



**NOAA TECHNICAL MEMORANDUM
NWS WR-260**

CLIMATE OF LAS VEGAS, NEVADA

**Paul H. Skrbac
National Weather Service Office
Las Vegas, NV**

December 1999

**U.S. DEPARTMENT
OF COMMERCE**

National Oceanic and
Atmospheric Administration

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Service



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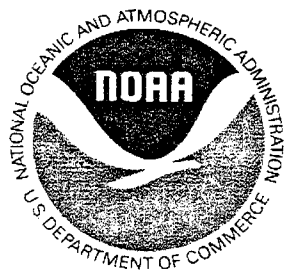
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National Weather Service Office
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December 1999

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PAUL H. SKRBAC

ABSTRACT

During the last two decades, the Las Vegas Valley has emerged as one of the fastest growing metropolitan areas in the nation. The population has expanded from about 400,000 in 1980 to an estimated 1.1 million in 1995. In addition, Las Vegas attracts more visitors annually than any other American city except Orlando, Florida. As a result, local forecasters continually field inquiries regarding the area's climate from a broad base of public interests. Yet to this date, no formal publication of the Las Vegas climate record has been made. Official weather observations have been recorded in Las Vegas since 1937, initially at Nellis Field in the northeast portion of the valley, then later at McCarran Field on the south end. This Technical Attachment (TA) represents an effort to assemble these data into a useful reference for National Weather Service personnel to use in responding to climate inquiries. It is also intended to be of some value and interest to the general public.

I. TOPOGRAPHY AND HISTORY

Las Vegas is located in a broad desert valley in extreme southern Nevada. Mountains surrounding the valley extend 2,000 to 10,000 feet above the valley floor. The Las Vegas Valley comprises about 600 square miles and runs from northwest to southeast. The valley is bounded on the north by the Sheep Range, while Boulder City and the Lake Mead National Recreation Area are generally considered its southern extent. To the west are the Spring Mountains, which include Mt. Charleston, the region's highest peak at 11,918 feet. Several smaller ranges line the eastern rim of the valley, including the Muddy Mountains, the Black Mountains and the Eldorado Range.

Official weather observations began in 1937 at what is now Nellis Air Force Base. In late 1948, the U.S. Weather Bureau moved to McCarran Field, now McCarran International Airport. McCarran is located 7 miles south of downtown Las Vegas. It is approximately 5 miles southwest of, and 300 feet higher than the lowest part of the valley. Thus, for most of the Las Vegas metropolitan area, the valley floor slopes downward from west to east. This affects the local climatology significantly in terms of driving variations in wind, precipitation, and storm runoff.

II. GENERAL CLIMATIC SUMMARY

The four seasons are actually well defined in Las Vegas., although they differ from the traditional view of seasonal variation. Summers display classic desert

southwest characteristics. Daily high temperatures typically exceed 100 degrees with lows in the 70s. The summer heat is tempered somewhat by the extremely low relative humidities. However, it is not uncommon for humidity to increase markedly for several weeks each summer in association with a moist "monsoonal flow" from the south, typically during July and August. Aside from increasing the discomfort level, these moist winds also support the development of spectacular desert thunderstorms which are frequently associated with significant flash flooding and/or strong downburst winds.

Winters on the whole, are mild and pleasant. Afternoon temperatures average near 60 degrees and skies are mostly clear. Pacific storms occasionally produce rainfall in Las Vegas, but in general, the Sierra Nevada Mountains of eastern California and the Spring Mountains immediately west of the Las Vegas Valley act as effective barriers to moisture.

Snow accumulation is rare in Las Vegas. Flurries are observed once or twice during most winters, but snowfall of an inch or more occurs only once every four to five years. However, freezing temperatures do occur with some regularity. Based on the 1961-90 period of record, the average first occurrence of 32 degrees in the fall is November 25; the average last occurrence is February 28.

The spring and fall seasons are generally considered ideal. Although rather sharp temperature changes can occur during

these months, outdoor activities are seldom hampered.

Strong winds are arguably the most persistent and provoking weather hazard experienced in the area. Winds over 50 mph are infrequent but can occur with some of the more vigorous storms. Winter and spring wind events often generate widespread areas of blowing dust and sand. Strong wind episodes in the summertime are usually connected with thunderstorms, and are thus more isolated and localized. Prevailing wind direction is typically either southwest or north, unless associated with a thunderstorm outflow.

MONTHLY NORMALS

LAS VEGAS NEVADA

PERIOD OF RECORD: 1961-1990

	MAX	MIN	AVG	HDD	CDD	PCPN	SEASON TOTAL	
							HDD	CDD
JAN	57.3	33.6	45.5	605	0	0.48	1569	0
FEB	63.3	38.8	51.1	389	0	0.48	1958	0
MAR	68.8	43.8	56.3	292	22	0.42	2250	22
APR	77.5	50.7	64.1	143	116	0.21	2393	138
MAY	87.8	60.2	74.0	14	293	0.28	2407	431
JUN	100.3	69.4	84.9	0	597	0.12	2407	1028
JUL	105.9	76.2	91.1	0	809	0.35	0	1837
AUG	103.2	74.2	88.7	0	735	0.49	0	2572
SEP	94.7	66.2	80.5	0	465	0.28	0	3037
OCT	82.1	54.3	68.3	62	164	0.21	62	3201
NOV	67.4	42.6	55.0	304	0	0.43	366	3201
DEC	57.5	33.9	45.7	598	0	0.38	964	3201
ANNUAL	80.5	53.7	67.1	2407	3201	4.13		

ALL UNITS OF MEASUREMENT IN THIS DOCUMENT ARE DEFINED AS FOLLOWS:

TEMPERATURES ARE IN DEGREES FAHRENHEIT .

PRECIPITATION IS IN INCHES

EXTREMES AND RECORDS ARE CONSIDERED THE SAME THING

HEATING AND COOLING DEGREE DAYS ARE BASED ON A 65 DEGREE STANDARD

(eg a mean temp for the day of 75 would equate to 10 cooling degree days
or a mean temp of 50 degrees would equate to 15 heating degree days)

MONTHLY EXTREMES (RECORDS)

MONTH	HIGH MAX	LAST OCCURRED	LOW MIN	LAST OCCURRED	LOW MAX	LAST OCCURRED	HIGH MIN	LAST OCCURRED
JANUARY	77	01/26/75	8#	01/13/63	28#	01/21/37	58	01/20/99
FEBRUARY	87	02/26/86	16	02/07/89	34	02/06/89	59	02/26/89
MARCH	91	03/31/66	19	03/02/39	42	03/01/71	66	03/12/89 + 03/24/98
APRIL	99	04/30/81	31	04/02/75	48	04/2+12/65	74	04/24/43
MAY	109	05/26/51	38	05/03/42	60	05/08/79	82	05/31/97
JUNE	116	06/15/40	48*	06/06/93	67	06/04/99	89	06/30/94
JULY	117#	07/24/42	56	07/21/40	81	07/08/92	91#	07/08/89
AUGUST	116	08/03/79	54	08/03/37	74	08/18/83	89	08/10/95
SEPTEMBER	113	09/01/50	43	09/27/48	67	09/18/65	83	09/01/85
OCTOBER	103	10/01/78	26	10/30/71	50	10/29/71	73	10/05/88
NOVEMBER	87	11/01/88	15	11/24/38	42	11/16/64	62	11/12/83
DECEMBER	78	12/02/40	11	12/23/90	32	12/10/72	57	12/24/55

- EXTREMES FOR ENTIRE PERIOD OF RECORD (1937-FEB 1998)

* - ALSO IN PREVIOUS YEARS

PERIOD OF RECORD INCLUDES TWO MAJOR LOCATION MOVES ON DECEMBER 18TH 1948 FROM WHAT IS NOW KNOWN AS NELLIS AIR FORCE BASE (36 DEGREES 14 MINUTES NORTH - 115 DEGREES 02 MINUTES WEST) TO MCCARRAN INTERNATIONAL AIRPORT (36 DEGREES 05 MINUTES NORTH - 115 DEGREES 10 MINUTES WEST) AND FINALLY TO ITS CURRENT LOCATION AT 7851 S. INDUSTRIAL ROAD (36 DEGREES 2 MINUTES 48 SECONDS NORTH - 115 DEGREES 11 MINUTES 4 SECONDS WEST).

JANUARY

TEMPERATURE EXTREMES/DAILY NORMALS - 1937 TO DATE

DATE	HI MAX	LAST OCCURD	LO MIN	LAST OCCURD	LO MAX	LAST OCCURD	HI MIN	LAST OCCURD	NORMAL MAX/MIN
1	69	1981	21	1954	39	1979	47	1996	56/32
2	69	1997*	13	1974	31	1974	52	1997	56/32
3	69	1997	12	1974	32	1974	47	1998	56/32
4	67	1981	14	1970	33	1974	45	1981	56/32
5	68	1948	12	1950	35	1971	46	1986	56/32
6	74	1962	12	1971	35	1971	43	1978	56/33
7	75	1962	15	1971	36	1971	52	1962	56/33
8	74	1962	19	1937	28#	1937	47	1993	56/33
9	72	1945	11	1937	31	1937	47	1962	56/33
10	69	1996	11	1937	35	1949	53	1980	56/33
11	73	1938	14	1937	36	1949	48	1980	56/33
12	71	1986	14	1963	29	1963	51	1980	56/33
13	73	1945	8#	1963	31	1963	48	1980	57/33
14	74	1945	14	1963	42	1997*	50	1980	57/33
15	73	1945	20	1962	38	1997	44	1996*	57/33
16	73	1976	23	1964	38	1949	45	1956	57/33
17	72	1976	20	1949	36	1949	45	1993	57/33
18	72	1971	20	1949	40	1949	49	1954	57/34
19	74	1971	10	1943	35	1949	51	1998	57/34
20	72	1986	17	1937	33	1937	(58)	1999	58/34
21	69	1981	13	1937	28#	1937	52	1969	58/34
22	74	1948	9	1937	31	1937	50	1997	58/34
23	76	1948	14	1937	35	1937	47	1997	58/34
24	75	1948	15	1937	31	1937	51	1999	58/35
25	75	1953	8#	1937	35	1949	50	1956	59/35
26	(77)	1975	10	1937	39	1949	52	1956	59/35
27	73	1971	12	1937	39	1949	48	1941	59/35
28	71	1971	18	1937	35	1979	48	1980	59/35
29	71	1976	17	1979	38	1979	50	1997	59/36
30	72	1971	18	1949	38	1979	54	1963	60/36
31	74	1971	19	1949	37	1979	55	1963	60/36

- INDICATES THE EXTREME TEMPERATURE FOR ENTIRE PERIOD OF RECORD.
 () - INDICATES THE MONTHLY EXTREME.
 * - AND IN PREVIOUS YEARS

FEBRUARY

TEMPERATURE EXTREMES/DAILY NORMALS - 1937 TO DATE

DATE	HI MAX	LAST OCCURD	LO MIN	LAST OCCURD	LO MAX	LAST OCCURD	HI MIN	LAST OCCURD	NORMAL MAX/MIN
1	77	1963	17	1937	37	1985	58	1963	60/36
2	77	1995	22	1951	35	1985	50	1952	61/36
3	75	1995	19	1972	38	1939	47	1992	61/37
4	76	1953	19	1948	43	1949	51	1976	61/37
5	78	1947	18	1939	39	1989	49	1996	61/37
6	78	1963	19	1989	(34)	1989	55	1950	62/37
7	77	1963	(16)	1989	36	1989	48	1993	62/37
8	76	1996	25	1949	36	1989	50	1976	62/38
9	77	1951	19	1946	45	1939	51	1968	62/38
10	74	1951	19	1946	39	1939	54	1962	62/38
11	79	1971	22	1939	44	1948	53	1962	63/38
12	75	1954	22	1965	46	1949	51	1996	63/38
13	79	1957	20	1949	42	1949	52	1954	63/39
14	78	1957	18	1949	42	1990	52	1986	63/39
15	77	1977	22	1949	45	1990	50	1945	64/39
16	79	1996	24	1949	46	1956	55	1991	64/39
17	81	1996	21	1956	49	1956	52	1996	64/39
18	81	1977	17	1938	48	1938	58	1986	64/40
19	82	1981	25	1952	45	1955	58	1986	64/40
20	79	1995	23	1942	43	1955	55	1996	64/40
21	80	1977	21	1955	47	1955	54	1996	65/40
22	77	1961	20	1953	51	1955	54	1995*	65/40
23	78	1947	25	1953	47	1944	53	1957	65/40
24	82	1989	24	1955	49	1987	51	1986	65/40
25	85	1986	26	1960	40	1987	57	1989	65/41
26	(87)	1986	28	1971	40	1944	(59)	1989	65/41
27	83	1986	19	1971	39	1962	56	1940	66/41
28	82	1986	19	1962	45	1962	51	1978	66/41
29	76	1972	33	1996	47	1960	58	1972	66/41

() - INDICATES THE MONTHLY EXTREME.

* - ALSO OCCURRED IN PREVIOUS YEARS

MARCH

TEMPERATURE EXTREMES/DAILY NORMALS - 1937 TO DATE

DATE	HI MAX	LAST OCCURD	LO MIN	LAST OCCURD	LO MAX	LAST OCCURD	HI MIN	LAST OCCURD	NORMAL MAX/MIN
1	82	1986	23	1962	(42)	1971	56	1974	66/41
2	82	1967	(19)	1939	47	1951	57	1990	66/41
3	85	1972	23	1971	46	1976	60	1999	66/42
4	84	1972	25	1966	50	1966	58	1972	66/42
5	84	1972	26	1948	51	1976	53	1986	66/42
6	85	1972	24	1939	51	1964	54	1987	67/42
7	84	1972	27	1940	49	1964	53	1994	67/42
8	87	1989	26	1942	43	1952	62	1989	67/42
9	87	1989	27	1964	54	1969	61	1954	67/43
10	89	1972	29	1962	44	1969	59	1982	67/43
11	86	1989	26	1948	47	1958	65	1989	67/43
12	86	1989	27	1940	51	1990	(66)	1989	68/43
13	84	1966	25	1956	47	1969	57	1989	68/43
14	82	1972	27	1962	49	1944	60	1943	68/43
15	84	1994	26	1962	48	1991	56	1980	68/44
16	84	1994	31	1991	52	1963	62	1997	69/44
17	87	1947	30	1955	55	1963	64	1994	69/44
18	88	1972	30	1954	55	1982	64	1974	69/44
19	88	1939	31	1937	51	1979	58	1995	69/44
20	88	1997	34	1964	49	1991	58	1995	70/44
21	88	1997	26	1955	53	1952	59	1978	70/45
22	88	1940	28	1948	49	1973	59	1996	70/45
23	89	1940	32	1938	48	1964	59	1967	70/45
24	89	1940	34	1957	53	1995	(66)	1998	71/45
25	87	1981	31	1964	50	1977	60	1993	71/45
26	87	1947	34	1948	53	1975	65	1971	71/46
27	88	1988	33	1975	49	1991	60	1990	71/46
28	89	1986	31	1975	48	1975	57	1986	72/46
29	86	1966	33	1975	50	1998	60	1986	72/46
30	88	1971	33	1987	57	1938	59	1999	72/46
31	(91)	1966	25	1938	48	1949	58	1986	73/47

() - INDICATES THE MONTHLY EXTREME.

APRIL

TEMPERATURE EXTREMES/DAILY NORMALS - 1937 TO DATE

DATE	HI MAX	LAST OCCURD	LO MIN	LAST OCCURD	LO MAX	LAST OCCURD	HI MIN	LAST OCCURD	NORMAL MAX/MIN
1	92	1966	35	1948	55	1980	62	1986	73/47
2	95	1966	(31)	1975	(48)	1997	58	1966	73/47
3	91	1961	(31)	1955	52	1965	60	1989	74/47
4	94	1961	(31)	1945	51	1965	63	1989	74/48
5	94	1960	32	1945	59	1965	63	1972	74/48
6	95	1989	35	1945	60	1983	65	1991	75/48
7	98	1989	36	1939	53	1958	62	1960	75/48
8	98	1989	39	1983	56	1965	61	1989	75/49
9	95	1989	32	1953	54	1943	62	1989	75/49
10	91	1985	38	1950	55	1965	66	1960	76/49
11	88	1990	35	1965	54	1965	64	1989	76/49
12	91	1990	32	1967	(48)	1965	61	1957	76/50
13	93	1990	35	1967	58	1972	62	1978	77/50
14	95	1962	38	1983	57	1939	64	1955	77/50
15	97	1947	34	1939	56	1998	64	1994	77/50
16	95	1989	39	1998*	55	1976	66	1962	78/51
17	97	1989	40	1976	56	1963	69	1989	78/51
18	98	1946	35	1963	60	1995	68	1994	78/51
19	98	1938	35	1968	60	1972	65	1994	79/52
20	97	1994	34	1966	62	1967	69	1989	79/52
21	98	1950	37	1966	52	1957	71	1989	79/52
22	97	1939	33	1963	60	1967	70	1950	80/52
23	98	1949	36	1937	58	1999	62	1986	80/53
24	(99)	1946	38	1937	58	1999*	(74)	1943	80/53
25	96	1946	37	1960	64	1971	69	1996	80/53
26	97	1996	42	1967	60	1963	67	1981	81/54
27	97	1992	39	1984	59	1970	70	1996	81/54
28	95	1992	39	1955	55	1970	71	1943	81/54
29	96	1981	35	1970	56	1999	67	1986	82/55
30	(99)	1981	38	1967	56	1999	70	1992	82/55

() - INDICATES THE MONTHLY EXTREME.

* - AND IN PREVIOUS YEARS

MAY

TEMPERATURE EXTREMES/DAILY NORMALS - 1937 TO DATE

DATE	HI MAX	LAST OCCURD	LO MIN	LAST OCCURD	LO MAX	LAST OCCURD	HI MIN	LAST OCCURD	NORMAL MAX/MIN
1	102	1947	41	1967	62	1955	67	1965	82/55
2	107	1947	43	1955	65	1955	72	1981	83/56
3	108	1947	(38)	1942	67	1950	70	1985	83/56
4	108	1947	40	1959	67	1964	72	1997	83/56
5	108	1947	40	1950	65	1973	71	1994	84/57
6	103	1947	43	1964	63	1964	69	1947	84/57
7	102	1989	41	1938	62	1964	73	1990	84/57
8	102	1989	42	1964	(60)	1979	74	1989	85/58
9	99	1941	42	1938	70	1953	68	1997	85/58
10	102	1940	41	1948	68	1991	71	1961	85/58
11	103	1960	47	1938	63	1989	70	1997*	86/59
12	104	1996	45	1963	67	1961	74	1993	86/59
13	103	1996	45	1953	66	1998	75	1994	86/59
14	106	1937	45	1998	66	1962	77	1997	87/60
15	107	1937	44	1968	61	1951	74	1997	87/60
16	107	1937	43	1953	67	1962	74	1997	88/60
17	102	1937	43	1962	71	1977	78	1997	88/61
18	103	1973	45	1977	72	1949	72	1997	88/61
19	102	1958	47	1974	63	1974	72	1979	89/61
20	102	1984	46	1975	69	1975	74	1968	89/61
21	104	1942	42	1975	66	1957	75	1989	90/62
22	104	1967	45	1975	73	1971	73	1989	90/62
23	106	1984	48	1980	69	1957	74	1984	90/62
24	102	1943	46	1939	61	1965	77	1984	91/63
25	105	1951	47	1977	69	1996	76	1981	91/63
26	(109)	1951	50	1980	74	1998*	75	1943	92/63
27	108	1974	44	1953	73	1971	77	1951	92/64
28	106	1968	50	1971	64	1971	77	1994	93/64
29	108	1984	46	1953	66	1971	79	1984	93/64
30	106	1997*	48	1971	74	1988	78	1984	94/65
31	104	1997*	47	1937	68	1991	(82)	1997	94/65

() - INDICATES THE MONTHLY EXTREME. * AND IN PREVIOUS YEARS

JUNE

TEMPERATURE EXTREMES/DAILY NORMALS - 1937 TO DATE

DATE	HI MAX	LAST OCCURD	LO MIN	LAST OCCURD	LO MAX	LAST OCCURD	HI MIN	LAST OCCURD	NORMAL MAX/MIN
1	105	1977	50	1991	74	1955	78	1997	95/65
2	106	1938	49	1955	76	1999	80	1986	95/65
3	107	1957	53	1961	69	1949	79	1997	96/66
4	109	1996*	50	1999	(67)	1999	77	1990	96/66
5	108	1996	51	1993	75	1993	82	1990	97/66
6	108	1981	(48)	1993	70	1993	78	1981	97/67
7	108	1955	52	1954	68	1995	80	1981	97/67
8	111	1955	52	1995	76	1995	77	1981	98/67
9	111	1985	50	1950	75	1954	80	1978	98/68
10	108	1996	51	1954	75	1957	78	1973	99/68
11	109	1956	55	1976	83	1976	81	1996	99/68
12	112	1940	52	1937	82	1943	81	1994	99/68
13	114	1940	49	1938	77	1997	82	1985	100/69
14	115	1940	55	1943	75	1997	83	1979	100/69
15	(116)	1940	52	1962	80	1962	83	1989	101/69
16	114	1940	53	1944	70	1995	83	1999*	101/70
17	113	1940	50	1944	79	1995	80	1999	101/70
18	115	1940	49	1939	82	1979	80	1991	102/70
19	114	1940	56	1939	85	1975	83	1997	102/70
20	113	1961	53	1939	86	1975	84	1996	102/71
21	111	1954	53	1941	86	1947	83	1999	102/71
22	115	1954	56	1944	91	1976	82	1981	103/71
23	113	1959	55	1944	86	1963	83	1954	103/72
24	113	1961	56	1963	87	1963	83	1981	103/72
25	115	1970	55	1941	86	1975	86	1974	103/72
26	114	1970	56	1944	81	1965	86	1994	104/72
27	114	1977	59	1941	83	1991	86	1994	104/73
28	115	1994	55	1941	91	1991	87	1994	104/73
29	115	1994	60	1941	85	1938	87	1977	104/73
30	115	1994	60	1970	83	1982	(89)	1994	104/74

() - INDICATES THE MONTHLY EXTREME.

* - AND IN PREVIOUS YEARS.

JULY

TEMPERATURE EXTREMES/DAILY NORMALS - 1937 TO DATE

DATE	HI MAX	LAST OCCURD	LO MIN	LAST OCCURD	LO MAX	LAST OCCURD	HI MIN	LAST OCCURD	NORMAL MAX/MIN
1	116	1972	58	1938	88	1980	90	1994	105/74
2	115	1950	62	1943	93	1980	88	1994	105/74
3	116	1937	60	1943	(81)	1961	89	1996	105/74
4	115	1985	60	1941	89	1949	85	1986	105/75
5	116	1985	60	1938	89	1937	86	1981	105/75
6	115	1989	63	1939	84	1950	90	1957	106/75
7	114	1989	62	1939	92	1950	83	1996*	106/75
8	113	1989	60	1938	(81)	1992	91#	1989	106/75
9	113	1943	63	1938	89	1999	86	1996	106/76
10	114	1943	64	1948	91	1974	83	1995	106/76
11	116	1959	62	1944	87	1989	86	1973	106/76
12	114	1979	62	1937	87	1999	85	1985	106/76
13	115	1939	64	1944	85	1999	89	1961	106/76
14	116	1972	63	1952	94	1953	84	1958	106/76
15	114	1949	62	1944	89	1974	84	1987	106/77
16	116	1998	65	1944	91	1953	87	1977	106/77
17	115	1959	62	1940	90	1953	87	1997	106/77
18	115	1979	59	1940	85	1985	87	1977	106/77
19	115	1989	(56)	1937	90	1943	84	1990	106/77
20	113	1959	58	1940	(81)	1979	88	1989	107/77
21	113	1942	(56)	1940	86	1986	84	1962	107/77
22	114	1937	62	1943	85	1984	89	1989	106/77
23	115	1942	61	1938	89	1998*	85	1996	106/77
24	117#	1942	64	1957	86	1965	85	1964	106/77
25	115	1942	66	1944	87	1954	86	1980	106/77
26	116	1943	65	1944	91	1950	87	1967	106/77
27	115	1943	63	1944	90	1969	86	1995	106/77
28	114	1995	61	1984	84	1984	87	1995	106/77
29	115	1995	64	1984	92	1999	88	1980	106/77
30	114	1978	64	1941	87	1976	87	1972	106/77
31	115	1978	65	1940	93	1968	86	1995	106/77

- INDICATES THE EXTREME TEMPERATURE FOR ENTIRE PERIOD OF RECORD.
 () - INDICATES THE MONTHLY EXTREME.
 * - AND IN PREVIOUS YEARS.

AUGUST

TEMPERATURE EXTREMES/DAILY NORMALS - 1937 TO DATE

DATE	HI MAX	LAST OCCURD	LO MIN	LAST OCCURD	LO MAX	LAST OCCURD	HI MIN	LAST OCCURD	NORMAL MAX/MIN
1	(116)	1979	66	1940	89	1983	86	1972	106/77
2	115	1979	55	1937	94	1991	88	1996	106/76
3	(116)	1979	(54)	1937	81	1951	87	1980	105/76
4	114	1979	58	1937	82	1970	86	1995	105/76
5	113	1969	63	1953	89	1992	85	1995	105/76
6	114	1978	64	1950	95	1963	88	1994	105/76
7	111	1994	63	1950	92	1963	88	1997*	105/76
8	114	1978	64	1957	91	1938	88	1995	105/76
9	114	1940	65	1951	87	1989	86	1975	105/76
10	115	1940	60	1937	82	1983	(89)	1995	105/75
11	(116)	1940	60	1948	86	1991	86	1958	104/75
12	115	1937	60	1949	82	1979	87	1980	104/75
13	113	1937	60	1949	83	1972	82	1996*	104/75
14	111	1962	64	1984	89	1972	85	1996*	104/75
15	111	1994	60	1938	85	1990	84	1992	104/75
16	113	1939	58	1938	84	1943	85	1992	103/74
17	111	1939	55	1938	(74)	1983	86	1994	103/74
18	111	1992	60	1944	(74)	1983	85	1973	103/74
19	111	1992	60	1938	81	1983	85	1992	103/74
20	110	1950	55	1938	78	1957	87	1992	103/74
21	109	1940	63	1957	(74)	1957	83	1994	102/73
22	110	1939	60	1968	86	1968	81	1986	102/73
23	109	1998*	56	1947	88	1968	85	1998	102/73
24	110	1985	56	1968	80	1982	84	1998*	102/73
25	110	1985	59	1944	84	1982	83	1998*	101/73
26	109	1944	55	1943	91	1982	82	1998	101/72
27	109	1944	60	1943	90	1972	82	1994	101/72
28	110	1944	58	1945	84	1951	80	1958	101/72
29	110	1948	57	1947	90	1942	85	1998	100/72
30	112	1948	55	1947	85	1992	86	1981	100/71
31	112	1948	55	1942	86	1991	83	1985	100/71

() - INDICATES THE MONTHLY EXTREME.

* - AND IN PREVIOUS YEARS

SEPTEMBER

TEMPERATURE EXTREMES/DAILY NORMALS - 1937 TO DATE

DATE	HI MAX	LAST OCCURD	LO MIN	LAST OCCURD	LO MAX	LAST OCCURD	HI MIN	LAST OCCURD	NORMAL MAX/MIN
1	(113)	1950	57	1942	80	1960	(83)	1985	100/71
2	110	1950	56	1964	79	1940	(83)	1958	99/71
3	108	1982	55	1946	78	1997	80	1969	99/70
4	111	1947	57	1941	79	1939	(83)	1995*	99/70
5	109	1977	52	1940	80	1970	82	1995	98/70
6	110	1955	54	1970	70	1939	80	1989	98/69
7	108	1977	56	1938	79	1950	80	1947	98/69
8	110	1979	56	1965	84	1941	80	1995	97/69
9	108	1944	50	1941	81	1975	81	1999	97/68
10	108	1945	48	1941	79	1976	81	1994	97/68
11	109	1945	54	1952	77	1985	80	1960	96/68
12	108	1948	53	1985	80	1988	82	1993	96/68
13	109	1948	52	1952	83	1994	80	1960	96/67
14	107	1945	50	1941	82	1978	80	1960	95/67
15	107	1945	49	1941	83	1986	77	1955	95/67
16	107	1937	49	1941	80	1982	76	1992	95/66
17	108	1937	53	1941	71	1965	76	1944	94/66
18	108	1937	53	1965	(67)	1965	79	1980	94/66
19	104	1962	47	1965	70	1985	78	1962	94/65
20	103	1951	46	1965	72	1952	75	1981	93/65
21	104	1943	49	1978	75	1988	73	1981	93/64
22	104	1949	51	1944	72	1941	73	1992	92/64
23	104	1947	46	1941	73	1986	76	1992	92/64
24	106	1947	45	1941	69	1986	79	1992	92/63
25	106	1947	47	1945	68	1939	78	1982	91/63
26	105	1947	45	1948	75	1986	72	1989	91/62
27	104	1947	(43)	1948	68	1986	72	1999*	91/62
28	103	1978	48	1971	68	1986	74	1994	90/62
29	102	1978	51	1940	75	1959	72	1957	90/61
30	101	1978	47	1982	69	1982	74	1969	89/61

() - INDICATES THE MONTHLY EXTREME.
 * - AND IN PREVIOUS YEARS

OCTOBER

TEMPERATURE EXTREMES/DAILY NORMALS - 1937 TO DATE

DATE	HI MAX	LAST OCCURD	LO MIN	LAST OCCURD	LO MAX	LAST OCCURD	HI MIN	LAST OCCURD	NORMAL MAX/MIN
1	(103)	1978	42	1971	69	1971	69	1951	89/60
2	100	1980	43	1971	73	1984	(74)	1997	89/60
3	99	1987	44	1950	71	1969	69	1998	88/60
4	100	1947	43	1940	69	1969	69	1979	88/59
5	99	1980	41	1937	65	1946	73	1988	87/59
6	98	1980	43	1969	71	1946	72	1990	87/58
7	99	1978	36	1941	68	1938	73	1960	86/58
8	98	1964	41	1941	59	1961	68	1991	86/58
9	97	1996*	41	1949	61	1961	69	1963	85/57
10	97	1996*	40	1961	64	1960	67	1991	85/57
11	95	1991	43	1961	65	1997	70	1980	85/56
12	97	1950	38	1946	63	1947	71	1991	84/56
13	95	1992	41	1946	66	1981	63	1991	84/55
14	96	1950	42	1981	65	1966	69	1992	83/55
15	94	1958	43	1966	66	1994	70	1950	83/54
16	96	1991	42	1984	60	1971	66	1950	82/54
17	94	1991	38	1938	57	1971	67	1991	82/54
18	95	1958	35	1938	60	1971	63	1991	81/53
19	96	1940	35	1946	57	1949	70	1958	81/53
20	95	1940	36	1943	58	1949	64	1975	80/53
21	91	1940	32	1949	62	1996*	65	1961	80/52
22	90	1988	38	1996	54	1953	64	1991	79/52
23	94	1959	37	1953	60	1953	63	1959	79/52
24	92	1959	36	1953	60	1956	64	1983	78/51
25	92	1937	32	1945	64	1954	61	1950	78/51
26	90	1937	35	1945	56	1951	60	1950	77/50
27	92	1937	35	1939	58	1996	61	1950	77/50
28	91	1937	32	1970	53	1996	66	1944	76/50
29	90	1950	30	1971	(50)	1971	65	1988	76/49
30	87	1937	(26)	1971	52	1971	66	1950	75/49
31	86	1988	30	1971	51	1961	62	1990	75/48

() - INDICATES THE MONTHLY EXTREME. * AND IN PREVIOUS YEARS

NOVEMBER

TEMPERATURE EXTREMES/DAILY NORMALS - 1937 TO DATE

DATE	HI MAX	LAST OCCURD	LO MIN	LAST OCCURD	LO MAX	LAST OCCURD	HI MIN	LAST OCCURD	NORMAL MAX/MIN
1	(87)	1988	33	1971	59	1956	60	1988	74/48
2	84	1937	28	1943	56	1974	57	1953	74/47
3	85	1976	26	1943	52	1994	58	1960	73/47
4	85	1988	26	1956	56	1957	56	1988	73/47
5	84	1980	28	1940	50	1957	57	1944	72/46
6	85	1988	27	1940	57	1938	57	1970	72/46
7	83	1991	23	1938	60	1986	55	1984	71/46
8	83	1950	24	1938	55	1946	56	1991	71/45
9	82	1978	26	1945	55	1966	56	1991	70/45
10	81	1990	27	1948	52	1950	60	1978	70/45
11	85	1973	24	1950	52	1946	58	1980	69/44
12	81	1973	24	1950	48	1985	(62)	1983	69/44
13	81	1953	16	1938	49	1985	(62)	1981	68/43
14	81	1995	22	1938	45	1964	61	1981	68/43
15	82	1981	24	1938	47	1964	54	1942	67/43
16	78	1977	24	1938	(42)	1964	51	1981	67/42
17	79	1981	28	1958	43	1964	52	1989	67/42
18	79	1949	23	1958	48	1964	58	1942	66/42
19	78	1976	24	1985	46	1985	55	1950	66/41
20	76	1976	23	1956	46	1953	54	1946	65/41
21	77	1976	24	1945	49	1983	57	1996	65/41
22	77	1976	24	1941	51	1984	55	1996	64/40
23	76	1995*	24	1941	48	1952	50	1965	64/40
24	81	1949	(15)	1938	50	1978	50	1998*	64/40
25	76	1970	18	1938	47	1988	48	1985	63/39
26	75	1997*	24	1944	49	1984	50	1989	63/39
27	79	1954	21	1952	45	1984	48	1977	62/38
28	73	1977	19	1938	48	1976	48	1939	62/38
29	73	1949	21	1948	49	1991	47	1970	62/38
30	79	1980	22	1948	50	1975	50	1961	61/38

() - INDICATES THE MONTHLY EXTREME.

* - AND IN PREVIOUS YEARS

DECEMBER

TEMPERATURE EXTREMES/DAILY NORMALS - 1937 TO DATE

DATE	HI MAX	LAST OCCURD	LO MIN	LAST OCCURD	LO MAX	LAST OCCURD	HI MIN	LAST OCCURD	NORMAL MAX/MIN
1	74	1940	26	1957	51	1991	49	1955	61/37
2	(78)	1940	24	1948	51	1991	54	1966	61/37
3	77	1980	23	1948	48	1984	46	1966	60/37
4	76	1939	24	1948	50	1992	52	1980	60/36
5	76	1938	18	1948	42	1972	52	1956	60/36
6	76	1938	23	1942	41	1978	55	1966	59/36
7	76	1938	21	1948	39	1978	46	1986	59/35
8	77	1939	23	1978	38	1978	48	1988	59/35
9	71	1975	16	1956	37	1972	51	1970	58/35
10	74	1950	20	1972	(32)	1972	52	1996	58/35
11	72	1939	21	1972	36	1972	50	1996	58/34
12	74	1958	15	1949	34	1972	51	1995	58/34
13	70	1952	19	1949	35	1967	55	1995	58/34
14	72	1942	16	1945	36	1967	46	1995	57/34
15	75	1980	14	1940	40	1987	54	1998	57/34
16	74	1980	23	1964	41	1940	46	1957	57/33
17	71	1942	20	1945	43	1967	46	1952	57/33
18	72	1939	22	1945	42	1984	48	1962	57/33
19	68	1942	22	1945	42	1970	48	1943	56/33
20	73	1981	14	1945	42	1990	49	1943	56/33
21	68	1950	20	1990	35	1990	51	1981	56/33
22	68	1950	12	1990	34	1990	49	1982	56/33
23	74	1955	(11)	1990	33	1990	44	1945	56/33
24	70	1942	14	1990	39	1990	(57)	1955	56/33
25	69	1964	17	1948	40	1962	50	1955	56/33
26	73	1980	20	1962	39	1941	48	1983	56/32
27	70	1980	19	1988	36	1941	49	1955	56/32
28	73	1980	20	1954	42	1988	47	1980	56/32
29	73	1980	23	1962	43	1982	52	1951	56/32
30	70	1980	15	1990	40	1990	48	1996*	56/32
31	74	1995	18	1990	45	1975	42	1985	56/32

() - INDICATES THE MONTHLY EXTREME.

* - AND IN PREVIOUS YEARS

10 WETTEST AND DRIEST YEARS AND OVERALL MONTHS

10 WETTEST MONTHS

* 4.80.....MAR 1992
* 3.39.....SEP 1939
* 3.00.....JAN 1995
* 2.89.....FEB 1998
* 2.59.....AUG 1957
* 2.52.....FEB 1993
2.49.....FEB 1976
* 2.48.....JUL 1984
2.44.....APR 1965
2.25.....FEB 1980

10 DRIEST MONTHS

0.00 MANY TIMES

* INDICATES WETTEST ALL TIME FOR THAT PARTICULAR MONTH

10 WETTEST YEARS

10.72.....1941
9.88.....1992
7.96.....1965
7.65.....1978
7.30.....1939
6.96.....1998
6.85.....1984
6.79.....1979
6.77.....1976
6.59.....1987

10 DRIEST YEARS

0.56.....1953
0.76.....1948#
1.11.....1968
1.12.....1964
1.27.....1985
1.47.....1962
1.91.....1966
2.04.....1956
2.11.....1989
2.20.....1944

INTERRUPTED DURING MOVE

10 WETTEST AND DRIEST MONTHS BY MONTH

10 WETTEST MONTHS (BY MONTH)

JANUARY

3.00.....1995
 2.41.....1949
 2.18.....1979
 2.00.....1974
 1.63.....1993
 1.57.....1969
 1.55.....1939
 1.45.....1980
 1.40.....1955
 1.18.....1990

FEBRUARY

2.89.....1998
 2.52.....1993
 2.49.....1976
 2.25.....1980
 1.64.....1973
 1.58.....1941
 1.51.....1978
 1.30.....1992
 1.18.....1940
 1.10.....1982

10 WETTEST

MARCH

4.80.....1992
 1.83.....1973
 1.63.....1941
 1.58.....1945
 1.50.....1952
 1.44.....1981
 1.17.....1938
 1.13.....1978
 1.07.....1975
 1.03.....1998

APRIL

2.44.....1965
 1.68.....1941
 0.85.....1943
 0.76.....1988
 0.73.....1999
 0.64.....1958
 0.57.....1952
 0.55.....1939
 0.55.....1957
 0.45.....1983

10 DRIEST MONTHS (BY MONTH)

JANUARY

0.00.....1942
 0.00.....1972
 0.00.....1976
 TRACE....1947
 TRACE....1948
 TRACE....1966
 TRACE....1971
 TRACE....1984
 0.01.....1946/53/68/70/75

FEBRUARY

0.00.....1953
 0.00.....1956
 0.00.....1967
 0.00.....1977
 TRACE....1947
 TRACE....1952
 TRACE....1972
 0.01.....1961
 0.02.....1951/54/64/85

10 DRIEST

MARCH

0.00.....1956
 0.00.....1972
 0.00.....1988/97
 TRACE....1947
 TRACE....1950
 TRACE....1955
 TRACE....1959
 TRACE....1967
 TRACE....1971
 TRACE....1984/90

APRIL

0.00.....1962/1996
 TRACE....1937
 1944/45/47/48
 1950/53/54/59
 1969
 1971/74
 1989
 1991/94

10 WETTEST AND DRIEST MONTHS BY MONTH (CONT)

MAY

0.96.....1969
 0.90.....1987
 0.84.....1971
 0.72.....1977
 0.64.....1989
 0.54.....1978
 0.50.....1981
 0.46.....1972
 0.40.....1965
 0.35.....1975/1979

MAY

0.00.....1948
 0.00.....1954
 0.00.....1970
 0.00.....1984
 TRACE....1937
 1942/43
 1950/52/56/59
 1960/61/63/66/68
 1974
 1985/88
 1990

JUNE

0.97.....1990
 0.82.....1967
 0.39.....1955
 0.32.....1972
 0.31.....1968
 0.23.....1938
 0.23.....1969
 0.22.....1984
 0.19.....1991
 0.18.....1970

JUNE

0.00.....1939
 1942/43/44/46/47
 1951/56/58
 1974/76/78/79
 1982
 1994

JULY

2.48.....1984
 2.18.....1999
 1.95.....1976
 1.68.....1945
 1.64.....1956
 1.61.....1954 1962
 1.55.....1955 1973/77
 1.34.....1950 1995
 0.93.....1941
 0.78.....1979

JULY

0.00.....1948
 0.00.....1963
 0.00.....1981
 0.00.....1993
 TRACE....1940/42/43/44

AUGUST

2.59.....1957
 2.12.....1979
 1.79.....1970
 1.77.....1942
 1.75.....1941
 1.74.....1955
 1.38.....1977
 1.25.....1983
 0.99.....1984
 0.90.....1971

AUGUST

0.00.....1944
 0.00.....1956
 0.00.....1976
 0.00.....1980
 0.00.....1985
 TRACE....1937
 TRACE....1960
 TRACE....1962
 TRACE....1990
 0.01.....1987

10 WETTEST AND DRIEST MONTHS BY MONTH (CONT)

SEPTEMBER

3.39.....1939
 2.06.....1997
 1.58.....1963
 1.29.....1998
 1.17.....1975
 1.09.....1976
 1.03.....1967
 0.98.....1951
 0.88.....1940
 0.87.....1952
 0.63.....1972

OCTOBER

1.22.....1992
 1.13.....1941
 1.13.....1947
 1.12.....1972
 0.70.....1976
 0.66.....1946
 0.63.....1958
 0.62.....1978
 0.61.....1963
 0.61.....1974

NOVEMBER

2.22.....1965
 1.88.....1960
 1.80.....1987
 1.52.....1967
 1.09.....1959
 1.09.....1972
 1.04.....1946
 0.96.....1958
 0.94.....1984
 0.81.....1986

DECEMBER

1.78.....1940
 1.71.....1992
 1.68.....1984
 1.38.....1959
 1.34.....1943
 1.15.....1978
 1.06.....1977
 1.00.....1965
 0.96.....1947
 0.89.....1987

SEPTEMBER

0.00.....1942
 0.00.....1944
 0.00.....1945
 0.00.....1955
 0.00.....1956
 0.00.....1970
 0.00.....1971
 0.00.....1992
 0.00.....1993/96
 TRACE....1941/48/49/57
 TRACE....1964/65/73/79
 1987/88/89

OCTOBER

0.00.....1937
 0.00.....1952
 0.00.....1967
 0.00.....1979
 0.00.....1988/95
 TRACE....1950/55
 1964/65/68
 1984/89
 1994

NOVEMBER

0.00.....1942
 0.00.....1948
 0.00.....1956
 0.00.....1980
 0.00.....1989
 0.00.....1992/95
 TRACE....1937/38
 1943/45
 1950
 1962
 1975/88

DECEMBER

0.00.....1956
 0.00.....1958
 0.00.....1963
 0.00.....1981
 TRACE....1950/53
 1964/69
 1989
 1990

MEASURABLE PRECIPITATION DAYS AND EXTREMES

NORMAL .01 DAYS (1961-1990)

JAN.....2.9
 FEB.....2.8
 MAR.....3.3
 APR.....1.9
 MAY.....1.5
 JUN.....0.8
 JUL.....2.4
 AUG.....3.1
 SEP.....1.8
 OCT.....1.4
 NOV.....2.1
 DEC.....2.6

YEARLY
 AVG.....26.6

MOST EVER (1937-JAN 1997)

13.....1995
 12.....1998
 12.....1973
 8.....1965
 4.....1938/49/71/77/81/87/95
 3.....1949/67/72
 8.....1976/84
 9.....1983
 8.....1939/67
 8.....1946
 6.....1946/65/78
 9.....1984/92

NORMAL (.10 DAYS) (1961-1990)

JAN.....1.4
 FEB.....1.3
 MAR.....1.1
 APR.....0.6
 MAY.....0.7
 JUN.....0.4
 JUL.....0.7
 AUG.....1.1
 SEP.....0.7
 OCT.....0.6
 NOV.....0.9
 DEC.....1.2

YEARLY
 AVG.....10.7

MOST EVER (1937-JAN 1997)

7.....1949/79
 8.....1998
 9.....1992
 6.....1965
 3.....1977
 2.....1938/72/84/90
 5.....1950
 4.....1972/83
 5.....1939
 4.....1974
 3.....1965/67/87
 6.....1943

CONSECUTIVE WET AND DRY DAYS

CONSECUTIVE WET DAYS (0.01 INCH OR GREATER)

6.....4/43 AND 1/49

5.....2-3/38...1/74...1/93

CONSECUTIVE DAYS WITH A TRACE OR BETTER

9.....7/52 AND 2/78

7.....7-8/47...4/65 AND 9/98

CONSECUTIVE DRY DAYS

101.....7/2-10/10/1944 + 9/2/95-12/11/95

84.....5/2-7/24/1978

83.....4/8-6/28/1984

CONSECUTIVE DAYS WITHOUT MEASURABLE PRECIPITATION

150.....2/22-7/21/1959

145.....5/31-10/22/1944

143.....2/12-7/4/1950

PRECIPITATION RECORDS

(MAXIMUM AMOUNT RECORDED IN TIME SHOWN)

JANUARY (1971-94)

5 MIN.....0.06.....1990/93
10 MIN.....0.07.....1993
15 MIN.....0.09.....1993
30 MIN.....0.13.....1993
1 HR.....0.20.....1974/93
2 HRS.....0.31.....1974
3 HRS.....0.38.....1990

24 HRS.....1.09.....1990
(1937-94)

FEBRUARY (1971-94)

5 MIN.....0.14.....1980
10 MIN.....0.17.....1980
15 MIN.....0.18.....1973
30 MIN.....0.25.....1976
1 HR.....0.33.....1976
2 HRS.....0.45.....1978
3 HRS.....0.56.....1978

24 HRS.....1.30.....1993
(1937-94)

MARCH (1971-94)

5 MIN.....0.07.....1980/81
10 MIN.....0.11.....1981
15 MIN.....0.18.....1981
30 MIN.....0.23.....1981
1 HR.....0.32.....1978
2 HRS.....0.54.....1975
3 HRS.....0.61.....1975

24 HRS.....1.27.....1992
(1937-94)

APRIL (1971-94)

5 MIN.....0.11.....1988
10 MIN.....0.15.....1988
15 MIN.....0.16.....1988
30 MIN.....0.21.....1988
1 HR.....0.29.....1988
2 HRS.....0.32.....1988
3 HRS.....0.34.....1988

24 HRS.....0.97.....1965
(1937-94)

MAY (1971-94)

5 MIN.....0.16.....1989
10 MIN.....0.27.....1989
15 MIN.....0.33.....1989
30 MIN.....0.45.....1989
1 HR.....0.54.....1989
2 HRS.....0.60.....1989
3 HRS.....0.61.....1989

24 HRS.....0.83.....1983
(1937-94)

JUNE (1971-94)

5 MIN.....0.13.....1990
10 MIN.....0.22.....1990
15 MIN.....0.25.....1990
30 MIN.....0.45.....1990
1 HR.....0.70.....1990
2 HRS.....0.76.....1990
3 HRS.....0.76.....1990

24 HRS.....0.97.....1990
(1937-94)

JULY (1971-94)

5 MIN.....0.30.....1976/84
10 MIN.....0.59.....1984
15 MIN.....0.86.....1984
30 MIN.....1.24.....1984
1 HR.....1.29.....1984
2 HRS.....1.33.....1984
3 HRS.....1.35.....1984
24 HRS.....1.36.....1984
(1937-94)

AUGUST (1971-94)

5 MIN.....0.23.....1977
10 MIN.....0.34.....1977
15 MIN.....0.41.....1979
30 MIN.....0.63.....1979
1 HR.....0.93.....1979
2 HRS.....1.22.....1979
3 HRS.....1.38.....1979
24 HRS.....2.59.....1957
(1937-94)

PRECIPITATION RECORDS (CONT)

SEPTEMBER (1971-94)

5 MIN.....0.16.....1975
 10 MIN.....0.24.....1975
 15 MIN.....0.35.....1975
 30 MIN.....0.50.....1975
 1 HR.....0.86.....1975
 2 HRS.....0.91.....1975
 3 HRS.....0.91.....1975

 24 HRS.....1.12.....1939
 (1937-94)

NOVEMBER (1971-94)

5 MIN.....0.15.....1987
 10 MIN.....0.22.....1987
 15 MIN.....0.24.....1987
 30 MIN.....0.31.....1987
 1 HR.....0.40.....1987
 2 HRS.....0.49.....1987
 3 HRS.....0.57.....1987

 24 HRS.....1.78.....1960
 (1937-94)

OCTOBER (1971-94)

5 MIN.....0.22.....1972
 10 MIN.....0.23.....1972
 15 MIN.....0.25.....1972
 30 MIN.....0.29.....1976
 1 HR.....0.35.....1976
 2 HRS.....0.47.....1972
 3 HRS.....0.52.....1972

 24 HRS.....1.09.....1992
 (1937-94)

DECEMBER (1971-94)

5 MIN.....0.04.....1982
 10 MIN.....0.06.....1982
 15 MIN.....0.08.....1978
 30 MIN.....0.14.....1978
 1 HR.....0.24.....1982
 2 HRS.....0.33.....1978
 3 HRS.....0.42.....1978

 24 HRS.....0.95.....1977
 (1937-94)

MOST PRECIPITATION IN 24 HOURS

2.59.....8/20-21/1957
 1.78.....11/5-6/1960
 1.75.....8/9-10/1942
 1.56.....8/12/1979
 1.36.....7/28/1984
 1.34.....8/16-17/1977
 1.32.....8/3-4/1955
 1.32.....7/24/1956
 1.30.....2/7-8/1993
 1.29.....7/23-24/1955 + 7/8/1999

10 COLDEST AND HOTTEST YEARS AND OVERALL MONTHS

10 COLDEST YEARS

64.1.....1941
64.2.....1949
64.3.....1937
64.3.....1938
64.6.....1948
64.8.....1955
64.8.....1964
64.8.....1971
65.0.....1951
65.1.....1939/65/82

10 HOTTEST YEARS

69.4.....1996
69.0.....1994/95
68.7.....1989
68.6.....1997
68.5.....1986
68.3.....1977
68.2.....1992
67.9.....1980
67.8.....1978
67.8.....1988

10 COLDEST OVERALL MONTHS

31.2.....JAN 1937
32.4.....JAN 1949
40.2.....DEC 1990
40.8.....DEC 1968
40.9.....JAN 1973
41.0.....JAN 1960
41.0.....JAN 1974
41.1.....JAN 1955/63/79
41.1.....DEC 1948

10 HOTTEST OVERALL MONTHS

93.4.....JUL 1959
93.4.....JUL 1989
93.2.....JUL 1997
93.1.....JUL 1972
92.9.....AUG 1994
92.8.....JUL 1971
92.7.....JUL 1981
92.6.....JUL 1988
92.4.....JUL 1977
92.2.....AUG 1969

10 COLDEST AND HOTTEST MONTHS BY MONTH

COLDEST

JANUARY

31.2.....1937
32.4.....1949
40.9.....1973
41.0.....1960
41.0.....1974
41.1.....1955
41.1.....1963
41.1.....1979
41.2.....1950
41.8.....1952

FEBRUARY

41.2.....1939
41.8.....1949
43.7.....1955
44.8.....1937
45.6.....1956
45.6.....1964
45.8.....1966
46.0.....1960
46.3.....1942
46.3.....1969

MARCH

50.4.....1948
50.4.....1952
50.7.....1973
51.3.....1962
52.1.....1948
52.2.....1954
52.3.....1964
52.6.....1977
52.7.....1991
53.0.....1945/69

APRIL

56.2.....1967
56.6.....1975
58.5.....1963
58.5.....1983
58.6.....1970
59.2.....1941
60.3.....1955
61.1.....1998
61.2.....1965
61.6.....1937

HOTTEST

JANUARY

51.7.....1986
51.1.....1981
50.5.....1999
50.4.....1953
49.5.....1980
49.3.....1994
48.8.....1956
48.7.....1998
48.5.....1996
48.3.....1997

FEBRUARY

58.6.....1995
55.9.....1991
55.8.....1963/86
55.7.....1968
55.0.....1957
54.8.....1996
54.2.....1977
54.1.....1954/92
53.4.....1947

MARCH

63.7.....1972
63.4.....1989
63.0.....1986
62.7.....1994/97
60.9.....1993
60.5.....1990
59.9.....1947
59.9.....1978
59.8.....1996
59.7.....1960

APRIL

72.7.....1989
70.6.....1981
70.5.....1992
70.3.....1962
69.6.....1954
69.1.....1946
68.8.....1990
68.7.....1959
68.6.....1977
68.4.....1987

10 COLDEST AND HOTTEST MONTHS BY MONTH (CONT)

MAY

66.2.....1953
67.7.....1977
68.0.....1971
69.0.....1980
69.3.....1957
69.6.....1965
69.9.....1991
70.0.....1998
70.2.....1938
70.2.....1955

JUNE

77.6.....1944
78.0.....1965
78.6.....1963
78.8.....1941
79.6.....1967
80.0.....1998
80.2.....1943
80.3.....1952
80.8.....1945
80.9.....1964/95

JULY

86.9.....1976
86.9.....1987
87.0.....1938
87.1.....1944
87.2.....1941
87.2.....1955
87.6.....1986
87.8.....1937
88.1.....1982
88.2.....1952/56/84/97/99

AUGUST

83.0.....1941
83.5.....1968
83.8.....1983
85.0.....1949
85.4.....1984
85.5.....1951
85.5.....1976
85.9.....1979
86.0.....1938
86.0.....1954

MAY

81.6.....1997
80.7.....1984
78.8.....1947
78.0.....1940
78.0.....1958
77.8.....1954
77.8.....1976
77.7.....1992
77.5.....1966
77.3.....1996

JUNE

90.3.....1994
89.1.....1974
88.8.....1981
88.0.....1977
87.8.....1986
87.4.....1960
87.4.....1985
87.1.....1978
87.0.....1961
87.0.....1996

JULY

93.4.....1959
93.4.....1989
93.3.....1994
93.2.....1996
93.1.....1972
92.8.....1971
92.7.....1981
92.6.....1988
92.4.....1977
92.0.....1980/85

AUGUST

93.1.....1995
92.9.....1994
92.2.....1969
92.0.....1998
91.9.....1996
91.2.....1986
90.8.....1952
90.7.....1997
90.5.....1958/92
90.3.....1967

10 COLDEST AND HOTTEST MONTHS BY MONTH (CONT)

SEPTEMBER

73.0.....1941
 74.8.....1965
 75.4.....1985
 75.4.....1986
 75.6.....1939
 75.6.....1961
 76.3.....1940
 77.2.....1970
 77.4.....1942
 77.6.....1971

OCTOBER

60.7.....1941
 61.6.....1946
 61.7.....1971
 62.8.....1969
 63.0.....1982
 63.0.....1984
 63.3.....1949
 63.4.....1938
 63.5.....1972
 63.7.....1939/57

NOVEMBER

46.0.....1938
 49.0.....1957
 49.4.....1994
 49.5.....1952
 49.6.....1948
 49.7.....1972
 50.0.....1964
 50.1.....1940
 50.3.....1947
 50.3.....1961

DECEMBER

40.2.....1990
 40.8.....1968
 41.1.....1948
 41.3.....1972
 41.4.....1971
 41.6.....1967
 42.3.....1951
 42.5.....1961
 42.5.....1987
 42.9.....1978

SEPTEMBER

85.3.....1979
 83.7.....1992/95
 83.4.....1956
 83.4.....1974
 83.3.....1947
 83.1.....1994
 82.5.....1969
 82.5.....1981
 82.5.....1983
 82.2.....1949

OCTOBER

74.9.....1988
 73.5.....1978
 72.2.....1991
 72.0.....1964
 71.9.....1952
 71.8.....1950
 71.4.....1977
 71.0.....1987
 70.9.....1992
 70.7.....1979

NOVEMBER

59.8.....1995
 58.9.....1949
 58.0.....1976/81
 57.3.....1962
 57.3.....1989
 57.2.....1954
 57.2.....1977
 56.8.....1980
 56.7.....1967
 56.6.....1950

DECEMBER

52.7.....1980
 51.9.....1977
 51.2.....1950
 48.9.....1995
 48.8.....1958/81
 48.6.....1946
 48.5.....1939
 48.3.....1985
 48.2.....1975
 48.0.....1989

DESERT HEAT STATISTICS

90 DEGREE DAYS

(AVG PER MONTH)
1961-1990

MOST EVER
1937-1996

LEAST EVER
1937-1996

MAR.....0.0*	1...1966*	
APR.....3.3	14...1946	0...MANY TIMES
MAY.....15.4	26...1937	3...1953
JUN.....25.7	30...MANY TIMES	19...1963/98
JUL.....30.5	31...MANY TIMES	28...1984
AUG.....29.8	31...MANY TIMES	24...1983
SEP.....22.2	30...1947/79	11...1986
OCT.....6.0	19...1991	0...MANY TIMES

AVG 90 DEGREE DAYS....132.9 * ONLY OCCURRED ONCE 3/31/1966

NORMAL 90 DEGREE DAYS EXTEND FROM
.....MAY 21ST TO SEP 29TH.....

MOST 90 DEGREE DAYS IN A YEAR (1937-1996)

158.....1937/40
157.....1943/58

LEAST 90 DEGREE DAYS IN A YEAR (1937-1996)

102.....1998
110.....1982
111.....1983
117.....1941

100 DEGREE DAYS

(AVG PER MONTH)
1961-1990

MOST EVER
1937-1996

LEAST EVER
1937-1996

MAY.....2.4	14...1947	0...MANY TIMES
JUN.....14.9	25...1974	1...1965
JUL.....25.9	31...1944/63/71/88	15...1999
AUG.....21.2	31...1937/44/52/85	14...1968/83/84
SEP.....7.0	22...1943	0...1961/65/67/72
OCT.....0.1	2...1980	0...MANY TIMES

AVG 100 DEGREE DAYS.....71.5

NORMAL 100 DEGREE DAYS EXTEND FROM
.....JUN 13TH TO SEP 1ST.....

DESERT HEAT STATISTICS (CONT)

MOST 100 DEGREE DAYS IN A YEAR (1937-1996)

100.....1947
95.....1946/48

LEAST 100 DEGREE DAYS IN A YEAR (1937-1996)

44.....1965
55.....1941/92

105 DEGREE DAYS (AVG PER MONTH) 1961-1990	MOST EVER 1937-1996	LEAST EVER 1937-1996
MAY.....0.3	MAY....4/1947	MAY....0 (NMRS TIMES)
JUN.....7.4	JUN...17/1940/85	JUN....0/1965/69
JUL....15.9	JUL...28/1942	JUL....5/1955
AUG....10.0	AUG...23/1969	AUG....1/1968
SEP.....1.8	SEP...11/1945/48	SEP....0 (NMRS TIMES)
AVG 105 DEGREE DAYS....35.4		

110 DEGREE DAYS (AVG PER MONTH) 1961-1990	MOST EVER 1937-1996	LEAST EVER 1937-1996
JUN.....2.0	JUN...10/1940/61	SEVERAL YEARS
JUL.....5.0	JUL...17/1942	NEVER REACHED
AUG.....1.6	AUG...10/1937	
SEP.....0.*	SEP....3/1947	
AVG 110 DEGREE DAYS.....8.6 * 1 IN 30 YEARS		

115 DEGREE DAYS (AVG PER MONTH) 1961-1990	MOST EVER 1937-1996
JUN.....0.1	JUN....3/1940/94
JUL.....0.4	JUL....3/1942
AUG.....0.1	AUG....3/1979
AVG 115 DEGREE DAYS.....0.6	

AVG HOTTEST HIGH (BY MONTH) (1949-97)	AVG HOTTEST HIGH FOR THE SUMMER (JUN-SEP) (1949-97)
JAN.....68113.....
FEB.....75	AUG....110
MAR.....83	SEP....105
APR.....92	OCT....94
MAY....101	NOV....79
JUN....110	DEC....68

DESERT HEAT STATISTICS (CONT)

CONSECUTIVE 90 DEGREE DAYS

118.....5/7/1940-9/1/40
 114.....5/29/1956-9/19/56
 109.....5/26/1994-9/11/94

CONSECUTIVE 100 DEGREE DAYS

66.....6/27-8/31/1944
 46.....6-8/1988
 45.....7-8/1971

CONSECUTIVE DAYS 105 OR HOTTER

21.....7/1957
 21.....6-7/1973
 19.....6-7/1972

CONSECUTIVE DAYS 110 OR HOTTER

10.....6/1961
 9.....7/1961
 9.....7/1978

CONSECUTIVE DAYS 115 OR HOTTER

3.....6/28-30/1994
 3.....6/30-7/2/1950
 3.....7/22-24/1942

EARLIEST DAY WITH READING

80 OR HIGHER.....2/17/1977 + 1996
 90 OR HIGHER.....3/31/1966
 100 OR HIGHER.....5/1/1947
 110 OR HIGHER.....6/8/1955
 115 OR HIGHER.....6/14/1940

LATEST DATE OF LAST...

80 OR HIGHER.....11/24/1949
 90 OR HIGHER.....10/29/1937+50
 100 OR HIGHER.....10/4/1947
 110 OR HIGHER...SEVERAL YEARS
 115 OR HIGHER...NEVER OCCURRED

LATEST DATE OF FIRST

80 OR HIGHER.....4/15/1958
 90 OR HIGHER.....5/21/1993
 100 OR HIGHER.....6/30/1965
 110 OR HIGHER.....SEVERAL YEARS
 NEVER REACHED

EARLIEST IN SEASON TO END WITH

80 OR HIGHER.....10/10/1957
 90 OR HIGHER.....9/28/1968
 100 OR HIGHER.....8/28/61
 110 OR HIGHER...SEVERAL YEARS
 NEVER REACHED

AVERAGE DATE OF FIRST

80.....MARCH 20TH
 90.....APRIL 23RD
 100.....MAY 27TH
 105.....JUNE 10TH

FROST/FREEZE DATA

CONSECUTIVE DAYS WITH LOWS 32 OR LESS

32.....1/3/1947-2/3/47
 25.....12/28/48-1/21/49
 22.....12/7-28/1937
 22.....1/7-28/1947

HIGHS LESS THAN OR EQUAL TO 32

JAN.....5/1937
 FEB-NOV.....NEVER OCCURRED
 DEC.....1/1972

AVERAGE LOWS LESS THAN OR EQUAL TO 32...BY MONTH (1961-1990)

JAN.....12.5
 FEB.....4.3
 MAR.....1.2
 APR.....0.1
 MAY-SEP...NEVER OCCURRED
 OCT.....0.1
 NOV.....2.2
 DEC.....11.2

MOST LOWS AT OR BELOW FREEZING

JAN.....30 IN 1947/49
 FEB.....23 IN 1939
 MAR.....12 IN 1948
 APR.....2 IN 1945
 MAY-SEP...NEVER OCCURRED
 OCT.....3 IN 1971
 NOV.....21 IN 1938
 DEC.....25 IN 1948

AVERAGE...31.5

EARLIEST DATE WITH READING OF

32 OR LESS.....10/21/1949
 28 OR LESS.....10/30/1971
 24 OR LESS.....11/7/1938

LATEST DATE IN SPRING WITH

32 OR LESS.....4/12/1967
 28 OR LESS.....3/22/1948
 24 OR LESS.....3/3/1971

AVG DATE OF FIRST FREEZE (1961-90)

.....11/25.....

AVG DATE OF LAST FREEZE (1961-90)

.....2/28.....

SHORTEST FREEZE FREE PERIOD....202 DAYS (4/6/45-10/24/45)

AVERAGE FREEZE FREE PERIOD.....269 DAYS

LONGEST FREEZE FREE PERIOD.....367 DAYS (12/17/94-12/18/95)

LATEST DATE IN FALL/WINTER OF FIRST READING

32 OR LESS.....12/19/95
 28 OR LESS.....NONE IN 1959/77/91
 24 OR LESS.....NONE NUMEROUS YEARS

EARLIEST IN WINTER/SPRING SEASON FOR LAST READING

32 OR LESS.....12/16/94
 28 OR LESS.....NONE 77-78/91-92
 24 OR LESS.....NONE MANY TIMES

AVG COLDEST LOW (BY MONTH) (1949-97)

JAN.....22
 FEB.....27
 MAR.....32
 APR.....39
 MAY.....47
 JUN.....57
 JUL.....66
 AUG.....65
 SEP.....55
 OCT.....42
 NOV.....29
 DEC.....24

AVG COLDEST LOW FOR THE WINTER (NOV-FEB) (1949-98)

.....20.....

THUNDERSTORM DAYS

AVERAGE PER MONTH (1961-90)

JAN.....0.0
FEB.....0.3
MAR.....0.4
APR.....0.4
MAY.....1.0
JUN.....1.2
JUL.....3.6
AUG.....4.1
SEP.....1.8
OCT.....0.5
NOV.....0.1
DEC.....0.0*

MOST EVER BY MONTH (1951-96)

JAN.....0
FEB.....1 NUMEROUS YEARS
MAR.....4...1992
APR.....3...1952
MAY.....4...1965/92
JUN.....6...1972
JUL.....9...1952
AUG....12...1955
SEP.....6...1967
OCT.....4...1974
NOV.....2...1959
DEC.....1...1966

* OCCURRED ONCE IN 30 YEARS

ANNUAL AVG.....13.4

MOST THUNDERSTORM DAYS IN A MONSOON SEASON JUNE-SEPTEMBER (1951-1994)

22.....1955
20.....1961/67/84
18.....1998
17.....1972

HAIL DAYS

AVG PER MONTH (1961-90)

JAN.....0.0
FEB.....0.0*
MAR.....0.1
APR.....0.0
MAY.....0.1
JUN.....0.1
JUL.....0.0
AUG.....0.0*
SEP.....0.1
OCT.....0.0
NOV.....0.0
DEC.....0.0

MOST EVER BY MONTH (1951-1999)

JAN.....0
FEB.....1...1970
MAR.....2...1992
APR.....0
MAY.....1...1973/75/79
JUN.....1...1955/67/69/70
JUL.....1...1960
AUG.....1...1989
SEP.....1...1972/83
OCT.....0
NOV.....0
DEC.....0

* OCCURRED ONCE IN 30 YEARS

ANNUAL AVG.....0.4

MOST HAIL DAYS IN MONSOON SEASON JUNE-SEPTEMBER (1951-94)

1.....SEVERAL OCCASIONS

WIND NORMALS...MEANS AND EXTREMES

MEAN

JAN.....WSW	7.4
FEB.....WSW	8.6
MAR.....SW	10.4
APR.....SW	11.0
MAY.....SW	11.5
JUN.....S	11.4
JUL.....S	10.4
AUG.....S	9.8
SEP.....SW	9.1
OCT.....SW	8.2
NOV.....SW	7.7
DEC.....WSW	7.0
ANN.....SW	9.4

ALL TIME WINDIEST MONTHS* (1949-98)

JAN....11.2...	1982
FEB....11.3...	1986
MAR....13.8...	1984
APR....14.4...	1957
MAY....13.7...	1955
JUN....14.5...	1958
JUL....13.3...	1963
AUG....13.6...	1954
SEP....12.3...	1986
OCT....10.5...	1975
NOV....10.8...	1983
DEC....10.1...	1988

PEAK GUSTS BY MONTH IN MPH

JAN.....WSW	58.....1/24/65
FEB.....NW	73.....2/19/76
MAR.....NW	82.....3/21/84
APR.....W	69.....4/30/88
MAY.....NW	73.....5/30/91
JUN.....NNW	67.....6/7/64
JUL.....S	75.....7/14/91
AUG.....SE	90.....8/8/89
SEP.....SE	73.....9/4/73
OCT.....SW	71.....10/23/56
NOV.....S	70.....11/20/83
DEC.....W	68.....12/5/51

* PREVAILING WIND DIRECTION TO NEAREST CARDINAL COMPASS POINT.
MEAN WINDSPEEDS IN MILES PER HOUR.

10 WINDIEST MONTHS BY MONTH

JAN

11.2.....1982
 9.5.....1980
 9.3.....1957
 9.2.....1989
 8.9.....1962/73/75
 8.8.....1987
 8.3.....1965/90/97

FEB

11.3.....1986
 11.0.....1955
 10.9.....1956
 10.7.....1989
 10.3.....1960/90
 10.2.....1962/84
 9.9.....1964/77

MAR

13.8.....1984
 13.5.....1977
 13.1.....1985
 13.0.....1975/89
 12.3.....1954
 12.0.....1982
 11.9.....1957
 11.5.....1983
 11.3.....1976/86

APR

14.4.....1957
 13.9.....1963
 13.8.....1955
 13.4.....1983
 13.3.....1986
 12.8.....1972
 12.7.....1973/84
 12.6.....1964
 12.3.....1956

MAY

13.7.....1955
 13.6.....1956
 13.4.....1989/90
 13.1.....1985
 12.9.....1998
 12.7.....1962
 12.6.....1957
 12.5.....1959/61/63

JUN

14.5.....1958
 13.6.....1980
 13.4.....1963
 13.3.....1954/78
 12.8.....1989
 12.7.....1976/90
 12.6.....1956
 12.4.....1981/97

JUL

13.3.....1963
 12.8.....1958/83
 12.6.....1981
 12.5.....1955
 12.3.....1972
 12.2.....1989
 12.1.....1957
 11.8.....1988
 11.7.....1977

AUG

13.6.....1954
 12.1.....1957
 12.0.....1962
 11.8.....1976
 11.7.....1956/89
 11.4.....1985
 11.3.....1960/95
 10.7.....1963
 10.5.....1964/75/77/88/90

10 WINDIEST MONTHS BY MONTH (CONT)

SEP

12.3.....1986
12.0.....1954
11.1.....1989
11.0.....1955/85
10.7.....1977
10.3.....1956
10.2.....1964
10.0.....1963
9.8.....1981

OCT

10.5.....1975
10.4.....1956
10.2.....1973/81
10.0.....1961/84
9.9.....1989
9.7.....1962
9.3.....1979
9.1.....1985

NOV

10.8.....1983
10.4.....1973
10.1.....1988/94
10.0.....1985
9.9.....1975
9.3.....1964
9.0.....1961/80/81/82

DEC

10.1.....1988
9.5.....1982
9.1.....1972
8.8.....1987
8.6.....1959/67/75
8.5.....1971/97
8.4.....1998

HEATING/COOLING DEGREE DAYS

NORMALS (HDD/CDD)

NORMALS (1961-90)

JAN.....605/0
FEB.....389/0
MAR.....292/22
APR.....143/116
MAY.....14/293
JUN.....0/597
JUL.....0/809
AUG.....0/735
SEP.....0/465
OCT.....62/164
NOV.....304/0
DEC.....598/0

ANNUAL HDD...2407
CDD...3201

MOST/LEAST HDD EVER (1937-94)

JAN.....1049...1937
404...1986
FEB.....666...1939
170...1995
MAR.....451...1948
93...1994
APR.....249...1975
7...1992
MAY.....60...1953
0...MANY TIMES
JUN.....8...1994
0...MANY TIMES
JUL/AUG NEVER OCCURRED
SEP.....15...1966
0...MANY TIMES
OCT.....207...1971
0...1944/52/88
NOV.....569...1938
151...1995
DEC.....761...1990
374...1980

MOST/LEAST CDD (1971-94)

JAN.....NEVER OCCURRED
FEB.....20...1986
0...NUMEROUS YEARS
MAR.....74...1989
0...SEVERAL YEARS
APR.....259...1989
2...1975
MAY.....522...1997
148...1971
JUN.....768...1994
457...1998
JUL.....883...1994
685...1987
AUG.....880...1995
589...1983
SEP.....614...1979
319...1985
OCT.....312...1988
30...1982
NOV.....31...1988
0...NUMEROUS TIMES
DEC.....NEVER OCCURRED

SNOW (1937-98)

NORMALS (1961-90)

JAN.....0.8
 FEB.....0.1
 MAR.....0.*
 APR-SEP.....NEVER OCCURRED
 OCT.....0.0
 NOV.....0.2
 DEC.....0.*
 * LESS THAN 0.1
ANNUAL AVERAGE.....1.1

MOST EVER BY MONTH (1937-94)

16.7.....JAN/1949
 4.1.....FEB/1939
 0.1.....MAR/1976
 TRACE...OCT/1956
 4.0.....NOV/1964
 2.0.....DEC/1967

6 SNOWIEST MONTHS

16.7.....1/1949
 13.4.....1/1974
 9.9.....1/1979
 4.1.....2/1939
 4.0.....11/1964
 2.0.....12/1967

MOST SNOW IN 24 HOURS

9.0.....1/4-5/1974
 7.5.....1/30-31/1979
 5.0.....1/11-12/1949
 4.1.....2/3-4/1939
 4.0.....11/15-16/1964

GREATEST SNOW DEPTHS (INCHES)

8.....1/5/1974
 7.....1/12/1949
 6.....1/31/1979

MOST SNOW IN A SEASON

16.7....1948/49
 13.4....1973/74
 10.2....1978/79
 4.1....1938/39
 4.0....1964/65

BIGGEST SNOW STORMS

9.7.....1/10-12/1949
 9.0.....1/4-5/1974
 7.8.....1/30-2/2/1979
 4.7.....1/25/1949
 4.1.....2/3-4/1939
 4.0.....11/15-16/1964
 2.4.....1/28/1979
 2.3.....1/19-20/1949
 2.0.....12/15/1967
 1.5.....1/12/1937 AND 1/7/1955
 1.4.....2/19/1990
 1.0.....1/20/1945...1/29/1957...12/6/98

CONSECUTIVE SNOW DAYS

(TRACE OR MORE)
 5.....1/9-13/1949
 5.....1/4-8/1974

CONSECUTIVE SNOW DAYS

(MEASURABLE)
 3.....1/11-13/1949
 3.....1/30-2/1/1979

EARLIEST SNOW EVER

Trace.....10/31/56
 Measurable.....11/15/64...3.0" (1" more on the 16th)

LATEST SNOW EVER

Trace.....4/4/58
 Measurable.....3/3/76.....0.1"

SUNSHINE

NORMAL SUNSHINE (PERCENT OF POSSIBLE, 1961-90)

JAN.....	77
FEB.....	80
MAR.....	83
APR.....	87
MAY.....	88
JUN.....	93
JUL.....	88
AUG.....	88
SEP.....	91
OCT.....	87
NOV.....	81
DEC.....	79

ANNUAL AVG.....85

MEAN SKY COVER (IN TENTHS) (1961-90 NORMALS)

JAN.....	4.8
FEB.....	4.7
MAR.....	4.6
APR.....	3.8
MAY.....	3.4
JUN.....	2.1
JUL.....	2.8
AUG.....	2.5
SEP.....	2.1
OCT.....	2.8
NOV.....	3.9
DEC.....	4.4

ANNUAL AVG.....3.5

SUNSHINE (CONT)

SUNNIEST MONTHS ALL TIME (PERCENT OF POSSIBLE, 1951-98)

JAN

95.....1976/84
92.....1972/96
91.....1971

FEB

94.....1984
93.....1954/64
92.....1956/72/74/95

MAR

97.....1972
96.....1953/88
95.....1956/90/97

APR

97.....1974
96.....1969/81
94.....1966/89

MAY

98.....1984
95.....1952/70/76

JUN

98.....1952/58/71/74/96
97.....1956/61/76/83/92

JUL

99.....1993
96.....1963/83/95
95.....1958/71/72

AUG

98.....1976/85
97.....1952/56/80
95.....1966/78

SEP

100.....1970
99.....1955
98.....1993

OCT

96.....1967/76/97
95.....1973/80
93.....1954/64/89/91

NOV

98.....1956
96.....1988
95.....1976

DEC

96.....1976/95
94.....1963/88
93.....1998

ALL TIME SUNNIEST YEARS (IN PERCENTAGE OF POSSIBLE)

93.....1976
92.....1989
91.....1956

CLOUDIEST MONTHS AND YEARS

(IN PERCENTAGE OF POSSIBLE SUNSHINE, 1951-94)

JAN	FEB
45.....1995	55.....1998
53.....1979	61.....1983
54.....1978	62.....1973

MAR	APR
64.....1958	73.....1965
70.....1973/75	76.....1952/57
73.....1952	

MAY	JUN
72.....1977	80.....1977
73.....1995	84.....1965
77.....1951/57/94	86.....1972

JUL	AUG
75.....1984	74.....1955
76.....1954	76.....1982
78.....1970	78.....1971

SEP	OCT
75.....1963	55.....1972
78.....1967	70.....1987
79.....1989/97	71.....1951/96

NOV	DEC
69.....1982	61.....1983
70.....1972	63.....1971
71.....1964/96	64.....1977

ALL TIME CLOUDIEST YEARS (IN PERCENTAGE OF POSSIBLE SUNSHINE)

78.....1957
80.....1986
81.....1965

RELATIVE HUMIDITY

AVERAGE RELATIVE HUMIDITY (IN PERCENTAGE)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
LOCAL TIME													
HOUR 04	56	51	46	35	32	25	29	35	33	37	46	55	40
HOUR 10	42	36	31	22	19	15	19	24	22	25	32	40	27
HOUR 16	31	27	22	16	14	11	15	17	17	19	26	32	21
HOUR 22	50	43	37	26	23	17	22	26	26	30	40	49	32

FOG

NORMALS (VISIBILITIES 1/4 MILES OR LESS) (1961-90)

JAN.....0.3
FEB.....0.1
MAR.....0.1
APR-AUG....NONE
SEP.....0.*
OCT.....0.*
NOV.....0.1
DEC.....0.2

ANNUAL AVG...0.8
* LESS THAN 0.05

AVERAGE FOG DAYS (<= 5/8 MILE) (1971-98)

JAN.....1.2
FEB.....0.8
MAR.....0.4
APR.....0.1
MAY.....0.*
JUN.....0.0
JUL.....0.*
AUG.....0.1
SEP.....0.*
OCT.....0.1
NOV.....0.3
DEC.....0.7

ANNUAL AVG.....3.7
* LESS THAN 0.05

FOGGIEST MONTHS (<= 5/8 MILE) (1971-98)

JAN.....5 IN 1980
FEB.....5 IN 1980
MAR.....3 IN 1981/92
APR.....2 IN 1988
MAY.....1 IN 1977/87
JUN.....0
JUL.....1 IN 1984
AUG.....1 IN 1979/83
SEP.....1 IN 1983
OCT.....1 IN 1978/87/92
NOV.....3 IN 1987
DEC.....5 IN 1984

PRESSURE

ALL TIME HIGHEST (BY MONTH) (1937-94)

JAN.....30.76...1979
FEB.....30.61...1943/60
MAR.....30.61...1971
APR.....30.39...1963/71
MAY.....30.55...1966
JUN.....30.24...1981
JUL.....30.18...1988
AUG.....30.18...1981
SEP.....30.29...1970
OCT.....30.55...1981
NOV.....30.72...1969
DEC.....30.80...1967

ALL TIME LOWEST (BY MONTH) (1937-94)

JAN.....29.37...1944
FEB.....29.31...1987
MAR.....29.25...1984
APR.....29.24...1954
MAY.....29.28...1975
JUN.....29.18...1947
JUL.....29.45...1974
AUG.....29.44...1984
SEP.....29.40...1978
OCT.....29.35...1994
NOV.....29.18...1982
DEC.....29.17...1949

ALL TIME HIGHEST.....30.80...12/1967
ALL TIME LOWEST.....29.17...12/1949

HOLIDAY WEATHER

(1937-1994)

NEW YEAR HOLIDAY (JANUARY 1ST)

AVERAGE HIGH/LOW.....56/32

RECORD HIGH.....69 IN 1981

RECORD LOW.....21 IN 1954

MOST SNOW EVER.....4.4 INCHES IN 1974

MOST PRECIPITATION...0.43 IN 1974

DAYS OF MEASURABLE PRECIPITATION.....2

DAYS WITH ANY PRECIPITATION.....4

MEMORIAL DAY WEEKEND

AVERAGE HIGH/LOW.....93/64

4TH OF JULY

AVERAGE HIGH/LOW.....105/75

RECORD HIGH.....115 IN 1985

RECORD LOW.....60 IN 1941

MOST PRECIPITATION EVER.....0.16 IN 1949

DAYS OF MEASURABLE PRECIPITATION.....2

DAYS WITH ANY RAIN.....3

LABOR DAY WEEKEND

AVERAGE HIGH/LOW.....99/70

HALLOWEEN

AVERAGE HIGH.....75/48

RECORD HIGH.....86 IN 1988

RECORD LOW.....30 IN 1971

MOST PRECIPITATION EVER.....0.25 IN 1987

DAYS OF MEASURABLE PRECIPITATION.....6

DAYS WITH ANY RAIN.....7

THANKSGIVING

AVERAGE HIGH/LOW.....64/40

HOLIDAY WEATHER (CONT)

CHRISTMAS

AVERAGE HIGH/LOW.....56/33

RECORD HIGH.....69 IN 1964

RECORD LOW.....17 IN 1948

MOST PRECIPITATION EVER.....0.28 IN 1983

MOST SNOW EVER.....TRACE IN 1941 AND 1988

DAYS WITH MEASURABLE PRECIPITATION.....5

DAYS WITH ANY RAIN OR SNOW.....8

CONSECUTIVE DAYS ABOVE/BELOW NORMAL

RECORD DAYS BELOW NORMAL

46 days (12/27/1948 - 2/10/49)

42 days (7/7/1999 - 8/17/99)

RECORD DAYS ABOVE NORMAL

45 days (12/15/1985 - 1/29/85)

ACKNOWLEDGMENTS

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Finally, I would like to thank all the observers down through WSO Las Vegas' existence. It is fascinating looking back at our historical database to see how detailed the records were 50 or more years ago.

Record Max/Min Temperature

Las Vegas, NV

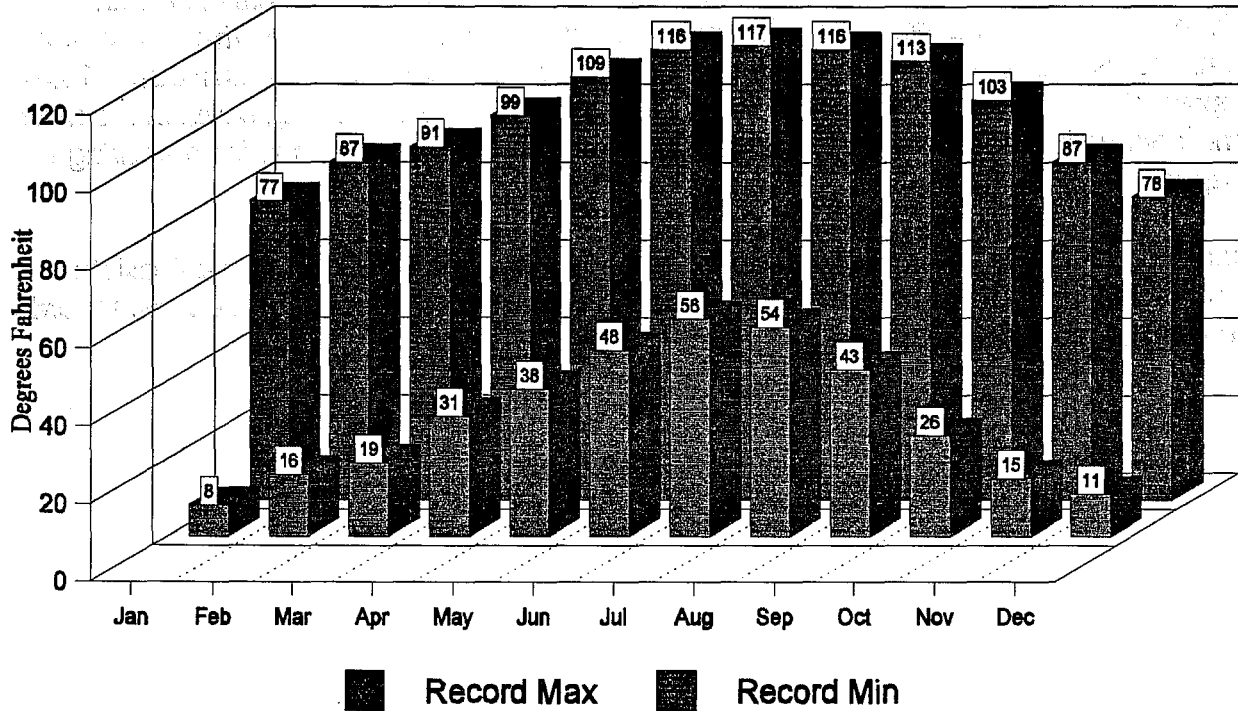


Figure 1. Record Maximum/Minimum Temperatures at McCarran International Airport, Las Vegas, NV

ANNUAL PRECIPITATION AT LAS VEGAS

1937-1998

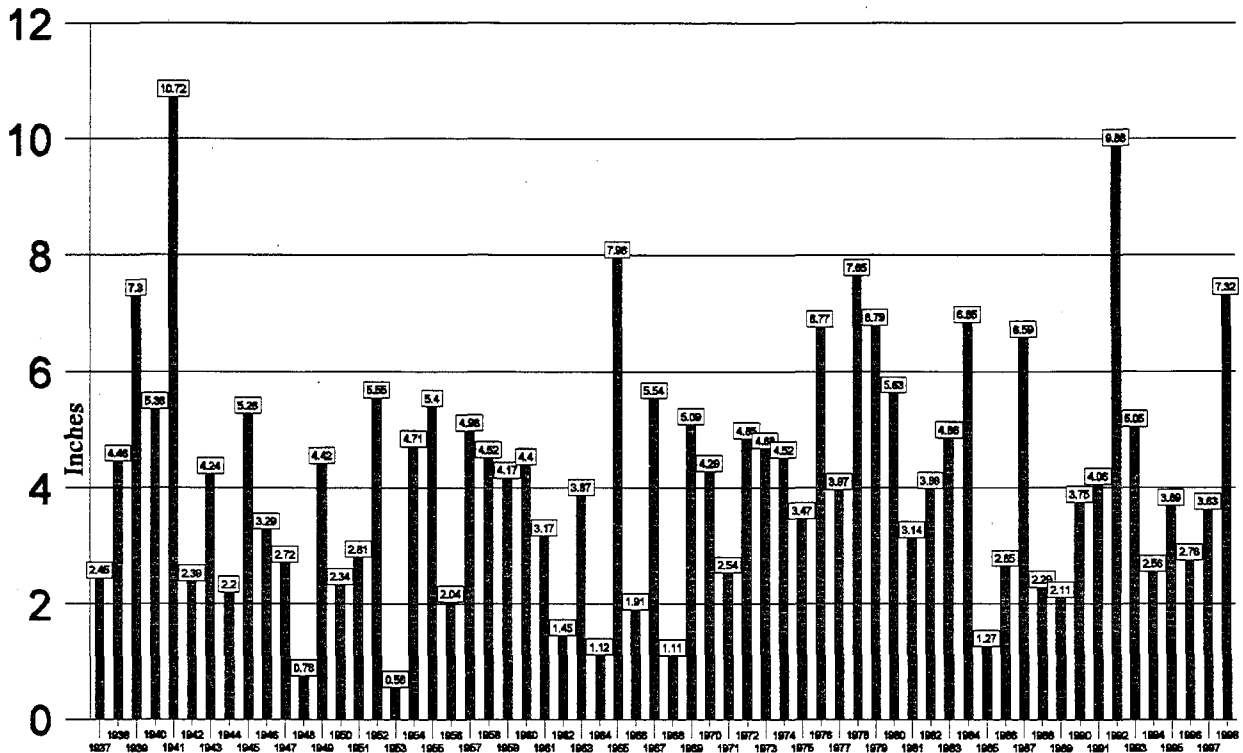


Figure 2. Annual Precipitation (in inches) at Las Vegas, NV (1937-1948 at Nellis) (1949-1998 at McCarran)

Average RH

(4 a.m. and 4 p.m.)

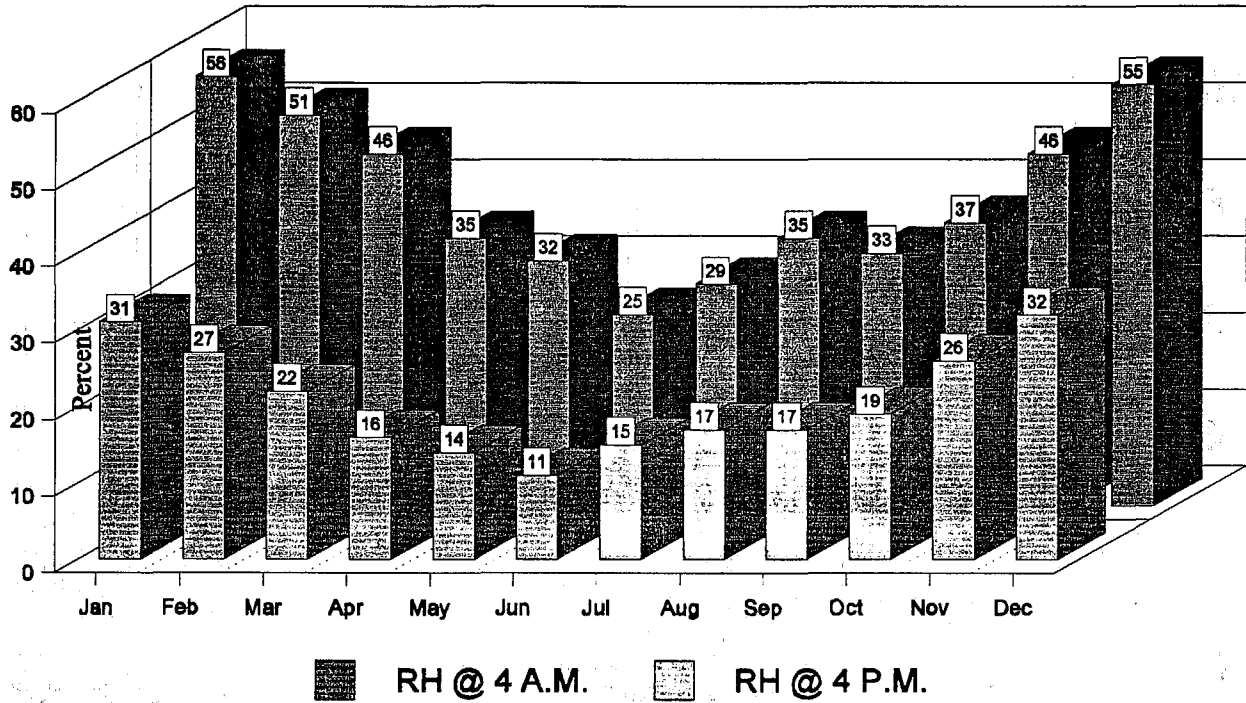


Figure 3. Average Relative Humidity at 4:00 a.m. and 4:00 p.m. PST for McCarran International Airport, Las Vegas, NV

Avg. # of Thunderstorm Days

Las Vegas, NV

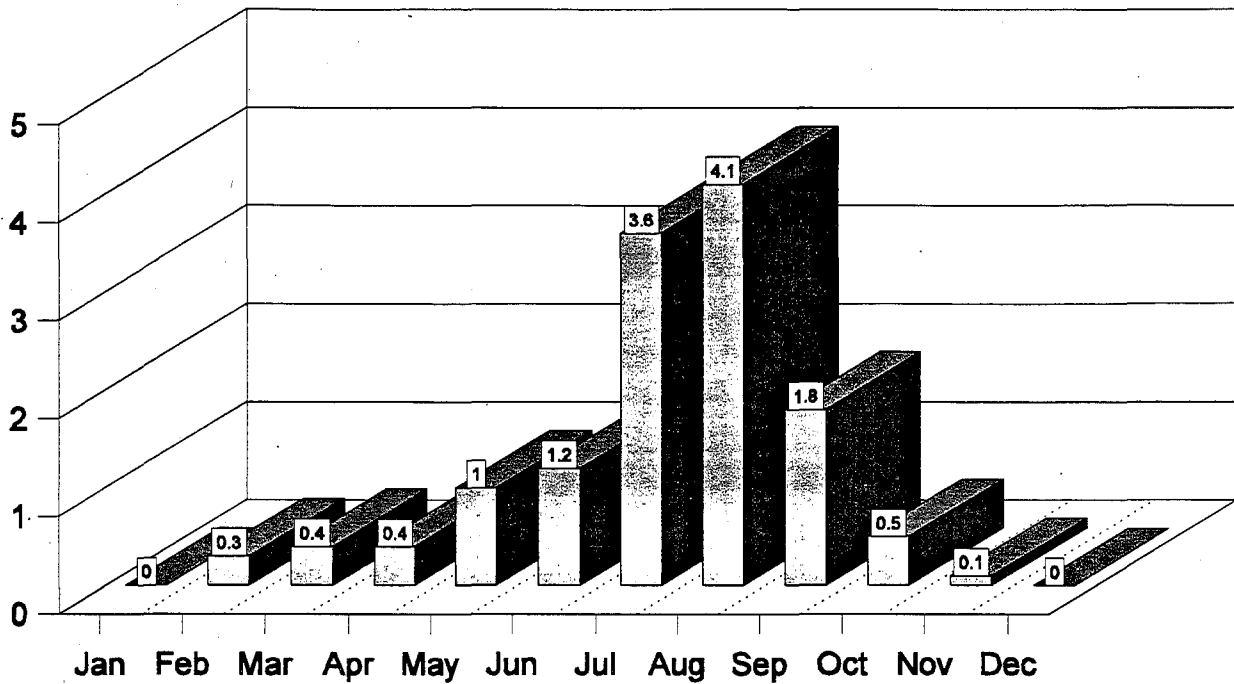


Figure 4. Average Number of Thunderstorm Days for McCarran International Airport, Las Vegas, NV

Avg 90/100 Degree Days

Las Vegas, NV

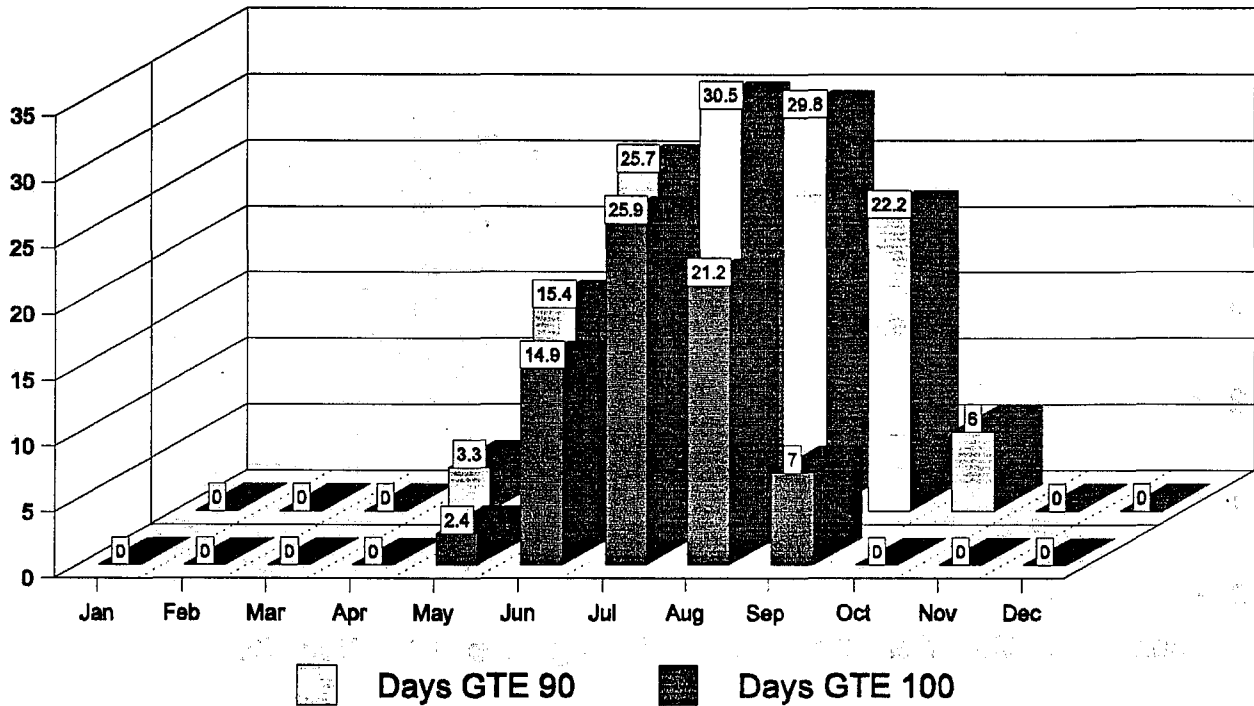


Figure 5. Average number of 90 and 100 degree days at McCarran International Airport, Las Vegas, NV

- 151 NMC Model Performance in the Northeast Pacific. James E. Overland, PMEL-ERL, April 1980. (PB80 196033)
- 152 Climate of Salt Lake City, Utah. William J. Alder, Sean T. Buchanan, William Cope (Retired), James A. Cisco, Craig C. Schmidt, Alexander R. Smith (Retired), Wilbur E. Figgins (Retired), February 1998 - Seventh Revision (PB98-130727)
- 153 An Automatic Lightning Detection System in Northern California. James E. Rea and Chris E. Fontana, June 1980. (PB80 225592)
- 154 Regression Equation for the Peak Wind Gust 6 to 12 Hours in Advance at Great Falls During Strong Downslope Wind Storms. Michael J. Card, July 1980. (PB81 108367)
- 155 A Raininess Index for the Arizona Monsoon. John H. Ten Harkel, July 1980. (PB81 106494)
- 156 The Effects of Terrain Distribution on Summer Thunderstorm Activity at Reno, Nevada. Christopher Dean Hill, July 1980. (PB81 102501)
- 157 An Operational Evaluation of the Scofield/Oliver Technique for Estimating Precipitation Rates from Satellite Imagery. Richard Ochoa, August 1980. (PB81 108227)
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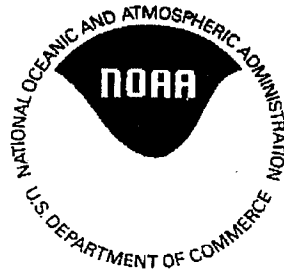
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