

1999

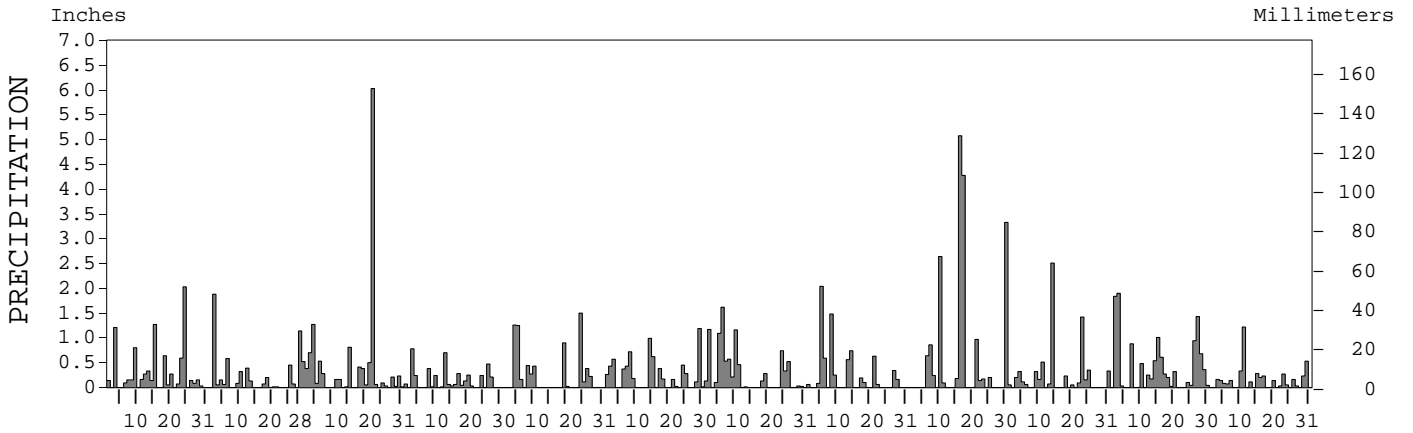
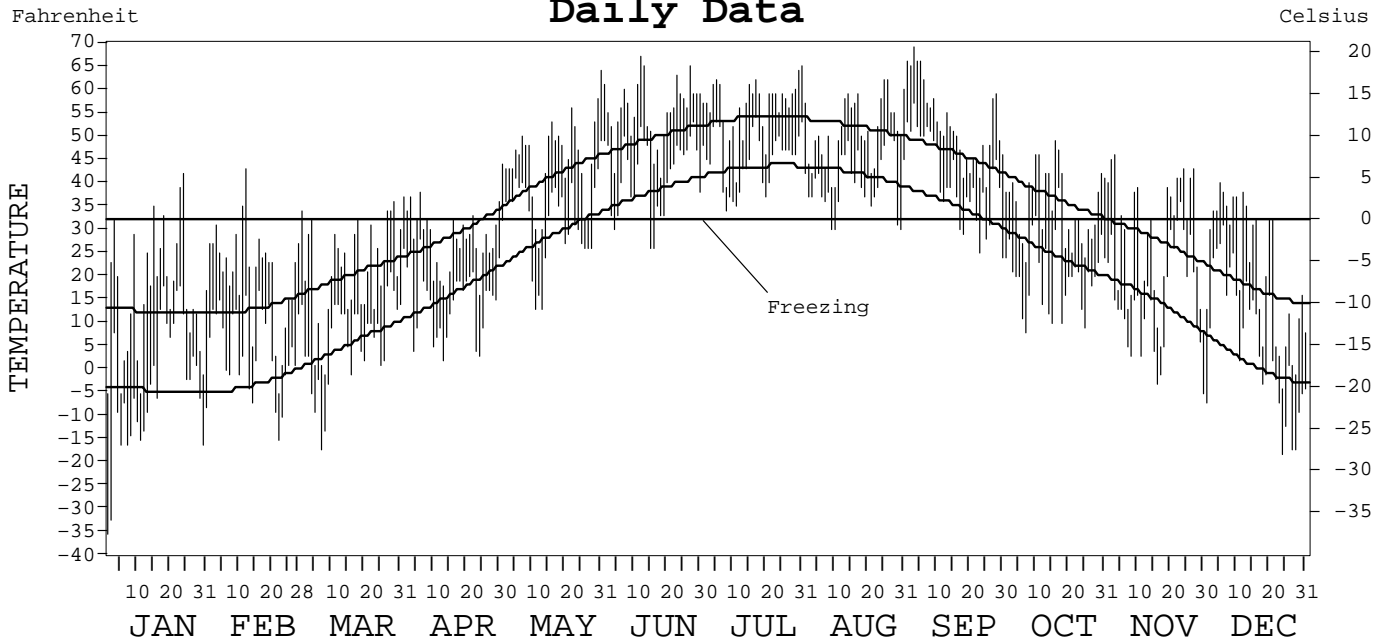
LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-3385

MOUNT WASHINGTON OBS.
GORHAM, NEW HAMPSHIRE (MWN)

Daily Data



I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL ENVIRONMENTAL AND INFORMATION SERVICE
NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE
NATIONAL CLIMATIC DATA CENTER
ASHEVILLE, NORTH CAROLINA
DIRECTOR
NATIONAL CLIMATIC DATA CENTER

METEOROLOGICAL DATA FOR 1999

MT. WASHINGTON, NH (MWN)

LATITUDE: 44° 16' 0" N LONGITUDE: 71° 18' 0" W ELEVATION (FT): GRND: 6262 BARO: 6274 TIME ZONE: EASTERN (UTC + 5) WBAN: 14755

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	16.3	20.6	21.4	27.8	44.9	55.4	56.1	51.3	52.7	35.3	28.6	21.4	36.0	
	HIGHEST DAILY MAXIMUM	42	43	36	38	64	67	65	62	69	49	46	40	69	
	DATE OF OCCURRENCE	24	12	29	06	31	12	31	26+	03	16	03	05	SEP 03	
	MEAN DAILY MINIMUM	-3.5	4.6	6.1	14.7	32.0	41.7	45.0	40.4	40.8	20.4	15.0	6.0	21.9	
	LOWEST DAILY MINIMUM	-35	-15	-17	2	13	26	34	30	24	8	-5	-18	-35	
	DATE OF OCCURRENCE	01	22	07	13	13+	16+	08	30+	30	07	30	24	JAN 01	
	AVERAGE DRY BULB	6.4	12.6	13.8	21.3	38.5	48.6	50.6	45.9	46.8	27.9	21.8	13.7	29.0	
	MEAN WET BULB														
	MEAN DEW POINT														
	NUMBER OF DAYS WITH:														
MAXIMUM ≥ 90°	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MAXIMUM ≤ 32°	27	26	27	24	5	0	0	0	0	14	16	22	161		
MINIMUM ≤ 32°	31	28	31	30	14	3	0	4	7	29	29	31	237		
MINIMUM ≤ 0°	19	9	7	0	0	0	0	0	0	0	3	12	50		
H/C	HEATING DEGREE DAYS	1808	1461	1583	1306	814	487	439	586	542	1145	1287	1584	13042	
	COOLING DEGREE DAYS	0	0	0	0	0	0	0	0	0	0	0	0	0	
RH	MEAN (PERCENT)														
	HOUR 01 LST														
	HOUR 07 LST														
	HOUR 13 LST														
	HOUR 19 LST														
S	PERCENT POSSIBLE SUNSHINE	36	54	31	36	54	39	25	30	47	32	20	33	36	
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	29	19	28	29	18	23	31	28	23	27	30	26	311	
	THUNDERSTORMS	0	0	1	3	0	5	8	2	1	0	1	0	21	
CLOUDINESS	AVG. SKY COVER (OKTAS)														
	SUNRISE - SUNSET	6	5	6	6	5	6	7	7	6	7	7	6	6	
	MIDNIGHT - MIDNIGHT	7	5		6	5	7			6	7	7	6		
	NUMBER OF DAYS WITH:														
	CLEAR	2	5	4	2	6	1	1	1	5	0	2	3	32	
PARTLY CLOUDY	9	11	7	9	12	9	7	6	10	12	2	10	104		
CLOUDY	20	12	20	19	13	20	23	24	15	19	26	18	229		
PR	MEAN STATION PRESS. (IN.)														
	MEAN SEA-LEVEL PRESS. (IN.)														
WINDS	RESULTANT SPEED (MPH)														
	RES. DIR. (TENS OF DEGS.)														
	MEAN SPEED (MPH)	45.0	34.0	41.5	28.9	21.4	17.2	26.5	21.2	20.1	36.6	43.3	41.0	31.4	
	PREVAIL. DIR. (TENS OF DEGS.)														
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)														
	DIR. (TENS OF DEGS.)														
	DATE OF OCCURRENCE														
PEAK GUST:															
SPEED (MPH)	108	108	137	109	81	78	90	82	128	117	110	125	137		
DIR. (TENS OF DEGS.)	SE	NW	NW	NW	W	W	W	W	NW	NW	SE	W	NW		
DATE OF OCCURRENCE	18	26	16	13	12	07	06	09	17	14	03	11	MAR 16		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	8.76	5.59	12.92	4.23	6.94	7.34	9.10	7.28	18.82	6.93	12.11	4.40	104.42	
	GREATEST 24-HOUR (IN.)	2.03	1.93	6.45	1.02	2.07	1.61	1.62	2.04	6.70	2.51	3.74	1.22	6.70	
	DATE OF OCCURRENCE	24	02-03	21-22	03-04	04-05	14-15	06	05	16-17	14	02-03	11	SEP 16-17	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	21	16	23	19	12	18	18	14	13	17	21	19	211	
PRECIPITATION ≥ 0.10	16	9	15	11	11	16	15	11	12	12	17	14	159		
PRECIPITATION ≥ 1.00	3	2	2	0	3	1	4	2	4	2	4	1	28		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)	44.6	30.8	70.2	25.3	2.5	T	T	T	3.2	20.6	44.8	30.2	272.2	
	GREATEST 24-HOUR (IN.)	11.7	11.2	25.7	5.2	1.3	T	T	T	3.2	8.3	11.5	9.4	25.7	
	DATE OF OCCURRENCE	03	02	21-22	20	26-27	24+	25+	09	17	23	07	11	MAR 21-22	
	MAXIMUM SNOW DEPTH (IN.)	9	6	9	5	3	0	0	0	1	4	2	2	9	
	DATE OF OCCURRENCE	18+	08+	27+	01	01				18	29+	19+	31+	MAR 27+	
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0	15	8	14	9	1	0	0	0	1	3	11	9	71		

NORMALS, MEANS, AND EXTREMES

MT. WASHINGTON, NH (MWN)

LATITUDE: 44° 16' 0" N LONGITUDE: 71° 18' 0" W ELEVATION (FT): GRND: 6262 BARO: 6274 TIME ZONE: EASTERN (UTC + 5) WBAN: 14755

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	12.3	13.1	20.1	28.7	41.0	49.4	53.6	51.8	45.9	36.4	27.3	17.1	33.1
	MEAN DAILY MAXIMUM	51	13.9	14.0	19.7	29.3	41.0	50.5	54.2	52.7	46.0	36.7	27.1	17.8	33.6
	HIGHEST DAILY MAXIMUM	67	47	43	54	60	66	71	71	72	69	59	52	45	72
	YEAR OF OCCURRENCE		1995	1999	1998	1976	1977	1933	1953	1975	1999	1938	1982	1992	AUG 1975
	MEAN OF EXTREME MAXS.	51	35.8	34.8	39.2	45.7	57.0	62.7	65.1	63.6	59.4	52.1	44.4	37.7	49.8
	NORMAL DAILY MINIMUM	30	-4.6	-3.2	5.4	16.1	28.5	37.9	43.0	41.6	34.6	24.2	13.9	6	19.8
	MEAN DAILY MINIMUM	51	-3.1	-2.4	5.0	16.3	28.6	38.5	43.2	41.8	34.9	24.6	13.8	2.0	20.3
	LOWEST DAILY MINIMUM	67	-47	-46	-38	-20	-2	8	25	20	9	-5	-20	-46	-47
	YEAR OF OCCURRENCE		1934	1943	1950	1995	1966	1945	1982	1986	1992	1939	1958	1933	JAN 1934
	MEAN OF EXTREME MINS.	51	-30.6	-27.1	-18.5	-3.0	11.7	23.9	31.5	29.0	18.2	6.7	-6.4	-23.6	1.0
	NORMAL DRY BULB	30	3.9	5.0	12.8	22.4	34.8	43.7	48.3	46.8	40.3	30.3	20.6	8.9	26.5
	MEAN DRY BULB	51	5.4	5.8	12.4	22.8	34.8	44.5	48.8	47.2	40.4	30.6	20.5	9.8	26.9
	MEAN WET BULB														
	MEAN DEW POINT														
NORMAL NO. DAYS WITH:															
MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAXIMUM ≤ 32°	30	29.4	26.0	25.7	19.5	6.6	0.6	*	0.2	2.3	10.8	19.9	27.6	168.6	
MINIMUM ≤ 32°	30	31.0	28.0	30.6	28.0	20.3	7.0	1.9	3.3	12.3	23.1	28.1	30.7	244.3	
MINIMUM ≤ 0°	30	19.4	16.8	10.8	2.2	*	0.0	0.0	0.0	0.0	0.2	3.9	14.4	67.7	
H/C	NORMAL HEATING DEG. DAYS	30	1894	1680	1618	1278	936	639	518	564	741	1076	1332	1739	14015
	NORMAL COOLING DEG. DAYS	30	0	0	0	0	0	0	0	0	0	0	0	0	0
RH	NORMAL (PERCENT)														
	HOUR 01 LST														
	HOUR 07 LST														
	HOUR 13 LST														
	HOUR 19 LST														
S	PERCENT POSSIBLE SUNSHINE	60	32	35	34	35	36	32	30	31	35	38	29	30	33
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	67	26.7	24.5	27.1	24.8	23.9	25.1	27.1	27.3	25.8	25.3	26.6	27.2	311.4
	THUNDERSTORMS	67	0.1	0.1	0.3	1.0	1.8	3.5	4.4	2.9	0.9	0.6	0.3	0.1	16.0
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	60	6.2	6.2	6.2	6.2	6.2	6.6	6.4	6.2	5.9	5.7	6.3	6.2	6.2
	MIDNIGHT-MIDNIGHT (OKTAS)	29	6.3	6.2	6.2	6.3	6.2	6.5	6.3	6.2	6.0	5.7	6.2	6.2	6.2
	MEAN NO. DAYS WITH:														
	CLEAR	67	4.6	4.4	4.6	3.9	3.4	2.2	1.5	2.7	4.3	5.9	3.6	4.2	45.3
PARTLY CLOUDY	67	5.6	5.4	5.4	6.1	7.4	6.8	7.4	8.0	6.5	6.0	5.0	5.0	74.6	
CLOUDY	67	20.9	18.5	21.0	20.0	20.2	21.1	22.1	20.5	19.2	19.0	21.6	21.4	245.5	
PR	MEAN STATION PRESSURE (IN)			30.03											
	MEAN SEA-LEVEL PRES. (IN)														
WINDS	MEAN SPEED (MPH)	64	46.2	44.2	41.6	36.0	29.8	27.4	25.9	24.9	29.0	33.9	40.3	45.4	35.4
	PREVAIL. DIR (TENS OF DEGS)														
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)														
	YEAR OF OCCURRENCE														
PEAK GUST:															
SPEED (MPH)	67	173	166	180	231	164	136	154	142	174	161	163	178	231	
DIR. (TENS OF DEGS)		NW	E	W	SE	W	NW	W	ENE	SE	W	NW	NW	SE	
YEAR OF OCCURRENCE		1985	1972	1942	1934	1945	1949	1996	1954	1979	1943	1983	1980	APR 1934	
PRECIPITATION	NORMAL (IN)	30	7.94	8.56	8.97	8.17	7.51	7.82	7.08	8.24	7.38	7.19	10.38	9.72	98.96
	MAXIMUM MONTHLY (IN)	67	18.23	25.56	15.98	15.21	19.28	19.96	16.85	20.69	18.82	21.25	19.56	17.95	25.56
	YEAR OF OCCURRENCE		1958	1969	1977	1988	1997	1998	1996	1991	1999	1995	1983	1973	FEB 1969
	MINIMUM MONTHLY (IN)	67	1.29	0.98	2.15	2.19	1.78	2.43	2.69	2.46	2.74	0.75	2.31	1.49	0.75
	YEAR OF OCCURRENCE		1981	1980	1946	1959	1951	1979	1955	1996	1948	1947	1939	1955	OCT 1947
	MAXIMUM IN 24 HOURS (IN)	67	4.85	10.38	6.45	8.30	4.60	6.50	7.37	6.63	6.70	10.82	6.07	8.64	10.82
	YEAR OF OCCURRENCE		1986	1970	1999	1984	1967	1973	1969	1991	1999	1996	1968	1969	OCT 1996
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	20.5	18.3	18.9	18.1	16.7	15.9	15.7	16.1	14.8	16.2	19.9	20.9	212.0	
PRECIPITATION ≥ 1.00	30	1.9	2.1	2.4	2.1	2.0	1.8	1.8	2.2	2.3	2.1	2.9	2.4	26.0	
SNOWFALL	NORMAL (IN)	30	50.4	48.2	51.0	40.8	11.3	1.2	T	0.3	2.2	14.0	40.4	55.0	314.8
	MAXIMUM MONTHLY (IN)	67	94.6	172.8	98.0	110.9	95.8	8.1	1.1	2.5	7.8	34.4	86.6	103.7	172.8
	YEAR OF OCCURRENCE		1978	1969	1970	1988	1997	1959	1957	1965	1949	1969	1968	1968	FEB 1969
	MAXIMUM IN 24 HOURS (IN)	67	24.0	49.3	27.4	27.2	22.2	5.1	1.1	2.5	7.7	17.0	25.0	37.5	49.3
	YEAR OF OCCURRENCE		1978	1969	1969	1988	1967	1988	1957	1965	1986	1969	1968	1968	FEB 1969
	MAXIMUM SNOW DEPTH (IN)	50	28	38	42	41	30	9	4	1	5	11	25	28	42
	YEAR OF OCCURRENCE		1978	1970	1970	1956	1953	1994	1988	1976	1949	1960	1972	1972	MAR 1970
	NORMAL NO. DAYS WITH:														
SNOWFALL ≥ 1.0	30	12.9	10.5	11.7	8.9	3.3	0.4	0.0	0.1	0.7	4.4	9.8	13.0	75.7	

PRECIPITATION (inches) 1999 MOUNT WASHINGTON OBS. NH (MWN)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	5.53	22.29	13.92	8.43	8.36	5.03	5.59	6.76	10.98	6.89	6.15	13.06	112.99
1971	8.18	8.32	10.19	7.57	10.96	4.89	9.25	9.29	6.24	5.71	10.18	9.51	100.29
1972	7.01	13.37	11.75	9.73	6.36	10.40	7.62	8.31	7.34	8.38	15.28	16.06	121.61
1973	11.74	5.72	9.01	13.33	11.59	16.00	4.38	5.16	6.93	7.71	11.87	17.95	121.39
1974	8.26	9.43	15.96	14.62	7.57	7.00	9.84	7.30	9.03	4.34	11.45	16.24	121.04
1975	13.61	8.92	15.95	13.45	4.32	6.75	8.31	6.50	12.32	6.59	6.37	10.48	113.57
1976	11.87	12.81	9.42	6.04	11.08	9.07	6.29	10.63	6.65	10.36	13.61	13.57	121.40
1977	11.11	12.09	15.98	8.90	3.73	11.12	3.99	7.21	10.64	8.89	11.37	12.08	117.11
1978	18.19	2.98	14.16	9.96	8.13	10.84	3.75	4.23	5.67	4.41	3.24	6.83	92.39
1979	12.62	4.34	5.30	4.98	7.62	2.43	3.80	7.53	6.62	6.75	5.97	3.38	71.34
1980	2.59	0.98	7.99	6.65	2.55	5.37	5.92	7.96	9.96	8.41	11.55	4.31	74.24
1981	1.29	19.81	3.72	5.41	8.59	8.90	11.02	9.38	10.82	9.59	5.72	7.09	101.34
1982	8.03	4.43	5.56	8.25	4.49	10.16	5.90	9.89	6.20	5.54	14.64	7.97	91.06
1983	7.93	5.67	10.26	10.73	11.43	3.60	6.96	10.32	5.57	7.29	19.56	17.38	116.70
1984	4.99	11.56	9.31	14.19	18.82	10.71	8.51	4.79	4.48	5.66	9.84	12.92	115.78
1985	5.48	10.88	12.72	6.77	6.97	9.69	7.93	6.51	9.60	6.15	8.07	7.02	97.79
1986	16.89	4.63	8.06	5.34	7.30	7.68	10.12	10.95	7.79	5.83	10.04	9.48	104.11
1987	8.87	5.48	12.07	8.38	7.49	9.15	6.47	5.95	8.09	8.97	7.97	6.85	95.74
1988	6.52	9.59	8.24	15.21	5.22	6.46	6.56	11.68	7.31	7.43	15.68	3.52	103.42
1989	6.20	4.20	6.41	9.45	14.34	12.22	5.74	10.44	8.19	9.28	14.49	6.19	107.15
1990	8.94	5.24	5.98	5.30	8.27	8.20	6.87	12.73	7.29	13.55	9.72	13.10	105.19
1991	6.53	5.66	6.70	7.50	7.78	4.18	5.35	20.69	8.66	9.86	7.33	8.07	98.31
1992	4.56	6.13	13.43	5.24	2.61	4.66	9.63	8.50	8.30	5.99	7.87	3.07	79.99
1993	4.99	6.05	5.21	5.32	4.42	9.45	9.63	4.25	10.24	5.15	9.02	5.13	78.86
1994	6.20	3.22	10.77	6.73	6.31	8.77	5.25	7.72	15.47	2.17	7.38	4.99	84.98
1995	8.47	5.34	4.89	3.82	6.98	3.03	7.40	4.70	6.47	21.25	12.83	6.05	91.23
1996	10.93	8.95	3.99	12.70	7.81	9.23	16.85	2.46	7.54	17.20	10.80	9.67	118.13
1997	10.28	5.79	10.55	7.84	19.28	6.88	15.44	7.30	6.96	4.77	15.75	7.51	118.35
1998	7.39	6.15	9.61	4.39	7.13	19.96	10.81	7.03	8.64	10.00	7.58	5.07	103.76
1999	8.76	5.59	12.92	4.23	6.94	7.34	9.10	7.28	18.82	6.93	12.11	4.40	104.42
POR= 67 YRS	6.80	6.85	7.60	6.99	6.83	7.29	7.08	7.41	7.48	6.98	8.77	7.83	87.91

WBAN : 14755

AVERAGE TEMPERATURE (°F) 1999 MOUNT WASHINGTON OBS. NH (MWN)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	-3.6	4.8	11.0	22.5	36.9	44.9	51.1	48.3	41.0	34.9	24.2	6.4	26.9
1971	-2.1	8.2	8.6	20.3	34.1	45.0	47.9	46.9	45.2	39.7	18.0	9.6	26.8
1972	5.7	1.3	12.0	16.6	37.9	43.2	49.4	46.0	42.2	26.3	18.6	10.8	25.8
1973	6.0	5.2	22.6	23.5	33.1	46.0	50.4	51.2	38.4	32.6	17.8	16.7	28.6
1974	6.6	2.9	8.5	24.0	29.4	45.0	47.1	48.5	39.0	23.2	23.0	13.5	25.9
1975	7.5	4.3	9.6	16.4	40.3	44.2	51.4	48.3	38.8	32.2	24.8	9.0	27.2
1976	2.6	8.4	13.5	23.7	33.6	48.3	47.1	47.6	38.7	26.5	11.0	0.0	25.1
1977	-3.3	5.3	18.1	22.3	36.2	42.1	47.4	46.9	39.2	29.6	23.7	6.9	26.2
1978	2.9	-1.3	6.6	18.4	37.0	43.5	48.7	48.9	37.7	28.4	19.6	7.1	24.8
1979	7.5	-1.0	18.4	23.9	37.7	45.1	50.9	45.2	40.9	29.7	25.2	11.4	27.9
1980	4.7	1.1	12.2	25.3	35.1	40.9	48.7	48.6	39.0	25.2	16.5	3.5	25.1
1981	-2.5	15.5	11.5	23.2	36.2	44.8	48.9	47.1	38.7	29.8	21.3	11.2	27.1
1982	-2.2	5.1	12.4	18.5	38.3	40.9	47.9	42.1	43.1	32.3	24.1	16.9	26.6
1983	7.9	10.6	17.9	25.6	32.9	46.1	48.4	48.2	43.0	31.2	22.9	7.5	28.5
1984	4.0	16.7	8.0	25.4	32.1	44.5	47.8	50.6	36.5	34.9	21.8	14.1	28.0
1985	-1.8	6.9	10.9	22.1	35.9	39.3	47.9	46.1	43.2	31.0	23.2	3.7	25.7
1986	5.7	5.4	15.6	28.9	38.0	40.9	47.3	45.0	38.0	29.2	16.9	11.4	26.9
1987	6.0	2.4	16.5	28.5	36.1	44.7	49.4	45.2	39.3	28.3	20.2	11.3	27.3
1988	4.8	5.3	11.7	23.8	37.4	40.1	51.6	49.0	37.7	23.0	22.4	5.3	26.0
1989	8.1	3.2	13.8	19.1	39.0	45.3	49.1	46.4	41.7	32.2	15.3	-5.4	25.7
1990	11.9	9.4	15.9	26.2	31.7	45.6	49.3	50.4	39.3	34.9	23.0	14.7	29.4
1991	4.7	8.3	16.9	28.1	39.8	44.3	47.8	48.2	37.8	32.6	23.6	10.7	28.6
1992	4.9	6.7	8.3	20.9	37.1	43.9	44.7	46.3	42.8	27.2	20.2	11.8	26.2
1993	8.3	0.3	14.2	28.7	35.6	42.4	48.4	49.3	39.6	26.8	19.9	11.9	27.1
1994	-2.2	1.4	13.0	24.6	32.5	46.3	52.2	46.6	38.2	31.3	22.9	17.1	27.0
1995	13.1	0.9	17.8	18.1	33.0	48.8	51.8	49.6	39.1	35.5	15.7	6.8	27.5
1996	6.6	4.4	10.2	22.3	31.6	46.8	47.4	48.7	41.5	29.4	16.9	16.1	26.8
1997	3.6	9.3	8.3	19.1	28.0	45.2	47.7	45.8	39.4	30.1	18.3	12.0	25.6
1998	14.4	18.7	16.8	24.9	41.5	44.4	48.4	48.6	40.8	30.5	18.9	13.0	30.1
1999	6.4	12.6	13.8	21.3	38.5	48.6	50.6	45.9	46.8	27.9	21.8	13.7	29.0
POR= 67 YRS	5.1	5.7	12.2	22.6	35.0	44.4	48.3	47.3	40.7	30.9	20.3	9.5	26.8

HEATING DEGREE DAYS (base 65°F) 1999 MOUNT WASHINGTON OBS. NH (MWN)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	424	511	713	924	1217	1812	2079	1583	1746	1334	949	593	13885
1971-72	527	554	587	780	1404	1714	1838	1846	1639	1450	832	646	13817
1972-73	474	579	675	1196	1388	1677	1830	1672	1306	1239	983	567	13586
1973-74	445	422	793	997	1409	1495	1809	1738	1747	1225	1096	591	13767
1974-75	544	505	771	1291	1252	1589	1777	1699	1713	1453	758	616	13968
1975-76	415	513	780	1009	1197	1735	1935	1638	1591	1233	967	496	13509
1976-77	547	534	781	1184	1617	2017	2114	1670	1445	1275	887	686	14757
1977-78	538	551	768	1091	1233	1796	1924	1855	1805	1393	861	634	14449
1978-79	497	493	811	1128	1355	1792	1782	1849	1440	1229	841	593	13810
1979-80	430	607	715	1090	1185	1657	1867	1853	1633	1184	919	717	13857
1980-81	499	500	774	1227	1448	1907	2093	1381	1651	1246	890	598	14214
1981-82	492	545	781	1085	1305	1660	2085	1676	1623	1391	821	718	14182
1982-83	524	703	649	1009	1221	1488	1766	1520	1455	1176	988	559	13058
1983-84	508	513	654	1042	1256	1780	1885	1394	1766	1180	1012	609	13599
1984-85	527	437	849	926	1290	1574	2068	1622	1675	1280	899	766	13913
1985-86	525	579	646	1044	1249	1898	1838	1669	1526	1074	829	717	13594
1986-87	540	611	802	1101	1439	1657	1826	1750	1495	1088	890	603	13802
1987-88	478	607	765	1132	1340	1659	1863	1729	1648	1231	849	742	14043
1988-89	409	490	814	1295	1271	1849	1759	1729	1582	1370	799	584	13951
1989-90	487	569	691	1007	1487	2184	1641	1551	1519	1157	1030	574	13897
1990-91	479	443	762	928	1255	1558	1866	1584	1486	1100	774	614	12849
1991-92	529	515	808	998	1234	1683	1863	1688	1757	1318	857	627	13877
1992-93	624	570	659	1165	1338	1647	1755	1815	1572	1082	903	670	13800
1993-94	507	484	750	1176	1346	1642	2080	1784	1605	1207	999	554	14134
1994-95	389	563	796	1036	1256	1480	1606	1794	1458	1402	985	478	13243
1995-96	401	473	772	908	1473	1802	1809	1760	1697	1273	1027	539	13934
1996-97	539	501	698	1096	1437	1509	1897	1556	1752	1374	1142	589	14090
1997-98	529	588	763	1076	1393	1635	1561	1288	1487	1198	721	610	12849
1998-99	507	501	721	1060	1374	1606	1808	1461	1583	1306	814	487	13228
1999-	439	586	542	1145	1287	1584							

WBAN : 14755

COOLING DEGREE DAYS (base 65°F) 1999 MOUNT WASHINGTON OBS. NH (MWN)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	1	0	0	0	0	1
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0	0	0	0

SNOWFALL (inches) 1999 MOUNT WASHINGTON OBS. NH (MWN)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	T	0.0	4.9	3.9	23.8	84.5	57.2	45.9	86.6	55.9	33.8	0.0	396.5
1971-72	0.0	0.2	0.0	0.4	52.8	60.3	38.9	79.1	63.1	74.4	7.0	2.0	378.2
1972-73	0.0	T	0.0	12.5	80.7	91.6	70.5	35.2	46.1	71.9	25.3	0.1	433.9
1973-74	0.0	0.0	0.6	10.5	46.3	55.4	49.5	53.7	77.3	64.0	10.6	T	367.9
1974-75	T	0.0	3.7	16.3	44.6	77.1	80.7	50.9	86.3	89.3	1.7	1.1	451.7
1975-76	0.0	0.0	4.3	4.7	11.5	61.5	66.2	65.2	52.0	23.0	19.5	0.2	308.1
1976-77	0.0	1.6	1.5	22.9	76.1	82.0	90.8	65.5	97.4	44.8	16.3	0.3	499.2
1977-78	T	T	0.4	14.9	43.0	73.4	94.6	21.4	71.4	44.3	7.4	3.5	374.3
1978-79	T	0.0	T	8.7	19.9	43.5	67.7	22.3	18.0	24.1	1.8	0.6	206.6
1979-80	0.8	T	0.4	11.5	8.7	23.5	15.6	14.2	43.3	18.1	4.8	1.4	142.3
1980-81	T	0.0	0.7	18.7	55.1	35.8	12.2	36.4	32.3	18.3	5.7	0.0	215.2
1981-82	0.0	0.0	5.6	10.3	22.4	54.3	54.0	34.7	40.6	35.2	0.4	T	257.5
1982-83	0.0	0.6	T	9.4	20.2	13.4	40.8	20.6	36.4	39.2	8.2	T	188.8
1983-84	T	0.0	0.3	11.3	69.6	78.1	40.3	62.9	49.5	41.4	26.3	T	379.7
1984-85	0.0	0.0	1.7	18.3	28.3	62.2	45.6	54.7	71.5	44.3	13.3	2.1	342.0
1985-86	0.0	0.0	0.2	5.1	18.5	51.9	87.5	41.0	47.2	17.4	5.7	0.5	275.0
1986-87	T	1.8	7.7	6.2	42.7	41.0	73.8	44.0	78.3	45.9	3.6	0.0	345.0
1987-88	0.0	T	4.7	23.3	29.4	53.5	50.8	60.7	44.2	110.9	10.0	6.7	394.2
1988-89	0.2	T	T	21.0	60.9	34.3	44.0	28.6	29.8	71.9	2.9	T	293.6
1989-90	T	0.0	7.3	13.4	67.7	55.7	58.5	40.0	25.5	26.0	17.4	0.7	312.2
1990-91	0.0	0.0	5.2	8.6	56.3	58.4	51.6	38.3	43.2	25.3	8.9	0.7	296.5
1991-92	0.0	0.0	2.3	8.3	18.8	51.4	18.2	45.8	72.4	32.5	8.3	T	258.0
1992-93	T	T	3.4	15.1	20.0	19.5	36.5	45.5	41.6	20.3	2.5	4.2	208.6
1993-94	T	0.0	1.9	20.0	23.3	36.8	50.6	24.2	65.1	19.1	14.0	3.5	258.5
1994-95	0.0	0.0	3.7	4.0	25.7	26.0	36.8	52.4	17.1	18.8	2.8	T	187.3
1995-96	T	0.0	0.0	7.0	43.1	56.4	66.0	54.5	41.0	73.3	16.7	0.0	358.0
1996-97	T	0.0	2.6	10.6	35.4	41.8	71.4	43.6	81.4	43.7	95.8	T	426.3
1997-98	T	0.0	5.5	24.4	55.2	50.3	30.9	27.7	60.6	21.4	T	4.9	280.9
1998-99	0.0	0.0	T	13.0	45.9	27.4	44.6	30.8	70.2	25.3	2.5	T	259.7
1999-	T	T	3.2	20.6	44.8	30.2							
POR= 66 YRS	0.0	0.1	2.0	12.1	32.6	42.3	40.9	40.1	43.2	31.2	11.8	1.3	257.6

WBAN : 14755

REFERENCE NOTES:

<p>PAGE 1: THE TEMPERATURE GRAPH SHOWS NORMAL MAXIMUM AND NORMAL MINIMUM DAILY TEMPERATURES (SOLID CURVES) AND THE ACTUAL DAILY HIGH AND LOW TEMPERATURES (VERTICAL BARS).</p> <p>PAGE 2 AND 3: H/C INDICATES HEATING AND COOLING DEGREE DAYS. RH INDICATES RELATIVE HUMIDITY W/O INDICATES WEATHER AND OBSTRUCTIONS S INDICATES SUNSHINE. PR INDICATES PRESSURE. CLOUDINESS ON PAGE 3 IS THE SUM OF THE CEILOMETER AND SATELLITE DATA NOT TO EXCEED EIGHT EIGHTHS(OKTAS).</p> <p>GENERAL: T INDICATES TRACE PRECIPITATION, AN AMOUNT GREATER THAN ZERO BUT LESS THAN THE LOWEST REPORTABLE VALUE. + INDICATES THE VALUE ALSO OCCURS ON EARLIER DATES. BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA. NORMALS ARE 30-YEAR AVERAGES (1961 - 1990). ASOS INDICATES AUTOMATED SURFACE OBSERVING SYSTEM. PM INDICATES THE LAST DAY OF THE PREVIOUS MONTH. POR (PERIOD OF RECORD) BEGINS WITH THE JANUARY DATA MONTH AND IS THE NUMBER OF YEARS USED TO COMPUTE THE MEAN. INDIVIDUAL MONTHS WITHIN THE POR MAY BE MISSING. WHEN THE POR FOR A NORMAL IS LESS THAN 30 YEARS, THE NORMAL IS PROVISIONAL AND IS BASED ON THE NUMBER OF YEARS INDICATED. 0.* OR * INDICATES THE VALUE OR MEAN-DAYS-WITH IS BETWEEN 0.00 AND 0.05. CLOUDINESS FOR ASOS STATIONS DIFFERS FROM THE NON-ASOS OBSERVATION TAKEN BY A HUMAN OBSERVER. ASOS STATION CLOUDINESS IS BASED ON TIME-AVERAGED CEILOMETER DATA FOR CLOUDS AT OR BELOW 12,000 FEET AND ON SATELLITE DATA FOR CLOUDS ABOVE 12,000 FEET. THE NUMBER OF DAYS WITH CLEAR, PARTLY CLOUDY, AND CLOUDY CONDITIONS FOR ASOS STATIONS IS THE SUM OF THE CEILOMETER AND SATELLITE DATA FOR THE SUNRISE TO SUNSET PERIOD.</p>	<p>GENERAL CONTINUED: CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS. WHEN AT LEAST ONE OF THE ELEMENTS (CEILOMETER OR SATELLITE) IS MISSING, THE DAILY CLOUDINESS IS NOT COMPUTED. WIND DIRECTION IS RECORDED IN TENS OF DEGREES (2 DIGITS) CLOCKWISE FROM TRUE NORTH. "00" INDICATES CALM. "36" INDICATES TRUE NORTH. RESULTANT WIND IS THE VECTOR AVERAGE OF THE SPEED AND DIRECTION. AVERAGE TEMPERATURE IS THE SUM OF THE MEAN DAILY MAXIMUM AND MINIMUM TEMPERATURE DIVIDED BY 2. SNOWFALL DATA COMPRISE ALL FORMS OF FROZEN PRECIPITATION, INCLUDING HAIL. A HEATING (COOLING) DEGREE DAY IS THE DIFFERENCE BETWEEN THE AVERAGE DAILY TEMPERATURE AND 65° F. DRY BULB IS THE TEMPERATURE OF THE AMBIENT AIR. DEW POINT IS THE TEMPERATURE TO WHICH THE AIR MUST BE COOLED TO ACHIEVE 100 PERCENT RELATIVE HUMIDITY. WET BULB IS THE TEMPERATURE THE AIR WOULD HAVE IF THE MOISTURE CONTENT WAS INCREASED TO 100 PERCENT RELATIVE HUMIDITY.</p> <p>ON JULY 1, 1996, THE NATIONAL WEATHER SERVICE BEGAN USING THE "METAR" OBSERVATION CODE THAT WAS ALREADY EMPLOYED BY MOST OTHER NATIONS OF THE WORLD. THE MOST NOTICEABLE DIFFERENCE IN THIS ANNUAL PUBLICATION WILL BE THE CHANGE IN UNITS FROM TENTHS TO EIGHTHS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.</p>
---	---

1999
MOUNT WASHINGTON OBS.
GORHAM, NEW HAMPSHIRE (MWN)

The Mount Washington Observatory is located at the summit of Mount Washington, New Hampshire, highest mountain of the Presidential range. The weather is very severe most of the year, conditions approximating those that would be encountered at a much higher latitude. The upper limits of timberline extend to 4,500 to 5,000 feet.

Prevailing winds are from the west and west-northwest, although the most severe storms are usually from the southeast. Winds are stronger at the summit than at the same elevation at a distance from the mountain, due to the Bernouilli effect. Mount Washington is near the mid-point of a 60-mile-long mountain front trending northeast to southwest. Wind speeds in excess of 100 mph are not uncommon, and the stations highest measured wind, 231 mph, still stands as a world record.

The station is in the clouds approximately 55 percent of the time. This is due partly to the effect of orographic uplift and partly due to the fact that the summit is often above the cloud base when there are low clouds in the area.

Minimum temperatures are not extreme compared to some U. S. valley stations. Annual temperature variations are not as great as they are in the surrounding lowlands, which may actually be colder than the summit when there is a strong inversion. Rime or glaze icing occurs often in winter, when the mountain is frequently in supercooled clouds.

Because of its severe climate, Mount Washington has for many years been used as a natural laboratory for cloud physics research and for the development and testing of instruments, aircraft components, and structures which are required to withstand high winds and icing conditions.

STATION LOCATION

MOUNT WASHINGTON OBSERVATORY
GORHAM, NEW HAMPSHIRE

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE										AUTOMATED CHRONOMETER * * * *	* Type M = AMOS T = AUTOB S = ASOS W = AWOS	REMARKS	
						SEA LEVEL	GROUND												
							GROUND TEMPERATURE	WIND SPEED	WIND DIRECTION	EMERGENCY TELEPHONE	EMERGENCY TELEPHONE	RECORDING	RECORDING	RECORDING	RECORDING				RECORDING
1. Mount Washington New Hampshire	12/01/32	8/1/80	NA	44°16'	71°18'	6262	a41 b40	5	4	NA	c3 e	NA	c4	NA	NA	a - Three cup anemometer. b - Pitot tube anemometer. c - Located 200 feet west of station. Moved to 100 ft. E of station in 1960. e - Decommissioned in 1960.			
2. Mount Washington Sherman Adams Summit Building	8/1/80	Present	300 ft. N	44°16'	71°18'	6280	a34 b35	5	4	NA	NA	NA	f4 g4	NA	NA	f - Located on roof. g - Moved 220' S 10/1983.			

1. The station pressure is compensated for wind velocity by a Bowen Pressure Tube device. The 3-cup anemometer normally in use is removed during icing conditions and wind speed is obtained from a heated pitot tube on a Hays Chart Recorder. Severe icing of winter must constantly be removed from the wind vane and shelter instruments. The shelter door is removed because icing seals it shut and the shelter is located leeward of the building to minimize damage from extreme windspeed. The station is located approximately 200 feet west of the geographic summit to cause the least interference of terrain or buildings to the prevailing winds.
2. The station pressure is taken from the total pressure line of the pitot-static anemometer; it has been determined that this compensates for the Bernouilli effect of the mountain on wind flow and results in the best agreement with the nearby radiosonde pressure readings. Wind speed is obtained from the heated, vaned pitot-static tube as recorded on the Hays draft recorder. The 3-cup anemometer is used only in summer when wind speed is below about 20 mph. The station is located approximately 150 feet Northwest of the geographical summit.

STATION HISTORY NOTES

The original Army Signal Services Weather Station established jointly with Dartmouth College in 1870 was abandoned with respect to winter operations in 1887 and to summer operations in 1892. Communications during its existence were maintained between the summit and Littleton, New Hampshire by means of telegraph.

In 1932 the Mount Washington Observatory was established as a private institution to record weather conditions on the summit. In 1935 a first order Weather Bureau Office was established in conjunction with the observatory. Facilities at that time were in the old stage office of the Carriage Road. In 1937 a new observatory building was constructed by the Mount Washington Cog Railway to which the Weather Station was moved in October.

Beginning on January 1, 1952 the observational work on the summit of Mount Washington was taken over by the Mount Washington Observatory under a contract with the Weather Bureau. In August 1980 the station was moved to the southwest end of the new Sherman Adams Summit Building.

SUBSCRIPTION:
Price and ordering information available through: National Climatic Data Center, Federal Building, Asheville, North Carolina 28801.
INQUIRIES/COMMENTS CALL: (828) 271-4800

National Climatic Data Center
151 Patton Avenue, Rm 120
Asheville NC 28801-5001

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300
FORWARD AND ADDRESS CORRECTION

FIRST CLASS
POSTAGE & FEES PAID
United States Department of Commerce
NOAA Permit No. G - 19