

NOAA Technical Memorandum NWS WR-79

CLIMATE OF STOCKTON, CALIFORNIA

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Stockton, California

First printed July 1972
Revised September 1975

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CLIMATE OF STOCKTON, CALIFORNIA

I. GEOGRAPHICAL LOCATION

Stockton, the county seat of San Joaquin County, is located near the center of the Great Central Valley of California, on the southeast corner of the broad delta formed by the confluence of the San Joaquin and Sacramento Rivers (Figure 1). The surrounding terrain is flat, irrigated farm and orchard land, near sea level, with rivers and canals of the delta controlled by a system of levees.

Approximately 25 miles east and northeast of Stockton lie the foothills of the Sierra Nevada, rising gradually to an elevation of about 1,000 feet. Beyond the foothills, the mountains rise abruptly to the crest of the Sierra, at a distance of about 75 miles, with some peaks exceeding 9,000 feet in elevation. On a few days during the year, when atmospheric conditions are favorable, the downslope effect of a north or northeast wind can bring unseasonably dry weather to the delta area. The entire economy of the Great Valley depends upon underground water supplies and rivers which are fed in summer by melting snows piled up during winter on the windward (western) slopes of the Sierra Nevada.

To the west and southwest, the Coast Range, with peaks above 2,000 feet, form a barrier separating the Great Valley from the marine air which dominates the climate of the coastal communities. Several gaps in the Coast Range in the San Francisco Bay Area, however, permit passage inland of a sea breeze which fans out into the delta and has a moderating effect on summer heat, with the result that Stockton enjoys slightly cooler summer days than communities in the upper San Joaquin and Sacramento Valleys.

II. HISTORY OF WEATHER OBSERVATIONS

Precipitation records at Stockton began in 1851 and temperature records in 1871. Although the early location of the cooperative station is assumed to have been at the Stockton State Hospital, available records do not definitely place the station there until 1891. In 1949, the instruments were moved from the hospital grounds to Bonnie Lane Fire Station No. 4, and then, in 1967, to the present location at Fire Station No. 4 on Robin Hood Drive (Table 1).

Weather observations were also made concurrently at the Southern Pacific Depot, probably beginning in December 1891 and continuing through May 1918.

In 1914 another weather station was located at Atchison, Topeka, and Santa Fe Railroad Depot, the station agent serving as the observer.

This station was called Stockton No. 1. In 1937, the instruments were moved approximately two miles east-northeast from the depot to 519 North Golden Gate Avenue. This station was closed in September 1948.

An Army Air Corps weather station was operated at the Stockton Field from February 1941 to July 1946. From July 1946 to April 1947, the station was operated by United Airlines. In April 1947 a Civil Aeronautics Authority (now Federal Aviation Administration) weather station was established at the airport.

The U. S. Weather Bureau (now National Weather Service) took over operation of the FAA station in March 1963. In October 1963 the station was moved to its present location in the terminal building.

III. CLIMATOLOGICAL CHARACTERISTICS

Stockton's climate is characterized in summer by warm, dry days and relatively cool nights with clear skies and no rainfall, and in winter by mild temperatures and relatively light rains, with frequent heavy fogs.

The annual rainfall of Stockton averages between 13 and 14 inches, with 90 percent of this precipitation falling from November through April. Thunderstorms are infrequent, occurring on 3 or 4 days a year, and rain exceeding .50 inch on about 9 days a year. Since the Pacific storms which bring rainfall to this area are associated with above-freezing temperatures at sea level, snowfall is rare in the Stockton area.

Temperatures exceeding 100° can be expected on 6 days in July, and about 15 days during the entire summer. During these hot afternoons, the air is extremely dry with relative humidities generally less than 20 percent. Even on these hot days, however, temperatures will fall into the low sixties at night. In winter, nighttime temperatures on clear nights will fall to, or slightly below, freezing and will rise in the afternoon into the low fifties.

In late autumn and early winter, clear, still nights give rise to the formation of dense fogs which normally settle in during the night and burn off sometime during the day. However, in December and January, under stagnant atmospheric conditions the fog may last for as long as 4 to 5 weeks with only brief periods of clearing.

The following tables present averages and extremes of temperature, precipitation, wind and clouds that have been observed at Stockton during the period of record.

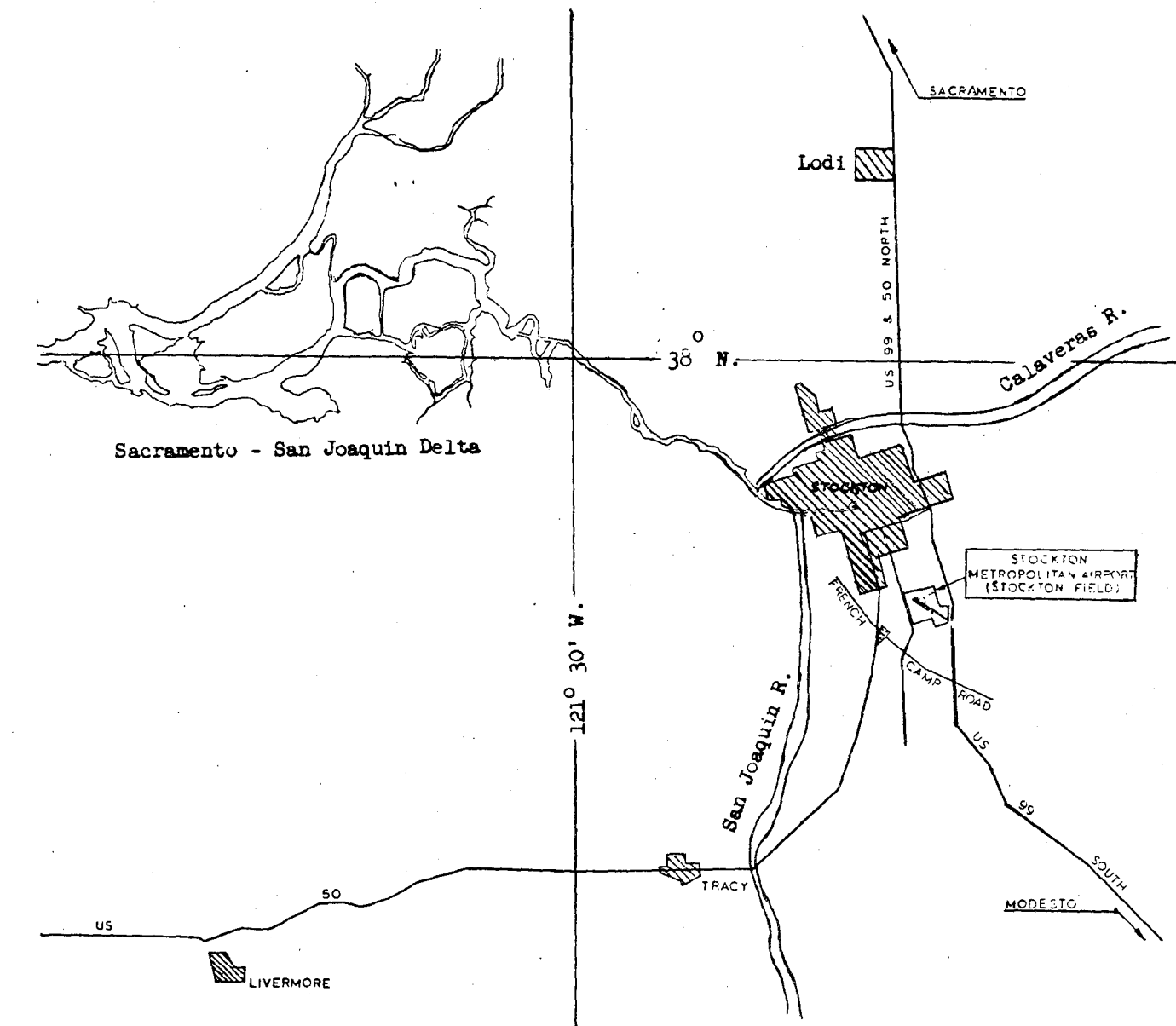


FIGURE 1.
STOCKTON AND VICINITY

TABLE I

STOCKTON COOPERATIVE WEATHER STATION LOCATIONS

1. Stockton State Hospital - 1891 - May 16, 1949.
2. Stockton Fire Station No. 4 - May 16, 1949 - December 1, 1967 - Bonnie Lane.
3. Stockton Fire Station No. 4 - December 1, 1967 to present - Robin Hood Drive.
4. Southern Pacific Depot - December 1891 - May 1918.
5. Atchison, Topeka, and San Fe Depot - 1914 - November 21, 1937.
6. 519 No. Golden Gate Avenue - November 21, 1937 - September 1948.

AIRPORT LOCATIONS

7. Stockton Airport - USAAF - February 1941 - July 1946.
8. Stockton Airport - United Airlines - July 1946 - April 10, 1947.
9. Stockton Airport - FAA - April 10, 1947 - March 4, 1963.
10. Stockton Airport - National Weather Service - March 4, 1963 - (El. 22 ft., 37°54'N, 121°15'W).

TABLE 2

DAILY NORMALS OF TEMPERATURE AND HEATING AND COOLING DEGREE DAYS 1941-70

STOCKTON, CALIF

METRO AP

JANUARY						FEBRUARY					MARCH					APRIL					MAY					JUNE					DAY
DAY	TEMPERATURE MAX	TEMPERATURE MIN	TEMPERATURE AVG	DEG HDD	DAY CDD	TEMPERATURE MAX	TEMPERATURE MIN	TEMPERATURE AVG	DEG HDD	DAY CDD	TEMPERATURE MAX	TEMPERATURE MIN	TEMPERATURE AVG	DEG HDD	DAY CDD	TEMPERATURE MAX	TEMPERATURE MIN	TEMPERATURE AVG	DEG HDD	DAY CDD	TEMPERATURE MAX	TEMPERATURE MIN	TEMPERATURE AVG	DEG HDD	DAY CDD	TEMPERATURE MAX	TEMPERATURE MIN	TEMPERATURE AVG	DEG HDD	DAY CDD	DAY
1	51	36	44	21	0	56	38	47	18	0	62	40	51	14	0	69	42	55	10	0	76	47	62	4	1	84	53	69	1	5	1
2	51	36	44	21	0	56	38	47	18	0	62	40	51	14	0	69	42	56	10	0	77	48	62	4	1	85	53	69	1	5	2
3	51	36	44	21	0	56	38	47	18	0	62	40	51	14	0	69	43	56	9	0	77	48	62	4	1	85	53	69	1	5	3
4	51	36	44	21	0	57	38	47	18	0	62	40	51	14	0	69	43	56	9	0	77	48	63	4	1	85	54	69	1	5	4
5	51	36	44	21	0	57	38	48	17	0	63	40	51	14	0	70	43	56	9	0	77	48	63	4	1	85	54	70	1	5	5
6	51	36	44	21	0	57	38	48	17	0	63	40	51	14	0	70	43	57	9	0	78	48	63	3	1	85	54	70	1	5	6
7	52	36	44	21	0	57	39	48	17	0	63	40	52	13	0	70	43	57	9	0	78	48	63	3	1	86	54	70	1	6	7
8	52	36	44	21	0	58	39	48	17	0	63	40	52	13	0	70	44	57	9	0	78	49	63	3	1	86	54	70	1	6	8
9	52	36	44	21	0	58	39	48	17	0	63	40	52	13	0	71	44	57	8	1	79	49	64	3	2	86	54	70	1	6	9
10	52	36	44	21	0	58	39	49	16	0	63	40	52	13	0	71	44	57	8	1	79	49	64	3	2	87	55	71	1	6	10
11	52	36	44	21	0	58	39	49	16	0	64	40	52	13	0	71	44	58	8	1	79	49	64	3	2	87	55	71	1	6	11
12	52	36	44	21	0	59	39	49	16	0	64	40	52	13	0	71	44	58	8	1	79	49	64	2	2	87	55	71	1	7	12
13	52	36	44	21	0	59	39	49	16	0	64	40	52	13	0	72	44	58	8	1	80	49	65	2	2	87	55	71	1	7	13
14	52	36	44	21	0	59	39	49	16	0	64	40	52	13	0	72	45	58	7	1	80	50	65	2	2	88	55	71	1	7	14
15	52	36	44	21	0	59	39	49	16	0	64	40	52	13	0	72	45	58	7	1	80	50	65	2	2	88	55	72	1	7	15
16	52	36	44	21	0	59	39	49	16	0	65	40	53	12	0	73	45	59	7	1	80	50	65	2	2	88	56	72	0	7	16
17	53	36	44	21	0	60	40	50	15	0	65	40	53	12	0	73	45	59	7	1	81	50	65	2	2	88	56	72	0	8	17
18	53	36	44	21	0	60	40	50	15	0	65	41	53	12	0	73	45	59	7	1	81	50	66	2	2	89	56	72	0	8	18
19	53	36	45	20	0	60	40	50	15	0	65	41	53	12	0	73	45	59	6	1	81	50	66	2	3	89	56	73	0	8	19
20	53	36	45	20	0	60	40	50	15	0	66	41	53	12	0	74	46	60	6	1	81	51	66	2	3	89	56	73	0	8	20
21	53	36	45	20	0	60	40	50	15	0	66	41	53	12	0	74	46	60	6	1	82	51	66	1	3	90	56	73	0	8	21
22	54	36	45	20	0	61	40	50	15	0	66	41	53	12	0	74	46	60	6	1	82	51	67	1	3	90	56	73	0	9	22
23	54	36	45	20	0	61	40	50	15	0	66	41	54	11	0	74	46	60	6	1	82	51	67	1	3	90	57	73	0	9	23
24	54	37	45	20	0	61	40	50	15	0	67	41	54	11	0	75	46	60	6	1	82	51	67	1	3	90	57	74	0	9	24
25	54	37	45	20	0	61	40	51	14	0	67	41	54	11	0	75	46	61	5	1	83	52	67	1	3	91	57	74	0	9	25
26	54	37	46	19	0	61	40	51	14	0	67	41	54	11	0	75	47	61	5	1	83	52	67	1	4	91	57	74	0	9	26
27	55	37	46	19	0	62	40	51	14	0	67	42	54	11	0	75	47	61	5	1	83	52	68	1	4	91	57	74	0	9	27
28	55	37	46	19	0	62	40	51	14	0	67	42	55	11	0	76	47	61	5	1	83	52	68	1	4	92	57	74	0	10	28
29	55	37	46	19	0	62	40	51	14	0	68	42	55	10	0	76	47	62	5	1	83	52	68	1	4	92	57	75	0	10	29
30	55	37	46	19	0	62	40	51	14	0	68	42	55	10	0	76	47	62	4	1	84	53	68	1	4	92	58	75	0	10	30
31	56	38	47	19	0						68	42	55	10	0						84	53	68	1	4						31

MONTHLY NORMALS		MONTHLY NORMALS		MONTHLY NORMALS		MONTHLY NORMALS		MONTHLY NORMALS		MONTHLY NORMALS	
MAX	52.8	MAX	59.0	MAX	64.8	MAX	72.4	MAX	80.3	MAX	88.1
MIN	36.3	MIN	39.2	MIN	40.6	MIN	44.8	MIN	50.0	MIN	55.4
MEAN	44.6	MEAN	49.1	MEAN	52.7	MEAN	58.6	MEAN	65.2	MEAN	71.8
HEATING	632	HEATING	445	HEATING	381	HEATING	214	HEATING	67	HEATING	15
COOLING	0	COOLING	0	COOLING	0	COOLING	22	COOLING	73	COOLING	219

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TABLE 2 (Continued)

DAILY NORMALS OF TEMPERATURE AND HEATING AND COOLING DEGREE DAYS 1941-70

STOCKTON, CALIF METRO AP

JULY						AUGUST						SEPTEMBER						OCTOBER						NOVEMBER						DECEMBER						DAY
TEMPERATURE	DEG	DAY	TEMPERATURE	DEG	DAY	TEMPERATURE	DEG	DAY	TEMPERATURE	DEG	DAY	TEMPERATURE	DEG	DAY	TEMPERATURE	DEG	DAY	TEMPERATURE	DEG	DAY	TEMPERATURE	DEG	DAY	TEMPERATURE	DEG	DAY	TEMPERATURE	DEG	DAY	TEMPERATURE	DEG	DAY	DAY			
DAY	MAX	MIN	AVG	HDD	CDD	DAY	MAX	MIN	AVG	HDD	CDD	DAY	MAX	MIN	AVG	HDD	CDD	DAY	MAX	MIN	AVG	HDD	CDD	DAY	MAX	MIN	AVG	HDD	CDD	DAY	MAX	MIN	AVG	HDD	CDD	DAY
1	93	58	75	0	10	95	59	77	0	12	91	57	74	0	9	84	53	69	0	4	71	45	58	7	0	57	39	48	17	0	1					
2	93	58	76	0	11	94	59	77	0	12	91	57	74	0	9	84	52	68	1	4	70	44	57	8	0	57	39	48	17	0	2					
3	93	58	76	0	11	94	59	76	0	12	91	57	74	0	9	84	52	68	1	4	70	44	57	8	0	57	39	48	17	0	3					
4	93	58	76	0	11	94	59	76	0	11	91	57	74	0	9	83	52	68	1	3	69	44	57	8	0	56	39	48	17	0	4					
5	94	58	76	0	11	94	58	76	0	11	91	57	74	0	9	83	52	67	1	3	69	44	56	9	0	56	39	47	18	0	5					
6	94	58	76	0	11	94	58	76	0	11	91	57	74	0	9	82	51	67	1	3	69	43	56	9	0	56	39	47	18	0	6					
7	94	58	76	0	11	94	58	76	0	11	91	56	74	0	9	82	51	67	1	3	68	43	56	9	0	55	39	47	18	0	7					
8	94	58	76	0	11	94	58	76	0	11	91	56	74	0	9	82	51	66	1	2	68	43	55	10	0	55	39	47	18	0	8					
9	94	58	76	0	12	94	58	76	0	11	90	56	73	0	8	81	51	66	1	2	67	43	55	10	0	55	39	47	18	0	9					
10	95	59	77	0	12	93	58	76	0	11	90	56	73	0	8	81	51	66	1	2	67	42	55	10	0	54	38	46	19	0	10					
11	95	59	77	0	12	93	58	76	0	11	90	56	73	0	8	80	50	65	1	2	66	42	54	11	0	54	38	46	19	0	11					
12	95	59	77	0	12	93	58	76	0	11	90	56	73	0	8	80	50	65	2	2	66	42	54	11	0	54	38	46	19	0	12					
13	95	59	77	0	12	93	58	75	0	11	90	56	73	0	8	80	50	65	2	1	65	42	53	12	0	53	38	46	19	0	13					
14	95	59	77	0	12	93	58	75	0	11	90	56	73	0	8	79	50	64	2	1	65	42	53	12	0	53	38	46	19	0	14					
15	95	59	77	0	12	93	58	75	0	10	89	56	73	0	8	79	49	64	2	1	64	41	53	12	0	53	38	46	19	0	15					
16	95	59	77	0	12	93	58	75	0	10	89	55	72	0	7	78	49	64	2	1	64	41	53	12	0	53	38	45	20	0	16					
17	95	59	77	0	12	93	58	75	0	10	89	55	72	0	7	78	49	63	3	1	63	41	52	13	0	53	38	45	20	0	17					
18	95	59	77	0	12	92	58	75	0	10	89	55	72	0	7	77	48	63	3	1	63	41	52	13	0	52	38	45	20	0	18					
19	95	59	77	0	12	92	58	75	0	10	88	55	72	0	7	77	48	63	3	1	63	41	52	13	0	52	38	45	20	0	19					
20	96	59	77	0	12	92	58	75	0	10	88	55	71	0	7	76	48	62	3	1	62	40	51	14	0	52	38	45	20	0	20					
21	96	59	77	0	12	92	58	75	0	10	88	55	71	0	6	76	48	62	4	0	62	40	51	14	0	52	37	45	20	0	21					
22	96	59	77	0	12	92	57	75	0	10	87	54	71	0	6	76	47	61	4	0	61	40	51	14	0	52	37	45	20	0	22					
23	96	59	77	0	12	92	57	75	0	10	87	54	71	0	6	75	47	61	4	0	61	40	50	15	0	52	37	44	21	0	23					
24	95	59	77	0	12	92	57	75	0	10	87	54	71	0	6	75	47	61	4	0	60	40	50	15	0	52	37	44	21	0	24					
25	95	59	77	0	12	92	57	75	0	10	87	54	70	0	6	74	47	60	5	0	60	40	50	15	0	51	37	44	21	0	25					
26	95	59	77	0	12	92	57	75	0	10	86	54	70	0	5	74	46	60	5	0	59	40	50	15	0	51	37	44	21	0	26					
27	95	59	77	0	12	92	57	74	0	10	86	54	70	0	5	73	46	60	5	0	59	40	49	16	0	51	37	44	21	0	27					
28	95	59	77	0	12	92	57	74	0	9	86	53	69	0	5	73	46	59	6	0	59	39	49	16	0	51	37	44	21	0	28					
29	95	59	77	0	12	92	57	74	0	9	85	53	69	0	5	72	45	59	6	0	58	39	49	16	0	51	37	44	21	0	29					
30	95	59	77	0	12	91	57	74	0	9	85	53	69	0	4	72	45	59	6	0	58	39	49	16	0	51	37	44	21	0	30					
31	95	59	77	0	12	91	57	74	0	9					71	45	58	7	0						51	36	44	21	0	31						

MONTHLY NORMALS

MAX 94.7
MIN 58.7
MEAN 76.7
HEATING 0
COOLING 363

MONTHLY NORMALS

MAX 92.8
MIN 57.8
MEAN 75.3
HEATING 0
COOLING 323

MONTHLY NORMALS

MAX 88.8
MIN 55.3
MEAN 72.1
HEATING 0
COOLING 217

MONTHLY NORMALS

MAX 78.1
MIN 48.9
MEAN 63.5
HEATING 88
COOLING 42

MONTHLY NORMALS

MAX 64.2
MIN 41.5
MEAN 52.9
HEATING 363
COOLING 0

MONTHLY NORMALS

MAX 53.3
MIN 37.9
MEAN 45.6
HEATING 601
COOLING 0

09/07/73

TABLE 3

NORMAL, HIGHEST, AND LOWEST MONTHLY AVERAGE TEMPERATURE
WITH YEAR OF OCCURRENCE
APRIL 1906 TO JULY 1975

MONTH	NORMAL MONTHLY AVERAGE	HIGHEST MONTHLY AVERAGE	YEAR	LOWEST MONTHLY AVERAGE	YEAR
JANUARY	44.6	53.6	1909	37.2	1937
FEBRUARY	49.1	57.1	1907	45.5	1949
MARCH	52.7	60.8	1934	49.4	1935
APRIL	58.6	65.3	1926	50.1	1967
MAY	65.2	71.5	1910	59.2	1930
JUNE	71.8	78.3	1960	65.4	1923
JULY	76.7	82.8	1906	71.4	1930
AUGUST	75.3	81.2	1967	70.3	1925
SEPTEMBER	72.1	75.7	1967	63.8	1930
OCTOBER	63.5	68.1	1907	58.2	1946
NOVEMBER	52.9	59.1	1909	48.4	1946
DECEMBER	45.6	51.1	1910	39.2	1963
ANNUAL	60.7	82.8	1906	37.2	1937

CLIMATOLOGICAL STANDARD NORMALS 1941 - 1970

TABLE 4

STOCKTON, CALIFORNIA

*NORMAL, HIGHEST, AND LOWEST AVERAGE MAXIMUM TEMPERATURE BY MONTH -
APRIL 1906 - JULY 1975

MONTH	NORMAL MONTHLY MAXIMUM	HIGHEST AVERAGE MAXIMUM	YEAR	LOWEST AVERAGE MAXIMUM	YEAR
JANUARY	52.8	60.9	1948	46.5	1937
FEBRUARY	59.2	65.3	1924	52.5	1969
MARCH	64.8	75.5	1926	59.9	1907
APRIL	72.4	80.7	1931	58.9	1967
MAY	80.3	86.5	1973	67.3	1915
JUNE	88.1	96.1	1960	78.7#	1923
JULY	94.7	99.4	1961	85.6	1915
AUGUST	92.8	98.5	1967	84.5	1925
SEPTEMBER	88.8	92.3	1952	76.1	1930
OCTOBER	78.1	83.3	1952	69.8	1920
NOVEMBER	64.2	72.0	1939	56.9	1972
DECEMBER	53.3	62.9	1958	43.1	1963
ANNUAL	74.1	99.4	1961	43.1	1963

TABLE 5

HIGHEST AND LOWEST DAILY MAXIMUM TEMPERATURE BY MONTH
JANUARY 1907 TO JULY 1975

MONTH	HIGHEST TEMP.	DAY	YEAR	LOWEST MAXIMUM TEMP.	DAY	YEAR
JANUARY	75	9	1953	32#	6	1961
FEBRUARY	77	26	1926	41	1	1972
MARCH	89	9	1946	46	4	1951
APRIL	98	21	1931	49	16	1942
MAY	103#	29	1973	55	13	1968
JUNE	111#	21	1961	59	8	1964
JULY	114	14	1972	72	30	1966
AUGUST	109	10	1971	64	31	1964
SEPTEMBER	108#	2	1950	66#	27	1965
OCTOBER	101	2	1952	55	16	1971
NOVEMBER	88	5	1950	42	28	1952
DECEMBER	74#	5	1940	32	20	1965
ANNUAL	114	14	1972	32#	20	1965

*Climatological Standard Normals (1941 - 1970).

#Also on other dates, months, or years.

TABLE 6

STOCKTON, CALIFORNIA

NUMBER OF DAYS PER YEAR WITH MAXIMUM TEMPERATURES 90°, 100°, 105° OR HIGHER
1906 - 1974

(1) 90° OR HIGHER		(2) 100° OR HIGHER		(3) 105° OR HIGHER	
DAYS	YEAR	DAYS	YEAR	DAYS	YEAR
102	1970	38	1961	17	1961
100	1960	34	1960	15	1960
99	1967	27	1926	9	1950
99	1974	26	1967	8	1926
97	1961	24	1970	7	1931
96	1971	23	1931	6	1959
93	1952	23	1971	6	1972
89	1926	23	1973	6	1973
89	1969	22	1952	6	1917
88	1971	22	1966	5	1906
87	1972	21	1969	5	1942
85	1936	21	1973	5	1964
85	1939	21	1974	5	1967
85	1966	20	1933	5	1971
85	1962				
80	1958				

(1) Only years with 80 or more days tabulated.

(2) Only years with 20 or more days tabulated.

(3) Only years with 5 or more days tabulated.

TABLE 7

AVERAGE NUMBER OF DAYS PER MONTH WITH MAXIMUM TEMPERATURES 90°, 100°, 105° OR HIGHER

APRIL 1906 - DECEMBER 1974

MONTH	90° OR HIGHER	100° OR HIGHER	105° OR HIGHER
APRIL	*	-	-
MAY	4	*	-
JUNE	11	2	*
JULY	21	3	1
AUGUST	18	3	*
SEPTEMBER	10	1	*
OCTOBER	1	-	-
ANNUAL AVERAGE	65	9	1

*Less than 1 day.

TABLE 8

STOCKTON, CALIFORNIA

GREATEST NUMBER OF CONSECUTIVE DAYS WITH 90° OR HIGHER IN JUNE, JULY,
AUGUST, SEPTEMBER, AND OCTOBER
JUNE 1906 - OCTOBER 1974

(Only Periods of 20 or More Days Tabulated)

<u>YEAR</u>	<u>PERIOD</u>	<u>DAYS</u>
1967	June 21 - August 27	68
1971	July 18 - August 27	41
1959	July 8 - August 3	27
1966	July 31 - August 25	26
1964	July 5 - July 29	25
1969	July 25 - August 17	24
1961	July 6 - July 29	24
1954	July 11 - August 4	24
1953	July 1 - July 23	23
1952	August 13 - September 3	22
1952	September 14 - October 5	22
1960	July 31 - August 20	21
1948	August 25 - September 14	21
1939	July 7 - July 27	21
1937	August 2 - August 22	21
1933	July 10 - June 30	21
1973	June 24 - July 13	20
1962	July 13 - August 1	20
1950	June 26 - July 15	20

Average Number of Consecutive Days with 90 or Higher 20

Earliest in the Spring - April 11, 1908.

Latest in the Fall - October 25, 1959.

TABLE 9
STOCKTON, CALIFORNIA

*NORMAL, HIGHEST, AND LOWEST AVERAGE MINIMUM TEMPERATURE BY MONTH, APRIL 1906 - JULY 1975

NORMAL	NORMAL MONTHLY MINIMUM	HIGHEST AVERAGE MINIMUM	YEAR	LOWEST AVERAGE MINIMUM	YEAR
JANUARY	36.3	46.3	1909	27.0	1949
FEBRUARY	39.2	50.2	1907	33.0	1964
MARCH	40.6	51.5	1911	36.7	1935
APRIL	44.8	56.1	1907	40.0	1929
MAY	50.0	60.8	1910	43.7	1908
JUNE	55.4	65.3	1906	50.3	1946
JULY	58.7	70.4	1906	53.7	1940
AUGUST	57.8	68.6	1913	50.7	1946
SEPTEMBER	55.3	61.2	1967	49.2	1946
OCTOBER	48.9	57.8	1907	41.1	1946
NOVEMBER	41.5	51.6	1913	32.6	1938
DECEMBER	37.9	44.7	1950	30.1	1932
ANNUAL	47.2	70.4	1906	27.0	1949

TABLE 10

*NORMAL, HIGHEST, AND LOWEST DAILY MINIMUM TEMPERATURE BY MONTH, APRIL 1906 - JULY 1975

MONTH	LOWEST TEMPERATURE	DAY	YEAR	HIGHEST MINIMUM TEMPERATURE	DAY	YEAR
JANUARY	16	11	1949	57#	21	1970
FEBRUARY	23#	1	1948	57#	23	1968
MARCH	26	14	1954	58	29	1974
APRIL	29	6	1929	58#	17	1954
MAY	36#	1	1948	69#	29	1973
JUNE	38	21	1928	76	27	1973
JULY	45	23	1924	80	25	1974
AUGUST	42	17	1957	76	6	1961
SEPTEMBER	39#	27	1948	71	7	1969
OCTOBER	28	29	1946	62	3	1952
NOVEMBER	24	13	1938	62#	20	1950
DECEMBER	17#	15	1940	61	23	1964
ANNUAL	16	11	1949	80	25	1974

*Climatological Standard Normals (1941 - 1960).

#Also on Other Dates, Months, and Years.

TABLE 11

STOCKTON, CALIFORNIA

AVERAGE, HIGHEST, AND LOWEST COOLING DEGREE-DAYS BY MONTH, 1906 - 1974
(Base 75 Degrees)

MONTH	AVERAGE	HIGHEST	YEAR	LOWEST	YEAR
MAY	13	141	1961	0	Many Years
JUNE	44	229	1961	2	1923
JULY	87	246	1906	3	1925
AUGUST	57	199	1967	0	1925
SEPTEMBER	22	77	1952	0	Several Years
OCTOBER	1	18	1952	0	Most Years
ANNUAL	224	591	1961	41	1930

A cooling degree-day is equal to the average temperature for the day minus 75°F. with negative difference being counted as zero. The cooling degree-day is used by utility companies to determine cooling requirements. It is also used to help determine the size of refrigeration plants needed. The accumulation of "cooling degree-days" begins January 1.

TABLE 12

FREEZE DATA - STOCKTON AIRPORT
JANUARY 1907 - DECEMBER 1974

AVERAGE DATE IN THE SPRING	AVERAGE DATE IN THE FALL	LATEST DATE IN THE SPRING	EARLIEST DATE IN THE FALL
February 20	December 1	April 24, 1964	October 26, 1939

*FREEZE-FREE PERIOD

AVERAGE LENGTH	LONGEST		SHORTEST	
	DAYS	DATE	DAYS	DATE
286	365	1908 from January 1 to December 31	205	1964 from April 24 - November 16

*Freeze-free period is the number of days between the last freeze (32°F. or below) in the spring and the first freeze (32° or below) in the fall.

TABLE 13

NUMBER OF DAYS PER YEAR WITH MINIMUM TEMPERATURE 32°F OR LOWER (AVERAGE 25)

LEAST NUMBER OF DAYS		GREATEST NUMBER OF DAYS	
<u>Days</u>	<u>Year</u>	<u>Days</u>	<u>Year</u>
0	1908	65	1929
1	1907, 1909	53	1939
5	1911	51	1949
6	1925, 1934	50	1956
7	1910	45	1947
9	1942, 1973	42	1938, 1948
10	1914, 1958, 1970	41	1946
11	1920	38	1935, 1955
12	1915, 1941	37	1930, 1937, 1964
13	1921	36	1932
16	1965	35	1936
17	1952, 1974	33	1937

TABLE 14

PROBABILITY (%) OF OBSERVING 32° OR LOWER, 28° OR LOWER, AND 24° OR LOWER (1)

<u>Probability (%)</u>	<u>Later Than Given Date In the Spring (2)</u>			<u>Earlier Than Given Date In the Fall (3)</u>		
	<u>32° or Lower</u>	<u>28° or Lower</u>	<u>24° or Lower</u>	<u>32° or Lower</u>	<u>28° or Lower</u>	<u>24° or Lower</u>
90	Feb 4			Dec 7		
80	Feb 14	Jan 20		Dec 1	Dec 31	
70	Feb 22	Jan 29		Nov 26	Dec 21	
60	Feb 28	Feb 4		Nov 22	Dec 13	
50	Mar 6	Feb 10		Nov 18	Dec 7	
40	Mar 12	Feb 16	Jan 1	Nov 14	Dec 1	
30	Mar 18	Feb 22	Jan 12	Nov 10	Nov 26	
20	Mar 26	Mar 1	Jan 21	Nov 5	Nov 20	Dec 9
10	Apr 7	Mar 16	Jan 30	Oct 28	Nov 11	Nov 18

(1) Period of Record: 1931 - 1960.

(2) Spring Season: Later than January 1.

(3) Fall Season: Up through December 31.

TABLE 15

STOCKTON, CALIFORNIA

GREATEST NUMBER OF CONSECUTIVE DAYS WITH MINIMUM 32° OR LOWER IN
NOVEMBER, DECEMBER, JANUARY, AND FEBRUARY
JANUARY 1907 - JULY 1975

(Only periods of 12 days or more are tabulated)

YEAR	PERIOD	DAYS
1918 - 19	December 22 - January 9	19
1963	January 7 - January 25	19
1949	January 3 - January 18	16
1936	November 30 - December 14	15
1930	December 18 - December 31	14
1946 - 47	December 28 - January 10	14
1929	January 4 - January 16	13
1947	January 12 - January 24	13
1929	February 7 - February 18	12
1929	November 13 - November 24	12
1935	December 14 - December 25	12
1960 - 61	December 27 - January 7	12
Yearly Average		25

AVERAGE NUMBER OF DAYS WITH MINIMUM TEMPERATURE 32° OR LOWER

JANUARY	9 Days	NOVEMBER	3 Days
FEBRUARY	4 Days	DECEMBER	8 Days
MARCH	1 Day	ANNUAL AVERAGE	25 Days

TABLE 16

STOCKTON, CALIFORNIA

NORMAL, HIGHEST, AND LOWEST HEATING DEGREE-DAYS BY MONTH (BASE 65 DEGREES)
JULY 1907 - JULY 1975

MONTH	NORMAL	HIGHEST	YEAR	LOWEST	YEAR
July	0	5	1948	0	Most
August	0	6	1964	0	Most
September	0	52	1930	0	Few
October	88	202	1920	10	1907
November	363	487	1946	123	1937
December	601	794	1963	425	1910
January	632	854	1937	353	1909
February	445	549	1956	216	1907
March	381	478	1935	126	1934
April	214	442	1967	47	1907
May	67	206	1933	3	1907
June	15	58	1929	0	1974*
Seasonal	2806	3331	1954-55	1834	1909-10

A "Heating Degree-Day" is a measure of the departure of the average daily temperature from 65°F with negative differences being counted as zero. This means that each degree that the daily average temperature is below 65°F is equal to one degree day. The degree day is applied to fuel and power consumption and is used by utility companies, for example, to determine heating requirements. Industry has found that the preferred household temperature of 72°F is too high a base for their computations because of the certain amount of heat generated by appliances, electric light, human bodies, etc.

The accumulation of "Heating Degree-Days" begins on July 1.

*Also on 11 years.

TABLE 17

NORMAL (1931-60), MAXIMUM, AND MINIMUM MONTHLY AND SEASONAL PRECIPITATION
(1851 - 1975)

MONTH	NORMAL	MAXIMUM	YEAR	MINIMUM	YEAR
July	.01	.61	1974	.00	Most Years
August	.03	.85	1864	.00	Most Years
September	.17	3.68	1918	.00	Many Years
October	.72	3.39	1889	.00	Several Years
November	1.72	6.72	1864	.00	1884 1890 1929 1933 1936
December	2.68	13.41	1852	.00	1876
January	2.91	15.04	1862	.18	1948
February	2.11	8.94	1854	.05	1964
March	1.96	7.29	1903	.00	1934
April	1.37	6.28	1880	.00	1875 1877 1898 1909 1949
May	.42	4.84	1883	.00	Many Years
June	.07	1.36	1892	.00	Many Years
Seasonal	14.17	35.54	1861/62	6.73	1870/71

TABLE 18
STOCKTON, CALIFORNIA

GREATEST NUMBER OF DAYS WITH TRACE OR MORE AND .01 OR MORE PRECIPITATION BY MONTH AND YEAR OF OCCURRENCE AND AVERAGE NUMBER OF DAYS WITH .01 OR MORE BY MONTH 1907 - 1974

MONTH	TRACE OR MORE	YEAR	.01 OR MORE	YEAR	AVERAGE .01 OR MORE
JANUARY	21	1940, 1969 1970	21	1940	10
FEBRUARY	21	1915, 1969	21	1915	9
MARCH	19	1958	18	1907	8
APRIL	18	1948, 1967	16	1967	5
MAY	14	1957	11	1915	3
JUNE	7	1964	4	1907	1
JULY	3	1974	2	1974	0
AUGUST	4	1961, 1965	1*	10 Years	0
SEPTEMBER	6	1918	5	1918	1
OCTOBER	11	1945	8	1972	3
NOVEMBER	17	1972	15	1973	7
DECEMBER	23	1964	19	1970	9
ANNUAL	100	1941	81	1973	56

TABLE 19
STOCKTON, CALIFORNIA

GREATEST NUMBER OF DAYS WITH .10 INCH OR MORE, .50 INCH OR MORE, AND 1.00 INCH OR MORE (1907 - 1974)

MONTH	.10 OR MORE	YEAR	.50 OR MORE	YEAR	1.00 OR MORE	YEAR
JANUARY	17	1909	9	1911	4	1911
FEBRUARY	15	1936	7	1936	2	1922 1962
MARCH	13	1958	4	1949	2	1970 + 5 earlier years
APRIL	11	1967	3	1926 1951 1958	2	1926
MAY	6	1915	3	1915 1925	1	1932 1948
JUNE	3	1907	NONE		NONE	
JULY	2	1974	NONE		NONE	
AUGUST	1	1965 + 4 earlier years	NONE		NONE	
SEPTEMBER	4	1918	1	1912 1918 1959	1	1918 1959
OCTOBER	5	1920 1945 1947	2	1973 + 5 earlier years	2	1945
NOVEMBER	10	1913 1973	6	1972	3	1970
DECEMBER	13	1970	6	1922	2	1973 + 4 earlier years
ANNUAL	50	1941	18	1940	7	1943 1970

TABLE 20
 SNOWFALL OCCURRENCES (1)(2)
 OCCURRENCE OF SNOWFALL IN STOCKTON (JANUARY 1906 - JULY 1975)

YEAR	DATE	SNOWFALL
1916	January 1	5.0
1922	January 29	2.5
1922	January 30	T
1930	January 12	2.0
1932	December 9	1.0
1950	January 4	T
1968	December 20	T
1971	February 27	T
1972	February 3	T
1972	December 6	T
1972	December 12	T

(1) Sleet was included in snowfall totals beginning with July 1948.

Note: The item "Ice Pellets" is now internationally recognized and includes solid grains of ice (sleet) and particles of snow pellets encased in a thin layer of ice. In most cases snowfall in Stockton is estimated because it usually melts as fast as it falls.

T = Trace, less than .01 melted.

(2) Snowfall data is for city office through 1940; airport data thereafter.

TABLE 21
 STOCKTON, CALIFORNIA
 AVERAGE NUMBER OF CLEAR, PARTLY CLOUDY, CLOUDY, AND HEAVY FOG DAYS (1941 - 1974)

MONTH	CLEAR	PARTLY CLOUDY	CLOUDY	HEAVY FOG
JANUARY	5	8	18	12
FEBRUARY	8	6	14	7
MARCH	11	8	12	2
APRIL	11	9	10	1
MAY	16	9	6	0
JUNE	21	6	3	0
JULY	28	3	0	0
AUGUST	26	3	2	0
SEPTEMBER	25	4	1	0
OCTOBER	19	6	6	2
NOVEMBER	10	8	12	9
DECEMBER	6	7	18	11
ANNUAL	186	77	102	44

TABLE 22
STOCKTON, CALIFORNIA

GREATEST NUMBER OF CONSECUTIVE DAYS WITH HEAVY FOG FOR THE MONTHS OF NOVEMBER, DECEMBER, JANUARY, AND FEBRUARY* (JANUARY 1942 - JULY 1975)

YEAR	MONTH	DAYS
1963-64	December 9 - January 5	28
1962-63	December 25 - January 10	16
1975	January 12 - 25	14
1959	November 12 - 18	12
1967-68	December 26 - January 6	12
1954	November 17 - 27	11
1949	November 24 - December 3	10
1956	December 13 - December 22	10
1942	December 10 - 18	9
1944	December 5 - 13	9
1953	December 12 - 19	8
1958	January 15 - 22	8
1961	January 6 - 13	8
1965	January 13 - 20	8
1969	November 24 - December 1	8

Average based on period - 8.

*Only periods of 8 or more days are tabulated.

TABLE 23

GREATEST NUMBER OF DAYS OF HEAVY FOG IN ONE MONTH (JANUARY 1942 - JULY 1975)

MONTH-YEAR	DAYS	MONTH-YEAR	DAYS
December - 1963	25	December - 1961	18
December - 1962	23	January - 1975	17
January - 1961	23	January - 1968	17
January - 1962	19	December - 1944	16
January - 1963	19	January - 1942	15
February - 1963	19	December - 1947	14
January - 1972	19	November - 1951	14
December - 1973	19	November - 1954	14
November - 1949	18	January - 1965	14
January - 1958	18	February - 1968	14

(Only months with 14 or more days of heavy fog were tabulated.)

Heavy Fog - Visibility restricted to 1/4 mile or less during any period of a 24-hour day from midnight to midnight.

TABLE 24
 STOCKTON, CALIFORNIA
 AVERAGE RELATIVE HUMIDITY

	<u>4 a.m.</u>	<u>10 a.m.</u>	<u>4 p.m.</u>	<u>10 p.m.</u>
January	91	85	70	88
February	90	77	62	83
March	87	68	53	78
April	83	58	45	77
May	80	50	38	69
June	73	41	28	57
July	69	41	26	53
August	72	44	28	56
September	72	47	30	58
October	78	57	42	68
November	88	74	58	82
December	94	87	77	91
Annual	81	61	46	72

TABLE 25
STOCKTON, CALIFORNIA

HOLIDAY WEATHER INFORMATION

Holiday	Average Maximum Temp.	Average Minimum Temp.	Highest Temp.	Year	Lowest Temp.	Year	Frequency of Trace or More of Precipitation (Percentage)
New Year's Day January 1	50	36	61	1923	24	1919	34
Washington's Birthday February	62	41	73	1947	28	1951	36
Easter Season March - April 14	69	44	91	1942	29	1944	31*
Memorial Day May 30	81	54	102	1910	42	1908	0
Independence Day July 4	93	59	110	1931	47	1947	0
Labor Day Week September 1 - 7	88	57	108	1950	41	1939	1*
Halloween October 31	71	44	83	1966	31	1935	1
Thanksgiving Day November 22 - 28	52	38	78	1939	26	1947	45*
Christmas Day December 25	53	37	67	1915	21	1930	49

*These percentages relate to the probability of precipitation on any one day of the given period.

TABLE 26
STOCKTON, CALIFORNIA

AVERAGE SPEED, PREVAILING DIRECTION, AND HIGHEST ONE-MINUTE SPEED
(1941 - 1974)

MONTH	AVERAGE SPEED (MPH)	PREVAILING DIRECTION	HIGHEST ONE-MINUTE WIND SPEED (MPH)	DIRECTION	DAY/ YEAR
January	6.4	Southeast	46	Southeast	24/1967
February	6.8	Southeast	47	Southeast	1/1945
March	7.4	West	53	Southeast	16/1945
April	8.0	West	56	Northwest	1/1945
May	8.9	West	40	Southwest	20/1946
June	9.2	West	40	Northwest	20/1947
July	8.2	Northwest	29	Southwest	29/1945
August	7.6	Northwest	33	Southwest	24/1945
September	6.9	Northwest	38	Northwest	2/1961
October	6.2	Northwest	46	Southeast	29/1945
November	5.5	Southeast	40	Southeast	13/1965
December	5.9	Southeast	44	Southeast	28/1965
Annual	7.3	West	56	Northwest	4/1/1945

TABLE 27

AVERAGE, HIGHEST, AND LOWEST SEA-LEVEL PRESSURE
JANUARY 1957 - DECEMBER 1974

MONTH	AVERAGE	HIGHEST	DAY	YEAR	LOWEST	DAY	YEAR
January	30.11	30.63	26	1965	29.39	21	1969
February	30.05	30.50	12	1960	29.45	11	1973
March	30.01	30.59	2	1971	29.49	22	1964
April	29.98	30.38	3	1963	29.49	1	1958
May	29.90	30.34	16	1971	29.61	4	1969
June	29.84	30.18	3	1966	29.57	27	1957
July	29.85	30.18	5	1961	29.61	21	1974*
August	29.85	30.16	22	1968	29.67	16	1972*
September	29.85	30.23	19	1972	29.49	16	1965
October	29.95	30.33	28	1970	29.57	9	1960
November	30.05	30.53	18	1969	29.56	22	1965
December	30.10	30.64	22	1967	29.46	6	1966
Annual	29.96	30.64	22	1967	29.39	21	1969
		December			January		

*Also on earlier dates, months, or years.

SUNRISE AND SUNSET AT STOCKTON, CALIFORNIA

PACIFIC STANDARD TIME

DAY	JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		OCT.		NOV.		DEC.	
	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.	Rise A.M.	Set P.M.
1	7 21	4 56	7 10	5 28	6 37	5 58	5 51	6 28	5 09	6 56	4 44	7 22	4 46	7 31	5 08	7 14	5 35	6 35	6 00	5 48	6 30	5 06	7 02	4 46
2	7 21	4 57	7 09	5 29	6 36	5 59	5 49	6 29	5 08	6 56	4 44	7 22	4 47	7 31	5 09	7 13	5 35	6 33	6 01	5 47	6 32	5 05	7 03	4 46
3	7 21	4 58	7 08	5 30	6 34	6 00	5 48	6 30	5 07	6 57	4 44	7 23	4 47	7 31	5 10	7 12	5 36	6 32	6 02	5 45	6 33	5 04	7 04	4 46
4	7 21	4 59	7 07	5 32	6 33	6 01	5 46	6 31	5 06	6 58	4 43	7 24	4 48	7 31	5 10	7 11	5 37	6 30	6 03	5 44	6 34	5 03	7 05	4 46
5	7 21	5 00	7 06	5 33	6 31	6 02	5 45	6 32	5 05	6 59	4 43	7 24	4 48	7 31	5 11	7 10	5 38	6 29	6 04	5 42	6 35	5 02	7 06	4 46
6	7 21	5 01	7 05	5 34	6 30	6 03	5 43	6 32	5 04	7 00	4 43	7 25	4 49	7 31	5 12	7 09	5 39	6 27	6 05	5 41	6 36	5 01	7 07	4 46
7	7 21	5 02	7 04	5 35	6 29	6 04	5 42	6 33	5 03	7 01	4 43	7 25	4 49	7 30	5 13	7 08	5 40	6 26	6 06	5 39	6 37	5 00	7 07	4 46
8	7 21	5 03	7 03	5 36	6 27	6 05	5 40	6 34	5 02	7 02	4 42	7 26	4 50	7 30	5 14	7 07	5 41	6 24	6 07	5 38	6 38	4 59	7 08	4 46
9	7 21	5 04	7 02	5 37	6 26	6 06	5 39	6 35	5 01	7 03	4 42	7 26	4 50	7 30	5 15	7 06	5 41	6 23	6 08	5 36	6 39	4 58	7 09	4 46
10	7 21	5 04	7 01	5 38	6 24	6 07	5 37	6 36	5 00	7 04	4 42	7 27	4 51	7 29	5 16	7 05	5 42	6 21	6 09	5 35	6 40	4 58	7 10	4 46
11	7 21	5 05	7 00	5 39	6 23	6 08	5 36	6 37	4 59	7 05	4 42	7 27	4 52	7 29	5 16	7 03	5 43	6 20	6 10	5 34	6 41	4 57	7 11	4 46
12	7 21	5 06	6 59	5 40	6 21	6 09	5 34	6 38	4 58	7 06	4 42	7 28	4 52	7 29	5 17	7 02	5 44	6 18	6 11	5 32	6 42	4 56	7 12	4 46
13	7 21	5 07	6 58	5 42	6 20	6 10	5 33	6 39	4 57	7 06	4 42	7 28	4 53	7 28	5 18	7 01	5 45	6 16	6 11	5 31	6 43	4 55	7 12	4 46
14	7 20	5 08	6 57	5 43	6 18	6 11	5 32	6 40	4 56	7 07	4 42	7 29	4 54	7 28	5 19	7 00	5 46	6 15	6 12	5 29	6 44	4 54	7 13	4 46
15	7 20	5 10	6 55	5 44	6 17	6 12	5 30	6 41	4 55	7 08	4 42	7 29	4 54	7 27	5 20	6 58	5 47	6 13	6 13	5 28	6 45	4 54	7 14	4 47
16	7 20	5 11	6 54	5 45	6 15	6 13	5 29	6 42	4 54	7 09	4 42	7 29	4 55	7 27	5 21	6 57	5 47	6 12	6 14	5 26	6 47	4 53	7 14	4 47
17	7 19	5 12	6 53	5 46	6 14	6 14	5 27	6 43	4 53	7 10	4 42	7 30	4 56	7 26	5 22	6 56	5 48	6 10	6 15	5 25	6 48	4 52	7 15	4 47
18	7 19	5 13	6 52	5 47	6 12	6 15	5 26	6 44	4 53	7 11	4 42	7 30	4 57	7 25	5 23	6 55	5 49	6 09	6 16	5 24	6 49	4 52	7 16	4 48
19	7 18	5 14	6 50	5 48	6 11	6 16	5 25	6 44	4 52	7 12	4 42	7 30	4 57	7 25	5 23	6 53	5 50	6 07	6 17	5 22	6 50	4 51	7 16	4 48
20	7 18	5 15	6 49	5 49	6 09	6 17	5 23	6 45	4 51	7 12	4 42	7 31	4 58	7 24	5 24	6 52	5 51	6 06	6 18	5 21	6 51	4 50	7 17	4 49
21	7 17	5 16	6 48	5 50	6 08	6 18	5 22	6 46	4 50	7 13	4 43	7 31	4 59	7 24	5 25	6 51	5 52	6 04	6 19	5 20	6 52	4 50	7 17	4 49
22	7 17	5 17	6 47	5 51	6 06	6 19	5 21	6 47	4 50	7 14	4 43	7 31	5 00	7 23	5 26	6 49	5 53	6 02	6 20	5 18	6 53	4 49	7 18	4 50
23	7 16	5 18	6 45	5 52	6 04	6 20	5 19	6 48	4 49	7 15	4 43	7 31	5 00	7 22	5 27	6 48	5 53	6 01	6 21	5 17	6 54	4 49	7 18	4 50
24	7 16	5 19	6 44	5 53	6 03	6 21	5 18	6 49	4 48	7 16	4 43	7 31	5 01	7 21	5 28	6 46	5 54	5 59	6 22	5 16	6 55	4 48	7 19	4 51
25	7 15	5 20	6 43	5 54	6 01	6 21	5 17	6 50	4 48	7 16	4 44	7 31	5 02	7 21	5 29	6 45	5 55	5 58	6 23	5 15	6 56	4 48	7 19	4 51
26	7 14	5 21	6 41	5 55	6 00	6 22	5 15	6 51	4 47	7 17	4 44	7 31	5 03	7 20	5 29	6 44	5 56	5 56	6 24	5 13	6 57	4 47	7 19	4 52
27	7 14	5 23	6 40	5 56	5 58	6 23	5 14	6 52	4 47	7 18	4 44	7 31	5 04	7 19	5 30	6 42	5 57	5 55	6 25	5 12	6 58	4 47	7 20	4 53
28	7 13	5 24	6 39	5 57	5 57	6 24	5 13	6 53	4 46	7 19	4 45	7 32	5 04	7 18	5 31	6 41	5 58	5 53	6 26	5 11	6 59	4 47	7 20	4 53
29	7 12	5 25	6 38	5 58	5 55	6 25	5 12	6 54	4 46	7 19	4 45	7 32	5 05	7 17	5 32	6 39	5 59	5 52	6 27	5 10	7 00	4 47	7 20	4 54
30	7 11	5 26			5 54	6 26	5 10	6 55	4 45	7 20	4 46	7 31	5 06	7 16	5 33	6 38	6 00	5 50	6 28	5 09	7 01	4 46	7 21	4 55
31	7 11	5 27			5 52	6 27			4 45	7 21			5 07	7 15	5 34	6 36			6 29	5 08			7 21	4 55

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Add one hour for Daylight Saving Time if and when in use.

I certify that the above data are the result of an accurate and true computation by the Nautical Almanac Office, United States Naval Observatory, an agency charged by Federal Statute (9 Stat. L 374, 375) with the duty of making such computations and publishing the results.



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TABLE 29
STOCKTON, CALIFORNIA
WEATHER EXTREMES

WEATHER EXTREMES FOR STOCKTON AS COMPARED TO THOSE OF CALIFORNIA, THE UNITED STATES, NORTH AMERICA, AND THE WORLD

HIGHEST TEMPERATURE (DEGREES F.)

STOCKTON	114	July 14, 1972
California	134	Greenland Ranch, Death Valley, July 10, 1913
United States	134	Greenland Ranch, Death Valley, July 10, 1913
North America	134	Greenland Ranch, Death Valley, July 10, 1913
World	136	Azizia, Tripolitania, Libya, Africa, September 13, 1922

LOWEST TEMPERATURES (DEGREES F.)

STOCKTON	16	January 11, 1949
California	-45	Boca, Nevada County (Elevation 5532 Ft.), January 20, 1937
United States	-80	Prospect Creek, Alaska, January 23, 1971
North America	-81	Snag Yukon, Canada, February 3, 1947
World	-127	Vostok Antarctica (Elevation 11,440 Ft.), August 24, 1960

GREATEST PRECIPITATION IN 24 HOURS (INCHES)

STOCKTON	3.01	January 21, 1967
California	26.12	Hogee's Camp Ivy, Los Angeles County (Elevation 2750 Ft.), January 22 - 23, 1943
United States	38.20	Thrall, Texas, September 9 - 10, 1921
North America	38.20	Thrall, Texas, September 9 - 10, 1921
World	73.62	Cilaos La Reunion (Island 400 miles east of Madagascar), March 15 - 16, 1962

GREATEST PRECIPITATION IN ONE CALENDAR MONTH (INCHES)

STOCKTON	15.04	January 1862
California	71.54	Helen Mine, Lake County (Elevation 2760 Ft.), January 1909
United States	107.00	Puu Kukui, Maui, Hawaii, March 1942
North America	88.01	Swanson Bay, British Columbia, Canada, November 1917
World	366.14	Cherrapunji, India, July 1861

GREATEST PRECIPITATION IN ONE YEAR (SEASONAL OR CALENDAR YEAR, AS STATED)

	(Inches)	
STOCKTON	35.54	Seasonal year, July 1861 - June 1862
California	153.54	Monumental Del Norte County (Elevation 2750 Ft.), Calendar Year 1909
	161.00	Cold Springs Camp Monterey County (Elevation 3280 Ft.), Seasonal Year, July 1940 - June 1941
United States	578.00	Puu Kukui, Maui, Hawaii, Calendar Year 1931

WEATHER EXTREMES (Continued)

GREATEST PRECIPITATION IN ONE YEAR (SEASONAL OR CALENDAR YEAR, AS STATED)
(contd.)

	(Inches)	
North America	323.70	Henderson Lake, British Columbia, Canada, Calendar Year 1931
World	905.12	Cherranpunji, India, Calendar Year 1861
	1041.78	Cherranpunji, India, Seasonal, August 1860 - July 1861

LEAST PRECIPITATION IN ONE YEAR (SEASONAL OR CALENDAR, AS STATED)

STOCKTON	6.73	Seasonal Year, July 1870 - June 1871
California	0.00	Bagdad, California, Calendar Year 1913
United States	0.00	Bagdad, California, Calendar Year 1913

LOWEST SEA-LEVEL PRESSURE (MILLIBARS AND INCHES)

STOCKTON	995.3/29.39	January 21, 1969
California	975.6/28.81	Point Reyes, January 27, 1916
United States	892.3/26.35	Matecumbe Key, Florida, September 2, 1935
North America	892.3/26.35	Matecumbe Key, Florida, United States, September 2, 1935
World	877.0/25.90	19°N. 135°E. in Eye of Typhoon Ida, by Aerial Reconnaissance, September 24, 1958

HIGHEST SEA-LEVEL PRESSURE (MILLIBARS AND INCHES)

STOCKTON	1037.6/30.64	December 22, 1967
California	1041.0/30.74	Sacramento, February 17, 1883
United States	1063.3/31.40	Helena, Montana, January 9, 1962
North America	1067.3/31.51	Medicine Hat, Alberta, Canada, January 24, 1897
World	1079/31.89	Barnaul, Siberia, USSR, January 23, 1900

HIGHEST WIND SPEED (MILES PER HOUR)

STOCKTON	56	*Fastest Mile, April 1, 1945
California	70	*Sacramento, Fastest Mile, November 13, 1953, and December 7, 1952
United States	231	Peak Gust at Mt. Washington, New Hampshire, April 12, 1934
North America	231	Peak Gust at Mt. Washington, New Hampshire, United States, April 12, 1934
World	231	Peak Gust at Mt. Washington, New Hampshire, United States, April 12, 1934

*Fastest mile is the highest 1-minute observed wind speed. Stronger peak gusts have been observed, but an official record of peak wind gusts is not available.

NOTE: Weather extreme information other than Stockton data was extracted from National Weather Service Western Region Technical Memorandum WBTM-28 entitled, "Weather Extremes", by R. J. Schmidli, dated April 1968.

Western Region Technical Memoranda: (Continued)

- No. 45/2 Precipitation Probabilities in the Western Region Associated with Spring 500-mb Map Types. Richard P. Augulis, January 1970. (Out of print.) (PB-189434)
- No. 45/3 Precipitation Probabilities in the Western Region Associated with Summer 500-mb Map Types. Richard P. Augulis, January 1970. (Out of print.) (PB-189414)
- No. 45/4 Precipitation Probabilities in the Western Region Associated with Fall 500-mb Map Types. Richard P. Augulis, January 1970. (Out of print.) (PB-189455)
- No. 46 Applications of the Net Radiometer to Short-Range Fog and Stratus Forecasting at Eugene, Oregon. L. Yee and E. Bates, December 1969. (PB-190476)
- No. 47 Statistical Analysis as a Flood Routing Tool. Robert J. C. Burnash, December 1969. (PB-186744)
- No. 48 Tsunami. Richard P. Augulis, February 1970. (PB-190157)
- No. 49 Predicting Precipitation Type. Robert J. C. Burnash and Floyd E. Hug, March 1970. (PB-190962)
- No. 50 Statistical Report on Aeroallergens (Pollens and Molds) From Huachuca, Arizona, 1969. Wayne S. Johnson, April 1970. (PB-191743)
- No. 51 Western Region Sea State and Surf Forecaster's Manual. Gordon C. Shields and Gerald E. Burdwell, July 1970. (PB-193102)
- No. 52 Sacramento Weather Radar Climatology. R. C. Pappas and G. M. Veliquette, July 1970. (PB-195347)
- No. 53 Experimental Air Quality Forecasts in the Sacramento Valley. Norman S. Benas, August 1970. (Out of print.) (PB-194128)
- No. 54 A Refinement of the Vorticity Field to Delineate Areas of Significant Precipitation. Barry B. Arenovitch, August 1970.
- No. 55 Application of the SSARR Model to a Basin Without Discharge Record. Vali Schermerhorn and Donald W. Kiehl, August 1970. (PB-194394)
- No. 56 Areal Coverage of Precipitation in Northwestern Utah. Philip Williams, Jr., and Werner J. Heck, September 1970. (PB-194382)
- No. 57 Preliminary Report on Agricultural Field Burning vs. Atmospheric Visibility in the Willamette Valley of Oregon. Earl M. Bates and David C. Chilcote, September 1970. (PB-194710)
- No. 58 Air Pollution by Jet Aircraft at Seattle-Tacoma Airport. Wallace R. Donaldson, October 1970. (OO-71-00017)
- No. 59 Application of P.E. Model Forecast Parameters to Local-Area Forecasting. Leonard W. Smallman, October 1970. (OO-71-00016)

NOAA Technical Memoranda NWS

- No. 60 An Aid for Forecasting the Minimum Temperature at Medford, Oregon. Arthur W. Fritz, October 1970. (OO-71-00128)
- No. 61 Relationship of Wind Velocity and Stability to SO₂ Concentrations at Salt Lake City, Utah. Werner J. Heck, January 1971. (OO-71-00232)
- No. 62 Forecasting the Cotrellina Eddy. Arthur L. Eichelberger, February 1971. (OO-71-00223)
- No. 63 700-mb Warm Air Advection as a Forecasting Tool for Montana and Northern Idaho. Norris E. Woerner, February 1971. (OO-71-00349)
- No. 64 Wind and Weather Regimes at Great Falls, Montana. Warren S. Pries, March 1971.
- No. 65 Climate of Sacramento, California. Wilbur E. Figgins, June 1971. (OO-71-00764)
- No. 66 A Preliminary Report on Correlation of ARTC Radar Echoes and Precipitation. Wilbur K. Hall, June 1971. (OO-71-00828)
- No. 67 Precipitation Detection Probabilities by Los Angeles ARTC radars. Denis E. Renig, July 1971. (Out of print.) (OO-71-00825)
- No. 68 A Survey of Marine Weather Requirements. Herbert P. Benner, July 1971. (Out of print.) (OO-71-00889)
- No. 69 National Weather Service Support to Soaring Activities. Ellis Burton, August 1971. (Out of print.) (OO-71-00996)
- No. 70 Predicting Inversion Depths and Temperature Inversions in the Helena Valley. David E. Olson, October 1971. (Out of print.) (OO-71-01037)
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- No. 72 A Paradox Principle in the Prediction of Precipitation Type. Thomas J. Weitz, February 1972. (Out of print.) (OO-72-10452)
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- No. 75 A Study of the Low Level Jet Stream of the San Joaquin Valley. Ronald A. Willis and Philip Williams, Jr., May 1972. (OO-72-10707)
- No. 76 Monthly Climatological Charts of the Behavior of Fog and Low Stratus at Los Angeles International Airport. Donald W. Bates, July 1972. (OO-72-11140)
- No. 77 A Study of Radar Echo Distribution in Arizona During July and August. John E. Hayes, Jr., July 1972. (OO-72-11126)
- No. 78 Forecasting Precipitation at Bakersfield, California, Using Pressure Gradient Vectors. Earl T. Ridgough, July 1972. (OO-72-11146)

