
12	-16.1	-33.9	-25.0	100	63	81.5	-30.00	38.5	NW	85	NW	1035	0.1
13	-12.8	-19.4	-16.1	100	10	55	-28.89	33.4	SW	59	SW	2200	4.3
14	-6.1	-14.4	-10.3	100	100	100	-11.67	13.8	SE	44	W	0025	2.8
15	-10.0	-26.1	-18.1	100	72	86	-19.44	55.8	NW	98	NW	1705	2.3
16	-12.8	-26.1	-19.4	100	18	59	-21.11	51.0	W	87	W	0000	5.1
17	-21.1	-39.4	-30.3	100	100	100	-33.33	92.7	W	136	W	1238	1.8
18	-28.9	-38.3	-33.6	100	100	100	33.89	90.5	W	128	W	0217	0.5
19	-13.9	-31.1	-22.5	100	23	61.5	-31.11	60.6	NW	99	NW	0139	0.0
20	-14.4	-28.9	-21.7	100	52	76	-20.56	66.9	W	116	W	1605	4.1
21	-21.1	-25.0	-23.1	62	24	43	-33.33	54.4	NW	92	NW	0005	0.0
22	-11.1	-26.7	-18.9	45	14	29.5	-36.11	57.5	NW	106	NW	0245	0.0
23	-5.0	-20.6	-12.8	100	12	56	-23.89	44.2	S	94	S	1015	34.3
24	-6.7	-26.1	-16.4	100	100	100	-16.67	59.8	W	94	W	1625	7.6
25	-26.1	-32.8	-29.4	100	100	100	-29.44	74.9	W	101	W	1205	0.5
26	-23.3	-31.1	-27.2	100	72	86	-28.89	57.2	W	90	W	0405	0.0
27	-11.7	-24.4	-18.1	100	14	57	-30.56	24.5	N	58	N	0050	0.0
28	-6.1	-13.9	-10.0	100	18	59	-25.56	59.9	SW	102	W	2033	5.8
29	-11.7	-23.3	-17.5	100	81	90.5	-18.89	81.0	W	122	W	0145	4.3
30	-6.7	-16.7	-11.7	100	32	66	-16.67	60.3	W	116	S	1417	13.7
31	-4.4	-16.7	-10.6	100	69	84.5	-15.56	49.7	W	104	W	0222	21.8
				100	7	79.1	-20.1	54.4		139		1355	

Monthly

Ave =			-19.1
Max =	1.7		-4.4
Min =		-39.4	-33.6

Total 203.7

† - Conversion mph to m/s, mph x .447

Table B1 (cont'd).

FEBRUARY 1982 **MT. WASHINGTON**

Day	Temperature (°C) Max	Min	Mean	Relative Humidity % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)[1] Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	-0.6	-20.6	-10.6	100	77	88.5	-10.56	68.5	W	137	NW	1810	10.9
2	-3.9	-11.7	-7.8	33	4	18.5	-28.89	30.8	S	70	NW	0020	0.0
3	3.3	-7.2	-1.9	100	100	100	-4.44	56.5	SW	131	SW	2330	32.3
4	2.2	-15.6	-6.7	100	22	61	-10.56	61.7	W	116	W	0540	3.3
5	-11.7	-16.1	-13.9	100	30	65	-11.67	35.2	SW	63	S	2205	4.1
6	-7.2	-24.4	-15.8	100	100	100	-16.11	72.2	W	112	W	1125	10.7
7	-18.3	-26.1	-22.2	100	47	73.5	-23.89	71.2	W	107	W	1925	0.0
8	-17.2	-19.4	-18.3	100	100	100	-18.33	62.4	W	98	W	1430	6.9
9	-12.2	-19.4	-15.8	100	78	89	-16.11	41.9	W	77	W	0025	9.4
10	-13.3	-23.9	-18.6	100	80	90	-20.00	60.2	W	106	W	0805	4.6
11	-15.6	-25.6	-20.6	100	51	75.5	-23.89	51.5	W	79	W	2153	0.0
12	-14.4	-22.8	-18.6	100	26	63	-23.33	41.3	W	87	W	0411	1.8
13	-13.9	-23.9	-18.9	100	48	74	-19.44	21.8	SW	84	NW	1132	2.5
14	-16.1	-23.9	-20.0	100	58	79	-22.22	51.5	W	77	NW	0414	2.0
15	-6.1	-16.1	-11.1	100	22	61	-14.44	62.0	W	106	SW	1055	0.3
16	-6.1	-18.3	-12.2	100	49	74.5	-12.78	64.6	W	93	W	0722	3.8
17	-10.0	-16.1	-13.1	23	3	13	-39.44	37.8	N	82	NW	0030	0.0
18	-5.0	-12.2	-8.6	27	8	17.5	-31.11	10.4	NE	40	SW	2310	0.0
19	-5.0	-11.1	-8.1	100	8	54	-18.89	39.2	W	79	W	1230	3.3
20	-7.8	-9.4	-8.6	100	89	94.5	-8.89	25.5	N	56	N	0655	0.3
21	-7.2	-11.1	-9.2	100	87	93.5	-10.56	19.3	N	40	NE	2255	0.8
22	-5.6	-13.9	-9.7	100	93	96.5	-10.56	27.6	NE	53	N	0405	1.3
23	-5.0	-17.8	-11.4	100	57	78.5	-10.00	39.6	W	117	W	2115	5.3
24	-14.4	-25.0	-19.7	100	11	55.5	-26.67	64.1	NW	127	NW	0323	1.5
25	-25.0	-31.7	-28.3	100	77	88.5	-29.44	86.0	NW	133	W	2125	1.3
26	-22.2	-31.1	-26.7	100	77	38.5	-28.89	78.2	W	116	W	0210	1.5
27	-20.0	-22.8	-21.4	100	82	91	-21.11	61.7	W	93	W	0744	3.0
28	-17.8	-25.0	-21.4	100	19	59.5	-31.11	66.0	W	101	NW	1732	1.8
29													
30													
31													
				100	3	71.2	-19.4	50.3		137		1810	

Monthly			
Ave =			-15.0
Max =	3.3		-1.9
Min =		-26.1	-28.3

Total: 102.7

[1] - Conversion mph to m/s, mph x .447

Table B1 (cont'd).

MARCH 1982 **MT. WASHINGTON**

Day	Temperature (°C) Max	Min	Mean	Relative Humidity % Max	Min	Mean	Dew Point (°C) Mean	Wind (mph)† Speed	Dir.	Peak	Dir.	Time	Precipitation (mm) Amount
1	-11.7	-17.8	-14.7	100	16	58	-28.89	39.7	SW	90	SW	2320	2.3
2	-11.7	-21.7	-16.7	100	100	100	-16.11	60.6	W	97	W	2352	3.0
3	-18.3	-25.6	-21.9	100	55	77.5	-25.56	61.2	NW	94	W	0815	1.8
4	-9.4	-18.3	-13.9	100	13	56.5	-23.89	34.8	W	85	SW	1920	9.4
5	-1.1	-16.7	-8.9	100	100	100	-8.89	65.2	W	116	SW	0410	3.6
6	-1.1	-17.2	-9.2	94	11	52.5	-23.89	35.4	W	61	W	0215	0.1
7	0.0	-10.6	-5.3	100	100	100	-0.56	26.6	SW	63	S	0005	30.7
8	-9.4	-25.0	-17.2	100	100	100	-15.56	60.6	W	101	W	0820	3.3
9	-15.0	-20.6	-17.8	100	10	55	-28.33	32.5	W	62	SW	1545	3.8
10	-3.9	-16.7	-10.3	100	39	69.5	-17.22	29.3	SW	82	SW	2359	0.5
11	0.6	-7.8	-3.6	100	100	100	-2.78	65.6	W	94	SW	1744	3.8
12	1.1	-3.9	-1.4	100	39	69.5	-0.56	16.7	W	67	W	0125	0.1
13	1.1	-10.0	-4.4	100	30	65	-6.11	47.3	SW	101	W	2211	2.5
14	-9.4	-16.7	-13.1	100	75	87.5	-12.22	81.8	W	129	W	2144	7.9
15	-15.0	-18.9	-16.9	100	55	77.5	-20.00	76.8	NW	122	NW	2213	0.0
16	-3.3	-16.1	-9.7	53	18	35.5	-22.22	46.8	NW	121	NW	0014	0.0
17	-5.6	-10.6	-8.1	100	31	65.5	-13.33	21.2	N	51	N	2255	2.8
18	-3.9	-10.0	-6.9	63	36	49.5	-17.22	12.3	N	43	N	0035	0.3
19	-7.2	-11.1	-9.2	100	84	92	-10.00	7.5	N	26	W	1820	0.3
20	-8.3	-12.2	-10.3	100	79	89.5	-11.67	24.9	NW	41	W	1715	0.1
21	-7.2	-10.6	-8.9	100	27	63.5	-12.78	26.7	S	58	SE	1735	11.7
22	-8.3	-12.8	-10.6	100	100	100	-10.56	57.7	W	89	W	0955	16.3
23	-11.7	-14.4	-13.1	100	74	87	-13.33	46.4	W	76	W	0810	3.8
24	-6.1	-12.2	-9.2	100	60	80	-13.33	24.7	W	53	SW	2338	0.0
25	-1.1	-6.1	-3.6	100	82	91	-5.00	34.1	S	69	S	2222	0.0
26	-1.1	-15.6	-8.3	100	58	79	-6.11	54.8	S	95	S	0932	17.8
27	-14.4	-27.8	-21.1	100	100	100	-21.67	85.7	W	128	W	2008	4.3
28	-18.3	-29.4	-23.9	100	66	83	-27.22	79.3	W	118	W	0508	0.0
29	-8.3	-18.9	-13.6	100	72	86	-17.22	56.2	W	83	W	1316	0.0
30	-1.7	-9.4	-5.6	100	20	60	-15.00	27.3	W	51	W	0210	0.0
31	2.2	-3.3	-0.6	100	100	100	-2.78	40.3	SW	81	W	2335	11.4
Monthly				100	10	78.4	-14.5	44.5		129		2144	Total
Ave =			-10.9										141.1
Max =	2.2		-0.6										
Min =		-29.4	-23.9										

† - Conversion mph to m/s, mph x .447

Table B1 (cont'd).

APRIL 1982 **MT. WASHINGTON**

Day	Temperature (°C)			Relative Humidity %			Dew Point (°C)	Wind (mph)†				Time	Precipitation (mm)
	Max	Min	Mean	Max	Min	Mean	Mean	Speed	Dir.	Peak	Dir.		Amount
1	-3.3	-12.8	-8.1	100	100	100	-7.78	79.7	W	132	W	0605	11.4
2	-5.6	-20.6	-13.1	100	13	56.5	-22.22	74.6	NW	123	W	1010	3.6
3	-1.7	-11.1	-6.4	100	12	56	-17.22	47.1	S	110	SE	1840	38.6
4	-1.7	-20.0	-10.8	100	100	100	-9.44	48.7	W	94	W	1840	9.7
5	-18.3	-25.6	-21.9	100	82	91	-21.67	69.1	W	110	NW	1250	1.3
6	-7.2	-22.8	-15.0	100	7	53.5	-17.78	33.6	N	102	N	2140	15.5
7	-21.1	-27.2	-24.2	100	100	100	-23.89	88.3	NW	162	NW	1815	36.6
8	-17.2	-24.4	-20.8	100	100	100	-21.67	98.1	W	140	W	0140	7.9
9	-12.8	-18.9	-15.8	100	60	80	-18.89	76.0	W	116	W	0039	0.0
10	-10.0	-17.8	-13.9	100	65	82.5	-16.67	82.5	W	136	W	0848	0.0
11	-4.4	-12.8	-8.6	100	63	81.5	-10.00	23.4	W	70	W	0626	1.0
12	-7.8	-10.0	-8.9	100	100	100	-8.89	29.8	NW	66	W	2045	4.1
13	-0.6	-11.1	-5.8	100	58	79	-8.33	48.2	S	123	W	2328	0.8
14	-7.2	-12.8	-10.0	100	84	92	-10.56	79.5	W	127	W	0252	0.8
15	-0.6	-12.8	-6.7	100	15	57.5	-19.44	23.5	W	61	NW	0030	0.0
16	6.1	-2.2	1.9	69	23	46	-8.89	32.1	W	58	SW	0600	0.0
17	6.7	2.8	4.7	100	39	69.5	3.33	43.9	SW	84	SW	1315	6.6
18	5.6	-12.2	-3.3	100	100	100	-4.44	68.2	W	107	W	2030	15.2
19	0.0	-12.8	-6.4	100	59	79.5	-10.56	61.8	W	102	W	0930	0.5
20	5.0	-1.7	1.7	87	53	70	-4.44	32.3	SW	64	SW	2335	0.0
21	2.2	-14.4	-6.1	100	76	88	-3.33	58.4	W	106	W	2337	0.3
22	-11.7	-15.0	-13.3	100	100	100	-13.33	51.5	W	99	W	0004	3.3
23	-2.8	-11.7	-7.2	100	65	82.5	-9.44	53.0	W	93	W	2145	0.8
24	1.7	-5.6	-1.9	100	81	90.5	-3.89	44.3	W	98	W	0220	2.5
25	7.8	0.0	3.9	83	45	64	-2.78	39.6	W	61	W	0932	0.0
26	6.1	1.7	3.9	100	49	74.5	-1.67	29.9	SW	70	S	2343	24.4
27	5.6	-2.2	1.7	100	100	100	3.33	22.7	W	62	S	0005	12.7
28	-1.7	-8.9	-5.3	64	42	53	-12.78	34.0	N	68	N	2340	0.0
29	-3.3	-9.4	-6.4	71	40	55.5	-12,78	46.7	NW	71	N	0335	0.0
30	0.6	-7.8	-3.6	70	55	62.5	-10.00	56.1	NW	108	NW	1620	0.1
31													
				100	7	78.8	-10.9	52.6		162		1815	

Monthly				Total
Ave =			-7.4	197.7
Max =	7.8		4.7	
Min =		-27.2	-24.2	

† - Conversion mph to m/s, mph x .447

Figure B1. Monthly wind roses for Loon Mountain, 1980-81.

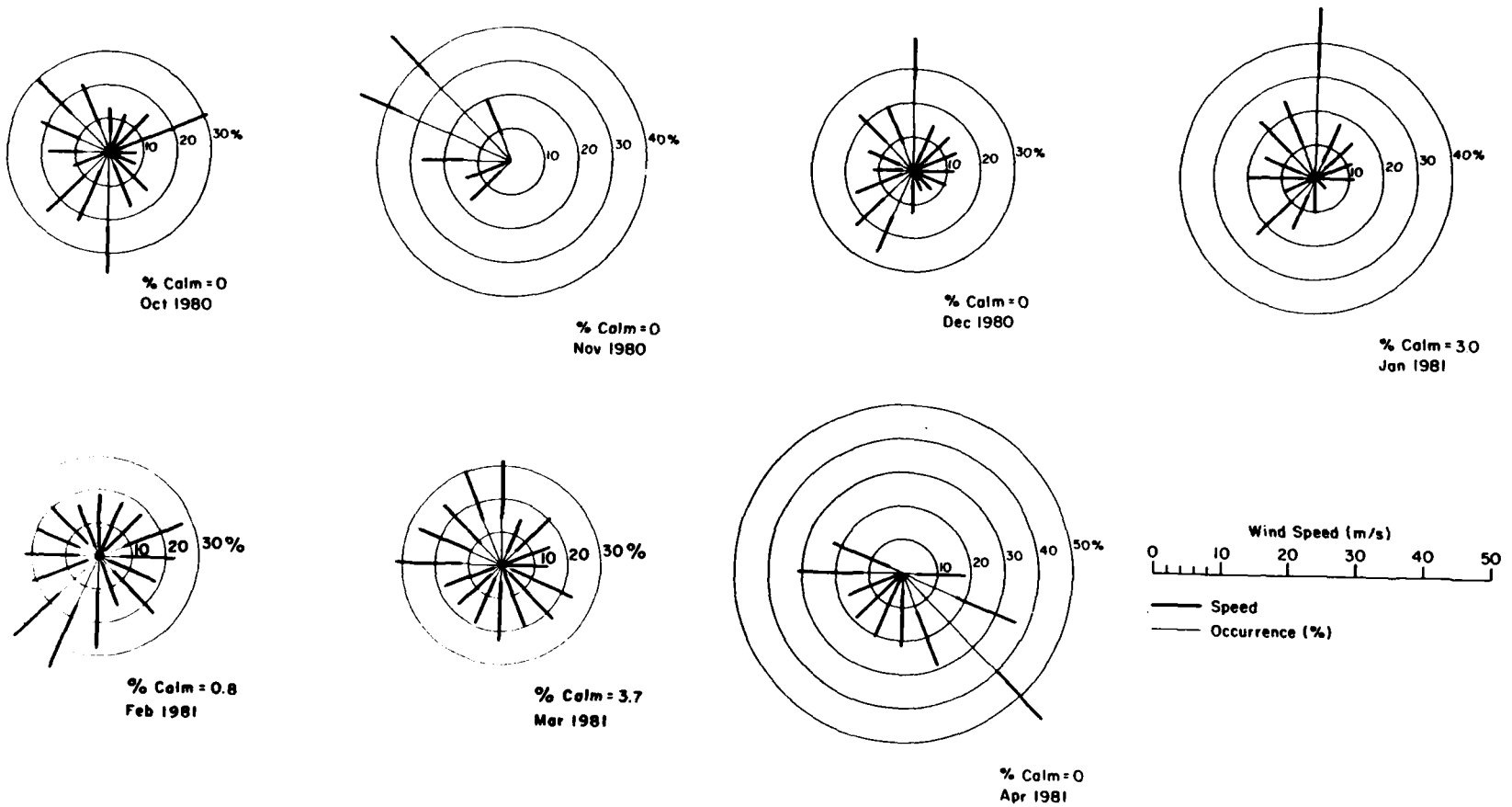


Figure B2. Monthly wind roses for Loon Mountain, 1981-82.

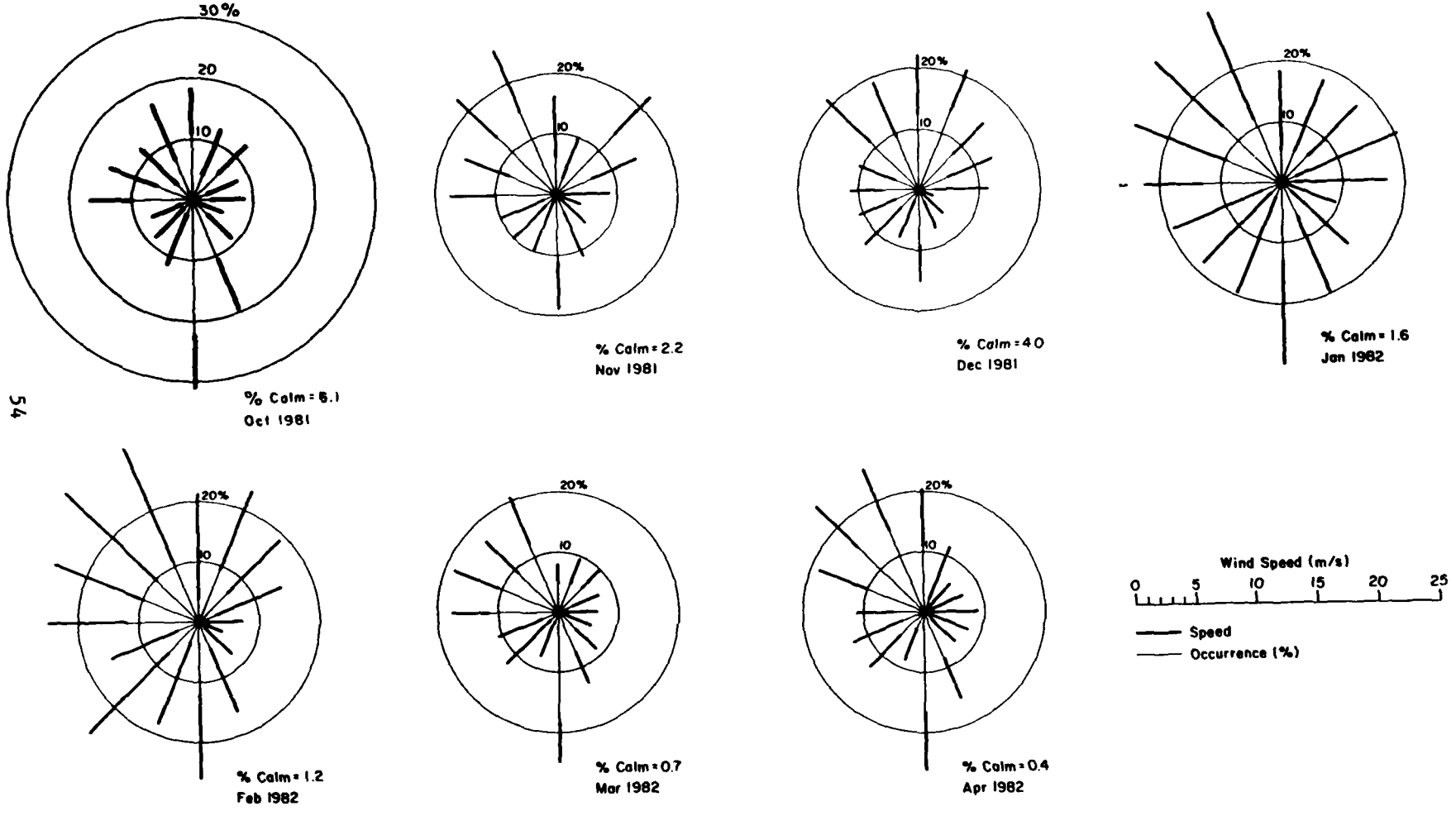


Figure B3. Monthly wind roses for CRREL, 1980-81.

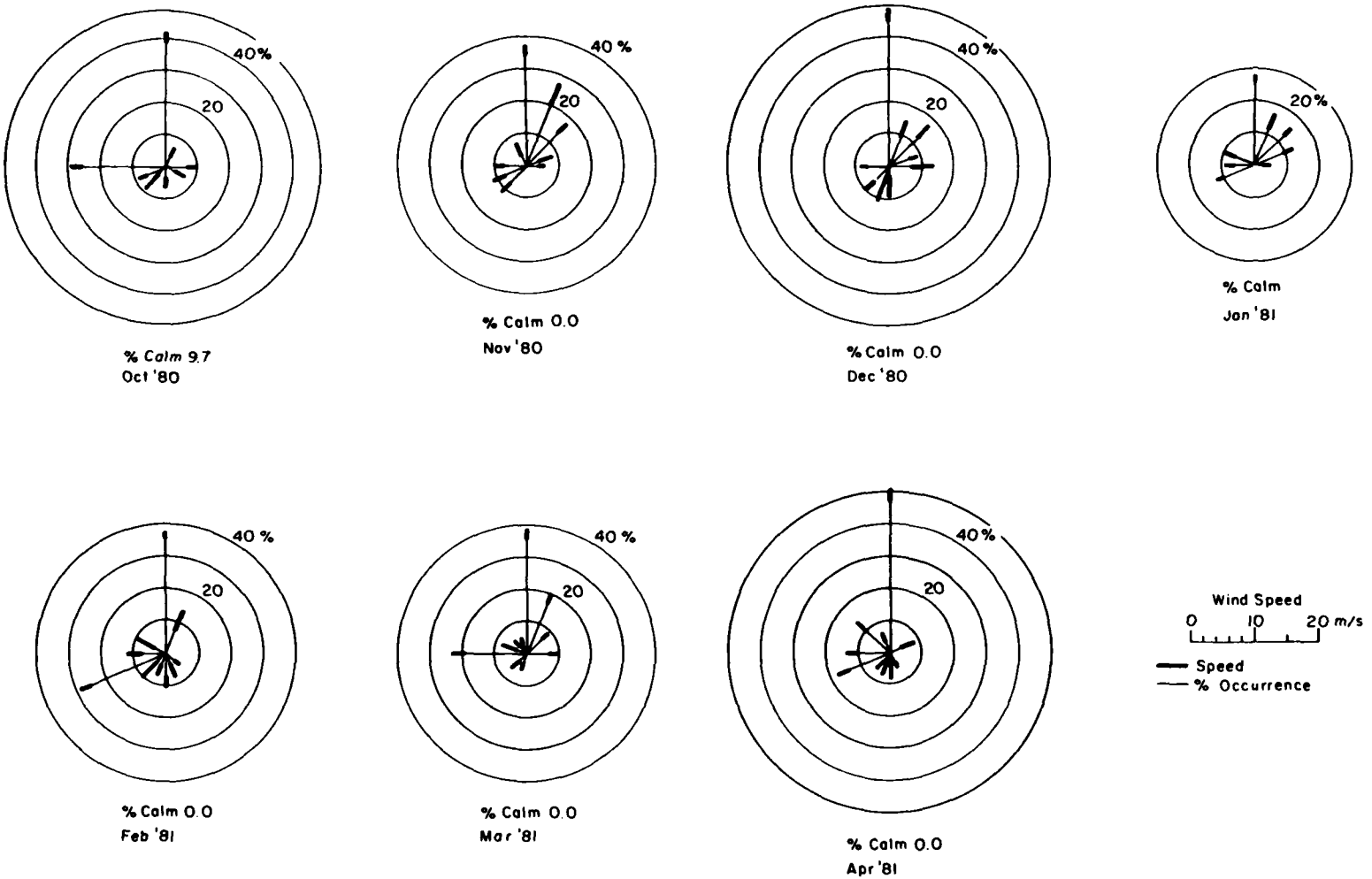
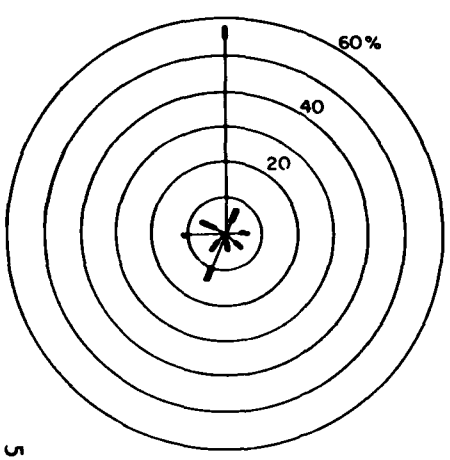
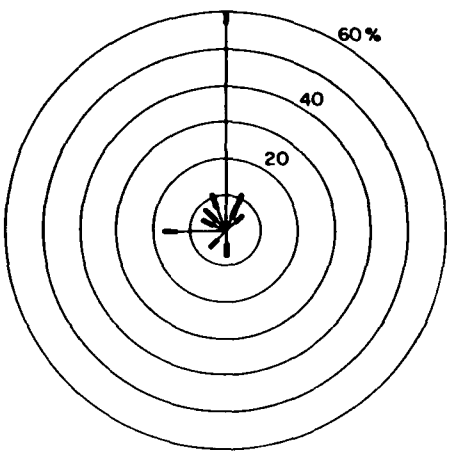


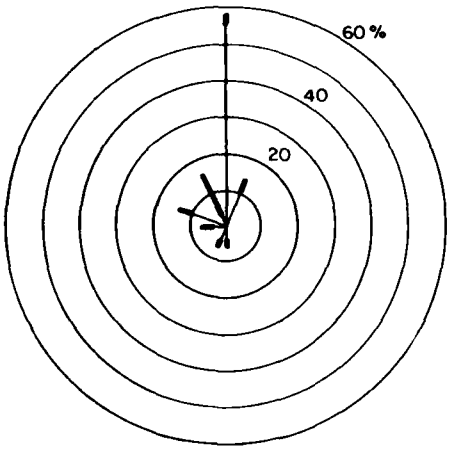
Figure B4. Monthly wind roses for CRREL, 1981-82.



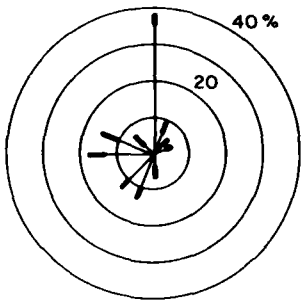
%Calm 6.5
Oct '81



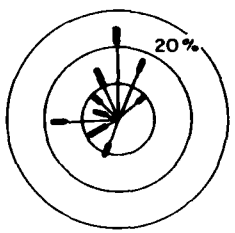
%Calm 3.3
Nov '81



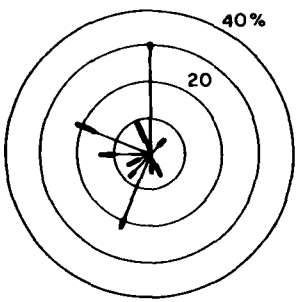
% Calm 10.3
Dec '81



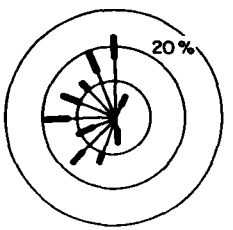
% Calm 3.2
Jan '82



% Calm 10.7
Feb '82



% Calm 3.2
Mar '82



% Calm 0.0
Apr '82

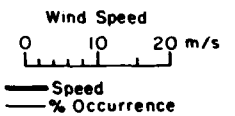
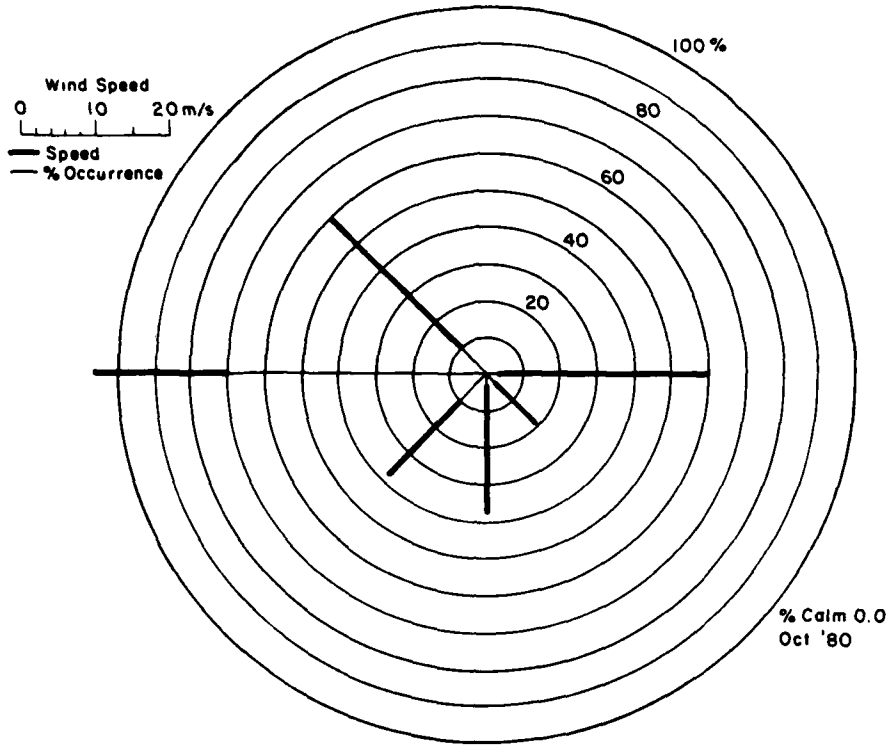


Figure B5. Monthly wind roses for Mount Washington, 1980-81.



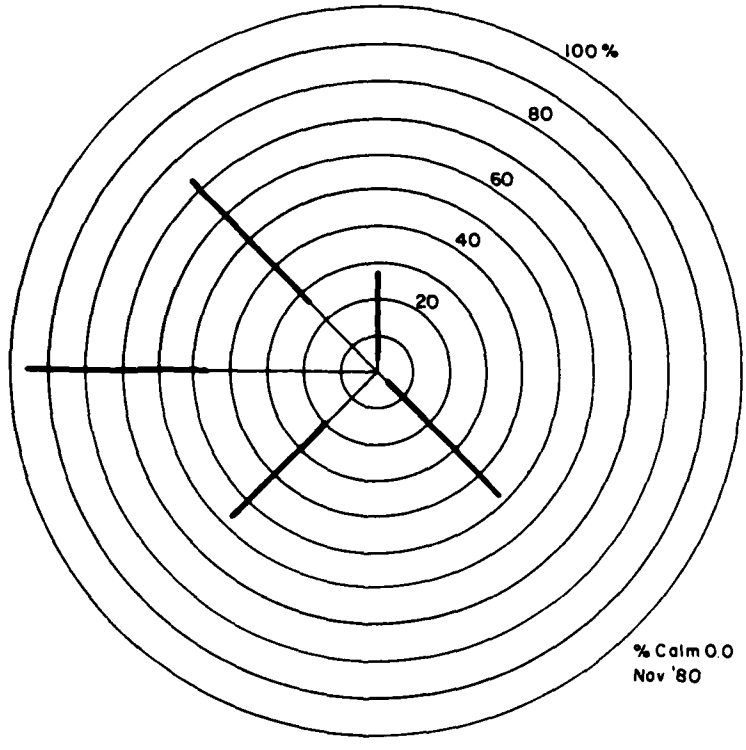


Figure B5 (cont'd).

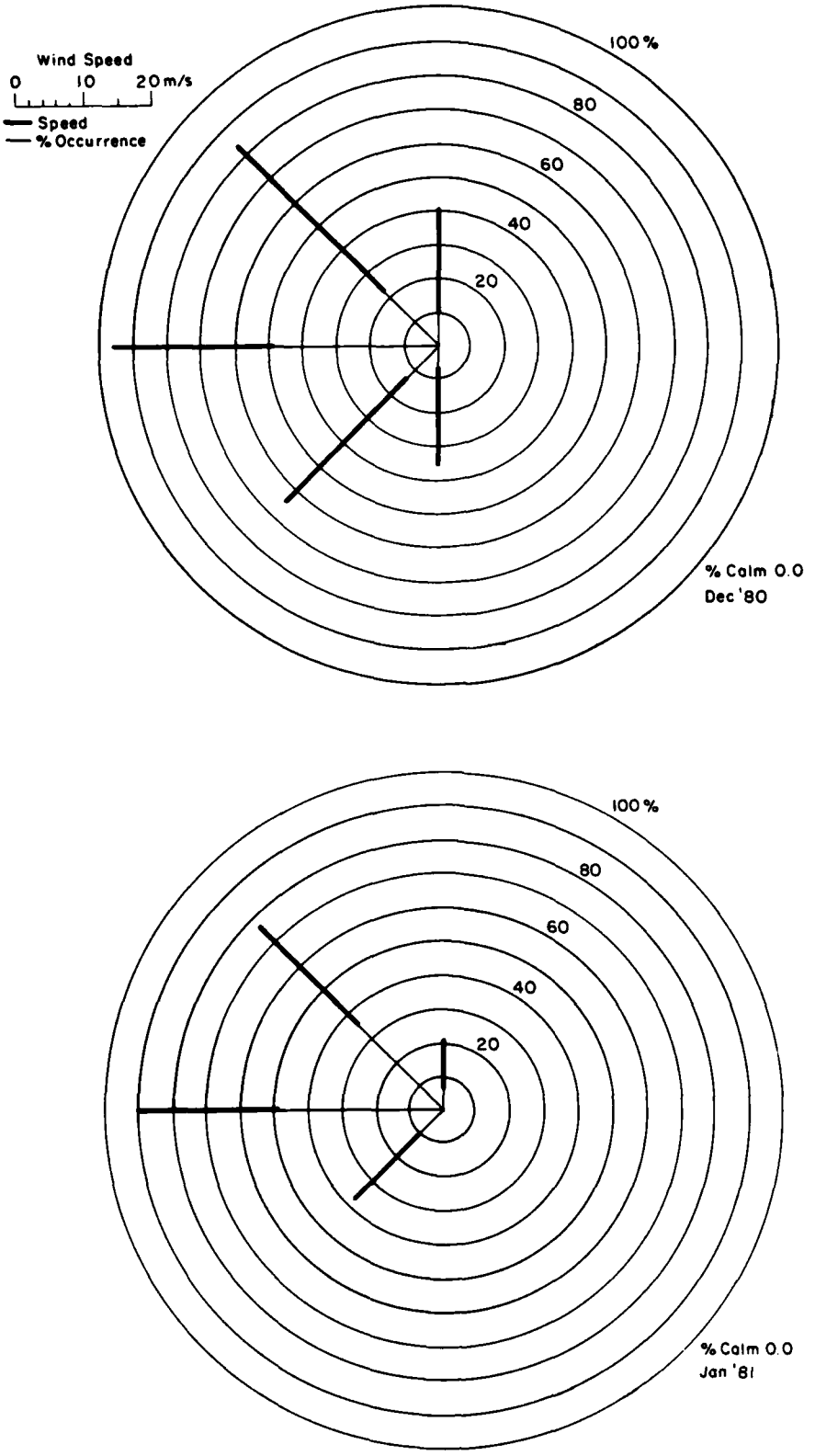


Figure B5 (cont'd).

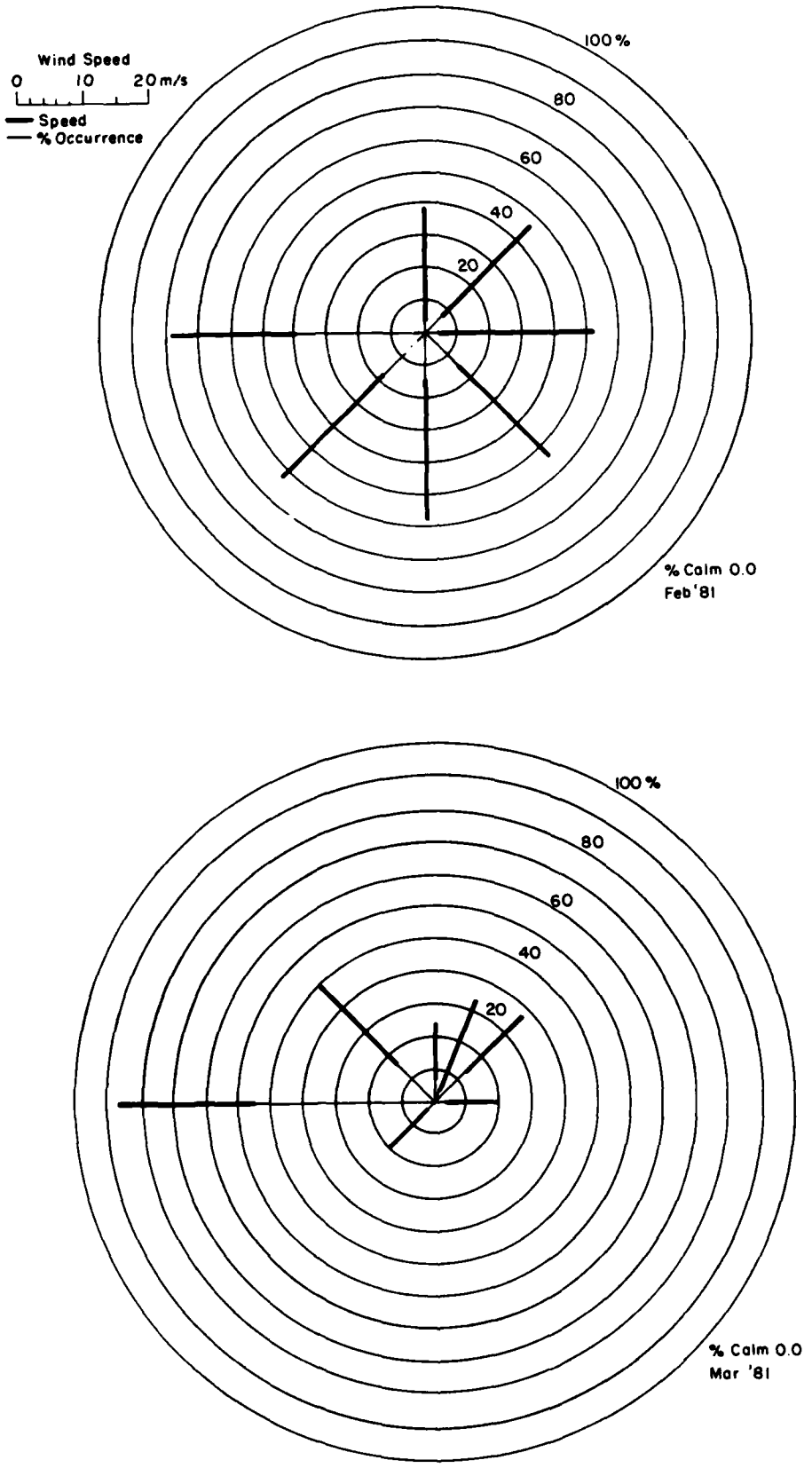


Figure B5 (cont'd).

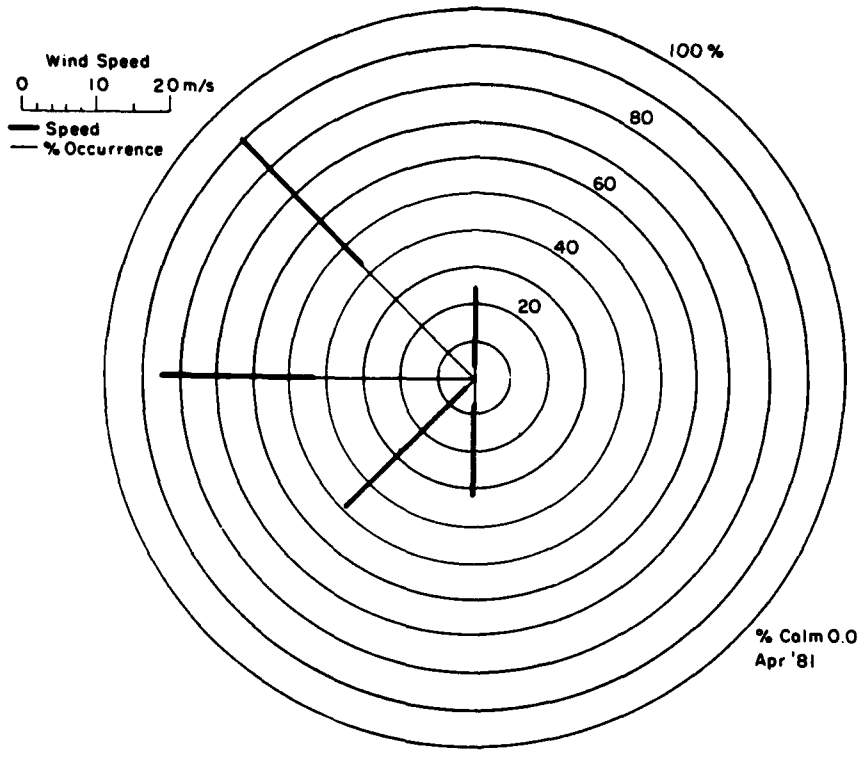


Figure B6. Monthly wind roses for Mount Washington, 1981-82.

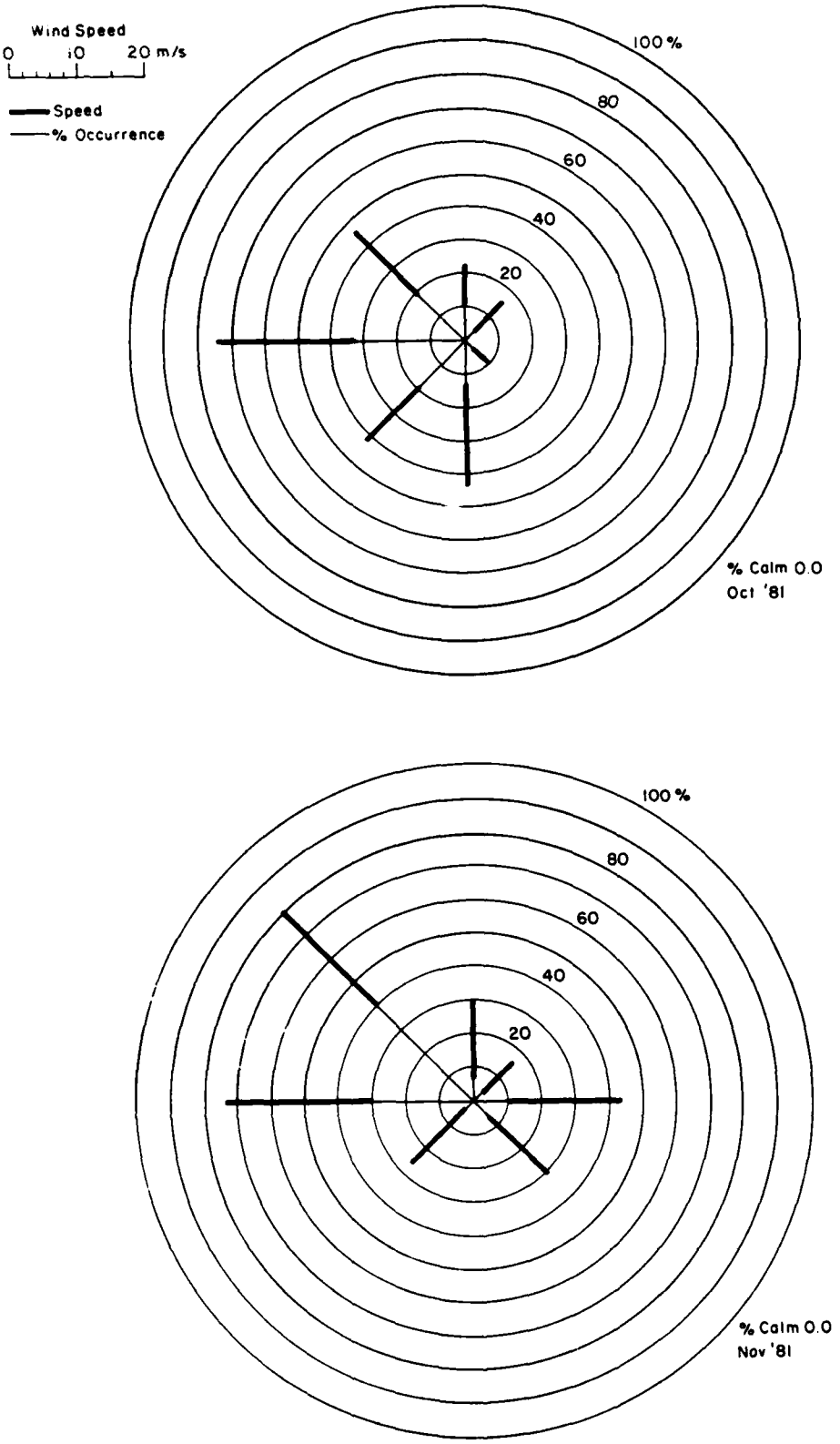


Figure B6 (cont'd).

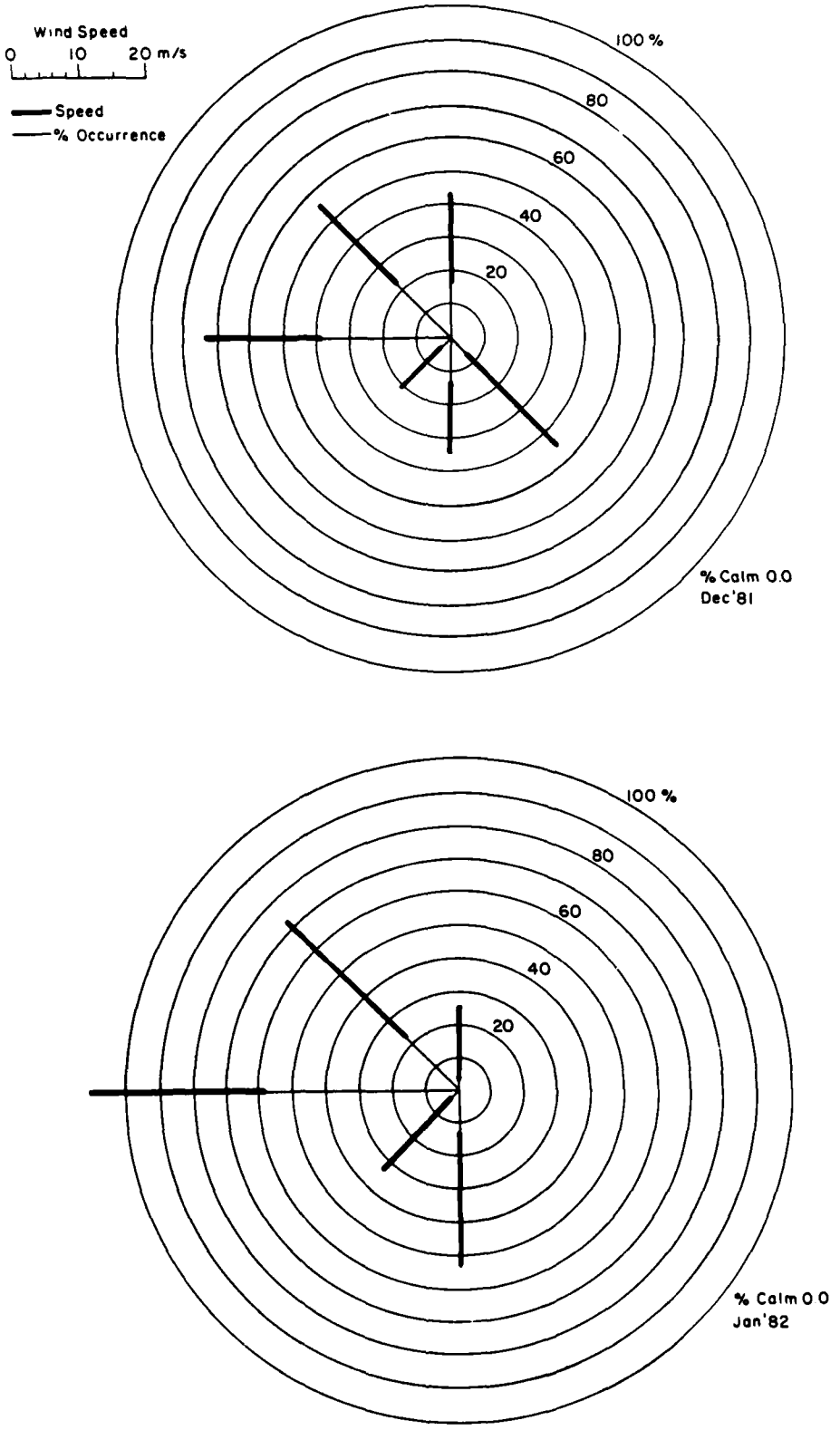
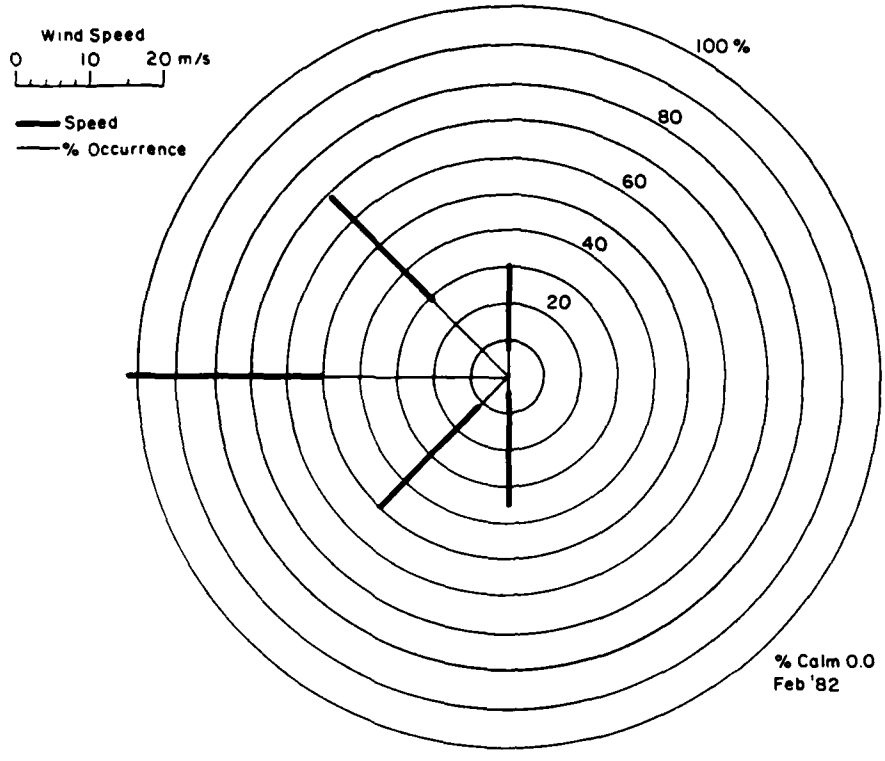


Figure B6 (cont'd).



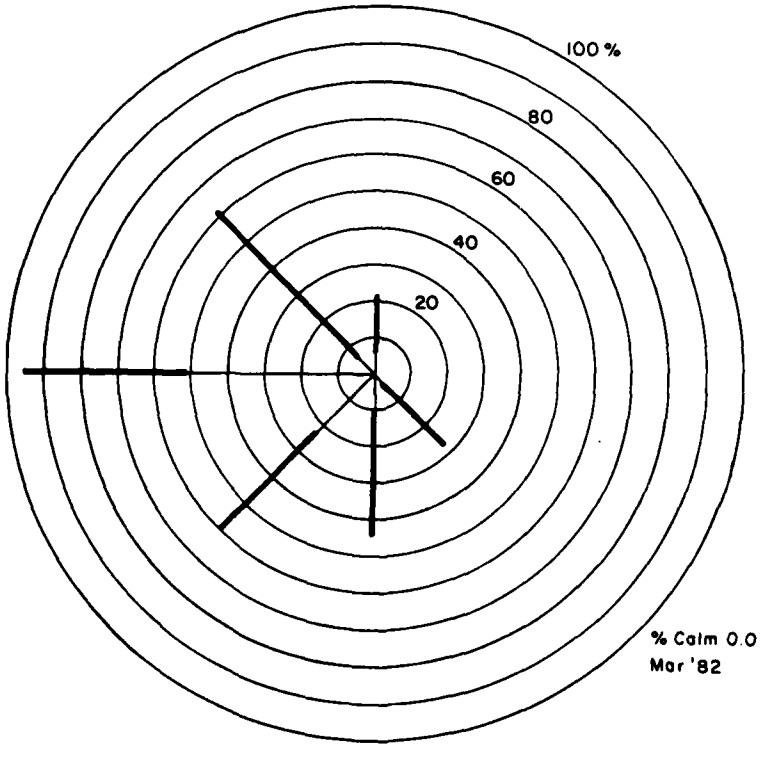
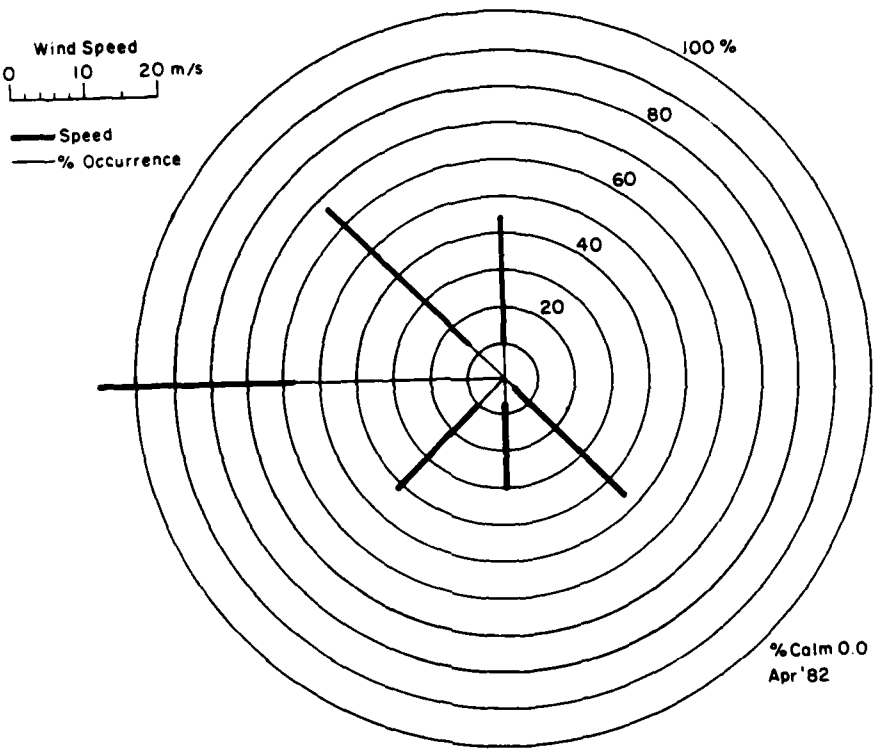
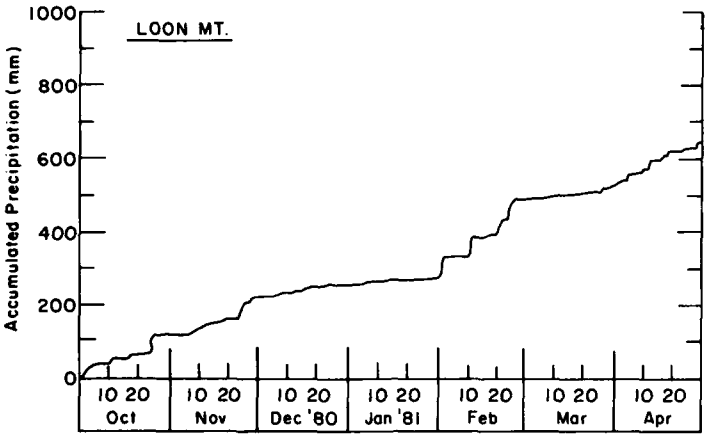
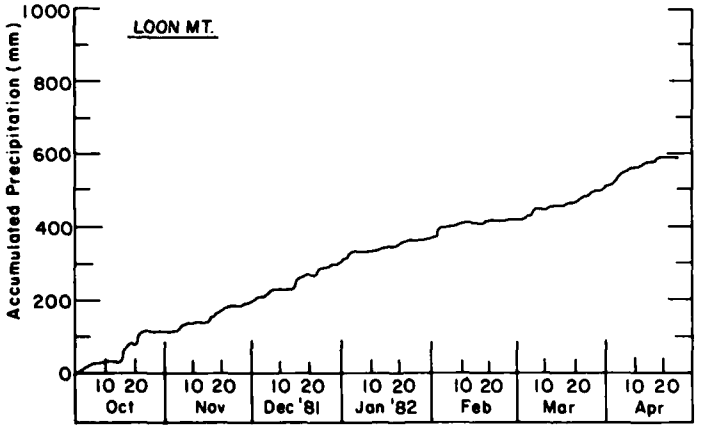


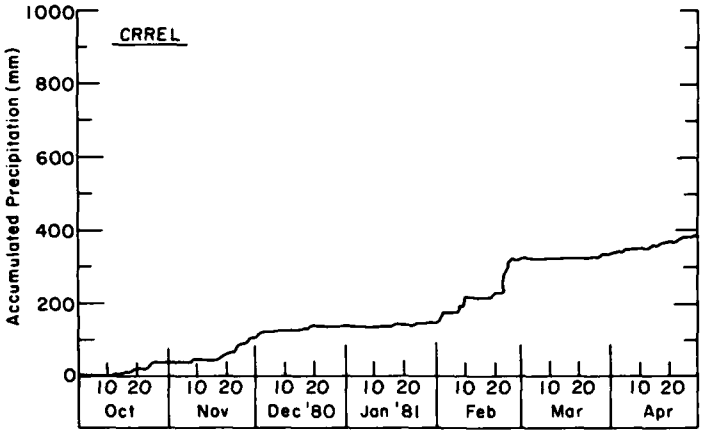
Figure B6 (cont'd).

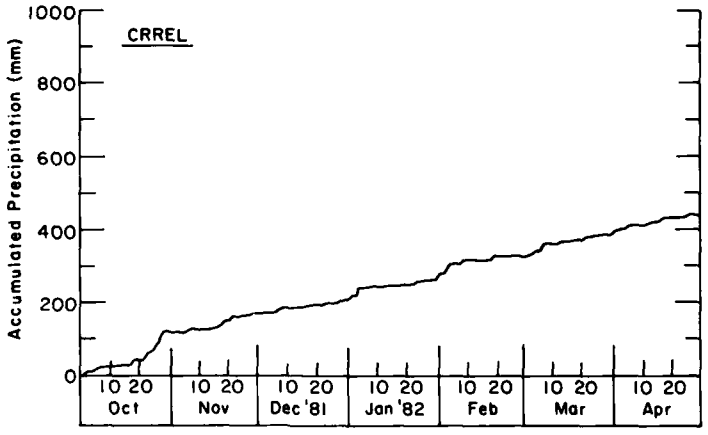


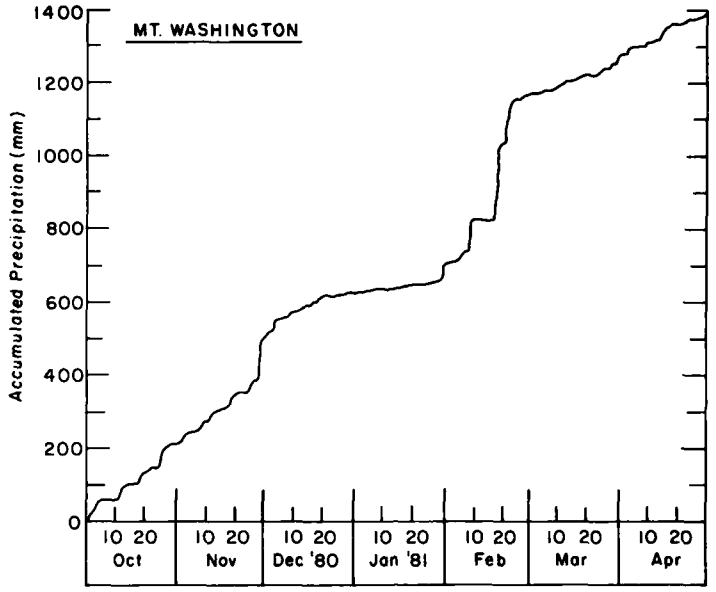
APPENDIX C: ACCUMULATED PRECIPITATION AMOUNTS (WATER EQUIVALENT)

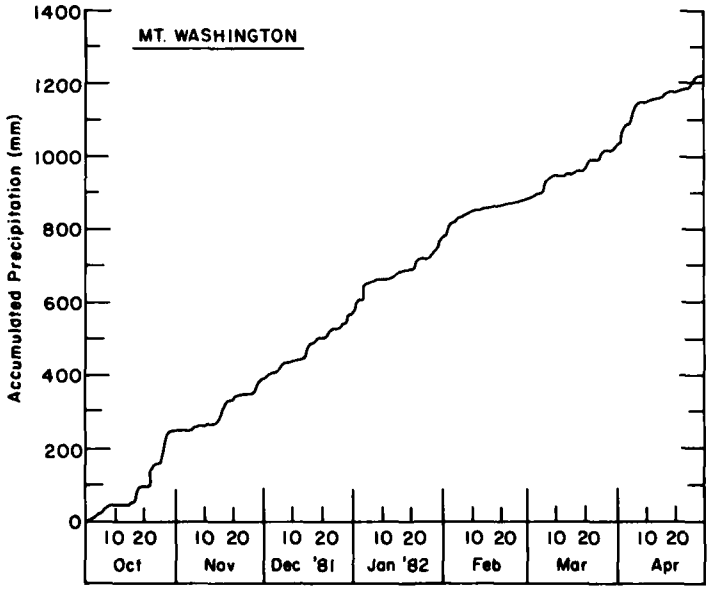




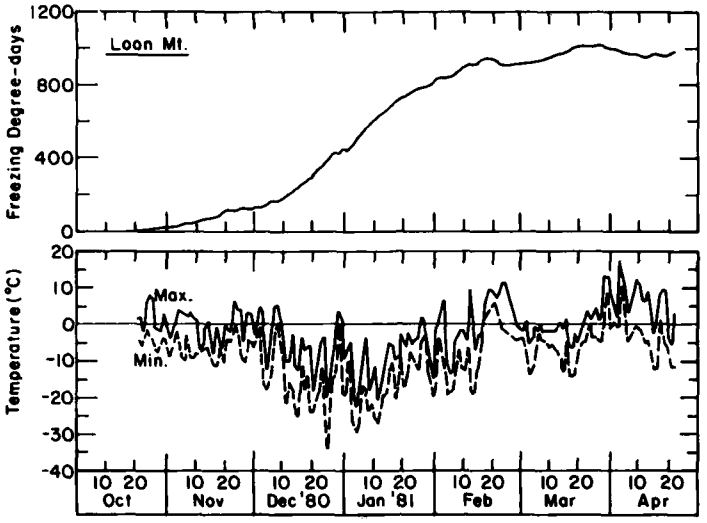

CRREL
Accumulated Precipitation (mm)
1000
800
600
400
200
0
10 20
Oct
10 20
Nov
10 20
Dec '80
10 20
Jan '81
10 20
Feb
10 20
Mar
10 20
Apr

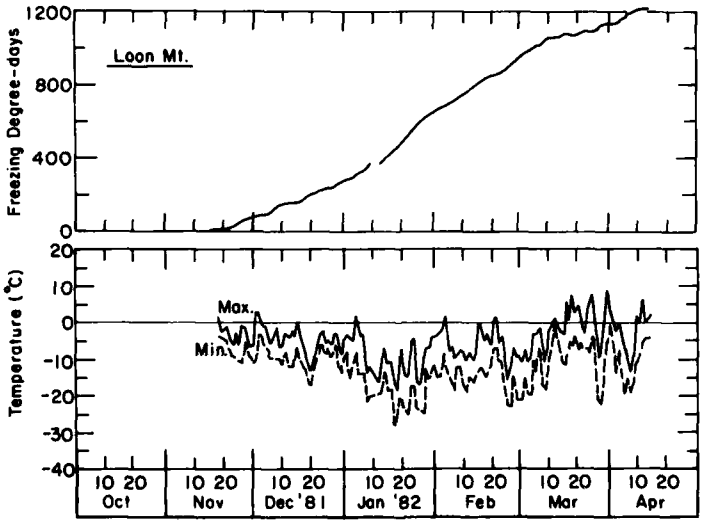

CRREL
Accumulated Precipitation (mm)
1000
800
600
400
200
0
10 20
Oct
10 20
Nov
10 20
Dec '81
10 20
Jan '82
10 20
Feb
10 20
Mar
10 20
Apr

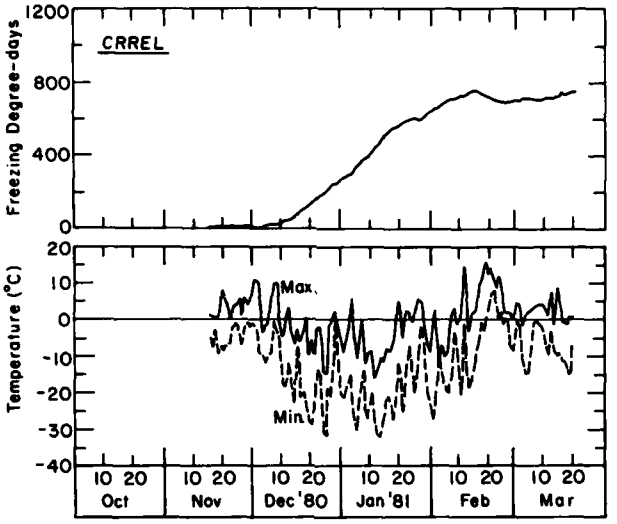

MT. WASHINGTON
Accumulated Precipitation (mm)
1400
1200
1000
800
600
400
200
0
10 20 Oct
10 20 Nov
10 20 Dec '80
10 20 Jan '81
10 20 Feb
10 20 Mar
10 20 Apr

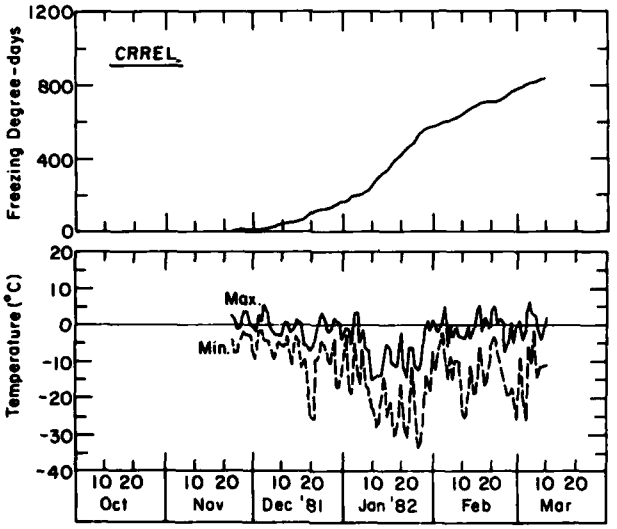

MT. WASHINGTON
Accumulated Precipitation (mm)
1400
1200
1000
800
600
400
200
0
10 20 Oct
10 20 Nov
10 20 Dec '81
10 20 Jan '82
10 20 Feb
10 20 Mar
10 20 Apr

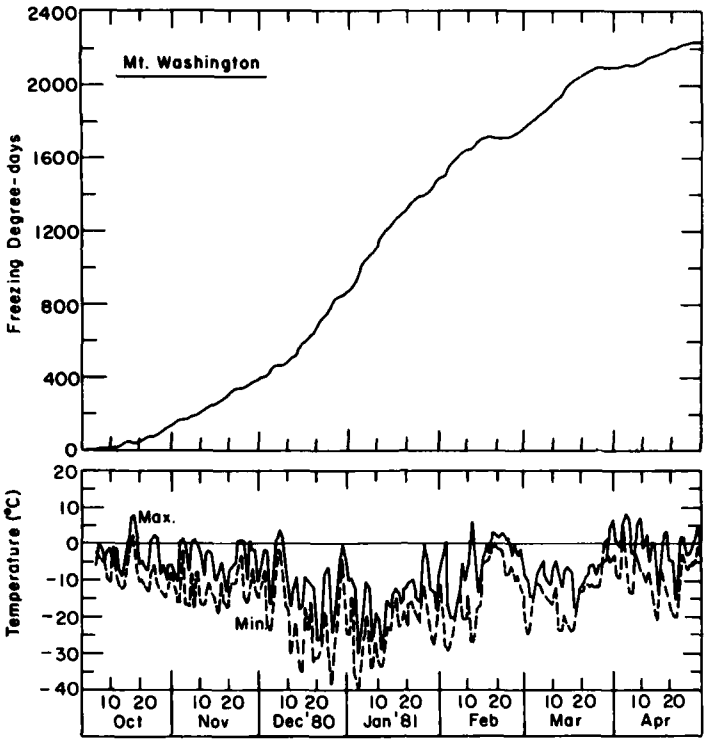
APPENDIX D: CUMULATIVE FREEZING-DEGREE-DAYS AND MAXIMUM AND MINIMUM AIR TEMPERATURES

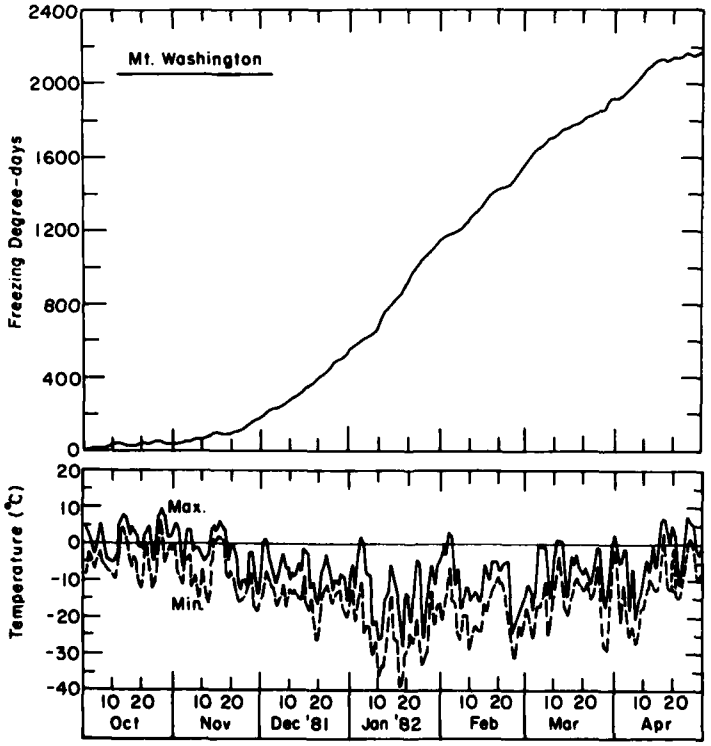





CRREL
Freezing Degree-days
1200
800
400
0
Temperature (°C)
20
10
0
-10
-20
-30
-40
Max.
Min.
10 20
Oct
10 20
Nov
10 20
Dec '80
10 20
Jan '81
10 20
Feb
10 20
Mar


CRREL
Freezing Degree-days
1200
800
400
0
Temperature (°C)
20
10
0
-10
-20
-30
-40
Max.
Min.
10 20
Oct
10 20
Nov
10 20
Dec '81
10 20
Jan '82
10 20
Feb
10 20
Mar


Mt. Washington
Freezing Degree-days
2400
2000
1600
1200
800
400
0
Temperature (°C)
20
10
0
-10
-20
-30
-40
Max.
Min.
10 20
Oct
10 20
Nov
10 20
Dec'80
10 20
Jan'81
10 20
Feb
10 20
Mar
10 20
Apr


Mt. Washington
Freezing Degree-days
2400
2000
1600
1200
800
400
0
Temperature (°C)
20
10
0
-10
-20
-30
-40
Max.
Min.
10 20
Oct
10 20
Nov
10 20
Dec '81
10 20
Jan '82
10 20
Feb
10 20
Mar
10 20
Apr

1980 Date	Time (Hrs) Begin	End	Begin	End	Begin	End
Oct 1						
2						
3						
4	1820	Cont				
5	Cont	0030	0850	1950		
6	1120	2250				
7	0210	(0230)	0520	Cont		
8	Cont	1120				
9	0440	Cont				
10	Cont	0415				
11	2100	2210				
12	0230	Cont				
13	Cont	Cont				
14	Cont	Cont				
15	Cont	0030				
16	0515	1415	2015	Cont		
17	Cont	0050				
18						
19	0100	Cont				
20	Cont	Cont				
21	Cont	Cont				
22	Cont	Cont				
23	Cont	1940	2105	2140		
24						
25	0855	2010				
26	0130	Cont				
27	Cont	Cont				
28	Cont	Cont				
29	Cont	Cont				
30	Cont	0050				
31	0450	Cont				

1980 Date	Time (Hrs) Begin	End	Begin	End	Begin	End
Nov 1	Cont	Cont				
2	Cont	Cont				
3	Cont	0115				
4	1040	Cont				
5	Cont	Cont				
6	0955	Cont				
7	Cont	2050				
8	0645	1910				
9	1205	Cont				
10	Cont	Cont				
11	Cont	Cont				
12	Cont	Cont				
13	Cont	0740	1540	1630	2050	Cont
14	Cont	Cont				
15	Cont	0340	1140	Cont		
16	Cont	1930				
17	2150	Cont				
18	Cont	Cont				
19	Cont	0950	1530	Cont		
20	Cont	1230				
21	1340	1430	1620	Cont		
22	Cont	1610				
23						
24	0605	0640	1710	2240		
25	1405	Cont				
26	Cont	0830	2030	2220		
27						
28	0810	Cont				
29	Cont	Cont				
30	Cont	Cont				

Cont - Continued

1980 Date	Time (Hrs) Begin	End	Begin	End	Begin	End
Dec 1	Cont	2250				
2	0520	Cont				
3	Cont	Cont				
4	Cont	Cont				
5	Cont	1155				
6	0450	1430				
7	2315	Cont				
8	Cont	0730	2140	Cont		
9	Cont	1315	2320	Cont		
10	Cont	Cont				
11	Cont	0845	1715	Cont		
12	Cont	Cont				
13	Cont	2250				
14	0545	Cont				
15	Cont	Cont				
16	Cont	1740	1845	Cont		
17	Cont	1230				
18	0635	Cont				
19	Cont	Cont				
20	Cont	0045	0510	1315	1525	Cont
21	Cont	Cont				
22	Cont	Cont				
23	Cont	0510	0830	1930		
24	0210	Cont				
25	Cont	2150				
26	0215	Cont				
27	Cont	0750				
28	0820	Cont				
29	Cont	Cont				
30	Cont	0445	0740	0810	1705	2150
31	0910	1050				

1981 Date	Time (Hrs) Begin	End	Begin	End	Begin	End
Jan 1	2015	Cont				
2	Cont	Cont				
3	Cont	Cont	0950	1150	1410	Cont
4	Cont	Cont				
5	Cont	1915				
6	0705	Cont				
7	Cont	Cont				
8	Cont	Cont				
9	Cont	0130				
10	0205	0955	1305	Cont		
11	Cont	Cont				
12	Cont	0640				
13						
14	1910	Cont				
15	Cont	0635	1520	1640		
16	1345	Cont				
17	Cont	1530				
18	0505	Cont				
19	Cont	Cont				
20	Cont	0705				
21						
22	0520	0940	1220	Cont		
23	Cont	Cont				
24	Cont	Cont				
25	Cont	0640				
26	1405	Cont				
27	Cont	Cont				
28	Cont	1345				
29	0455	Cont				
30	Cont	1230				
31						

1981 Date		Time (Hrs) Begin	End	Begin	End	Begin	End
Feb	1	1845	Cont				
	2	Cont	1415	1550	Cont		
	3	Cont	Cont				
	4	Cont	0430	1245	Cont		
	5	Cont	1640	1905	Cont		
	6	Cont	0150	1220	Cont		
	7	Cont	1250	1750	Cont		
	8	Cont	Cont				
	9	Cont	Cont				
	10	Cont	0655	1955	Cont		
	11	Cont	1110	2350	Cont		
	12	Cont	1850				
	13						
	14	0715	0815	1230	1315	1710	2220
	15						
	16	2250	Cont				
	17	Cont	Cont				
	18	Cont	1050				
	19	0000	0330				
	20						
	21						
	22	0510	1115				
	23	2010	Cont				
	24	Cont	Cont				
	25	Cont	Cont				
	26	Cont	Cont				
	27	Cont	1235				
	28	1250	Cont				

1981 Date		Time (Hrs) Begin	End	Begin	End	Begin	End
Mar	1	Cont	Cont				
	2	Cont	Cont				
	3	Cont	Cont				
	4	Cont	0645	1720	Cont		
	5	Cont	0050	2140	Cont		
	6	Cont	Cont				
	7	Cont	2250				
	8						
	9	0005	Cont				
	10	Cont	Cont				
	11	Cont	Cont				
	12	Cont	2040	2140	Cont		
	13	Cont	Cont				
	14	Cont	Cont				
	15	Cont	Cont				
	16	Cont	1545				
	17	1850	Cont				
	18	Cont	Cont				
	19	Cont	0215	0550	Cont		
	20	Cont	Cont				
	21	Cont	Cont				
	22	Cont	0050	1155	1415	1735	1815
	23						
	24	0705	Cont				
	25	Cont	1335				
	26						
	27	0410	2215				
	28						
	29						
	30						
	31	0220	1940	2315	Cont		

1981 Date		Time (Hrs) Begin	End	Begin	End	Begin	End
Apr	1	Cont	Cont				
	2	Cont	Cont				
	3	Cont	0410				
	4						
	5	2130	Cont				
	6	Cont	Cont				
	7	Cont	1005				
	8						
	9	1940	Cont				
	10	Cont	0855				
	11	0620	Cont				
	12	Cont	0130				
	13						
	14	0840	Cont				
	15	Cont	1315	1840	2240		
	16	0220	1625				
	17	1250	1340				
	18	1530	Cont				
	19	Cont	0430				
	20	0550	Cont				
	21	Cont	Cont				
	22	Cont	0550	0650	0810		
	23	2350	Cont				
	24	Cont	0155	0645	Cont		
	25	Cont	Cont				
	26	Cont	1430	1715	Cont		
	27	Cont	1230				
	28	0230	0840				
	29	0245	0540	2145	Cont		
	30	Cont	1130				

1981 Date		Time (Hrs) Begin	End	Begin	End	Begin	End	Begin	End
Oct	1	Cont	0220						
	2	0400	0740	1430	1630	1935	1950	2015	Cont
	3	Cont	Cont						
	4	Cont	Cont						
	5	Cont	1050	1250	(1930)				
	6								
	7	0030	Cont						
	8	Cont	Cont						
	9	Cont	2215						
	10	0615	2250						
	11	0945	1150						
	12								
	13								
	14								
	15								
	16	1530	Cont						
	17	Cont	0350						
	18	1215	1730	2250	Cont				
	19	Cont	Cont						
	20	Cont	1305						
	21	0515	1930						
	22								
	23	2050	Cont						
	24	Cont	1850						
	25	0750	1850	2240	Cont				
	26	Cont	0050						
	27								
	28	1420	1920						
	29								
	30								
	31								

1981		Time (Hrs)					
Date		Begin	End	Begin	End	Begin	End
Nov	1	1450	1530	1955	2205		
	2	1440	1550	1615	Cont		
	3	Cont	0830				
	4	0550	1245				
	5						
	6	1655	Cont				
	7	Cont	Cont				
	8	Cont	0710				
	9	0120	2030				
	10	1925	Cont				
	11	Cont	Cont				
	12	Cont	0815	1235	1255		
	13						
	14						
	15						
	16						
	17						
	18	0710	Cont				
	19	Cont	2320				
	20	0440	Cont				
	21	Cont	Cont				
	22	Cont	Cont				
	23	Cont	2140				
	24	0130	0830				
	25	0545	0635				
	26						
	27	0040	Cont				
	28	Cont	Cont				
	29	Cont	Cont				
	30	Cont	0750	1420	1440		

1981		Time (Hrs)					
Date		Begin	End	Begin	End	Begin	End
Dec	1	1915	Cont				
	2	Cont	0810	1215	2150		
	3	0430	Cont				
	4	Cont	1550				
	5	0130	(0530)	0655	0945	1015	Cont
	6	Cont	Cont				
	7	Cont	Cont				
	8	Cont	0240	1305	Cont		
	9	Cont	Cont				
	10	Cont	Cont				
	11	Cont	Cont				
	12	Cont	1530				
	13	2315	Cont				
	14	Cont	1040	1605	1620	1855	Cont
	15	Cont	1020	2040	Cont		
	16	Cont	Cont				
	17	Cont	1710				
	18	0130	Cont				
	19	Cont	Cont				
	20	Cont	1720				
	21						
	22	0410	1940	2145	Cont		
	23	Cont	Cont				
	24	Cont	Cont				
	25	Cont	Cont				
	26	Cont	1330				
	27	0850	Cont				
	28	Cont	1440	1550	Cont		
	29	Cont	Cont				
	30	Cont	1050	1230	Cont		
	31	Cont	0530				

1982 Date	Time (Hrs) Begin	End	Begin	End	Begin	End
Jan 1	0450	Cont				
2	Cont	1230				
3	1120	1130	1730	Cont		
4	Cont	1735	2155	Cont		
5	Cont	Cont				
6	Cont	0430	1440	Cont		
7	Cont	Cont				
8	Cont	Cont				
9	Cont	1140	1240	Cont		
10	Cont	2145	2250	Cont		
11	Cont	0950	1220	Cont		
12	Cont	1050				
13	1350	Cont				
14	Cont	Cont				
15	Cont	2230				
16	1120	Cont				
17	Cont	Cont				
18	Cont	Cont				
19	Cont	0530				
20	0110	2215				
21						
22						
23	0805	Cont				
24	Cont	Cont				
25	Cont	Cont				
26	Cont	Cont				
27	Cont	0340				
28	1320	Cont				
29	Cont	2040				
30	0650	0815	1020	Cont		
31	Cont	Cont				

1982 Date	Time (Hrs) Begin	End	Begin	End	Begin	End
Feb 1	Cont	2010				
2						
3	0110	1315				
4	0340	1615				
5	1310	Cont				
6	Cont	Cont				
7	Cont	0730	1745	1820	2050	Cont
8	Cont	Cont				
9	Cont	0415	0640	Cont		
10	Cont	Cont				
11	Cont	0755	1930	Cont		
12	Cont	1330				
13	0620	Cont				
14	Cont	1945				
15	0540	1010	1720	Cont		
16	Cont	1320				
17						
18						
19	0730	Cont				
20	Cont	1720				
21	1310	Cont				
22	Cont	2230				
23	1310	Cont				
24	Cont	0420				
25	0110	1305	1635	Cont		
26	Cont	0955	1645	Cont		
27	Cont	1415	1650	Cont		
28	Cont	0635	0755	1320		

1982 Date	Time (Hrs)					
	Begin	End	Begin	End	Begin	End
Mar 1	1610	Cont				
2	Cont	Cont				
3	Cont	1655				
4	1610	Cont				
5	Cont	Cont				
6	Cont	0120	2050	Cont		
7	Cont	Cont				
8	Cont	2210				
9	1040	Cont				
10	Cont	(0120)	2010	Cont		
11	Cont	1735	1910	Cont		
12	Cont	0525	1020	1710		
13	1120	2155				
14	0240	Cont				
15	Cont	0045				
16						
17	0130	1320				
18	2215	Cont				
19	Cont	1215	2000	Cont		
20	Cont	0930	1815	2150		
21	0705	Cont				
22	Cont	Cont				
23	Cont	1440				
24	1610	2130				
25	0040	0620	1710	2205		
26	0120	Cont				
27	Cont	Cont				
28	Cont	1130				
29	0120	0420	2230	2330		
30	0040	(0445)				
31	0510	1240	2215	Cont		

1982 Date	Time (Hrs)					
	Begin	End	Begin	End	Begin	End
Apr 1	Cont	Cont				
2	Cont	0950				
3	1250	Cont				
4	Cont	Cont				
5	Cont	Cont				
6	Cont	0040	0810	1050	1250	Cont
7	Cont	Cont				
8	Cont	Cont				
9	Cont	0215				
10	0150	(0510)	1740	Cont		
11	Cont	0050	1750	Cont		
12	Cont	Cont				
13	Cont	0145	0720	Cont		
14	Cont	1425	2250	Cont		
15	Cont	0110				
16						
17						
18	0420	Cont				
19	Cont	0720				
29						
21	0030	0050	0640	1330	1715	Cont
22	Cont	Cont				
23	Cont	0240	0935	1305	1530	Cont
24	Cont	1610				
25						
26						
27	2030	2215				
28						
29						
30						

☆ U. S. GOVERNMENT PRINTING OFFICE: 1986--600-048--22,084

END

FILMED

6-86

DTIC