



NOAA Technical Memorandum NWS WR-235

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## CLIMATE OF LAS VEGAS, NEVADA

Paul H. Skrbac  
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National Weather Service Office  
Las Vegas, Nevada

December 1995

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**U.S. DEPARTMENT OF  
COMMERCE**

National Oceanic and  
Atmospheric Administration

National Weather  
Service



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# CLIMATE OF LAS VEGAS, NEVADA

*Paul H. Skrbac and Scott Cordero*

## 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 Memorandum 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.*

## NARRATIVE SUMMARY

### 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 southwest, unless associated with a thunderstorm outflow.

[The period used for defining temperature and moisture extremes is from January 1937 through August 1995.]

# MONTHLY NORMALS

## LAS VEGAS NEVADA

PERIOD OF RECORD: 1961-1990

	MAX	MIN	AVG	HDD	CDD	PCPN	SEASON HDD	TOTAL 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 FARENHEIT

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	55	01/31/63
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
APRIL	99	04/30/81	31	04/02/75	48	04/12/65	74	04/24/43
MAY	109	05/26/51	38	05/03/42	60	05/08/79	79	05/29/84
JUNE	116	06/15/40	48*	06/06/93	68	06/07/95	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	87	08/20/92
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 1995)

\* - ALSO IN PREVIOUS YEARS

PERIOD OF RECORD INCLUDES ONE MAJOR LOCATION MOVE 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...THE CURRENT SITE FOR OBSERVATIONS...(36 DEGREES 05 MINUTES NORTH - 115 DEGREES 10 MINUTES 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	44	1981	56/32
2	69	1981	13	1974	31	1974	41	1981	56/32
3	66	1969	12	1974	32	1974	41	1981	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	1990	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	1949	50	1980	57/33
15	73	1945	20	1962	39	1960	44	1969	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	46	1969	57/34
20	72	1986	17	1937	33	1937	52	1969	58/34
21	69	1981	13	1937	28#	1937	52	1969	58/34
22	74	1948	9	1937	31	1937	47	1969	58/34
23	76	1948	14	1937	35	1937	46	1981	58/34
24	75	1948	15	1937	31	1937	45	1970	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	47	1980	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.

# 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	73	1963	22	1951	35	1985	50	1952	61/36
3	73	1947	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	47	1978	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	75	1960	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	47	1957	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	78	1977	24	1949	46	1956	55	1991	64/39
17	80	1977	21	1956	49	1956	49	1980	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	52	1957	64/40
21	80	1977	21	1955	47	1955	51	1995	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	36	1952	47	1960	58	1972	66/41

( ) - INDICATES THE MONTHLY EXTREME.

UPDATED - 12/29/94

\* - 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	56	1986	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	60	1994	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	84	1960	34	1964	49	1991	58	1995	70/44
21	87	1972	26	1955	53	1952	59	1978	70/45
22	88	1940	28	1948	49	1973	58	1972	70/45
23	89	1940	32	1938	48	1964	59	1967	70/45
24	89	1940	34	1957	55	1954	61	1993	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	55	1975	60	1986	72/46
30	88	1971	33	1987	57	1938	58	1994	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	58	1975	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	57	1988	64	1994	77/50
16	95	1989	39	1976	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	60	1960	62	1986	80/53
24	(99)	1946	38	1937	58	1964	(74)	1943	80/53
25	96	1946	37	1960	64	1971	68	1981	80/53
26	96	1946	42	1967	60	1963	67	1981	81/54
27	97	1992	39	1984	59	1970	65	1992	81/54
28	95	1992	39	1955	55	1970	71	1943	81/54
29	96	1981	35	1970	62	1951	67	1986	82/55
30	(99)	1981	38	1967	61	1973	70	1992	82/55

( ) - INDICATES THE MONTHLY EXTREME.

# 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	68	1992	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	67	1974	85/58
10	102	1940	41	1948	68	1991	71	1961	85/58
11	103	1960	47	1938	63	1989	70	1992	86/59
12	101	1988	45	1963	67	1961	74	1993	86/59
13	101	1978	45	1953	71	1977	75	1994	86/59
14	106	1937	46	1942	66	1962	71	1984	87/60
15	107	1937	44	1968	61	1951	73	1976	87/60
16	107	1937	43	1953	67	1962	69	1993	88/60
17	102	1937	43	1962	71	1977	73	1945	88/61
18	103	1973	45	1977	72	1949	72	1970	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	72	1980	76	1981	91/63
26	(109)	1951	50	1980	74	1962	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	1969	48	1971	74	1988	78	1984	94/65
31	104	1977	47	1937	68	1991	74	1986	94/65

( ) - INDICATES THE MONTHLY EXTREME.

# 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	73	1992	95/65
2	106	1938	49	1955	78	1948	80	1986	95/65
3	107	1957	53	1961	69	1949	77	1994	96/66
4	109	1990	54	1951	79	1943	77	1990	96/66
5	107	1979	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	107	1994	51	1954	75	1957	78	1973	99/68
11	109	1956	55	1976	83	1976	78	1985	99/68
12	112	1940	52	1937	82	1943	81	1994	99/68
13	114	1940	49	1938	80	1970	82	1985	100/69
14	115	1940	55	1943	76	1962	83	1979	100/69
15	(116)	1940	52	1962	80	1962	83	1989	101/69
16	114	1940	53	1944	70	1995	83	1949	101/70
17	113	1940	50	1944	81	1969	79	1960	101/70
18	115	1940	49	1939	82	1979	80	1991	102/70
19	114	1940	56	1939	85	1975	82	1989	102/70
20	113	1961	53	1939	86	1975	83	1989	102/71
21	111	1954	53	1941	86	1947	80	1978	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.

# 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	86	1988	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	1985	106/75
8	113	1989	60	1938	(81)	1992	91#	1989	106/75
9	113	1943	63	1938	94	1966	85	1989	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	93	1962	85	1985	106/76
13	115	1939	64	1944	94	1992	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	114	1979	65	1944	91	1953	87	1977	106/77
17	115	1959	62	1940	90	1953	84	1961	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	1984	84	1980	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	1994	106/77
28	114	1980	61	1984	84	1984	86	1994	106/77
29	112	1972	64	1984	93	1984	88	1980	106/77
30	114	1978	64	1941	87	1976	87	1972	106/77
31	115	1978	65	1940	93	1968	86	1989	106/77

# - INDICATES THE EXTREME TEMPERATURE FOR ENTIRE PERIOD OF RECORD.  
 ( ) - INDICATES THE MONTHLY EXTREME.

# 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	(87)	1980	106/76
3	(116)	1979	(54)	1937	81	1951	(87)	1980	105/76
4	114	1979	58	1937	82	1970	85	1971	105/76
5	113	1969	63	1953	89	1992	84	1979	105/76
6	114	1978	64	1950	95	1963	88	1994	105/76
7	111	1994	63	1950	92	1963	86	1994	105/76
8	114	1978	64	1957	91	1938	83	1975	105/76
9	114	1940	65	1951	87	1989	86	1975	105/76
10	115	1940	60	1937	82	1983	85	1964	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	1994	104/75
14	111	1962	64	1984	89	1972	85	1960	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	1944	56	1947	88	1968	83	1952	102/73
24	110	1985	56	1968	80	1982	83	1991	102/73
25	110	1985	59	1944	84	1982	80	1969	101/73
26	109	1944	55	1943	91	1982	81	1985	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	83	1981	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.

# 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	83	1961	80	1969	99/70
4	111	1947	57	1941	79	1939	(83)	1982	99/70
5	109	1977	52	1940	80	1970	79	1993	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	79	1994	97/69
9	108	1944	50	1941	81	1975	80	1994	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	1956	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.

# 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	68	1967	89/60
3	99	1987	44	1950	71	1969	68	1994	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	1980	41	1949	61	1961	69	1963	85/57
10	97	1991	40	1961	64	1960	67	1991	85/57
11	95	1991	43	1961	67	1947	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	1957	65	1961	80/52
22	90	1988	39	1958	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	64	1972	61	1950	77/50
28	91	1937	32	1970	56	1971	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.

# 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	80	1967	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	53	1966	65/41
22	77	1976	24	1941	51	1984	54	1974	64/40
23	76	1954	24	1941	48	1952	50	1965	64/40
24	81	1949	(15)	1938	50	1978	50	1980	64/40
25	76	1970	18	1938	47	1988	48	1985	63/39
26	75	1977	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.

UPDATED - 12/29/94

# 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	51	1937	58/35
11	72	1939	21	1972	36	1972	45	1939	58/34
12	74	1958	15	1949	34	1972	46	1975	58/34
13	70	1952	19	1949	35	1967	42	1992	58/34
14	72	1942	16	1945	36	1967	43	1950	57/34
15	75	1980	14	1940	40	1987	46	1983	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	1977	56/32
31	68	1980	18	1990	45	1975	42	1985	56/32

( ) - INDICATES THE MONTHLY EXTREME.

10 WETTEST AND DRIEST YEARS AND OVERALL MONTHS

10 WETTEST MONTHS

\* 4.80.....MAR 1992  
\* 3.39.....SEP 1939  
\* 3.00.....JAN 1995  
\* 2.59.....AUG 1957  
\* 2.52.....FEB 1993  
2.49.....FEB 1976  
\* 2.48.....JUL 1984  
2.44.....APR 1965  
2.41.....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  
6.85.....1984  
6.79.....1979  
6.77.....1976  
6.59.....1987  
5.63.....1980

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)

10 DRIEST 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

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

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  
 1.08.....1944

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 WETTEST

10 DRIEST

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  
 1.01.....1991

MARCH

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

APRIL

2.44.....1965  
 1.68.....1941  
 0.85.....1943  
 0.76.....1988  
 0.64.....1958  
 0.57.....1952  
 0.55.....1939  
 0.55.....1957  
 0.45.....1983  
 0.42.....1975

APRIL

0.00.....1962  
 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  
 1.95.....1976  
 1.68.....1945  
 1.64.....1956  
 1.61.....1954  
 1.55.....1955  
 1.34.....1950  
 0.93.....1941  
 0.78.....1979  
 0.70.....1937

JULY

0.00.....1948  
 0.00.....1963  
 0.00.....1974  
 0.00.....1976  
 0.00.....1978  
 0.00.....1979  
 0.00.....1982  
 TRACE....1940/42/43/44  
           1962  
           1971/75  
           1980/81/83/86/89

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  
 1.58.....1963  
 1.17.....1975  
 1.09.....1976  
 1.03.....1967  
 0.98.....1951  
 0.88.....1940  
 0.87.....1952  
 0.63.....1972  
 0.62.....1950

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  
 TRACE....1941/48/49/57/64  
 65//73/79/87/88/89

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

OCTOBER

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

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

NOVEMBER

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

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

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 1995)**

13.....1995  
 8.....1938/41/73/93  
 12.....1973  
 8.....1965  
 4.....1938/49/71/77/81/87  
 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  
(1937-1994)**

7.....1949/79  
 6.....1973/93  
 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 GREATER

9.....7/52 AND 2/78  
7.....78/47 AND 4/65

### CONSECUTIVE DRY DAYS

101.....7/2-10/11/1944  
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)

**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)

**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)

**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)

**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)

**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)

**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)

**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

# 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

69.0.....1994  
68.7.....1989  
68.5.....1986  
68.3.....1977  
68.2.....1992  
67.9.....1980  
67.8.....1978  
67.8.....1988  
67.5.....1993  
67.4.....1990

## 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  
93.1.....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  
92.0.....JUL 1980/85

10 COLDEST AND HOTTEST MONTHS BY MONTH

COLDEST

HOTTEST

**JANUARY**

**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

51.7.....1986  
 51.1.....1981  
 50.4.....1953  
 49.5.....1980  
 49.3.....1994  
 48.8.....1956  
 47.9.....1978  
 47.5.....1969  
 47.1.....1965  
 47.1.....1984

**FEBRUARY**

**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

58.6.....1995  
 55.9.....1991  
 55.8.....1963/86  
 55.7.....1968  
 55.0.....1957  
 54.2.....1977  
 54.1.....1954  
 54.1.....1992  
 53.4.....1947

**MARCH**

**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

63.7.....1972  
 63.4.....1989  
 63.0.....1986  
 62.7.....1994  
 60.9.....1993  
 60.5.....1990  
 59.9.....1947  
 59.9.....1978  
 59.7.....1960  
 59.5.....1974

**APRIL**

**APRIL**

56.2.....1967  
 56.6.....1975  
 58.5.....1963  
 58.5.....1983  
 58.6.....1970  
 59.2.....1941  
 60.3.....1955  
 61.2.....1965  
 61.6.....1937  
 61.8.....1964

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  
 70.2.....1938  
 70.2.....1955  
 70.6.....1962

MAY

80.7.....1984  
 78.8.....1947  
 78.0.....1940  
 78.0.....1958  
 77.8.....1954  
 77.8.....1976  
 77.7.....1992  
 77.5.....1966  
 77.0.....1974  
 77.0.....1993

JUNE

77.6.....1944  
 78.0.....1965  
 78.6.....1963  
 78.8.....1941  
 79.6.....1967  
 80.2.....1943  
 80.3.....1952  
 80.8.....1945  
 80.9.....1964/95  
 81.0.....1938

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  
 86.8.....1959

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

JULY

93.4.....1959  
 93.4.....1989  
 93.3.....1994  
 93.1.....1972  
 92.8.....1971  
 92.7.....1981  
 92.6.....1988  
 92.4.....1977  
 92.0.....1980  
 92.0.....1985

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

AUGUST

92.9.....1994  
 92.2.....1969  
 91.2.....1986  
 90.8.....1952  
 90.5.....1958  
 90.5.....1992  
 90.3.....1967  
 90.2.....1980  
 90.1.....1977  
 90.0.....1981

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  
 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

58.9.....1949  
 58.0.....1976  
 58.0.....1981  
 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  
 48.8.....1958  
 48.8.....1981  
 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 1937-1994	LEAST EVER 1937-1994
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
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 (1937-1994)

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

### LEAST 90 DEGREE DAYS IN A YEAR (1937-1994)

110.....1982  
111.....1983  
117.....1941

### 100 DEGREE DAYS (AVG PER MONTH) 1961-1990

	MOST EVER 1937-1994	LEAST EVER 1937-1994
MAY.....2.4	14...1947	0...MANY TIMES
JUN.....14.9	25...1974	1...1965
JUL.....25.9	31...1944/63/71/88	18...1984
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 (1937-1994)

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

LEAST 100 DEGREE DAYS IN A YEAR (1937-1994)

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

105 DEGREE DAYS (AVG PER MONTH) 1961-1990	MOST EVER 1937-1994	LEAST EVER 1937-1994
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 1937-1994	LEAST EVER 1937-1994
JUN.....2.0	JUN...10/1940/61	SEVERAL YEARS
JUL.....5.0	JUL...17/1942	NEVER REACHED
AUG....1.6	AUG...10/1937	
SEP.....0.0*	SEP....3/1947	

AVG 110 DEGREE DAYS.....8.6 \* 1 IN 30 YEARS

115 DEGREE DAYS (AVG PER MONTH) 1961-1990	MOST EVER 1937-1994
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) (1949-94)	AVG HOTTEST HIGH FOR THE SUMMER (JUN-SEP) (1949-94)
JAN.....68	JUL....112
FEB.....75	AUG....110
MAR.....83	SEP....105
APR.....92	OCT....94
MAY....101	NOV....79
JUN....110	DEC....68
	.....113.....

## 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  
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

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 OCCURED  
 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 OCCURED  
 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 OCCURED  
 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.....

AVERAGE FREEZE FREE PERIOD.....269 DAYS

### LATEST DATE IN FALL/WINTER OF FIRST READING

32 OR LESS.....12/17/82  
 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.....12/28/67  
 28 OR LESS.....NONE 78/81/92  
 24 OR LESS.....NONE MANY TIMES

### AVG COLDEST LOW (BY MONTH) (1949-94)

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) (1949-94)

.....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\*

\* OCCURRED ONCE IN 30 YEARS

ANNUAL AVG.....13.4

### MOST EVER BY MONTH (1951-94)

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

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

22.....1955  
20.....1961/67/84  
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-JUNE 1995)

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 AND EXTREMES

### NORMALS\* (1961-90)

JAN.....	SW	7.4
FEB.....	SW	8.6
MAR.....	SW	10.2
APR.....	SW	11.0
MAY.....	SW	11.1
JUN.....	SW	11.1
JUL.....	SSW	10.3
AUG.....	SSW	9.6
SEP.....	SW	9.0
OCT.....	WSW	8.1
NOV.....	NW	7.8
DEC.....	WNW	7.3

### ALL TIME WINDIEST MONTHS\* (1949-94)

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

### 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  
 12.7.....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

### 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  
 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  
8.3.....1956/60/73/92

# 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  
           247...1991  
 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 OCCURED  
 SEP.....15...1966  
           0...MANY TIMES  
 OCT.....207...1971  
           0...1944/52/88  
 NOV.....569...1938  
           183...1949  
 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.....496...1984  
           148...1971  
 JUN.....768...1994  
           500...1976  
 JUL.....883...1994  
           685...1987  
 AUG.....870...1994  
           589...1983  
 SEP.....614...1979  
           319...1985  
 OCT.....312...1988  
           30...1982  
 NOV.....31...1988  
           0...NUMEROUS TIMES  
 DEC.....NEVER OCCURRED

# SNOW

## NORMALS (1961-90)

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

## 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

## GREATEST SNOW DEPTHS (INCHES)

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

## 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...11/1

## 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

## 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

## 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

## 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

## 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, 1951-94)**

**JAN**

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

**FEB**

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

**MAR**

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

**APR**

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

**MAY**

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

**JUN**

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

**JUL**

99.....1993  
96.....1963/83  
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  
95.....1973/80  
93.....1954/64/89/91

**NOV**

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

**DEC**

96.....1976  
94.....1963/88  
92.....1974

**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	
53.....	1979	61.....	1983
54.....	1978	62.....	1973
56.....	1957	65.....	1969
MAR		APR	
64.....	1958	73.....	1965
70.....	1973/75	76.....	1952/57
73.....	1952		
MAY		JUN	
72.....	1977	80.....	1977
77.....	1951/57/94	84.....	1965
		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	71.....	1951
NOV		DEC	
69.....	1982	61.....	1983
70.....	1972	63.....	1971
71.....	1964	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.....0.0\*  
OCT.....0.0\*  
NOV.....0.1  
DEC.....0.2

ANNUAL AVG...0.8  
\* LESS THAN 0.05

AVERAGE FOG DAYS (<= 5/8 MILE)  
(1971-94)

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

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

FOGGIEST MONTHS (<= 5/8 MILE)  
(1971-94)

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

#### ACKNOWLEDGEMENTS

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Finally, we 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

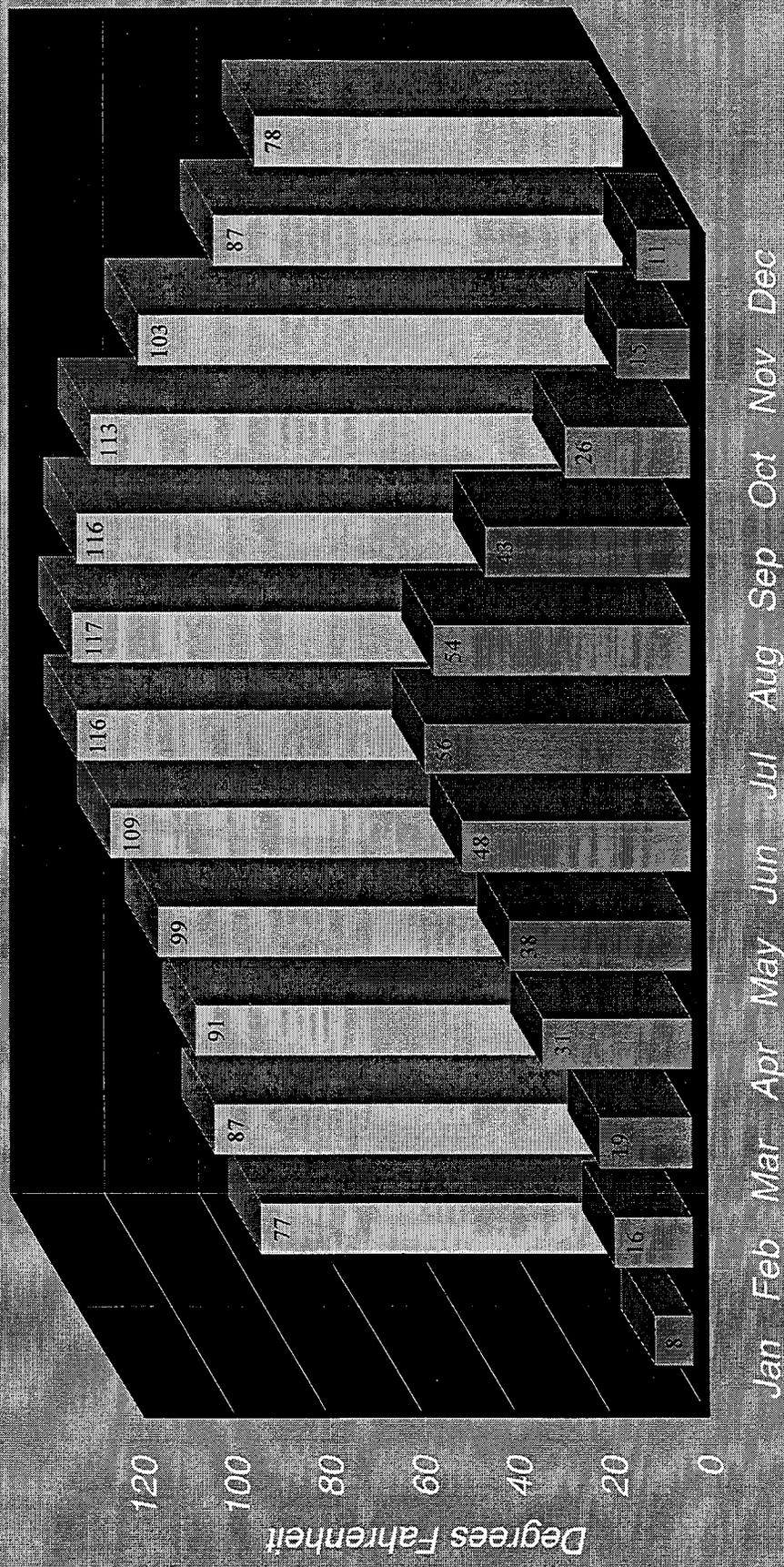


Figure 1. Record Maximum/Minimum Temperatures at McCarran International Airport, Las Vegas, NV

# Avg 90/100 Degree Days

Las Vegas, NV

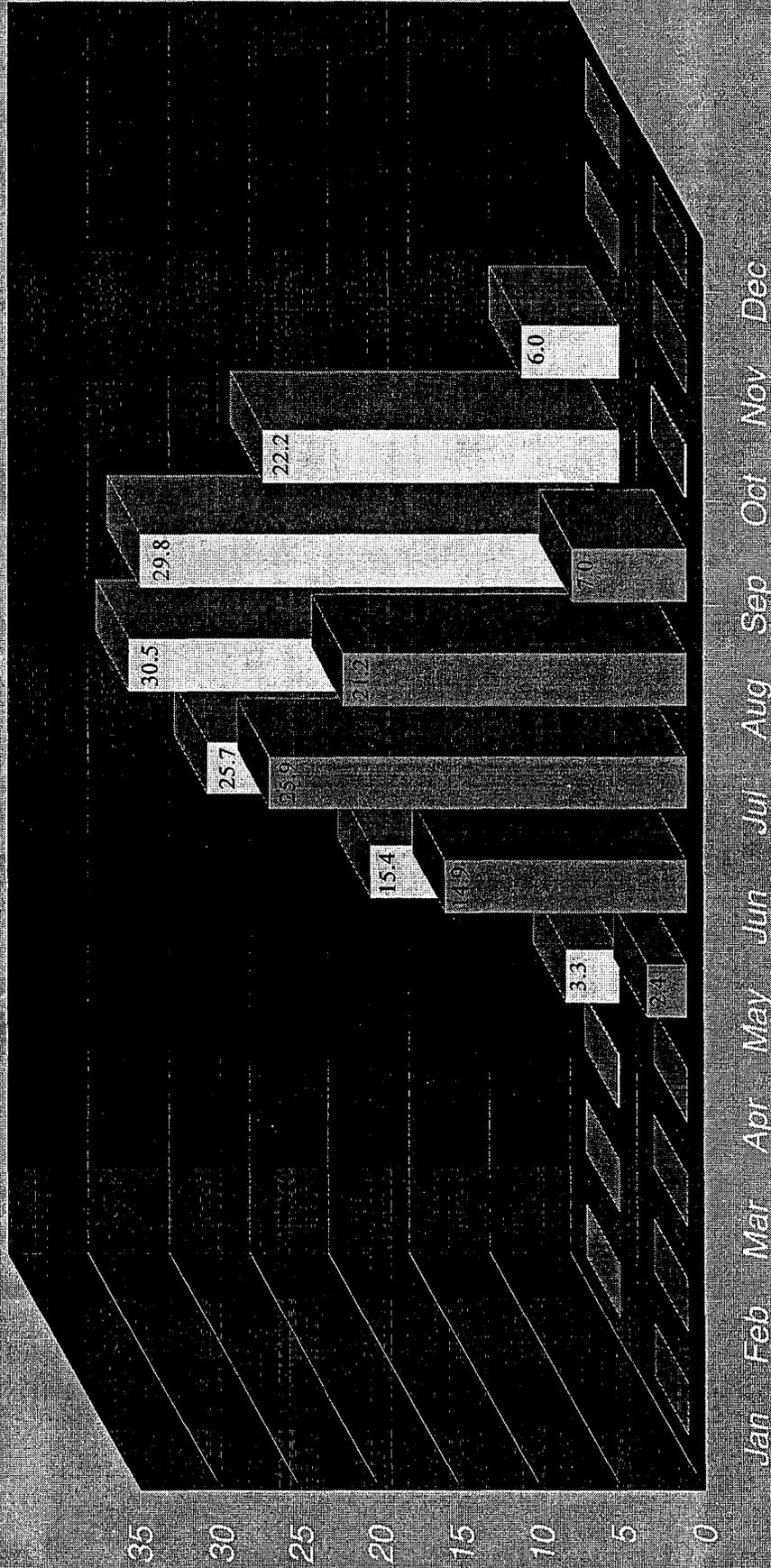


Figure 2. Average Number of Days Exceeding 90/100 Degrees F at McCarran International Airport, Las Vegas, NV

# Avg. # Thunderstorm Days

Las Vegas, NV

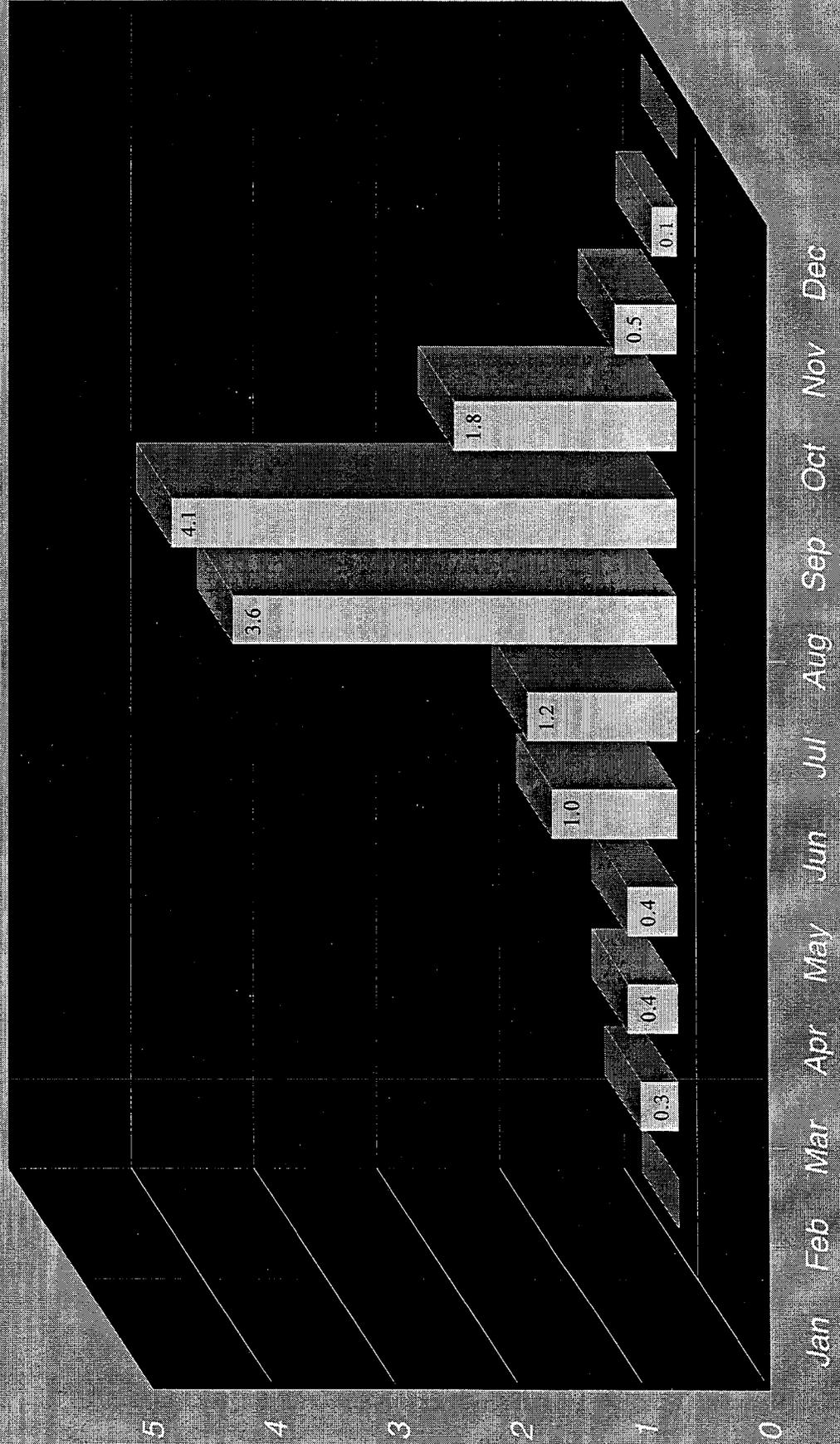


Figure 3. Average Number of Thunderstorm Days, By Month, At McCarran International Airport, Las Vegas, NV

# Average RH

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

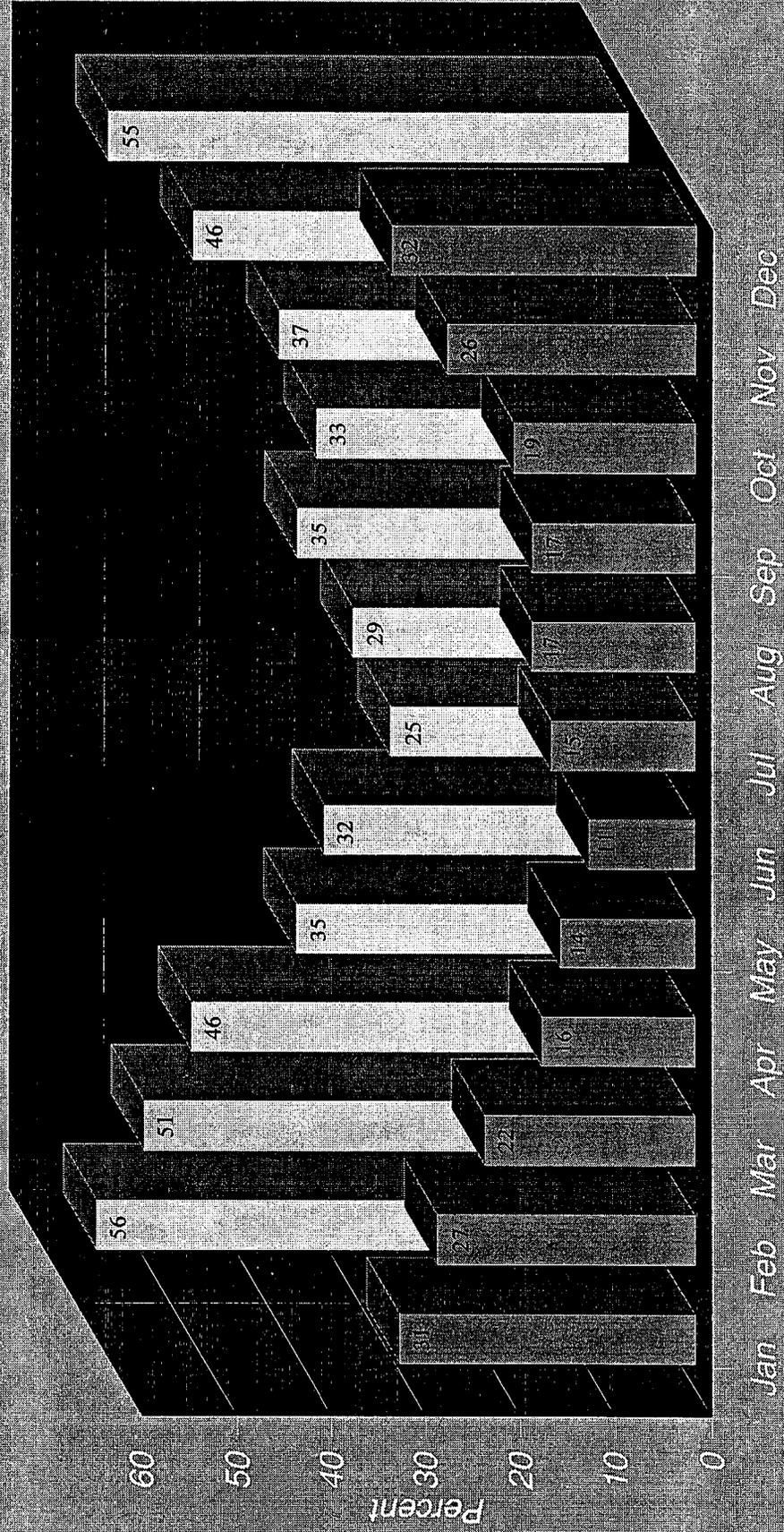


Figure 4. Average Relative Humidity at 4:00 a.m. and 4:00 p.m. PST for McCarran International Airport, Las Vegas, NV

# ANNUAL PRECIPITATION AT LAS VEGAS

## 1937 - 1994

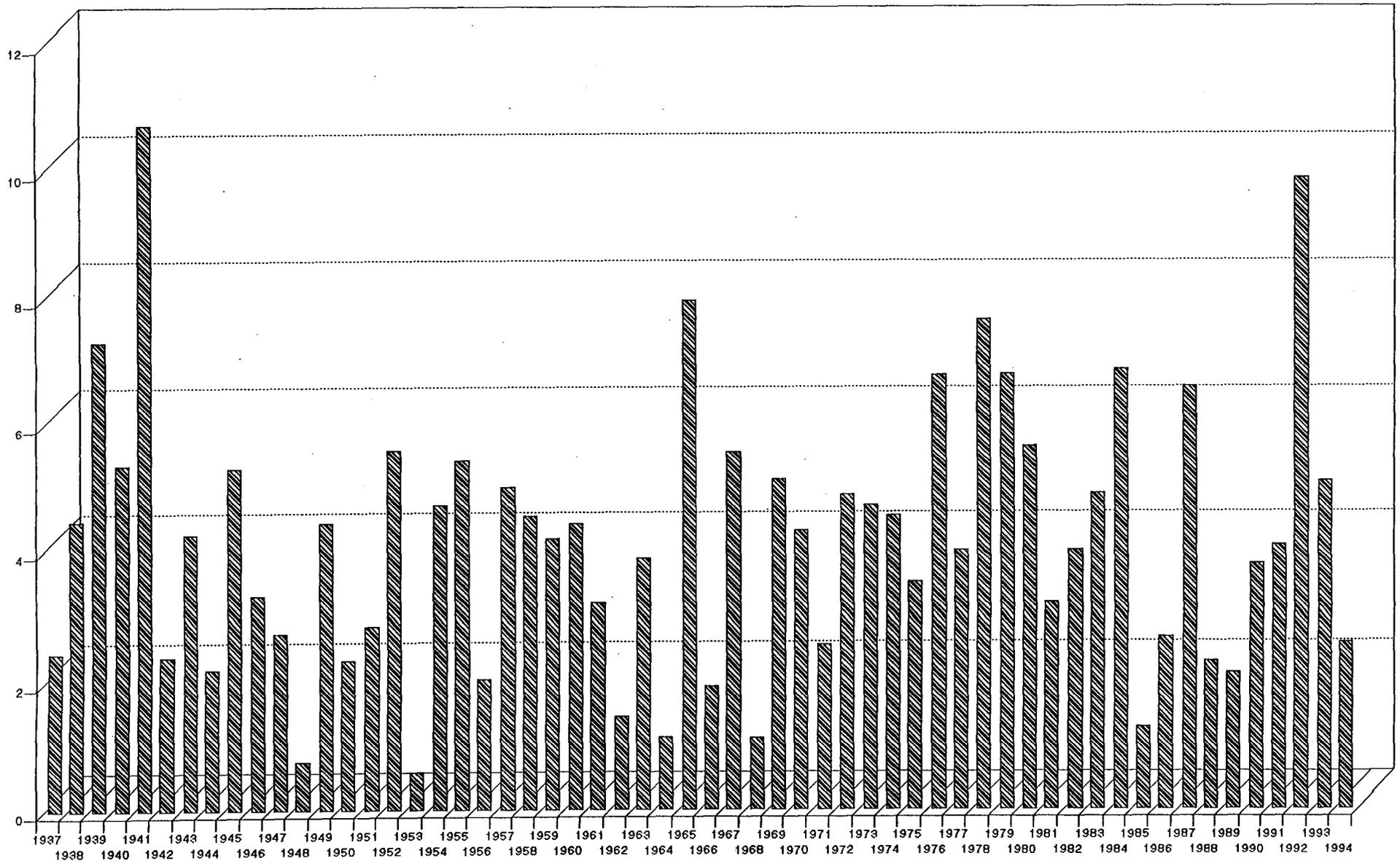


Figure 5. Annual Precipitation (in inches) at Las Vegas, NV (1937-1948 at Nellis; 1949-1994 at McCarran)

DAILY MAXIMUM TEMPERATURE (WHOLE DEGREES), JULY

YEAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	MEAN	
1931																																	
1932																																	
1933																																	
1934																																	
1935																																	
1936																																	
1937	112	115	116	110	89	100	100	102	102	95	96	96	103	105	106	106	107	107	108	112	112	114	112	110	114	108	110	102	99	99	102	105.5	
1938	98	95	93	96	100	102	105	110	107	108	108	103	105	108	110	111	109	107	112	113	106	107	104	105	98	101	103	108	108	111	115	105.4	
1939	107	102	99	99	98	100	106	113	111	112	108	112	115	114	110	107	106	106	109	112	113	111	108	110	108	101	97	94	98	102	106	106.3	
1940	105	108	112	110	113	113	110	108	109	107	110	107	112	107	106	103	99	97	100	103	107	111	111	113	110	106	103	101	103	104	106	106.9	
1941	101	103	104	107	108	113	112	112	112	112	109	108	109	107	108	108	100	106	103	109	113	111	103	89	92	92	98	93	102	106	104	105.0	
1942	110	111	111	113	114	114	112	111	110	106	108	109	111	108	98	96	104	105	107	110	113	113	115	117	115	109	111	107	108	109	105	109.4	
1943	96	97	103	105	107	106	109	112	113	114	109	106	102	105	105	104	105	97	90	99	102	104	108	111	114	116	115	110	112	111	112	106.4	
1944	110	108	105	105	105	106	105	105	103	104	103	105	106	106	107	107	108	108	110	107	107	106	102	105	104	105	105	106	109	105	104	105.8	
1945	108	113	111	110	110	112	111	102	102	105	108	110	108	108	107	106	109	94	97	104	111	112	105	110	109	112	109	104	104	106	105	108.2	
1946	105	106	106	105	105	105	106	105	106	108	106	105	107	103	105	108	108	91	105	105	106	106	96	105	103	107	110	107	110	107	112	105.5	
1947	107	108	104	104	106	91	95	104	105	104	102	107	108	111	100	106	108	113	113	101	105	107	104	107	106	108	108	111	109	110	112	106.0	
1948	108	103	102	104	100	102	102	105	107	109	109	109	108	110	113	112	110	108	107	106	105	105	89	103	106	109	107	104	109	108	111	106.0	
1949	103	100	98	89	103	102	102	103	107	106	105	103	106	110	114	112	112	108	106	104	102	103	102	98	101	103	103	109	105	105	104	104.0	
1950	115	115	111	108	97	84	92	93	95	98	102	106	111	111	110	108	104	103	102	105	107	105	102	100	101	91	103	100	99	100	94	102.3	
Sums,	1485	1484	1478	1465	1455	1450	1467	1485	1489	1482	1483	1486	1511	1513	1499	1496	1489	1450	1469	1490	1507	1515	1461	1483	1481	1468	1483	1451	1470	1483	1492	1481.7	
Means,	106.1	106.0	105.4	104.4	103.9	103.6	104.9	106.1	106.4	106.3	105.9	106.1	107.9	108.1	107.1	106.9	106.1	106.6	104.9	106.4	107.8	108.4	104.4	105.7	105.8	104.9	105.9	103.4	105.0	105.7	104.4	105.1.8	

Figure 6. Historical U.S. Weather Bureau Daily Maximum Temperature Summary, which includes the all-time record for Las Vegas, set July 24, 1942.

DAILY MINIMUM TEMPERATURE (WHOLE DEGREES), JANUARY

YEAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	MEAN	
1931																																	
1932																																	
1933																																	
1934																																	
1935																																	
1936																																	
1937	30	20	22	23	32	34	30	19	11	11	14	20	27	25	31	30	22	21	27	17	13	9	14	15	8	10	12	18	33	27	23	24.9	
1938	40	40	33	34	24	21	26	21	23	24	21	31	26	24	36	28	33	39	30	40	30	26	28	23	16	20	24	26	43	24	39	28.8	
1939	26	29	24	27	38	38	38	31	35	32	31	28	32	29	28	30	24	22	27	36	42	42	36	31	26	25	34	34	27	40	35	31.5	
1940	40	38	31	43	30	24	26	39	44	38	46	38	26	21	26	23	23	25	28	25	26	25	33	34	39	37	32	33	35	42	43	32.7	
1941	30	27	27	26	36	30	37	31	32	51	45	36	36	45	32	29	28	27	28	27	28	41	29	44	43	45	48	48	41	33	37	35.4	
1942	28	22	19	25	21	29	28	28	28	32	30	39	30	33	32	30	30	28	30	29	27	38	34	36	43	39	39	46	38	33	28	31.4	
1943	26	28	29	21	24	31	40	40	31	29	26	26	28	30	28	27	31	29	10	19	43	46	46	42	32	44	41	33	34	47	45	32.5	
1944	31	34	34	32	27	36	34	24	27	28	32	29	25	27	28	29	28	39	32	30	34	40	32	39	38	36	40	35	31	35	40	32.8	
1945	26	27	22	21	26	22	32	31	30	31	34	30	30	35	36	42	39	26	28	32	25	36	33	27	27	38	29	26	24	24	41	30.3	
1946	31	32	40	33	39	36	27	27	31	22	26	36	36	25	24	23	25	40	27	38	30	24	27	32	28	29	18	22	35	30	19	29.4	
1947	29	34	28	20	23	29	31	26	25	23	25	23	29	20	26	28	25	26	21	24	26	27	26	28	29	29	29	32	26	23	25	26.3	
1948	22	23	24	32	31	32	33	35	35	34	36	38	34	26	24	29	26	27	24	19	21	31	40	39	30	32	26	21	17	21	19	28.4	
1949	25	26	22	19	16	20	22	21	24	20	24	30	30	24	20	29	20	20	25	32	32	36	28	26	26	20	17	20	21	18	19	23.7	
1950	38	36	19	14	12	12	16	28	28	22	30	29	23	38	24	24	31	37	35	37	37	41	36	38	25	18	16	30	29	29	26	27.7	
Sums	422	416	374	370	379	404	420	401	406	397	420	433	412	462	395	401	385	466	372	465	414	462	442	454	410	422	465	424	434	426	439		
Means	30.1	29.7	26.7	26.4	27.1	25.9	30.0	28.7	29.0	28.4	30.0	30.9	29.4	28.7	25.2	28.6	27.5	29.0	26.6	28.9	29.6	33.0	31.6	32.4	29.3	30.1	28.9	30.3	31.6	30.4	31.4	30.5	

Figure 7. Historical U.S. Weather Bureau Daily Minimum Temperature Summary, which includes the all-time record for Las Vegas, set January 25, 1937.

## CLIMATOLOGICAL RECORD

PRECIPITATION (INCHES AND HUNDREDTHS) AND DEPARTURE FROM NORMAL																										
YEAR	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		ANNUAL	
	Total Precip.	Dep.																								
1031																										
1032																										
1033																										
1034																										
1035																										
1036																										
1037	.66		.06		.91		T		T		T		.70		T		.01		0		T		.11		2.45	
1038	.14		.89		1.17		.13		.13		.23		.46		.10		.27		.21		T		.63		4.46	
1039	1.55		.28		.40		.55		.11		.0		.25		.17		3.39		.07		.35		.18		7.30	
1040	.34		1.18		.23		.39		.13		.01		T		.07		.19		.05		.30		1.78		5.36	
1041	1.14		1.58		1.63		1.68		.21		T		.23		1.75		T		1.13		.33		.34		10.72	
1042	0		.06		.36		.06		T		0		T		1.77		0		.09		0		.05		2.39	
1043	1.01		.14		.52		.85		T		0		T		.04		.31		.03		T		1.34		4.24	
1044	.40		1.08		.06		T		.18		0		T		0		0		.01		.42		.05		2.20	
1045	.41		.10		1.58		T		.03		T		1.68		.40		0		.43		T		.65		5.28	
1046	.01		.04		.14		.07		.11		0		.08		.38		.51		.66		1.04		.25		3.29	
1047	T		T		T		T	0.24	0.11		0		.13		.16		.01		1.13		.22		.96		2.72	
1048	T		.33		.03		T		0		T		0		.06		T		.01		0		.33		.76	
1049	2.41		.62		.31		.08		.29		.07		.23		.25		T		.02		.01		.13		4.42	
1050	.02		.07		T		T		T		T		1.34		.29		.62		T		T		T		2.34	
Summ.	20.9		6.13		7.34		3.81		1.30		.31		5.80		5.44		6.10		3.24		2.67		6.80		57.90	
Means	.58		.41		.52		.27		.09		.02		.41		.39		.44		.27		.19		.47		4.14	

Figure 8. Historical U.S. Weather Bureau Precipitation Summary, which includes the rainiest year on record in Las Vegas (10.72" in 1941).

## DAILY SNOWFALL (INCHES AND TENTHS), JANUARY

YEAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL	
1981																																	
1982																																	
1983																																	
1984																																	
1985																																	
1986																																	
1987						T	T					1.5	T						T													1.5	
1988																																	0
1989																																	0
1990																																	0
1991																																	0
1992																																	0
1993																																	0
1994																																	0
1995																					1.0												1.0
1996																																	0
1997						T																											T
1998																																	T
1999		T								T	3.3	1.7	4.7	T						0.7	1.6	T				4.7	T					16.7	
2000																																	0
Sums		T				T	T			T	3.3	1.7	6.2	T					0.7	2.6	T				4.7	T						19.2	
Means																																	

Figure 9. Historical U.S. Weather Bureau Snowfall Summary, which includes the snowiest month on record in Las Vegas (16.7" in January 1949).

- 142 The Usefulness of Data from Mountaintop Fire Lookout Stations in Determining Atmospheric Stability. Jonathan W. Corey, April 1979. (PB296899/AS)
- 143 The Depth of the Marine Layer at San Diego as Related to Subsequent Cool Season Precipitation Episodes in Arizona. Ira S. Brenner, May 1979. (PB298817/AS)
- 144 Arizona Cool Season Climatological Surface Wind and Pressure Gradient Study. Ira S. Brenner, May 1979. (PB298900/AS)
- 146 The BART Experiment. Morris S. Webb, October 1979. (PB80 155112)
- 147 Occurrence and Distribution of Flash Floods in the Western Region. Thomas L. Dietrich, December 1979. (PB80 160344)
- 149 Misinterpretations of Precipitation Probability Forecasts. Allan H. Murphy, Sarah Lichtenstein, Baruch Fischhoff, and Robert L. Winkler, February 1980. (PB80 174576)
- 150 Annual Data and Verification Tabulation - Eastern and Central North Pacific Tropical Storms and Hurricanes 1979. Emil B. Gunther and Staff, EPHC, April 1980. (PB80 220486)
- 151 NMC Model Performance in the Northeast Pacific. James E. Overland, PMEL-ERL, April 1980. (PB80 196033)
- 152 Climate of Salt Lake City, Utah. Wilbur E. Figgins (Retired) and Alexander R. Smith. Fifth Revision, July 1992. (PB92 220177)
- 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. Oard, July 1980. (PB91 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)
- 158 Hydrology Practicum. Thomas Dietrich, September 1980. (PB81 134033)
- 159 Tropical Cyclone Effects on California. Arnold Court, October 1980. (PB81 133779)
- 160 Eastern North Pacific Tropical Cyclone Occurrences During Intraseasonal Periods. Preston W. Leitch and Gail M. Brown, February 1981. (PB81 205494)
- 161 Solar Radiation as a Sole Source of Energy for Photovoltaics in Las Vegas, Nevada, for July and December. Darryl Randerson, April 1981. (PB81 224503)
- 162 A Systems Approach to Real-Time Runoff Analysis with a Deterministic Rainfall-Runoff Model. Robert J.C. Burnash and R. Larry Ferral, April 1981. (PB81 224495)
- 163 A Comparison of Two Methods for Forecasting Thunderstorms at Luke Air Force Base, Arizona. LTC Keith R. Cooley, April 1981. (PB81 225393)
- 164 An Objective Aid for Forecasting Afternoon Relative Humidity Along the Washington Cascade East Slopes. Robert S. Robinson, April 1981. (PB81 23078)
- 165 Annual Data and Verification Tabulation, Eastern North Pacific Tropical Storms and Hurricanes 1980. Emil B. Gunther and Staff, May 1981. (PB82 230336)
- 166 Preliminary Estimates of Wind Power Potential at the Nevada Test Site. Howard G. Booth, June 1981. (PB82 127036)
- 167 ARAP User's Guide. Mark Mathewson, July 1981, Revised September 1981. (PB82 196783)
- 168 Forecasting the Onset of Coastal Gales Off Washington-Oregon. John R. Zimmerman and William D. Burton, August 1981. (PB82 127051)
- 169 A Statistical-Dynamical Model for Prediction of Tropical Cyclone Motion in the Eastern North Pacific Ocean. Preston W. Leitch, Jr., October 1981. (PB82195298)
- 170 An Enhanced Plotter for Surface Airways Observations. Andrew J. Spry and Jeffrey L. Anderson, October 1981. (PB82 153883)
- 171 Verification of 72-Hour 500-MB Map-Type Predictions. R.F. Quiring, November 1981. (PB82 158098)
- 172 Forecasting Heavy Snow at Wenatchee, Washington. James W. Holcomb, December 1981. (PB82 177783)
- 173 Central San Joaquin Valley Type Maps. Thomas R. Crossan, December 1981. (PB82 196064)
- 174 ARAP Test Results. Mark A. Mathewson, December 1981. (PB82 198103)
- 176 Approximations to the Peak Surface Wind Gusts from Desert Thunderstorms. Darryl Randerson, June 1982. (PB82 253089)
- 177 Climate of Phoenix, Arizona. Robert J. Schmidli, April 1969 (Revised December 1986). (PB87 142063/AS)
- 178 Annual Data and Verification Tabulation, Eastern North Pacific Tropical Storms and Hurricanes 1982. E.B. Gunther, June 1983. (PB85 106078)
- 179 Stratified Maximum Temperature Relationships Between Sixteen Zone Stations in Arizona and Respective Key Stations. Ira S. Brenner, June 1983. (PB83 249904)
- 180 Standard Hydrologic Exchange Format (SHEF) Version I. Phillip A. Pasteris, Vernon C. Bissel, David G. Bennett, August 1983. (PB85 106052)
- 181 Quantitative and Spatial Distribution of Winter Precipitation along Utah's Wasatch Front. Lawrence B. Dunn, August 1983. (PB85 106912)
- 182 500 Millibar Sign Frequency Teleconnection Charts - Winter. Lawrence B. Dunn, December 1983. (PB85 106276)
- 183 500 Millibar Sign Frequency Teleconnection Charts - Spring. Lawrence B. Dunn, January 1984. (PB85 111367)
- 184 Collection and Use of Lightning Strike Data in the Western U.S. During Summer 1983. Glenn Rasch and Mark Mathewson, February 1984. (PB85 110534)
- 185 500 Millibar Sign Frequency Teleconnection Charts - Summer. Lawrence B. Dunn, March 1984. (PB85 111359)
- 186 Annual Data and Verification Tabulation eastern North Pacific Tropical Storms and Hurricanes 1983. E.B. Gunther, March 1984. (PB85 109635)
- 187 500 Millibar Sign Frequency Teleconnection Charts - Fall. Lawrence B. Dunn, May 1984. (PB85 110930)
- 188 The Use and Interpretation of Isentropic Analyses. Jeffrey L. Anderson, October 1984. (PB85 132694)
- 189 Annual Data & Verification Tabulation Eastern North Pacific Tropical Storms and Hurricanes 1984. E.B. Gunther and R.L. Cross, April 1985. (PB85 187887AS)
- 190 Great Salt Lake Effect Snowfall: Some Notes and An Example. David M. Carpenter, October 1985. (PB86 119153/AS)
- 191 Large Scale Patterns Associated with Major Freeze Episodes in the Agricultural Southwest. Ronald S. Hamilton and Glenn R. Lusky, December 1985. (PB86 144474AS)
- 192 NWR Voice Synthesis Project: Phase I. Glen W. Sampson, January 1986. (PB86 145604/AS)
- 193 The MCC - An Overview and Case Study on Its Impact in the Western United States. Glenn R. Lusky, March 1986. (PB86 170651/AS)
- 194 Annual Data and Verification Tabulation Eastern North Pacific Tropical Storms and Hurricanes 1985. E.B. Gunther and R.L. Cross, March 1986. (PB86 170941/AS)
- 195 Radii Interpretation Guidelines. Roger G. Pappas, March 1986. (PB86 177680/AS)
- 196 A Mesoscale Convective Complex Type Storm over the Desert Southwest. Darryl Randerson, April 1986. (PB86 190998/AS)
- 197 The Effects of Eastern North Pacific Tropical Cyclones on the Southwestern United States. Walter Smith, August 1986. (PB87 106258AS)
- 198 Preliminary Lightning Climatology Studies for Idaho. Christopher D. Hill, Carl J. Gorski, and Michael C. Conger, April 1987. (PB87 180196/AS)
- 199 Heavy Rains and Flooding in Montana: A Case for Slantwise Convection. Glenn R. Lusky, April 1987. (PB87 185229/AS)
- 200 Annual Data and Verification Tabulation Eastern North Pacific Tropical Storms and Hurricanes 1986. Roger L. Cross and Kenneth B. Mielke, September 1987. (PB88 110895/AS)
- 201 An Inexpensive Solution for the Mass Distribution of Satellite Images. Glen W. Sampson and George Clark, September 1987. (PB88 114038/AS)
- 202 Annual Data and Verification Tabulation Eastern North Pacific Tropical Storms and Hurricanes 1987. Roger L. Cross and Kenneth B. Mielke, September 1988. (PB88 101935/AS)
- 203 An Investigation of the 24 September 1986 "Cold Sector" Tornado Outbreak in Northern California. John P. Monteverdi and Scott A. Braun, October 1988. (PB89 121297/AS)
- 204 Preliminary Analysis of Cloud-To-Ground Lightning in the Vicinity of the Nevada Test Site. Carven Scott, November 1988. (PB89 128649/AS)
- 205 Forecast Guidelines For Fire Weather and Forecasters - How Nighttime Humidity Affects Wildland Fuels. David W. Goens, February 1989. (PB89 162549/AS)
- 206 A Collection of Papers Related to Heavy Precipitation Forecasting. Western Region Headquarters, Scientific Services Division, August 1989. (PB89 230833/AS)
- 207 The Las Vegas McCarran International Airport Microburst of August 8, 1989. Carven A. Scott, June 1990. (PB90-240268)
- 208 Meteorological Factors Contributing to the Canyon Creek Fire Blowup, September 6 and 7, 1988. David W. Goens, June 1990. (PB90-240585)
- 209 Stratus Surge Prediction Along the Central California Coast. Peter Felsch and Woodrow Whitlatch, December 1990. (PB91-129239)
- 210 Hydrotools. Tom Egger, January 1991. (PB91-151787/AS)
- 211 A Northern Utah Soaker. Mark E. Struthwolf, February 1991. (PB91-168716)
- 212 Preliminary Analysis of the San Francisco Rainfall Record: 1849-1990. Jan Null, May 1991. (PB91-208439)
- 213 Idaho Zone Preformat, Temperature Guidance, and Verification. Mark A. Mollner, July 1991. (PB91-227405/AS)
- 214 Emergency Operational Meteorological Considerations During an Accidental Release of Hazardous Chemicals. Peter Mueller and Jerry Galt, August 1991. (PB91-235424)
- 215 WeatherTools. Tom Egger, October 1991. (PB93-184950)
- 216 Creating MOS Equations for RAWs Stations Using Digital Model Data. Dennis D. Gettman, December 1991. (PB92-131473/AS)
- 217 Forecasting Heavy Snow Events in Missoula, Montana. Mike Richmond, May 1992. (PB92-196104)
- 218 NWS Winter Weather Workshop in Portland, Oregon. Various Authors, December 1992. (PB93-146785)
- 219 A Case Study of the Operational Usefulness of the Sharp Workstation in Forecasting a Mesocyclone-Induced Cold Sector Tornado Event in California. John P. Monteverdi, March 1993. (PB93-178697)
- 220 Climate of Pendleton, Oregon. Claudia Bell, August 1993. (PB93-227536)
- 221 Utilization of the Bulk Richardson Number, Helicity and Sounding Modification in the Assessment of the Severe Convective Storms of 3 August 1992. Eric C. Evenson, September 1993. (PB94-131943)
- 222 Convective and Rotational Parameters Associated with Three Tornado Episodes in Northern and Central California. John P. Monteverdi and John Quadros, September 1993. (PB94-131943)
- 223 Climate of San Luis Obispo, California. Gary Ryan, February 1994. (PB94-162062)
- 224 Climate of Wenatchee, Washington. Michael W. McFarland, Roger G. Buckman, and Gregory E. Matzen, March 1994. (PB94-164308)
- 225 Climate of Santa Barbara, California. Gary Ryan, December 1994. (PB95-173720)
- 226 Climate of Yakima, Washington. Greg DeVoir, David Hogan, and Jay Neher, December 1994. (PB95-173688)
- 227 Climate of Kalispell, Montana. Chris Maier, December 1994. (PB95-169488)
- 228 Forecasting Minimum Temperatures in the Santa Maria Agricultural District. Wilfred Pi and Peter Felsch, December 1994. (PB95-171088)
- 229 The 10 February 1994 Oroville Tornado--A Case Study. Mike Staudenmaier, Jr., April 1995.
- 230 Santa Ana Winds and the Fire Outbreak of Fall 1993. Ivory Small, June 1995.
- 231 Washington State Tornadoes. Trest Huse, July 1995. (PB96-107024)
- 232 Fog Climatology at Spokane, Washington. Paul Frisbie, July 1995.
- 233 Storm Relative Isentropic Motion Associated with Cold Fronts in Northern Utah. Kevin B. Baker, Kathleen A. Hadley, and Lawrence B. Dunn, July 1995. (PB96-106596)
- 234 Some Climatological and Synoptic Aspects of Severe Weather Development in the Northwestern United States. Eric C. Evenson and Robert H. Johns, October 1995

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