

NOAA TECHNICAL MEMORANDUM NWS WR-65

## CLIMATE OF SACRAMENTO, CALIFORNIA

## Laura Masters-Bevan <br> National Weather Service Office Sacramento, California

November 1998
Sixth Revision

## NOAA TECHNICAL MEMORANDA

## National Weather Service, Western Region Subseries

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3 Western Region Pre-and Post-FP-3 Program, December 1, 1965, to February 20, 1966. Edward D. Diemer, March 1966

5 Station Descriptions of Local Effects on Synoptic Weather Patterns. Philip Williams, Jr., April 1966 (Revised November 1967, October 1969). (PB-17800)
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11 Some Electrical Processes in the Atmosphere. J. Latham, June 1966.
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8 Weather Extremes. R. J Schmidli, April 1968 (Revised March 1986). (PB86 177672/AS) (Revised October 1991 - PB92-115062/AS)
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# Laura Masters-Bevan National Weather Service Office Sacramento, California 

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## November 1998 <br> Sixth Revision

# This publication has been reviewed and is approved for publication by Scientific Services Division, Western Region 

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I. CLIMATE OF SACRAMENTO, CALIFORNIA

## CLIMATE OF SACRAMENTO, CALIFORNIA Laura Masters-Bevan

## I. NARRATIVE CLIMATOLOGICAL SUMMARY

The southern Sacramento Valley, including the city of Sacramento, is blessed with a mild climate and an abundance of sunshine the year-round. The summers are virtually cloudless with warm, dry days and mild, pleasant nights. During the winter "rainy season" (November through February), over half the total annual precipitation falls, yet rain in measurable amounts occurs only about 10 days monthly during the winter. Mountains surround the Sacramento Valley to the west, north and east. The Sierra Nevada snowfields are only 70 miles east of Sacramento and usually provide a plentiful supply of water to the valley streams during the dry season. Because of the shielding influence of the high mountains, winter storms reach the valley in a modified form. However, torrential rain and heavy snow frequently fall on the western Sierra slopes, the southern Cascades, and to a lesser extent, the Coastal Range. As a result, flood conditions occasionally occur along the Sacramento River and its tributaries. Excessive rainfall and damaging wind storms occur infrequently.

The prevailing wind in Sacramento is southerly all year. This is due to the north-south orientation of the valley and the deflecting effects of the towering Sierra Nevada on the prevailing oceanic wind that moves through the Carquinez Strait near the delta, at the junction of the Sacramento and San Joaquin Rivers. No
other tidewater gap exists in the coastal mountains to admit significant marine air into the Sacramento or the San Joaquin Valleys. Occasionally, a strong north or northeasterly barometric pressure gradient develops, forcing air south or southwestward down the Siskiyou Mountains or the Sierra Nevada. This air is warmed by compression as it descends, reaching the valley floor as a hot, dry north wind. Heat waves in the summer are produced by these winds and, fortunately, are usually followed within two or three days by the normally cool southwest delta breezes, especially at night.

Summer nights in the southern Sacramento Valley are usually pleasant. This is primarily the result of the refreshing breezes blowing up from the San Francisco Bay through the delta. The exception is when the north or northeasterly pressure difference develops during heat waves, causing light northerly breezes to continue through the night.

It is well known that relative humidity has a marked influence on the reaction of plants and animals to temperature. The extremely low relative humidity that accompanies high temperatures in the valley during the summer should be considered when comparing temperatures with those of cities in more humid regions.

Thunderstorms in Sacramento are few in number and usually occur in the late fall
or in the spring. Snow is so rare and falls in such small amounts that its occurrence may be disregarded as a climatic feature. Dense fog occurs mostly in mid-winter, seldom in the spring or autumn, and never in the summer. Light and moderate fog is more frequent and may happen anytime during the wet, cold season. Fog is usually of the radiational cooling type and is confined to the early morning hours. Under stagnant atmospheric conditions, winter fog can become very persistent and may continue for several days.

Sacramento is the geographical hub of the great Central Valley of California, which is the most productive agricultural region in the country. This region produces cotton, poultry, livestock and dairy products, plus a wide variety of fruits, cereals, vegetables and nuts, ranging from the semi-tropical to the hardier varieties.

## A History of Weather Observations at Sacramento

The first organized weather observations for Sacramento were started by the Smithsonian Institution in 1849. The first government weather service for Sacramento, under the U.S. Army Signal Service, got off to an auspicious start when the briefest of telegrams was sent back to Washington, D.C. The telegram, dated June 23, 1877, stated simply, "ARRIVED." This announced the arrival in Sacramento of Sgt. R. B. Watkins. Records indicate that Sgt. Watkins took the first official weather observation at 4:37 a.m., July 1, 1877.

The first weather office was located on the fourth floor of the St. George Building,
on 4th and J Streets. It consisted of two rooms--one for the weather office and the other for the living quarters. The meteorological variables observed by Sgt. Watkins would do justice to many of the electronic, computer assisted observational programs of present day.

Through the years, the Sacramento weather office has changed locations several times. In succession, the office has been located at the following addresses:

- 4th and J Streets (St. George Building), July 1, 1877 to November 27, 1879.
- 2nd and K Streets (Fratts Building), November 28, 1879 to May 31, 1882.
- 1006 2nd Street (Arcade Building), June 1, 1882 to January 31, 1884.
- 117 J Street (Lyon and Curtis Building), February 1, 1884 to April 30, 1894
- 7th and K Streets (Old Post Office Building), May 1, 1894 to October 31, 1933.
- 9th and I Streets (New Post Office and Courthouse Building), November 1, 1933 to November 19, 1958.
- 1725 23rd Street (State of California Building), November 20, 1958 to September 28, 1964.
- 1416 9th Street (Resources Building), September 29, 1964 to August 14, 1995.
- 3310 El Camino Avenue, August 15, 1995 to present. (Note: The temperature and precipitation sensors used for much of the information in this publication are currently located on top of the Post Office Building on 9th and I Streets. The data are remoted to the Weather Service Office.)

As the complexity of living changed over the past century, so did the services provided by the Sacramento weather office. Public weather forecasts now cover the mountains of the northern Sierra Nevada, Shasta Courty and the Lassen National Park area; the foothills of the northern Sierra Nevada; eastern slopes of the northern coastal range and Lake County; and the Sacramento and northern San Joaquin Valleys. The office's warning responsibility area encompasses 22 counties in northern and central California. Special, detailed forecasts for aviation, fire fighting, and hydrology are also provided.

In the past 20 to 40 years, the accelerating progress of computer technology has contributed greatly to the office's ability to accurately observe and forecast the weather. The commissioning of the WSR-57 weather radar on February 2, 1960, added a valuable tool for more precise, short-range weather forecasts. On December 6, 1995, the WSR 88D Doppler Radar was commissioned. Used in conjunction with satellite data and high speed computers, radar can detect severe local storms and flash floods along with small-scale weather features of importance to local, state, and federal agencies involved in river flood warning and control or in
aviation and firefighting operations, for example.

The advances in the science of meteorology could not have been dreamed of even by the most visionary meteorologist a century ago. The thousands of observations made daily, world-wide, all combine to work toward a successful answer to the very basic question: "What's the weather going to be?".

## Some Highlights of the Weather Records in Sacramento

Many unusual weather events have taken place in Sacramento since official weather observations began July 1, 1877. The following is a brief description of some of the more extreme conditions recorded since then.

The all-time high temperature in downtown Sacramento of 114 degrees occurred on July 17, 1925. Wind conditions on that date were light and mostly from a southeasterly direction. The early morning low temperature was a very warm 74 degrees. A strong delta breeze (up to 28 mph ) developed the following afternoon, dropping the maximum temperature to a relatively mild 97 degrees.

The longest consecutive stretch of days with maximum temperatures 105 degrees or higher in Sacramento was seven days. This occurred August 5-11, 1990.

The greatest number of consecutive days with maximum temperatures 100 degrees or higher is nine. This has happened three times since temperature records
began in July 1877: August 1-9, 1966; June 19-27, 1981; and July 10-18, 1984.

Heat waves having one or two day breaks between consecutive 100 degree-plus days have taken place quite frequently in the past. Two periods stand out significantly, however, and occurred during the summers of 1929 and 1980. In 1929, days with maximum temperatures 100 degrees or higher were recorded from June 20 through June 26, and again from June 29 through July 5. The two day break on the 27th and 28th had maximum temperatures of 99 degrees, and 91 degrees, respectively. In all, the period had 14 out of 16 days with maximum temperatures 100 degrees or higher.

In 1980, days with maximum temperatures of 100 degrees or higher occurred from July 21 through July 27, and again from July 29 through August 1. The one day break on the 28 th had clouds and scattered light showers that held the maximum temperature to only 95 degrees. All in all, there were 11 of 12 days with maximum temperatures 100 degrees or higher.

The coldest temperature ever recorded in the downtown area was 17 degrees on December 11, 1932. This record low temperature was part of a cold snap that lasted from December 9 through December 15. Minimum temperatures during this period dropped to the teens and low 20 s every night. Crop damage, as one might expect, was quite extensive, especially in the citrus orchards of Fair Oaks and Orangevale, where temperatures dipped to as low as 11 degrees above zero. The celery and lettuce crops in the delta were also hard
hit. Ice thick enough for skating formed on the small lakes and ponds at Southside and McKinley Parks, with a layer of ice one-sixteenth of an inch thick reported on the Sacramento River. The cold snap broke on December 16 when a warm and moist storm from the midPacific moved into northern California. A cold snap during the winter of 1990 was equally as devastating. It was during this period that downtown Sacramento had a record number of days (11) with minimum temperatures of 32 degrees or lower from December 20, 1990 through January 1 , 1991.

Snow in Sacramento is extremely rare. Most of the snow that has been observed in Sacramento occurs in January. The most snowfall measured in the downtown area in any 24 -hour period was 3.5 inches, January 4-5, 1888. The heaviest snowfall in recent years took place February 5, 1976, when 2 inches was reported at Sacramento's Executive Airport. Ironically, this happened during one of the drought years.

The all-time record for rainfall during any 24 -hour period in Sacramento is 7.24 inches on April 19-20, 1880. Streets were described as "... having the appearance of miniature rivers". The rainstorm was also reported (colorfully) in such terms as "...steady and business-like", "... a perfect torrent", and "...more like a cataract than an April shower".

The record maximum one-hour rainfall is 1.65 inches, which fell during the evening of April 7, 1935. Thunderstorms in the area were responsible for the downpour with considerable street flooding reported. (Note: Hourly rainfall records are only available after 1903).

January 1862, with 15.04 inches, is the wettest month on record. This took place before official government observations began. Precipitation records at that time were kept by two physicians, Dr. F.M. Hatch, a retired Army Surgeon, and his associate, Dr. T.M. Logan. Their records are believed to be reliable.

The most rainfall ever recorded in one season in Sacramento is 37.49 inches, set during the 1982-83 rainy season, under the influence of a strong El Niño. This followed the wet season of 1981-82 ( 32.65 inches), making it the wettest twoyear period on record in Sacramento. The most recent (with regards to the publication of this book) El Niño outbreak to saturate the Sacramento area was the 1997-98 water year, which received a whopping 32.25 inches of precipitation. Since rainfall records began in 1849-50, only eight other water years have received more.

Sacramento's maximum wind speed of 70 mph occurred on two separate occasions: December 7, 1952, and November 13, 1953. Both wind storms occurred during the passages of Pacific weather fronts and were accompanied by rain. (Both wind speed records are the recorded "fastest mile", or a one-minute observed wind speed taken from a multiple register with a time-record of the passing of each mile of wind. Further explanations of wind velocities are found later in this publication).

The most persistent case of dense fog at the Sacramento Executive Airport was 17 consecutive days, occurring December 12 through December 28, 1985. This long and gloomy period of dense fog broke the record of 13 consecutive days, set in

January 1975. (Fog is considered dense when it restricts visibility to a quarter-mile or less during any part of the day.)

## II. NORMALS

# NORMALS <br> DOWNTOWN SACRAMENTO <br> 1961 to 1990 

| Latitude: | 3835 N |
| :--- | ---: |
| Longitude: | 12130 W |
| Elevation: | 84 Ft |

The daily values presented in these tables are not simple means of observed daily values. They are interpolated from the much less variable monthly normals by use of the natural spline function.

In leap years use the February 28th values for the 29th and adjust the degree day monthly totals accordingly.

Daily precipitation normals were also computed using the natural spline function and do not exhibit the typical daily random patterns. However, they may be used to compute normal precipitation over time intervals.
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NORMALS
DOWNTOWN SACRAMENTO
1961 to 1990
Latitude: $\quad 3835 \mathrm{~N}$
Longitude: 12130 W
Elevation: $\quad 84 \mathrm{Ft}$

## JANUARY

|  | TEMPERATURE |  | DEGREE DAYS |  | PRECIPITATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| DATE | MAX | MIN | AVG | HDD | CDD | DAILY | SEASON |
| 1 | 52 | 39 | 46 | 19 | 0 | 0.11 | 7.45 |
| 2 | 52 | 39 | 46 | 19 | 0 | 0.11 | 7.56 |
| 3 | 52 | 39 | 46 | 19 | 0 | 0.11 | 7.67 |
| 4 | 52 | 39 | 46 | 19 | 0 | 0.11 | 7.78 |
| 5 | 52 | 39 | 46 | 19 | 0 | 0.12 | 7.90 |
| 6 | 52 | 39 | 46 | 19 | 0 | 0.12 | 8.02 |
| 7 | 53 | 39 | 46 | 19 | 0 | 0.12 | 8.14 |
| 8 | 53 | 39 | 46 | 19 | 0 | 0.12 | 8.26 |
| 9 | 53 | 39 | 46 | 19 | 0 | 0.12 | 8.38 |
| 10 | 53 | 39 | 46 | 19 | 0 | 0.12 | 8.50 |
| 11 | 53 | 40 | 46 | 19 | 0 | 0.12 | 8.62 |
| 12 | 53 | 40 | 46 | 19 | 0 | 0.13 | 8.75 |
| 13 | 53 | 40 | 46 | 19 | 0 | 0.13 | 8.88 |
| 14 | 53 | 40 | 46 | 19 | 0 | 0.13 | 9.01 |
| 15 | 53 | 40 | 46 | 19 | 0 | 0.13 | 9.14 |
| 16 | 54 | 40 | 47 | 18 | 0 | 0.13 | 9.27 |
| 17 | 54 | 40 | 47 | 18 | 0 | 0.13 | 9.40 |
| 18 | 54 | 40 | 47 | 18 | 0 | 0.13 | 9.53 |
| 19 | 54 | 40 | 47 | 18 | 0 | 0.13 | 9.66 |
| 20 | 54 | 40 | 47 | 18 | 0 | 0.13 | 9.79 |
| 21 | 55 | 40 | 47 | 18 | 0 | 0.13 | 9.92 |
| 22 | 55 | 41 | 48 | 17 | 0 | 0.13 | 10.05 |
| 23 | 55 | 41 | 48 | 17 | 0 | 0.13 | 10.18 |
| 24 | 56 | 41 | 48 | 17 | 0 | 0.13 | 10.31 |
| 25 | 56 | 41 | 48 | 17 | 0 | 0.13 | 10.44 |
| 26 | 56 | 41 | 49 | 16 | 0 | 0.13 | 10.57 |
| 27 | 56 | 41 | 49 | 16 | 0 | 0.13 | 10.70 |
| 28 | 57 | 41 | 49 | 16 | 0 | 0.13 | 10.83 |
| 29 | 57 | 42 | 49 | 16 | 0 | 0.12 | 10.95 |
| 30 | 57 | 42 | 50 | 15 | 0 | 0.12 | 11.07 |
| 31 | 58 | 42 | 50 | 15 | 0 | 0.12 | 11.19 |
| TOTAL |  |  |  | 555 | 0 | 3.85 |  |
| AVG | 54.1 | 40.1 | 47.1 |  |  |  |  |

NORMALS
DOWNTOWN SACRAMENTO
1961 to 1990
Latitude:
3835 N
Longitude: 12130 W
Elevation: $\quad 84 \mathrm{Ft}$
FEBRUARY

|  | TEMPERATURE |  | DEGREE DAYS |  | PRECIPITATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| DATE | MAX | MIN | AVG | HDD | CDD | DAILY | SEASON |
| 1 | 58 | 42 | 50 | 15 | 0 | 0.12 | 11.31 |
| 2 | 58 | 42 | 50 | 15 | 0 | 0.12 | 11.43 |
| 3 | 59 | 43 | 51 | 14 | 0 | 0.12 | 11.55 |
| 4 | 59 | 43 | 51 | 14 | 0 | 0.12 | 11.67 |
| 5 | 60 | 43 | 51 | 14 | 0 | 0.11 | 11.78 |
| 6 | 60 | 43 | 51 | 14 | 0 | 0.11 | 11.89 |
| 7 | 60 | 43 | 52 | 13 | 0 | 0.11 | 12.00 |
| 8 | 60 | 43 | 52 | 13 | 0 | 0.11 | 12.11 |
| 9 | 61 | 43 | 52 | 13 | 0 | 0.11 | 12.22 |
| 10 | 61 | 44 | 52 | 13 | 0 | 0.11 | 12.33 |
| 11 | 61 | 44 | 53 | 12 | 0 | 0.11 | 12.44 |
| 12 | 61 | 44 | 53 | 12 | 0 | 0.11 | 12.55 |
| 13 | 62 | 44 | 53 | 12 | 0 | 0.11 | 12.66 |
| 14 | 62 | 44 | 53 | 12 | 0 | 0.11 | 12.77 |
| 15 | 62 | 44 | 53 | 12 | 0 | 0.10 | 12.87 |
| 16 | 62 | 44 | 53 | 12 | 0 | 0.10 | 12.97 |
| 17 | 63 | 44 | 54 | 11 | 0 | 0.10 | 13.07 |
| 18 | 63 | 45 | 54 | 11 | 0 | 0.10 | 13.17 |
| 19 | 63 | 45 | 54 | 11 | 0 | 0.10 | 13.27 |
| 20 | 63 | 45 | 54 | 11 | 0 | 0.10 | 13.37 |
| 21 | 63 | 45 | 54 | 11 | 0 | 0.10 | 13.47 |
| 22 | 63 | 45 | 54 | 11 | 0 | 0.10 | 13.57 |
| 23 | 64 | 45 | 54 | 11 | 0 | 0.10 | 13.67 |
| 24 | 64 | 45 | 54 | 11 | 0 | 0.10 | 13.77 |
| 25 | 64 | 45 | 54 | 11 | 0 | 0.10 | 13.87 |
| 26 | 64 | 45 | 55 | 10 | 0 | 0.10 | 13.97 |
| 27 | 64 | 45 | 55 | 10 | 0 | 0.10 | 14.07 |
| 28 | 64 | 45 | 55 | 10 | 0 | 0.10 | 14.17 |
| TOTAL |  |  |  | 339 | 0 | 2.98 |  |
| AVG | 61.7 | 44.0 | 52.9 |  |  |  |  |

In leap years use the February 28 values for February 29.

Latitude: 3835 N
Longitude: 12130 W
Elevation: $\quad 84 \mathrm{Ft}$

MARCH

|  | TEMPERATURE |  | DEGREE DAYS |  | PRECIPITATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| DATE | MAX | MIN | AVG | HDD | CDD | DAILY | SEASON |
| 1 | 64 | 45 | 55 | 10 | 0 | 0.10 | 14.27 |
| 2 | 64 | 45 | 55 | 10 | 0 | 0.10 | 14.37 |
| 3 | 64 | 45 | 55 | 10 | 0 | 0.10 | 14.47 |
| 4 | 64 | 45 | 55 | 10 | 0 | 0.10 | 14.57 |
| 5 | 64 | 45 | 55 | 10 | 0 | 0.10 | 14.67 |
| 6 | 65 | 45 | 55 | 10 | 0 | 0.10 | 14.77 |
| 7 | 65 | 45 | 55 | 10 | 0 | 0.10 | 14.87 |
| 8 | 65 | 46 | 55 | 10 | 0 | 0.10 | 14.97 |
| 9 | 65 | 46 | 55 | 10 | 0 | 0.10 | 15.07 |
| 10 | 65 | 46 | 55 | 10 | 0 | 0.10 | 15.17 |
| 11 | 65 | 46 | 55 | 10 | 0 | 0.10 | 15.27 |
| 12 | 65 | 46 | 56 | 9 | 0 | 0.10 | 15.37 |
| 13 | 65 | 46 | 56 | 9 | 0 | 0.10 | 15.47 |
| 14 | 66 | 46 | 56 | 9 | 0 | 0.09 | 15.56 |
| 15 | 66 | 46 | 56 | 9 | 0 | 0.09 | 15.65 |
| 16 | 66 | 46 | 56 | 9 | 0 | 0.09 | 15.74 |
| 17 | 66 | 46 | 56 | 9 | 0 | 0.09 | 15.83 |
| 18 | 66 | 46 | 56 | 9 | 0 | 0.09 | 15.92 |
| 19 | 66 | 46 | 56 | 9 | 0 | 0.09 | 16.01 |
| 20 | 67 | 46 | 56 | 9 | 0 | 0.09 | 16.10 |
| 21 | 67 | 46 | 56 | 9 | 0 | 0.09 | 16.19 |
| 22 | 67 | 46 | 57 | 9 | 0 | 0.09 | 16.28 |
| 23 | 67 | 46 | 57 | 8 | 0 | 0.08 | 16.36 |
| 24 | 67 | 46 | 57 | 8 | 0 | 0.08 | 16.44 |
| 25 | 68 | 47 | 57 | 8 | 0 | 0.08 | 16.52 |
| 26 | 68 | 47 | 57 | 8 | 0 | 0.08 | 16.60 |
| 27 | 68 | 47 | 57 | 8 | 0 | 0.08 | 16.68 |
| 28 | 68 | 47 | 57 | 8 | 0 | 0.07 | 16.75 |
| 29 | 68 | 47 | 58 | 8 | 0 | 0.07 | 16.82 |
| 30 | 68 | 47 | 58 | 8 | 0 | 0.07 | 16.89 |
| 31 | 68 | 47 | 58 | 8 | 0 | 0.07 | 16.96 |
| TOTAL |  |  |  | 281 | 0 | 2.79 |  |
| AVG | 66.1 | 46.0 | 56.1 |  |  |  |  |
|  |  |  |  |  |  | 07 |  |

NORMALS
DOWNTOWN SACRAMENTO
1961 to 1990
Latitude: 38 35N
Longitude: 121 30W
Elevation:84 Ft

APRIL

|  | TEMPERATURE |  | DEGREE DAYS |  | PRECIPITATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| DATE | MAX | MIN | AVG | HDD | CDD | DAILY | SEASON |
| 1 | 69 | 47 | 58 | 7 | 0 | 0.07 | 17.03 |
| 2 | 69 | 47 | 58 | 7 | 0 | 0.07 | 17.10 |
| 3 | 70 | 47 | 58 | 7 | 0 | 0.06 | 17.16 |
| 4 | 70 | 47 | 59 | 7 | 1 | 0.06 | 17.22 |
| 5 | 70 | 47 | 59 | 7 | 1 | 0.06 | 17.28 |
| 6 | 70 | 48 | 59 | 7 | 1 | 0.06 | 17.34 |
| 7 | 71 | 48 | 59 | 7 | 1 | 0.05 | 17.39 |
| 8 | 71 | 48 | 59 | 7 | 1 | 0.05 | 17.44 |
| 9 | 71 | 48 | 60 | 6 | 1 | 0.05 | 17.49 |
| 10 | 71 | 48 | 60 | 6 | 1 | 0.05 | 17.54 |
| 11 | 72 | 48 | 60 | 6 | 1 | 0.05 | 17.59 |
| 12 | 72 | 48 | 60 | 6 | 1 | 0.05 | 17.64 |
| 13 | 72 | 48 | 60 | 6 | 1 | 0.04 | 17.68 |
| 14 | 72 | 48 | 60 | 6 | 1 | 0.04 | 17.72 |
| 15 | 73 | 49 | 61 | 6 | 2 | 0.04 | 17.76 |
| 16 | 73 | 49 | 61 | 6 | 2 | 0.04 | 17.80 |
| 17 | 73 | 49 | 61 | 6 | 2 | 0.04 | 17.84 |
| 18 | 73 | 49 | 61 | 6 | 2 | 0.04 | 17.88 |
| 19 | 74 | 49 | 61 | 6 | 2 | 0.03 | 17.91 |
| 20 | 74 | 49 | 62 | 5 | 2 | 0.03 | 17.94 |
| 21 | 74 | 49 | 62 | 5 | 2 | 0.03 | 17.97 |
| 22 | 74 | 49 | 62 | 5 | 2 | 0.03 | 18.00 |
| 23 | 75 | 50 | 62 | 5 | 2 | 0.03 | 18.03 |
| 24 | 75 | 50 | 62 | 5 | 2 | 0.03 | 18.06 |
| 25 | 75 | 50 | 63 | 4 | 2 | 0.03 | 18.09 |
| 26 | 76 | 50 | 63 | 4 | 2 | 0.03 | 18.12 |
| 27 | 76 | 50 | 63 | 4 | 2 | 0.02 | 18.14 |
| 28 | 76 | 50 | 63 | 4 | 2 | 0.02 | 18.16 |
| 29 | 76 | 51 | 64 | 4 | 3 | 0.02 | 18.18 |
| 30 | 77 | 51 | 64 | 4 | 3 | 0.02 | 18.20 |
| TOTAL |  |  |  | 171 | 45 | 1.24 |  |
| AVG | 72.8 | 48.7 | 60.8 |  |  |  |  |

NORMALS
DOWNTOWN SACRAMENTO
1961 to 1990
Latitude:38 35N
Longitude: 12130 W
Elevation:84 Ft
MAY

|  | TEMPERATURE |  | DEGREE DAYS |  | PRECIPITATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| DATE | MAX | MIN | AVG | HDD | CDD | DAILY | SEASON |
| 1 | 77 | 51 | 64 | 4 | 3 | 0.02 | 18.22 |
| 2 | 77 | 51 | 64 | 4 | 3 | 0.02 | 18.24 |
| 3 | 78 | 51 | 64 | 4 | 3 | 0.02 | 18.26 |
| 4 | 78 | 51 | 65 | 3 | 3 | 0.02 | 18.28 |
| 5 | 78 | 52 | 65 | 3 | 3 | 0.02 | 18.30 |
| 6 | 78 | 52 | 65 | 3 | 3 | 0.01 | 18.31 |
| 7 | 79 | 52 | 65 | 3 | 3 | 0.01 | 18.32 |
| 8 | 79 | 52 | 66 | 3 | 4 | 0.01 | 18.33 |
| 9 | 79 | 52 | 66 | 3 | 4 | 0.01 | 18.34 |
| 10 | 79 | 52 | 66 | 3 | 4 | 0.01 | 18.35 |
| 11 | 80 | 53 | 66 | 3 | 4 | 0.01 | 18.36 |
| 12 | 80 | 53 | 67 | 2 | 4 | 0.01 | 18.37 |
| 13 | 80 | 53 | 67 | 2 | 4 | 0.01 | 18.38 |
| 14 | 80 | 53 | 67 | 2 | 4 | 0.01 | 18.39 |
| 15 | 81 | 53 | 67 | 2 | 4 | 0.01 | 18.40 |
| 16 | 81 | 53 | 67 | 2 | 4 | 0.01 | 18.41 |
| 17 | 81 | 54 | 67 | 2 | 4 | 0.01 | 18.42 |
| 18 | 82 | 54 | 68 | 2 | 5 | 0.01 | 18.43 |
| 19 | 82 | 54 | 68 | 2 | 5 | 0.01 | 18.44 |
| 20 | 82 | 54 | 68 | 2 | 5 | 0.01 | 18.45 |
| 21 | 82 | 54 | 68 | 2 | 5 | 0.01 | 18.46 |
| 22 | 82 | 54 | 68 | 2 | 5 | 0.01 | 18.47 |
| 23 | 83 | 55 | 69 | 1 | 5 | 0.01 | 18.48 |
| 24 | 83 | 55 | 69 | 1 | 5 | 0.01 | 18.49 |
| 25 | 83 | 55 | 69 | 1 | 5 | 0.00 | 18.49 |
| 26 | 83 | 55 | 69 | 1 | 5 | 0.00 | 18.49 |
| 27 | 84 | 55 | 70 | 1 | 6 | 0.00 | 18.49 |
| 28 | 84 | 55 | 70 | 1 | 6 | 0.00 | 18.49 |
| 29 | 84 | 55 | 70 | 1 | 6 | 0.00 | 18.49 |
| 30 | 84 | 56 | 70 | 1 | 6 | 0.00 | 18.49 |
| 31 | 85 | 56 | 70 | 1 | 6 | 0.00 | 18.49 |
| TOTAL |  |  |  | 67 | 136 | 0.29 |  |
| AVG | 80.9 | 53.4 | 67.2 |  |  |  |  |

NORMALS
DOWNTOWN SACRAMENTO
1961 to 1990
Latitude:38 35N
Longitude: 121 30W
Elevation:84 Ft
JUNE

|  | TEMPERATURE |  |  | DEGREE DAYS |  | PRECIPITATION |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| DATE | MAX | MIN | AVG | HDD | CDD | DAILY | SEASON |
| 1 | 85 | 56 | 70 | 1 | 6 | 0.01 | 18.50 |
| 2 | 85 | 56 | 71 | 1 | 7 | 0.01 | 18.51 |
| 3 | 85 | 56 | 71 | 1 | 7 | 0.01 | 18.52 |
| 4 | 86 | 56 | 71 | 1 | 7 | 0.01 | 18.53 |
| 5 | 86 | 57 | 71 | 1 | 7 | 0.01 | 18.54 |
| 6 | 86 | 57 | 71 | 1 | 7 | 0.01 | 18.55 |
| 7 | 86 | 57 | 71 | 1 | 7 | 0.01 | 18.56 |
| 8 | 86 | 57 | 71 | 1 | 7 | 0.01 | 18.57 |
| 9 | 86 | 57 | 71 | 1 | 7 | 0.01 | 18.58 |
| 10 | 87 | 57 | 72 | 0 | 7 | 0.01 | 18.59 |
| 11 | 87 | 58 | 73 | 0 | 8 | 0.01 | 18.60 |
| 12 | 87 | 58 | 73 | 0 | 8 | 0.01 | 18.61 |
| 13 | 88 | 58 | 73 | 0 | 8 | 0.01 | 18.61 |
| 14 | 88 | 58 | 73 | 0 | 8 | 0.00 | 18.61 |
| 15 | 88 | 58 | 73 | 0 | 8 | 0.00 | 18.61 |
| 16 | 88 | 58 | 73 | 0 | 8 | 0.00 | 18.61 |
| 17 | 88 | 58 | 73 | 0 | 8 | 0.00 | 18.61 |
| 18 | 89 | 58 | 74 | 0 | 9 | 0.00 | 18.61 |
| 19 | 89 | 58 | 74 | 0 | 9 | 0.00 | 18.61 |
| 20 | 89 | 59 | 74 | 0 | 9 | 0.00 | 18.61 |
| 21 | 89 | 59 | 74 | 0 | 9 | 0.00 | 18.61 |
| 22 | 90 | 59 | 74 | 0 | 9 | 0.00 | 18.61 |
| 23 | 90 | 59 | 74 | 0 | 9 | 0.00 | 18.61 |
| 24 | 90 | 59 | 74 | 0 | 10 | 0.00 | 18.61 |
| 25 | 90 | 59 | 75 | 0 | 10 | 0.00 | 18.61 |
| 26 | 90 | 59 | 75 | 0 | 10 | 0.00 | 18.61 |
| 27 | 91 | 59 | 75 | 0 | 10 | 0.00 | 18.61 |
| 28 | 91 | 59 | 75 | 0 | 10 | 0.00 | 18.61 |
| 29 | 91 | 59 | 75 | 0 | 10 | 0.00 | 18.61 |
| 30 | 91 | 59 | 75 | 0 | 10 | 0.00 | 18.61 |
| TOTAL |  |  |  | 9 | 249 | 0.12 |  |
| AVG | 88.1 | 57.9 | 73.0 |  |  |  |  |

NORMALS
DOWNTOWN SACRAMENTO
1961 to 1990

Latitude:38 35N
Longitude: 121 30W
Elevation:84 Ft
JULY

|  | TEMPERATURE |  | DEGREE DAYS |  | PRECIPITATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| DATE | MAX | MIN | AVG | HDD | CDD | DAILY | SEASON |
| 1 | 92 | 59 | 76 | 0 | 11 | 0.01 | 0.01 |
| 2 | 92 | 60 | 76 | 0 | 11 | 0.01 | 0.02 |
| 3 | 92 | 60 | 76 | 0 | 11 | 0.01 | 0.03 |
| 4 | 92 | 60 | 76 | 0 | 11 | 0.01 | 0.04 |
| 5 | 92 | 60 | 76 | 0 | 11 | 0.01 | 0.05 |
| 6 | 92 | 60 | 76 | 0 | 11 | 0.00 | 0.05 |
| 7 | 93 | 60 | 77 | 0 | 12 | 0.00 | 0.05 |
| 8 | 93 | 60 | 77 | 0 | 12 | 0.00 | 0.05 |
| 9 | 93 | 60 | 77 | 0 | 12 | 0.00 | 0.05 |
| 10 | 93 | 60 | 77 | 0 | 12 | 0.00 | 0.05 |
| 11 | 93 | 60 | 77 | 0 | 12 | 0.00 | 0.05 |
| 12 | 93 | 60 | 77 | 0 | 12 | 0.00 | 0.05 |
| 13 | 93 | 60 | 77 | 0 | 12 | 0.00 | 0.05 |
| 14 | 94 | 60 | 77 | 0 | 12 | 0.00 | 0.05 |
| 15 | 94 | 60 | 77 | 0 | 12 | 0.00 | 0.05 |
| 16 | 94 | 60 | 77 | 0 | 12 | 0.00 | 0.05 |
| 17 | 94 | 60 | 77 | 0 | 12 | 0.00 | 0.05 |
| 18 | 94 | 60 | 77 | 0 | 12 | 0.00 | 0.05 |
| 19 | 94 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 20 | 94 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 21 | 94 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 22 | 94 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 23 | 94 | 61 | 78 | 0 | 13 | 0.00 | 0.05 |
| 24 | 94 | 61 | 78 | 0 | 13 | 0.00 | 0.05 |
| 25 | 94 | 61 | 78 | 0 | 13 | 0.00 | 0.05 |
| 26 | 94 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 27 | 94 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 28 | 94 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 29 | 94 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 30 | 94 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 31 | 94 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| TOTAL |  |  |  | 0 | 369 | 0.05 |  |
| AVG | 93.4 | 60.4 | 76.9 |  |  |  |  |
|  |  |  |  |  |  | 12 |  |

NORMALS
DOWNTOWN SACRAMENTO
1961 to 1990

Latitude:38 35N
Longitude: 121 30W
Elevation:84 Ft

AUGUST

|  | TEMPERATURE |  | DEGREE DAYS |  | PRECIPITATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| DATE | MAX | MIN | AVG | HDD | CDD | DAILY | SEASON |
| 1 | 94 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 2 | 94 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 3 | 93 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 4 | 93 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 5 | 93 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 6 | 93 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 7 | 93 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 8 | 93 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 9 | 93 | 61 | 77 | 0 | 12 | 0.00 | 0.05 |
| 10 | 93 | 60 | 77 | 0 | 12 | 0.00 | 0.05 |
| 11 | 93 | 60 | 77 | 0 | 12 | 0.00 | 0.05 |
| 12 | 93 | 60 | 77 | 0 | 12 | 0.00 | 0.05 |
| 13 | 92 | 60 | 76 | 0 | 11 | 0.00 | 0.05 |
| 14 | 92 | 60 | 76 | 0 | 11 | 0.00 | 0.05 |
| 15 | 92 | 60 | 76 | 0 | 11 | 0.00 | 0.05 |
| 16 | 92 | 60 | 76 | 0 | 11 | 0.00 | 0.05 |
| 17 | 92 | 60 | 76 | 0 | 11 | 0.00 | 0.05 |
| 18 | 92 | 60 | 76 | 0 | 11 | 0.00 | 0.05 |
| 19 | 92 | 60 | 76 | 0 | 11 | 0.00 | 0.05 |
| 20 | 92 | 60 | 76 | 0 | 11 | 0.00 | 0.05 |
| 21 | 92 | 60 | 76 | 0 | 11 | 0.00 | 0.05 |
| 22 | 91 | 60 | 76 | 0 | 11 | 0.00 | 0.05 |
| 23 | 91 | 60 | 76 | 0 | 11 | 0.00 | 0.05 |
| 24 | 91 | 60 | 76 | 0 | 11 | 0.00 | 0.05 |
| 25 | 91 | 60 | 76 | 0 | 11 | 0.01 | 0.06 |
| 26 | 91 | 60 | 75 | 0 | 10 | 0.01 | 0.07 |
| 27 | 91 | 60 | 75 | 0 | 10 | 0.01 | 0.08 |
| 28 | 91 | 60 | 75 | 0 | 10 | 0.01 | 0.09 |
| 29 | 91 | 60 | 75 | 0 | 10 | 0.01 | 0.10 |
| 30 | 91 | 60 | 75 | 0 | 10 | 0.01 | 0.11 |
| 31 | 90 | 60 | 75 | 0 | 10 | 0.01 | 0.12 |
| TOTAL |  |  |  | 0 | 347 | 0.07 |  |
| AVG | 92.1 | 60.3 | 76.2 |  |  |  |  |

NORMALS
DOWNTOWN SACRAMENTO
1961 to 1990

Latitude:38 35N
Longitude:121 30W
Elevation:84 Ft

## SEPTEMBER

|  | TEMPERATURE |  | DEGREE DAYS |  | PRECIPITATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| DATE | MAX | MIN | AVG | HDD | CDD | DAILY | SEASON |
| 1 | 90 | 60 | 75 | 0 | 10 | 0.01 | 0.13 |
| 2 | 90 | 60 | 75 | 0 | 10 | 0.01 | 0.14 |
| 3 | 90 | 60 | 75 | 0 | 10 | 0.01 | 0.15 |
| 4 | 90 | 59 | 75 | 0 | 10 | 0.01 | 0.16 |
| 5 | 90 | 59 | 75 | 0 | 10 | 0.01 | 0.17 |
| 6 | 90 | 59 | 74 | 0 | 9 | 0.01 | 0.18 |
| 7 | 89 | 59 | 74 | 0 | 9 | 0.01 | 0.19 |
| 8 | 89 | 59 | 74 | 0 | 9 | 0.01 | 0.20 |
| 9 | 89 | 59 | 74 | 0 | 9 | 0.01 | 0.21 |
| 10 | 89 | 59 | 74 | 0 | 9 | 0.01 | 0.22 |
| 11 | 89 | 59 | 74 | 0 | 9 | 0.01 | 0.23 |
| 12 | 89 | 59 | 74 | 0 | 9 | 0.01 | 0.24 |
| 13 | 88 | 59 | 74 | 0 | 9 | 0.01 | 0.25 |
| 14 | 88 | 59 | 73 | 0 | 8 | 0.01 | 0.26 |
| 15 | 88 | 59 | 73 | 0 | 8 | 0.01 | 0.27 |
| 16 | 88 | 58 | 73 | 0 | 8 | 0.01 | 0.28 |
| 17 | 88 | 58 | 73 | 0 | 8 | 0.01 | 0.29 |
| 18 | 87 | 58 | 73 | 0 | 8 | 0.01 | 0.30 |
| 19 | 87 | 58 | 73 | 0 | 8 | 0.01 | 0.31 |
| 20 | 87 | 58 | 73 | 0 | 8 | 0.01 | 0.32 |
| 21 | 87 | 58 | 72 | 1 | 8 | 0.01 | 0.33 |
| 22 | 86 | 58 | 72 | 1 | 8 | 0.01 | 0.34 |
| 23 | 86 | 57 | 72 | 1 | 8 | 0.01 | 0.35 |
| 24 | 86 | 57 | 72 | 1 | 8 | 0.02 | 0.37 |
| 25 | 86 | 57 | 71 | 1 | 7 | 0.02 | 0.39 |
| 26 | 86 | 57 | 71 | 1 | 7 | 0.02 | 0.41 |
| 27 | 85 | 57 | 71 | 1 | 7 | 0.02 | 0.43 |
| 28 | 85 | 57 | 71 | 1 | 7 | 0.02 | 0.45 |
| 29 | 84 | 57 | 70 | 1 | 6 | 0.02 | 0.47 |
| 30 | 84 | 56 | 70 | 1 | 6 | 0.02 | 0.49 |
| TOTAL |  |  |  | 10 | 250 | 0.37 |  |
| AVG | 87.7 | 58.3 | 73.0 |  |  |  |  |
|  |  |  |  |  |  | 0 | 0 |

NORMALS
DOWNTOWN SACRAMENTO
1961 to 1990

Latitude: 38 35N
Longitude: 121 30W
Elevation:84 Ft

## OCTOBER

|  | TEMPERATURE |  | DEGREE DAYS |  | PRECIPITATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| DATE | MAX | MIN | AVG | HDD | CDD | DAILY | SEASON |
| 1 | 84 | 56 | 70 | 1 | 6 | 0.02 | 0.51 |
| 2 | 84 | 56 | 70 | 1 | 6 | 0.02 | 0.53 |
| 3 | 84 | 56 | 70 | 1 | 6 | 0.02 | 0.55 |
| 4 | 83 | 56 | 69 | 1 | 5 | 0.02 | 0.57 |
| 5 | 83 | 55 | 69 | 1 | 5 | 0.02 | 0.59 |
| 6 | 83 | 55 | 69 | 1 | 5 | 0.02 | 0.61 |
| 7 | 82 | 55 | 69 | 1 | 5 | 0.02 | 0.63 |
| 8 | 82 | 55 | 68 | 1 | 4 | 0.02 | 0.65 |
| 9 | 82 | 55 | 68 | 1 | 4 | 0.02 | 0.67 |
| 10 | 81 | 54 | 68 | 1 | 4 | 0.02 | 0.69 |
| 11 | 81 | 54 | 68 | 1 | 4 | 0.02 | 0.71 |
| 12 | 80 | 54 | 67 | 1 | 3 | 0.02 | 0.73 |
| 13 | 80 | 54 | 67 | 1 | 3 | 0.03 | 0.76 |
| 14 | 80 | 54 | 67 | 1 | 3 | 0.03 | 0.79 |
| 15 | 79 | 53 | 66 | 2 | 3 | 0.03 | 0.82 |
| 16 | 79 | 53 | 66 | 2 | 3 | 0.03 | 0.85 |
| 17 | 78 | 53 | 66 | 2 | 3 | 0.03 | 0.88 |
| 18 | 78 | 53 | 65 | 2 | 2 | 0.04 | 0.92 |
| 19 | 78 | 53 | 65 | 2 | 2 | 0.04 | 0.96 |
| 20 | 77 | 52 | 64 | 3 | 2 | 0.04 | 1.00 |
| 21 | 77 | 52 | 64 | 3 | 2 | 0.04 | 1.04 |
| 22 | 76 | 52 | 64 | 3 | 2 | 0.04 | 1.08 |
| 23 | 76 | 52 | 64 | 3 | 2 | 0.05 | 1.13 |
| 24 | 75 | 51 | 63 | 4 | 2 | 0.05 | 1.18 |
| 25 | 75 | 51 | 63 | 4 | 2 | 0.05 | 1.23 |
| 26 | 74 | 51 | 63 | 4 | 2 | 0.06 | 1.29 |
| 27 | 74 | 51 | 62 | 4 | 1 | 0.06 | 1.35 |
| 28 | 73 | 50 | 62 | 4 | 1 | 0.06 | 1.41 |
| 29 | 72 | 50 | 61 | 5 | 1 | 0.06 | 1.47 |
| 30 | 72 | 50 | 61 | 5 | 1 | 0.07 | 1.54 |
| 31 | 71 | 50 | 61 | 5 | 1 | 0.07 | 1.61 |
| TOTAL |  |  |  | 71 | 95 | 1.12 |  |
| AVG | 78.5 | 53.1 | 65.8 |  |  |  |  |

NORMALS
DOWNTOWN SACRAMENTO
1961 to 1990
Latitude:38 35N
Longitude: 12130 W
Elevation:84 Ft

NOVEMBER

|  | TEMPERATURE |  | DEGREE DAYS |  | PRECIPITATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| DATE | MAX | MIN | AVG | HDD | CDD | DAILY | SEASON |
| 1 | 71 | 49 | 60 | 5 | 0 | 0.07 | 1.68 |
| 2 | 70 | 49 | 60 | 5 | 0 | 0.08 | 1.76 |
| 3 | 70 | 49 | 59 | 6 | 0 | 0.08 | 1.84 |
| 4 | 69 | 49 | 59 | 6 | 0 | 0.08 | 1.92 |
| 5 | 69 | 48 | 59 | 6 | 0 | 0.09 | 2.01 |
| 6 | 68 | 48 | 58 | 7 | 0 | 0.09 | 2.10 |
| 7 | 68 | 48 | 58 | 7 | 0 | 0.09 | 2.19 |
| 8 | 67 | 48 | 57 | 8 | 0 | 0.09 | 2.28 |
| 9 | 66 | 48 | 57 | 8 | 0 | 0.10 | 2.38 |
| 10 | 66 | 47 | 57 | 8 | 0 | 0.10 | 2.48 |
| 11 | 65 | 47 | 56 | 9 | 0 | 0.10 | 2.58 |
| 12 | 65 | 47 | 56 | 9 | 0 | 0.10 | 2.68 |
| 13 | 65 | 47 | 56 | 9 | 0 | 0.10 | 2.78 |
| 14 | 64 | 46 | 55 | 10 | 0 | 0.10 | 2.88 |
| 15 | 64 | 46 | 55 | 10 | 0 | 0.11 | 2.99 |
| 16 | 63 | 46 | 55 | 10 | 0 | 0.11 | 3.10 |
| 17 | 63 | 46 | 54 | 11 | 0 | 0.11 | 3.21 |
| 18 | 62 | 45 | 54 | 11 | 0 | 0.11 | 3.32 |
| 19 | 62 | 45 | 54 | 11 | 0 | 0.11 | 3.43 |
| 20 | 61 | 45 | 53 | 12 | 0 | 0.11 | 3.54 |
| 21 | 61 | 45 | 53 | 12 | 0 | 0.11 | 3.65 |
| 22 | 61 | 44 | 53 | 12 | 0 | 0.11 | 3.76 |
| 23 | 60 | 44 | 52 | 13 | 0 | 0.11 | 3.87 |
| 24 | 60 | 44 | 52 | 13 | 0 | 0.11 | 3.98 |
| 25 | 59 | 44 | 52 | 13 | 0 | 0.10 | 4.08 |
| 26 | 59 | 44 | 51 | 14 | 0 | 0.10 | 4.18 |
| 27 | 59 | 43 | 51 | 14 | 0 | 0.10 | 4.28 |
| 28 | 58 | 43 | 51 | 14 | 0 | 0.10 | 4.38 |
| 29 | 58 | 43 | 50 | 15 | 0 | 0.10 | 4.48 |
| 30 | 58 | 43 | 50 | 15 | 0 | 0.10 | 4.58 |
| TOTAL |  |  |  | 303 | 0 | 2.97 |  |
| AVG | 63.7 | 46.0 | 54.9 |  |  |  |  |
|  |  |  |  |  |  |  |  |

NORMALS
DOWNTOWN SACRAMENTO
1961 to 1990
Latitude: 3835 N
Longitude: 12130 W
Elevation:84 Ft

## DECEMBER

|  | TEMPERATURE |  | DEGREE DAYS |  | PRECIPITATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| DATE | MAX | MIN | AVG | HDD | CDD | DAILY | SEASON |
| 1 | 58 | 42 | 50 | 15 | 0 | 0.10 | 4.68 |
| 2 | 57 | 42 | 50 | 15 | 0 | 0.09 | 4.77 |
| 3 | 57 | 42 | 49 | 16 | 0 | 0.09 | 4.86 |
| 4 | 56 | 42 | 49 | 16 | 0 | 0.09 | 4.95 |
| 5 | 56 | 42 | 49 | 16 | 0 | 0.09 | 5.04 |
| 6 | 56 | 41 | 49 | 16 | 0 | 0.09 | 5.13 |
| 7 | 56 | 41 | 48 | 17 | 0 | 0.09 | 5.22 |
| 8 | 55 | 41 | 48 | 17 | 0 | 0.09 | 5.31 |
| 9 | 55 | 41 | 48 | 17 | 0 | 0.09 | 5.40 |
| 10 | 55 | 41 | 48 | 17 | 0 | 0.08 | 5.48 |
| 11 | 54 | 41 | 47 | 18 | 0 | 0.08 | 5.56 |
| 12 | 54 | 40 | 47 | 18 | 0 | 0.08 | 5.64 |
| 13 | 54 | 40 | 47 | 18 | 0 | 0.08 | 5.72 |
| 14 | 54 | 40 | 47 | 18 | 0 | 0.08 | 5.80 |
| 15 | 54 | 40 | 47 | 18 | 0 | 0.08 | 5.88 |
| 16 | 54 | 40 | 47 | 18 | 0 | 0.08 | 5.96 |
| 17 | 53 | 40 | 46 | 19 | 0 | 0.08 | 6.04 |
| 18 | 53 | 40 | 46 | 19 | 0 | 0.08 | 6.12 |
| 19 | 53 | 40 | 46 | 19 | 0 | 0.09 | 6.21 |
| 20 | 53 | 40 | 46 | 19 | 0 | 0.09 | 6.30 |
| 21 | 53 | 40 | 46 | 19 | 0 | 0.09 | 6.39 |
| 22 | 53 | 39 | 46 | 19 | 0 | 0.09 | 6.48 |
| 23 | 53 | 39 | 46 | 19 | 0 | 0.09 | 6.57 |
| 24 | 53 | 39 | 46 | 19 | 0 | 0.09 | 6.66 |
| 25 | 53 | 39 | 46 | 19 | 0 | 0.09 | 6.75 |
| 26 | 52 | 39 | 46 | 19 | 0 | 0.09 | 6.84 |
| 27 | 52 | 39 | 46 | 19 | 0 | 0.10 | 6.94 |
| 28 | 52 | 39 | 46 | 19 | 0 | 0.10 | 7.04 |
| 29 | 52 | 39 | 46 | 19 | 0 | 0.10 | 7.14 |
| 30 | 52 | 39 | 46 | 19 | 0 | 0.10 | 7.24 |
| 31 | 52 | 39 | 46 | 19 | 0 | 0.10 | 7.34 |
| TOTAL |  |  |  | 555 | 0 | 2.76 |  |
| AVG | 54.0 | 40.2 | 47.1 |  |  |  |  |
|  |  |  |  |  |  | 0 |  |

## III. DAILY RECORDS

MONTH: JANUARY

|  | Normal Max | Record Max | Record <br> Max <br> Year | Record <br> Low $\qquad$ | Record <br> Low Max Year | Normal Min | Record Min | Record <br> Min <br> Year | Record <br> High <br> Min | Record <br> High Min <br> Year | Grtst <br> Pcpn | Grtst <br> Pcpn <br> Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan 01 | 52 | 65 | 1887 | 38 | 1920 | 39 | 24 | 1919 | 60 | 1997 | 1.90 | 1883 |
| Jan 02 | 52 | 65 | 1940 | 36 | 1961** | 39 | 25 | 1961 | 56 | 1997 | 1.79 | 1940 |
| Jan 03 | 52 | 63 | 1913 | 37 | 1961** | 39 | 26 | 1950 | 53 | 1900 | 2.60 | 1916 |
| Jan 04 | 52 | 63 | 1994** | 37 | 1961** | 39 | 25 | 1949 | 53 | 1948 | 3.10 | 1982 |
| Jan 05 | 52 | 67 | 1948 | 33 | 1961** | 39 | 26 | 1949 | 55 | 1986 | 1.68 | 1978 |
| Jan 06 | 52 | 71 | 1911 | 35 | 1961 | 39 | 24 | 1950 | 53 | 1948 | 1.14 | 1993 |
| Jan 07 | 53 | 65 | 1943 | 36 | 1968 | 39 | 24 | 1937 | 54 | 1948 | 1.02 | 1940 |
| Jan 08 | 53 | 66 | 1990** | 37 | 1968 | 39 | 22 | 1937 | 57 | 1953 | 1.08 | 1995 |
| Jan 09 | 53 | 70 | 1990 | 37 | 1926** | 39 | 22 | 1937 | 58 | 1953 | 2.83 | 1995 |
| Jan 10 | 53 | 66 | 1996** | 35 | 1926 | 39 | 25 | 1949 | 57 | 1959 | 1.72 | 1995 |
| Jan 11 | 53 | 67 | 1959** | 35 | 1929** | 40 | 22 | 1949 | 54 | 1959 | 1.44 | 1952 |
| Jan 12 | 53 | 69 | 1980 | 36 | 1929** | 40 | 28 | 1949 | 56 | 1980 | 2.53 | 1990 |
| Jan 13 | 53 | 64 | 1981** | 35 | 1926 | 40 | 27 | 1963** | 59 | 1980 | 2.53 | 1993 |
| Jan 14 | 53 | 65 | 1980 | 35 | 1929 | 40 | 19 | 1888 | 56 | 1909 | 1.69 | 1911 |
| Jan 15 | 53 | 67 | 1981** | 37 | 1903** | 40 | 19 | 1888 | 55 | 1909 | 2.25 | 1894 |
| Jan 16 | 54 | 68 | 1991 | 39 | 1888 | 40 | 24 | 1888** | 56 | 1909 | 1.53 | 1973 |
| Jan 17 | 54 | 69 | 1986 | 40 | 1982 | 40 | 22 | 1888 | 54 | 1986** | 1.90 | 1921 |
| Jan 18 | 54 | 70 | 1976 | 40 | 1922 | 40 | 25 | 1888 | 56 | 1896 | 1.22 | 1973 |
| Jan 19 | 54 | 71 | 1991 | 41 | 1961 | 40 | 27 | 1922** | 53 | 1953 | 1.46 | 1969 |
| Jan 20 | 54 | 69 | 1976 | 36 | 1937 | 40 | 22 | 1883 | 55 | 1969 | 2.10 | 1964 |
| Jan 21 | 55 | 70 | 1976 | 34 | 1962 | 40 | 22 | 1937 | 57 | 1970 | 3.14 | 1943 |
| Jan 22 | 55 | 66 | 1991** | 40 | 1992** | 41 | 24 | 1937 | 59 | 1970 | 2.13 | 1997 |
| Jan 23 | 55 | 69 | 1948 | 39 | 1992 | 41 | 27 | 1937 | 54 | 1970 | 2.50 | 1886 |
| Jan 24 | 56 | 70 | 1984** | 39 | 1893 | 41 | 28 | 1949 | 54 | 1903 | 1.76 | 1942 |
| Jan 25 | 56 | 70 | 1934 | 40 | 1893 | 41 | 24 | 1937 | 53 | 1886 | 1.34 | 1890 |
| Jan 26 | 56 | 70 | 1899 | 40 | 1963 | 41 | 28 | 1949 | 54 | 1942** | 1.35 | 1997 |
| Jan 27 | 56 | 68 | 1988** | 40 | 1963 | 41 | 27 | 1957 | 53 | 1997 | 1.78 | 1896 |
| Jan 28 | 57 | 70 | 1984 | 43 | 1977** | 41 | 29 | 1898** | 53 | 1997** | 1.32 | 1926 |
| Jan 29 | 57 | 70 | 1976 | 40 | 1922 | 42 | 25 | 1880 | 56 | 1967 | 2.66 | 1881 |
| Jan 30 | 57 | 73 | 1976 | 40 | 1922 | 42 | 28 | 1957 | 56 | 1967 | 1.70 | 1963 |
| Jan 31 | 58 | 74 | 1976 | 44 | 1978** | 42 | 30 | 1950** | 55 | 1963 | 1.42 | 1938 |
| MONTHLY SUMMARY |  |  |  |  |  |  |  |  |  |  |  |  |
| Max Extreme |  | 74 | Jan 31 | 1976 | Min | Extreme | 19 | Jan 15 | 1888* |  |  |  |
| Low Max |  | 33 | Jan 05 | 1961** |  | High Min | 60 | Jan 01 | 1997 |  |  |  |
| Average Max |  | 54.1 |  |  | Average Min |  | 40.1 |  |  | Average Temp |  | 47.1 |
|  | ax Pcpn | 3.14 | Jan 21 | 1943 |  |  |  |  |  |  |  |  |

*Also occurred prior dates in month
**Also occurred prior years

| SACRAMENTO CLIMATE <br> MONTH: FEBRUARY |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Normal Max | Record Max | Record <br> Max <br> Year | Record <br> Low <br> Max | Record <br> Low Max Year | Normal $\operatorname{Min}$ | Record <br> Min | $\begin{gathered} \text { Record } \\ \text { Min } \\ \text { Year } \\ \hline \end{gathered}$ | Record <br> High <br> Min | Record <br> High Min Year | Grtst <br> Pcpn | Grtst <br> Pcpn <br> Year |
| Feb 01 | 58 | 74 | 1976 | 42 | 1932 | 42 | 28 | 1950 | 58 | 1963 | 2.74 | 1945 |
| Fet 02 | 58 | 76 | 1976 | 42 | 1883 | 42 | 26 | 1950 | 56 | 1963 | 2.4 | 1944 |
| Feb 03 | 59 | 71 | 1992 | 40 | 1883 | 43 | 22 | 1883 | 56 | 1963** | 1.72 | 1881 |
| Feb 04 | 59 | 72 | 1984 | 42 | 1899 | 43 | 23 | 1883 | 57 | 1996 | 2.32 | 1937 |
| Feb 05 | 60 | 70 | 1996 | 42 | 1989** | 43 | 24 | 1989 | 58 | 1996 | 1.8 | 1901 |
| Feb 06 | 60 | 73 | 1996** | 43 | 1949 | 43 | 24 | 1989 | 55 | 1963 | 1.3 | 1998 |
| Feb 07 | 60 | 70 | 1987 | 44 | 1929** | 43 | 23 | 1989 | 54 | 1960** | 1.15 | 1958 |
| Feb 08 | 60 | 70 | 1988 | 43 | 1901 | 43 | 23 | 1989 | 55 | 1975 | 1.17 | 1985 |
| Feb 09 | 61 | 70 | 1988 | 43 | 1989 | 43 | 28 | 1891** | 53 | 1992** | 2.19 | 1962 |
| Feb 10 | 61 | 74 | 1988 | 44 | 1939 | 44 | 29 | 1933** | 55 | 1996** | 1.96 | 1919 |
| Feb 11 | 61 | 75 | 1988 | 44 | 1894** | 44 | 30 | 1884 | 54 | 1970 | 2.34 | 1936 |
| Feb 12 | 61 | 74 | 1996** | 45 | 1884 | 44 | 25 | 1884 | 56 | 1879 | 2.48 | 1904 |
| Feb 13 | 62 | 74 | 1971 | 46 | 1884 | 44 | 21 | 1884 | 54 | 1996** | 1.61 | 1926 |
| Feb 14 | 62 | 76 | 1930 | 44 | 1911 | 44 | 27 | 1884 | 56 | 1986** | 1.34 | 1992 |
| Feb 15 | 62 | 76 | 1977 | 42 | 1884 | 44 | 30 | 1990 | 57 | 1982 | 1.86 | 1891 |
| Feb 16 | 62 | 76 | 1977 | 47 | 1990 | 44 | 30 | 1883 | 55 | 1982** | 1.94 | 1990 |
| Feb 17 | 63 | 76 | 1977 | 45 | 1990** | 44 | 30 | 1880 | 57 | 1996 | 3.21 | 1986 |
| Feb 18 | 63 | 80 | 1899 | 46 | 1890** | 45 | 31 | 1990** | 56 | 1980 | 1.91 | 1958 |
| Feb 19 | 63 | 77 | 1964** | 44 | 1897 | 45 | 31 | 1882 | 54 | 1968 | 2.16 | 1894 |
| Feb 20 | 63 | 75 | 1995 | 46 | 1909** | 45 | 31 | 1953** | 56 | 1968 | 1.21 | 1914 |
| Feb 21 | 63 | 75 | 1995** | 42 | 1913 | 45 | 31 | 1955 | 56 | 1968 | 1.26 | 1917 |
| Feb 22 | 63 | 78 | 1985 | 48 | 1951** | 45 | 33 | 1920 | 56 | 1904 | 1.04 | 1891 |
| Feb 23 | 64 | 79 | 1991 | 48 | 1890 | 45 | 32 | 1890 | 58 | 1968 | 1.26 | 1891 |
| Feb 24 | 64 | 77 | 1991 | 48 | 1930** | 45 | 35 | 1960** | 55 | 1957 | 1.82 | 1917 |
| Feb 25 | 64 | 77 | 1992** | 49 | 1887 | 45 | 30 | 1887 | 55 | 1957** | 0.9 | 1902 |
| Feb 26 | 64 | 77 | 1992 | 44 | 1962 | 45 | 30 | 1962 | 55 | 1957 | 1.46 | 1940 |
| Feb 27 | 64 | 80 | 1985 | 44 | 1911 | 45 | 30 | 1962 | 54 | 1980** | 2.19 | 1940 |
| Feb 28 | 64 | 79 | 1985 | 49 | 1951** | 45 | 33 | 1955** | 55 | 1976 | 1.41 | 1935 |
| Feb 29 | 64 | 73 | 1924 | 54 | 1920** | 45 | 36 | 1888 | 53 | 1992 | 0.61 | 1976 |
| MONTHLY SUMMARY |  |  |  |  |  |  |  |  |  |  |  |  |
| Max | Extreme | 80 | Feb 27 | 1985* | Min | Extreme | 21 | Feb 13 | 1884 |  |  |  |
|  | Low Max | 40 | Feb 03 | 1883 |  | High Min | $58$ | Feb 23 | 1968* |  |  |  |
| Ave | rage Max | 61.8 |  |  | Ave | rage Min | 44 |  |  |  | ge Temp | 52.9 |
|  | Max Pcpn | 3.21 | Feb 17 | 1986 |  |  |  |  |  |  |  |  |
| *Also occurred prior dates in month **Also occurred prior years |  |  |  |  |  |  |  |  |  |  |  |  |

MONTH: MARCH

|  | Normal Max | $\begin{gathered} \text { Record } \\ \text { Max } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Record } \\ \text { Max } \\ \text { Year } \\ \hline \end{gathered}$ | Record Low Max | Record Low Max Year | $\begin{array}{\|c\|} \hline \text { Normal } \\ \text { Min } \\ \hline \end{array}$ | $\begin{gathered} \text { Record } \\ \text { Min } \\ \hline \end{gathered}$ | Record <br> Min <br> Year | Record <br> High <br> Min | Record <br> High Min Year | Grtst <br> Pcpn | Grtst <br> Pcpn <br> Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mar 01 | 64 | 76 | 1936 | 49 | 1911 | 45 | 32 | 1971 | 55 | 1986** | 1.33 | 1911 |
| Mar 02 | 64 | 79 | 1994 | 45 | 1976 | 45 | 32 | 1953 | 54 | 1983 | 1.91 | 1995 |
| Mar 03 | 64 | 80 | 1929 | 47 | 1894 | 45 | 31 | 1951 | 55 | 1905** | 0.95 | 1906 |
| Mar 04 | 64 | 78 | 1986** | 46 | 1951 | 45 | 33 | 1939** | 55 | 1884 | 1.26 | 1978 |
| Mar 05 | 64 | 82 | 1986 | 49 | 1908 | 45 | 33 | 1880 | 56 | 1884 | 1.97 | 1879 |
| Mar 06 | 65 | 80 | 1953 | 47 | 1952** | 45 | 32 | 1918 | 56 | 1892 | 1.80 | 1952 |
| Mar 07 | 65 | 81 | 1953 | 48 | 1918 | 45 | 32 | 1964 | 58 | 1986 | 0.74 | 1986 |
| Mar 08 | 65 | 80 | 1953 | 50 | 1939** | 46 | 34 | 1985 | 57 | 1989 | 1.37 | 1939 |
| Mar 09 | 65 | 78 | 1892 | 49 | 1939 | 46 | 34 | 1882 | 58 | 1983 | 2.62 | 1884 |
| Mar 10 | 65 | 81 | 1997 | 48 | 1922 | 46 | 34 | 1951 | 58 | 1983 | 1.44 | 1918 |
| Mar 11 | 65 | 81 | 1934 | 47 | 1922 | 46 | 34 | 1922 | 56 | 1916 | 1.18 | 1893 |
| Mar 12 | 65 | 80 | 1934 | 47 | 1969 | 46 | 31 | 1950 | 56 | 1972 | 1.30 | 1983 |
| Mar 13 | 65 | 81 | 1994 | 50 | 1919 | 46 | 33 | 1954 | 56 | 1900 | 2.38 | 1889 |
| Mar 14 | 66 | 81 | 1994** | 46 | 1942 | 46 | 32 | 1942 | 56 | 1970 | 1.47 | 1942 |
| Mar 15 | 66 | 82 | 1972 | 49 | 1906 | 46 | 29 | 1880 | 56 | 1878 | 2.20 | 1899 |
| Mar 16 | 66 | 86 | 1972 | 48 | 1945 | 46 | 31 | 1898 | 60 | 1914 | 1.15 | 1907 |
| Mar 17 | 66 | 84 | 1996** | 49 | 1886 | 46 | 35 | 1955 | 60 | 1914 | 0.75 | 1991 |
| Mar 18 | 66 | 82 | 1914 | 52 | 1954** | 46 | 34 | 1945** | 55 | 1914 | 1.74 | 1907 |
| Mar 19 | 66 | 80 | 1996** | 50 | 1937 | 46 | 35 | 1898 | 60 | 1914 | 0.76 | 1954 |
| Mar 20 | 67 | 84 | 1960 | 50 | 1946** | 46 | 33 | 1952 | 56 | 1984 | 0.97 | 1910 |
| Mar 21 | 67 | 82 | 1990** | 48 | 1973 | 46 | 35 | 1952 | 59 | 1997 | 2.52 | 1937 |
| Mar 22 | 67 | 82 | 1915** | - 46 | 1964 | 46 | 34 | 1987 | 56 | 1978 | 1.09 | 1995 |
| Mar 23 | 67 | 80 | 1997** | 47 | 1913 | 46 | 30 | 1898 | 56 | 1896 | 1.55 | 1906 |
| Mar 24 | 67 | 83 | 1997 | 50 | 1991** | 46 | 34 | 1945** | 60 | 1896 | 1.06 | 1991 |
| Mar 25 | 68 | 86 | 1997 | 48 | 1907 | 47 | 34 | 1936 | 60 | 1896 | 0.98 | 1884 |
| Mar 26 | 68 | 90 | 1988 | 48 | 1991 | 47 | 32 | 1898 | 57 | 1997* | 1.61 | 1883 |
| Mar 27 | 68 | 85 | 1923 | 52 | 1884 | 47 | 32 | 1898 | 59 | 1882 | 1.33 | 1963 |
| Mar 28 | 68 | 84 | 1986 | 53 | 1905** | 47 | 37 | 1892 | 57 | 1986** | 1.28 | 1904 |
| Mar 29 | 68 | 83 | 1968 | 51 | 1914** | 47 | 36 | 1897 | 59 | 1918 | 0.96 | 1940 |
| Mar 30 | 69 | 86 | 1966 | 51 | 1925** | 47 | 34 | 1938 | 59 | 1881 | 2.27 | 1906 |
| Mar 31 | 69 | 90 | 1966 | 50 | 1982 | 47 | 37 | 1936 | 57 | 1885 | 1.83 | 1982 |


| MONTHLY SUMMARY |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Max Extreme | 90 | Mar 31 | 1966* | Min Extreme | 29 | Mar 15 | 1880 |  |  |
| Low Max | 45 | Mar 02 | 1976 | High Min | 60 | Mar 25 | 1896* |  |  |
| Average Max | 66.1 |  |  | Average Min | 46 |  |  | Average Temp | 56.1 |
| Max Pcpn | 2.62 | Mar 09 | 1884 |  |  |  |  |  |  |


| SACRAMENTO CLIMATE MONTH: APRIL |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Normal Max | Record Max | Record <br> Max <br> Year | Record <br> Low <br> Max | Record <br> Low Max <br> Year | Normal Min | Record <br> Min | Record <br> Min <br> Year | Record <br> High <br> Min | Record <br> High Min Year | Grtst <br> Pcpn | Grtst <br> Pcpn <br> Year |
| Apr 01 | 69 | 90 | 1966 | 52 | 1982 | 47 | 36 | 1936 | 56 | 1966 | 1.25 | 1958 |
| Apr 02 | 69 | 88 | 1985** | 52 | 1958 | 47 | 37 | 1955 | 56 | 1966** | 2.23 | 1958 |
| Apr 03 | 70 | 89 | 1966 | 53 | 1928** | 47 | 36 | 1955 | 58 | 1961 | 1.55 | 1936 |
| Apr 04 | 70 | 86 | 1960 | 52 | 1938** | 47 | 35 | 1901 | 60 | 1961 | 1.86 | 1941 |
| Apr 05 | 70 | 88 | 1985 | 50 | 1929 | 47 | 36 | 1929 | 57 | 1934 | 1.34 | 1926 |
| Apr 06 | 70 | 91 | 1989 | 55 | 1929** | 48 | 34 | 1929 | 57 | 1939 | 0.96 | 1896 |
| Apr 07 | 71 | 91 | 1989 | 54 | 1893 | 48 | 36 | 1929 | 60 | 1878 | 3.35 | 1935 |
| Apr 08 | 71 | 91 | 1989 | 54 | 1965 | 48 | 34 | 1953 | 63 | 1878 | 1.02 | 1926 |
| Apr 09 | 71 | 95 | 1989 | 52 | 1965 | 48 | 34 | 1929 | 60 | 1989** | 1.37 | 1884 |
| Apr 10 | 71 | 93 | 1988 | 52 | 1912 | 48 | 34 | 1927 | 60 | 1885 | 1.88 | 1982 |
| Apr 11 | 72 | 95 | 1988 | 51 | 1956 | 48 | 37 | 1953 | 62 | 1904 | 0.60 | 1886 |
| Apr 12 | 72 | 89 | 1990** | 50 | 1922 | 48 | 36 | 1912 | 58 | 1932** | 0.82 | 1992 |
| Apr 13 | 72 | 95 | 1990 | 50 | 1956 | 48 | 37 | 1945 | 60 | 1897 | 0.76 | 1942 |
| Apr 14 | 72 | 94 | 1985 | 52 | 1920 | 48 | 36 | 1921 | 59 | 1897 | 1.20 | 1963 |
| Apr 15 | 73 | 92 | 1987 | 51 | 1880 | 48 | 36 | 1896 | 61 | 1925 | 1.84 | 1880 |
| Apr 16 | 73 | 92 | 1987 | 55 | 1880 | 49 | 36 | 1917 | 62 | 1897 | 0.30 | 1957 |
| Apr 17 | 73 | 90 | 1954 | 55 | 1955** | 49 | 36 | 1933** | 58 | 1997** | 0.73 | 1881 |
| Apr 18 | 73 | 91 | 1939 | 54 | 1967 | 49 | 38 | 1933 | 62 | 1907 | 0.90 | 1890 |
| Apr 19 | 74 | 91 | 1939 | 53 | 1988** | 49 | 39 | 1933 | 64 | 1907 | 1.00 | 1988 |
| Apr 20 | 74 | 92 | 1931 | 49 | 1963 | 49 | 38 | 1904 | 60 | 1907 | 5.28 | 1880 |
| Apr 21 | 74 | 96 | 1931 | 54 | 1967 | 49 | 36 | 1963** | 62 | 1931** | 3.09 | 1880 |
| Apr 22 | 74 | 92 | 1984 | 54 | 1980 | 49 | 39 | 1920 | 60 | 1895 | 0.52 | 1990 |
| Apr 23 | 75 | 92 | 1946 | 54 | 1924 | 50 | 39 | 1920 | 62 | 1910 | 0.60 | 1896 |
| Apr 24 | 75 | 94 | 1946 | 57 | 1951** | 50 | 38 | 1964 | 59 | 1996** | 1.90 | 1896 |
| Apr 25 | 75 | 92 | 1987 | 54 | 1952 | 50 | 40 | 1891** | 61 | 1966** | 0.61 | 1952 |
| Apr 26 | 76 | 94 | 1987 | 54 | 1911 | 50 | 39 | 1892 | 63 | 1926 | 0.62 | 1960 |
| Apr 27 | 76 | 96 | 1987 | 56 | 1904** | 50 | 38 | 1955 | 62 | 1965** | 1.54 | 1953 |
| Apr 28 | 76 | 94 | 1992** | 56 | 1948** | 50 | 40 | 1970** | 61 | 1992 | 1.24 | 1983 |
| Apr 29 | 76 | 96 | 1981 | 53 | 1948 | 51 | 39 | 1948 | 63 | 1981 | 1.52 | 1901 |
| Apr 30 | 77 | 97 | 1996 | 54 | 1938 | 51 | 39 | 1933 | 62 | 1981 | 0.57 | 1995 |
| MONTHLY SUMMARY |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Extreme | 97 | Apr 30 | 1996 | Min | Extreme | $34$ | Apr 10 | 1927* |  |  |  |
|  | Low Max | 49 | Apr 20 | 1963 |  | High Min | $64$ | Apr 19 | 1907 |  |  |  |
|  | rage Max | 72.8 |  |  | Ave | rage Min | 48.7 |  |  |  | ge Temp | 60.8 |
|  | Max Pcpn | $5.28$ | Apr 20 | 1880 |  |  |  |  |  |  |  |  |
| *Also occurred prior dates in month |  |  |  |  |  | **Also occurred prior years |  |  |  |  |  |  |


|  |  |  |  |  | SACRAMENTO CLIMATE MONTH: MAY |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Normal <br> Max | Record <br> Max | $\begin{aligned} & \text { Record } \\ & \text { Max } \\ & \text { Year } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Record } \\ & \text { Low } \\ & \text { Max } \\ & \hline \end{aligned}$ | Record <br> Low Max <br> Year | Normal <br> Min | Record $\qquad$ Min | $\begin{gathered} \text { Record } \\ \text { Min } \\ \text { Year } \\ \hline \end{gathered}$ | Record <br> High <br> Min | Record <br> High Min Year | $\begin{aligned} & \text { Grst } \\ & \text { Pcpn } \\ & \hline \end{aligned}$ | Grtst <br> Pcpn <br> Year |
| May 01 | 77 | 97 | 1996 | 56 | 1915 | 51 | 39 | 1920 | 66 | 1996 | 0.59 | 1905 |
| May 02 | 77 | 96 | 1992 | 56 | 1950 | 51 | 40 | 1964 | 66 | 1996 | 0.56 | 1971 |
| May 03 | 78 | 97 | 1992 | 55 | 1892 | 51 | 37 | 1950 | 64 | 1990 | 0.76 | 1956 |
| May 04 | 78 | 100 | 1990 | 56 | 1892 | 51 | 42 | 1952** | 65 | 1989 | 0.85 | 1883 |
| May 05 | 78 | 100 | 1987 | 57 | 1964 | 52 | 42 | 1988 | 67 | 1878 | 1.94 | 1889 |
| May 06 | 78 | 104 | 1987 | 57 | 1994 | 52 | 39 | 1933 | 67 | 1987 | 1.24 | 1994 |
| May 07 | 79 | 105 | 1987 | 54 | 1905 | 52 | 37 | 1916 | 68 | 1987 | 1.31 | 1905 |
| May 08 | 79 | 96 | 1984 | 55 | 1963 | 52 | 40 | 1933 | 70 | 1987 | 0.78 | 1893 |
| May 09 | 79 | 96 | 1987 | 57 | 1922 | 52 | 39 | 1896 | 67 | 1987 | 0.41 | 1980 |
| May 10 | 79 | 100 | 1987 | 58 | 1887 | 52 | 41 | 1933 | 67 | 1897 | 0.48 | 1942 |
| May 11 | 80 | 102 | 1987 | 58 | 1880 | 53 | 40 | 1930 | 68 | 1897 | 1.00 | 1915 |
| May 12 | 80 | 102 | 1987 | 55 | 1880 | 53 | 39 | 1880 | 66 | 1976** | 0.62 | 1925 |
| May 13 | 80 | 102 | 1976 | 58 | 1968 | 53 | 40 | 1882 | 70 | 1987 | 0.95 | 1941 |
| May 14 | 80 | 103 | 1987 | 58 | 1894 | 53 | 41 | 1899 | 67 | 1987 | 0.39 | 1953 |
| May 15 | 81 | 99 | 1927 | 58 | 1911 | 53 | 40 | 1906 | 68 | 1910 | 1.67 | 1996 |
| May 16 | 81 | 102 | 1970 | 61 | 1898** | 53 | 40 | 1894 | 69 | 1970 | 0.38 | 1996 |
| May 17 | 81 | 101 | 1997 | 60 | 1911 | 54 | 43 | 1883 | 70 | 1997 | 0.43 | 1879 |
| May 18 | 82 | 104 | 1997 | 58 | 1991 | 54 | 42 | 1917 | 71 | 1997 | 0.82 | 1957 |
| May 19 | 82 | 98 | 1947 | 60 | 1948 | 54 | 41 | 1896 | 66 | 1920 | 0.46 | 1948 |
| May 20 | 82 | 102 | 1947 | 56 | 1957** | 54 | 44 | 1901** | 67 | 1931 | 0.62 | 1921 |
| May 21 | 82 | 100 | 1988 | 61 | 1933 | 54 | 45 | 1960** | 69 | 1892 | 0.45 | 1939 |
| May 22 | 82 | 100 | 1967 | 60 | 1977 | 54 | 42 | 1960 | 70 | 1943 | 0.65 | 1958 |
| May 23 | 83 | 98 | 1936 | 57 | 1960 | 55 | 45 | 1916 | 69 | 1943 | 0.37 | 1960 |
| May 24 | 83 | 98 | 1982** | 58 | 1916 | 55 | 43 | 1953 | 72 | 1890 | 0.62 | 1993 |
| May 25 | 83 | 100 | 1951 | 58 | 1917 | 55 | 43 | 1899 | 68 | 1883 | 0.77 | 1906 |
| May 26 | 83 | 102 | 1974 | 63 | 1906 | 55 | 42 | 1918 | 69 | 1951** | 0.30 | 1901 |
| May 27 | 84 | 104 | 1984 | 56 | 1906 | 55 | 45 | 1927 | 67 | 1984 | 1.56 | 1990 |
| May 28 | 84 | 107 | 1984 | 57 | 1998 | 55 | 44 | 1927 | 72 | 1887 | 1.27 | 1998 |
| May 29 | 84 | 101 | 1973 | 63 | 1911 | 55 | 44 | 1985 | 71 | 1973 | 0.26 | 1948 |
| May 30 | 84 | 103 | 1910 | 61 | 1932 | 56 | 44 | 1898 | 68 | 1969 | 1.67 | 1948 |
| May 31 | 85 | 100 | 1910 | 58 | 1899 | 56 | 45 | 1923 | 67 | 1910** | 0.44 | 1899 |
|  |  |  |  |  | MON | NTHLY SU | UMMARY |  |  |  |  |  |
| Max | Extreme | 107 | May 28 | 1984 | Min | Extreme | 37 | May 07 | 1916* |  |  |  |
|  | Low Max | 54 | May 07 | 1905 |  | High Min | 72 | May 28 | 1887* |  |  |  |
| Ave | age Max | 80.9 |  |  | Aver | rage Min | 53.4 |  |  | Ave | ge Temp | 67.2 |
|  | Max Pcpn | 1.94 | May 05 | 1889 |  |  |  |  |  |  |  |  |
| *Also occurred prior dates in month |  |  |  |  | **Also occurred prior years |  |  |  |  |  |  |  |


| SACRAMENTO CLIMATE MONTH: JUNE |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Normal Max | Record <br> Max | $\begin{aligned} & \text { Record } \\ & \text { Max } \\ & \text { Year } \\ & \hline \end{aligned}$ | Record <br> Low <br> Max | Record <br> Low Max Year | Normal <br> Min | Record <br> Min | Record <br> Min <br> Year | Record <br> High <br> Min | Record High Min Year | Grtst <br> Pcpn | Grtst <br> Pcpn <br> Year |
| Jun 01 | 85 | 104 | 1970 | 62 | 1967** | 56 | 43 | 1929 | 69 | 1960 | 0.45 | 1899 |
| Jun 02 | 85 | 106 | 1960 | 59 | 1967 | 56 | 45 | 1933** | 71 | 1960 | 0.15 | 1967 |
| Jun 03 | 85 | 107 | 1960 | 64 | 1936 | 56 | 46 | 1944** | 71 | 1893 | 0.38 | 1894 |
| Jun 04 | 86 | 103 | 1935** | 66 | 1984** | 56 | 46 | 1939 | 70 | 1981******** | 0.81 | 1993 |
| Jun 05 | 86 | 108 | 1926 | 60 | 1967 | 57 | 47 | 1988*** | 71 | 1883 | 0.23 | 1934 |
| Jun 06 | 86 | 105 | 1978 | 57 | 1914 | 57 | 46 | 1988 | 73 | 1974 | 0.44 | 1953 |
| Jun 07 | 86 | 102 | 1883 | 64 | 1927 | 57 | 44 | 1950 | 73 | 1903 | 0.57 | 1927 |
| Jun 08 | 86 | 103 | 1973 | 57 | 1964 | 57 | 46 | 1892 | 71 | 1973 | 0.34 | 1964 |
| Jun 09 | 86 | 102 | 1986** | 59 | 1964 | 57 | 46 | 1892 | 74 | 1883 | 0.34 | 1929 |
| Jun 10 | 87 | 105 | 1918 | 67 | 1955 | 57 | 46 | 1917 | 72 | 1921 | 0.13 | 1879 |
| Jun 11 | 87 | 107 | 1985** | 64 | 1907 | 58 | 48 | 1901 | 72 | 1985 | 0.32 | 1907 |
| Jun 12 | 87 | 105 | 1985 | 62 | 1884 | 58 | 44 | 1952 | 68 | 1960 | 0.80 | 1884 |
| Jun 13 | 88 | 107 | 1985 | 60 | 1907 | 58 | 48 | 1952** | 67 | 1966 | 0.53 | 1907 |
| Jun 14 | 88 | 109 | 1961 | 65 | 1944 | 58 | 47 | 1907 | 75 | 1966 | 0.11 | 1995 |
| Jun 15 | 88 | 111 | 1961 | 62 | 1944 | 58 | 47 | 1944 | 71 | 1961 | 0.60 | 1929 |
| Jun 16 | 88 | 108 | 1985 | 68 | 1929** | 58 | 47 | 1919 | 73 | 1985 | 0.25 | 1995 |
| Jun 17 | 88 | 102 | 1976 | 66 | 1909 | 58 | 48 | 1910 | 68 | 1922 | 0.03 | 1909 |
| Jun 18 | 89 | 105 | 1945*** | 68 | 1909 | 58 | 48 | 1910** | 70 | 1981** | T | 1949 |
| Jun 19 | 89 | 106 | 1988 | 65 | 1930 | 58 | 50 | 1910** | 76 | 1917 | 0.66 | 1974 |
| Jun 20 | 89 | 108 | 1920 | 63 | 1908 | 59 | 46 | 1910 | 74 | 1981 | 0.04 | 1897 |
| Jun 21 | 89 | 108 | 1961 | 68 | 1907 | 59 | 46 | 1908 | 74 | 1981 | 0.02 | 1943 |
| Jun 22 | 90 | 107 | 1981 | 65 | 1923 | 59 | 48 | 1943 | 74 | 1981 | 0.09 | 1923 |
| Jun 23 | 90 | 106 | 1988 | 59 | 1912 | 59 | 50 | 1930 | 78 | 1909 | 0.44 | 1912 |
| Jun 24 | 90 | 110 | 1925 | 64 | 1899 | 59 | 49 | 1918 | 74 | 1976 | 0.23 | 1914 |
| Jun 25 | 90 | 111 | 1925 | 68 | 1906 | 59 | 48 | 1901 | 74 | 1995** | 0.03 | 1988 |
| Jun 26 | 90 | 106 | 1973** | 61 | 1906 | 59 | 48 | 1930 | 74 | 1995 | 0.05 | 1971 |
| Jun 27 | 91 | 108 | 1976 | 65 | 1889 | 59 | 49 | 1906 | 73 | 1973 | 0.25 | 1889 |
| Jun 28 | 91 | 108 | 1976 | 65 | 1991 | 59 | 47 | 1916 | 74 | 1891 | 0.56 | 1991 |
| Jun 29 | 91 | 107 | 1950 | 74 | 1952** | 59 | 50 | 1949 | 75 | 1891 | 0.19 | 1992** |
| Jun 30 | 91 | 112 | 1934 | 71 | 1982 | 59 | 49 | 1881 | 74 | 1891 | 0.01 | 1916 |
| MONTHLY SUMMARY |  |  |  |  |  |  |  |  |  |  |  |  |
| Max | Extreme | 112 | Jun 30 | 1934 | Min | Extreme | 43 | Jun 01 | 1929 |  |  |  |
|  | Low Max | 57 | Jun 08 | 1964* |  | High Min | 78 | Jun 23 | 1909 |  |  |  |
| Ave | rage Max | 88.1 |  |  | Ave | rage Min | 57.9 |  |  | Ave | ge Temp | 73 |
|  | Max Pcpn | $0.81$ | Jun 04 | 1993 |  |  |  |  |  |  |  |  |
| *Also occurred prior dates in month |  |  |  |  |  | **Also occ | urred prio | r years |  |  |  |  |


| SACRAMENTO CLIMATE MONTH: JULY |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Normal } \\ \text { Max } \\ \hline \end{gathered}$ | Record <br> Max | Record <br> Max <br> Year | Record <br> Low <br> Max | Record <br> Low Max Year | Normal <br> Min | $\begin{gathered} \text { Record } \\ \text { Min } \\ \hline \end{gathered}$ | Record <br> Min Year | Record High Min | Record <br> High Min Year | Grtst <br> Pcpn | Grtst <br> Pcpn <br> Year |
| Jul 01 | 92 | 108 | 1950 | 71 | 1916 | 59 | 50 | 1919 | 74 | 1996 | 0.07 | 1916 |
| Jul 02 | 92 | 109 | 1991 | 68 | 1938 | 60 | 50 | 1919 | 73 | 1991 | 0.28 | 1980 |
| Jul 03 | 92 | 111 | 1991 | 65 | 1910 | 60 | 47 | 1901 | 74 | 1970 | T | 1882 |
| Jul 04 | 92 | 110 | 1991 | 68 | 1948** | 60 | 50 | 1919** | 75 | 1931 | 0.01 | 1925 |
| Jul 05 | 92 | 107 | 1931 | 71 | 1915 | 60 | 50 | 1919 | 72 | 1931 | 0.04 | 1895 |
| Jul 06 | 92 | 105 | 1989 | 76 | 1935 | 60 | 50 | 1899 | 71 | 1957 | T | 1936 |
| Jul 07 | 93 | 110 | 1989 | 73 | 1891 | 60 | 51 | 1899 | 74 | 1905 | 0.03 | 1974 |
| Jul 08 | 93 | 110 | 1905 | 68 | 1974 | 60 | 51 | 1930** | 74 | 1905** | 0.86 | 1974 |
| Jui 09 | 93 | 108 | 1985 | 73 | 1904 | 60 | 51 | 1888 | 72 | 1896 | 0.01 | 1974 |
| Jul 10 | 93 | 107 | 1988** | 72 | 1892** | 60 | 50 | 1932** | 72 | 1896 | T | 1952 |
| Jul 11 | 93 | 110 | 1961 | 75 | 1914** | 60 | 50 | 1898 | 76 | 1913 | T | 1908 |
| Jul 12 | 93 | 111 | 1990 | 71 | 1956 | 60 | 49 | 1899 | 74 | 1990 | T | 1961 |
| Jul 13 | 93 | 112 | 1972 | 71 | 1920 | 60 | 50 | 1903 | 75 | 1990 | T | 1942 |
| Jul 14 | 94 | 113 | 1972 | 75 | 1907 | 60 | 50 | 1918 | 77 | 1972 | T | 1935 |
| Jul 15 | 94 | 109 | 1926 | 74 | 1975 | 60 | 51 | 1903** | 74 | 1984** | 0.02 | 1975 |
| Jul 16 | 94 | 108 | 1935 | 74 | 1923 | 60 | 51 | 1903** | 73 | 1886 | T | 1917 |
| Jul 17 | 94 | 114 | 1925 | 75 | 1987 | 60 | 48 | 1887 | 75 | 1988 | 0.01 | 1995 |
| Jul 18 | 94 | 112 | 1988 | 69 | 1932 | 60 | 50 | 1921 | 72 | 1988** | T | 1922 |
| Jul 19 | 94 | 110 | 1998 | 72 | 1907 | 61 | 49 | 1887 | 74 | 1998 | 0.00 |  |
| Jul 20 | 94 | 107 | 1933 | 74 | 1985** | 61 | 50 | 1887 | 75 | 1917 | T | 1943 |
| Jul 21 | 94 | 106 | 1996** | 74 | 1987** | 61 | 50 | 1887 | 73 | 1936 | 0.22 | 1979 |
| Jul 22 | 94 | 105 | 1941** | 75 | 1913 | 61 | 52 | 1903** | 71 | 1939 | T | 1959 |
| Jul 23 | 94 | 107 | 1942 | 77 | 1903 | 61 | 50 | 1889 | 70 | 1956** | T | 1959 |
| Jul 24 | 94 | 108 | 1985** | 78 | 1977 | 61 | 52 | 1922 | 73 | 1974 | T | 1937 |
| Jul 25 | 94 | 109 | 1975 | 74 | 1913 | 61 | 52 | 1919 | 77 | 1974 | 0.01 | 1988 |
| Jul 26 | 94 | 110 | 1933 | 74 | 1941 | 61 | 51 | 1905 | 72 | 1973 | T | 1950 |
| Jul 27 | 94 | 108 | 1980** | 74 | 1941 | 61 | 50 | 1899 | 72 | 1933 | T | 1896 |
| Jul 28 | 94 | 107 | 1954 | 70 | 1919 | 61 | 50 | 1930 | 74 | 1967 | 0.01 | 1964 |
| Jul 29 | 94 | 106 | 1996 | 75 | 1985 | 61 | 51 | 1887 | 73 | 1996 | 0.00 |  |
| Jul 30 | 94 | 109 | 1977 | 68 | 1966 | 61 | 50 | 1919 | 70 | 1996** | 0.07 | 1966** |
| Jul 31 | 94 | 109 | 1996 | 74 | 1933** | 61 | 51 | 1919 | 74 | 1980 | T | 1949 |
|  |  |  |  |  |  | NTHLY SU | UMMARY |  |  |  |  |  |
| Ma | Extreme | 114 | Jul 17 | 1925 | Min | Extreme | $47$ | Jul 03 | 1901 |  |  |  |
|  | Low Max | $65$ | Jul 03 | 1910 |  | High Min | $77$ | Jul 25 | 1974* |  |  |  |
|  | rage Max | 93.4 |  |  | Ave | rage Min | 60.4 |  |  |  | ge Temp | 76.9 |
|  | Max Pcpn | $0.86$ | Jul 08 | 1974 |  |  |  |  |  |  |  |  |
| *Also oc | urred prior | dates in | month |  |  | **Also occ | curred prio | $r$ years |  |  |  |  |


| SACRAMENTO CLIMATE MONTH: AUGUST |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Normal Max | Record Max | Record <br> Max <br> Year | Record <br> Low <br> Max | Record <br> Low Max Year | Normal Min | $\begin{aligned} & \text { Record } \\ & \text { Min } \end{aligned}$ | Record <br> Min <br> Year | Record <br> High <br> Min | Record <br> High Min <br> Year | $\begin{aligned} & \text { Grtst } \\ & \text { Pcpn } \\ & \hline \end{aligned}$ | Grtst <br> Pcpn <br> Year |
| Aug 01 | 94 | 109 | 1993 | 76 | 1933 | 61 | 50 | 1887 | 74 | 1977** | T | 1918 |
| Aug 02 | 94 | 108 | 1987 | 69 | 1953 | 61 | 50 | 1887 | 76 | 1993 | T | 1917 |
| Aug 03 | 93 | 107 | 1998** | 73 | 1953** | 61 | 51 | 1919 | 73 | 1998 | T | 1899 |
| Aug 04 | 93 | 111 | 1998 | 70 | 1950 | 61 | 50 | 1897 | 77 | 1998 | 0.02 | 1899 |
| Aug 05 | 93 | 109 | 1990 | 78 | 1962** | 61 | 50 | 1950 | 75 | 1998 | 0.01 | 1974 |
| Aug 06 | 93 | 108 | 1978 | 77 | 1906** | 61 | 50 | 1891 | 76 | 1961 | T | 1961 |
| Aug 07 | 93 | 109 | 1997 | 75 | 1907 | 61 | 50 | 1931 | 76 | 1983 | 0.25 | 1989 |
| Aug 08 | 93 | 110 | 1990 | 74 | 1916 | 61 | 50 | 1919** | 71 | 1990*** | 0.13 | 1962 |
| Aug 09 | 93 | 109 | 1996*** | 72 | 1949 | 61 | 50 | 1931 | 75 | 1990 | T | 1963 |
| Aug 10 | 93 | 110 | 1996 | 75 | 1916 | 60 | 50 | 1919 | 72 | 1996 | 0.01 | 1965 |
| Aug 11 | 93 | 110 | 1996** | 72 | 1965 | 60 | 49 | 1910 | 75 | 1996 | 0.58 | 1965 |
| Aug 12 | 93 | 107 | 1996 | 73 | 1988 | 60 | 50 | 1910** | 75 | 1996 | T | 1923 |
| Aug 13 | 92 | 111 | 1933 | 73 | 1968** | 60 | 48 | 1921 | 75 | 1996 | 0.00 |  |
| Aug 14 | 92 | 107 | 1920 | 70 | 1976 | 60 | 49 | 1887 | 73 | 1933*********** | 0.15 | 1976 |
| Aug 15 | 92 | 108 | 1920 | 72 | 1918 | 60 | 51 | 1955 | 74 | 1983*** | 0.28 | 1976 |
| Aug 16 | 92 | 107 | 1992 | 75 | 1918 | 60 | 50 | 1955 | 73 | 1983 | 0.02 | 1958 |
| Aug 17 | 92 | 106 | 1967** | 71 | 1899 | 60 | 51 | 1917 | 74 | 1966 | 0.10 | 1976 |
| Aug 18 | 92 | 107 | 1950 | 68 | 1975 | 60 | 51 | 1985 | 70 | 1883 | 0.11 | 1975 |
| Aug 19 | 92 | 108 | 1950 | 73 | 1968 | 60 | 51 | 1890 | 69 | 1950 | 0.08 | 1968 |
| Aug 20 | 92 | 106 | 1950 | 72 | 1959 | 60 | 48 | 1914 | 69 | 1950 | 0.20 | 1997 |
| Aug 21 | 92 | 102 | 1982** | 72 | 1922 | 60 | 49 | 1910 | 68 | 1969 | 0.05 | 1975 |
| Aug 22 | 91 | 106 | 1891 | 72 | 1901*** | 60 | 50 | 1901 | 67 | 1982 | 0.01 | 1976 |
| Aug 23 | 91 | 109 | 1913 | 74 | 1963************* | 60 | 50 | 1908** | 74 | 1891 | 0.01 | 1904 |
| Aug 24 | 91 | 108 | 1931** | 76 | 1990** | 60 | 50 | 1887 | 73 | 1913 | 0.06 | 1904 |
| Aug 25 | 91 | 105 | 1988 | 68 | 1920 | 60 | 52 | 1887 | 69 | 1931 | 0.27 | 1954 |
| Aug 26 | 91 | 106 | 1988** | 73 | 1975 | 60 | 50 | 1929** | 74 | 1988** | 0.08 | 1954 |
| Aug 27 | 91 | 108 | 1894 | 71 | 1881 | 60 | 51 | 1952** | 73 | 1894 | 0.01 | 1949 |
| Aug 28 | 91 | 105 | 1915 | 67 | 1895 | 60 | 50 | 1910 | 74 | 1913 | T | 1949 |
| Aug 29 | 91 | 108 | 1987 | 69 | 1895 | 60 | 49 | 1880 | 71 | 1977 | 0.67 | 1953 |
| Aug 30 | 91 | 110 | 1987 | 70 | 1914 | 60 | 48 | 1887 | 70 | 1988 | 0.20 | 1896 |
| Aug 31 | 90 | 108 | 1976 | 66 | 1964 | 60 | 51 | 1914** | 68 | 1972 | 0.06 | 1964 |
| MONTHLY SUMMARY |  |  |  |  |  |  |  |  |  |  |  |  |
| Max | Extreme | 111 | Aug 13 | 1933** | Min | Extreme |  | Aug 30 | 1887** |  |  |  |
|  | Low Max | 66 | Aug 31 | 1964 |  | High Min | 77 | Aug 04 | 1998 |  |  |  |
| Ave | age Max | 92.1 |  |  | Aver | rage Min | 60.3 |  |  |  | ge Temp | 76.2 |
|  | Max Pcpn | 0.67 | Aug 29 | 1953 |  |  |  |  |  |  |  |  |
| *Also occurred prior dates in month |  |  |  |  |  | **Also occurred prior years |  |  |  |  |  |  |

## SACRAMENTO CLIMATE

MONTH: SEPTEMBER

|  | Normal Max | Record Max | Record <br> Max <br> Year | Record <br> Low <br> Max | Record <br> Low Max <br> Year | Normal Min | Record Min | $\begin{gathered} \text { Record } \\ \text { Min } \\ \text { Year } \\ \hline \end{gathered}$ | Record <br> High <br> Min | Record <br> High Min Year | Grtst <br> Pcpn | Grtst <br> Pcpn <br> Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sep 01 | 90 | 109 | 1950 | 69 | 1898 | 60 | 48 | 1899 | 67 | 1976 | T | 1941 |
| Sep 02 | 90 | 109 | 1955 | 70 | 1913 | 60 | 49 | 1898 | 72 | 1950 | 0.15 | 1912 |
| Sep 03 | 90 | 108 | 1955 | 68 | 1912 | 60 | 50 | 1895 | 71 | 1950 | 0.16 | 1897 |
| Sep 04 | 90 | 108 | 1988 | 67 | 1900 | 59 | 47 | 1914 | 72 | 1950 | T | 1900 |
| Sep 05 | 90 | 108 | 1988 | 70 | 1912 | 59 | 50 | 1920** | 72 | 1988 | 0.18 | 1912 |
| Sep 06 | 90 | 105 | 1923 | 62 | 1912 | 59 | 49 | 1900** | 72 | 1923 | 0.89 | 1912 |
| Sep 07 | 89 | 107 | 1923 | 67 | 1920 | 59 | 50 | 1935** | 72 | 1969 | 0.39 | 1919 |
| Sep 08 | 89 | 107 | 1944 | 64 | 1920 | 59 | 47 | 1914 | 73 | 1944 | 0.10 | 1884 |
| Sep 09 | 89 | 108 | 1944 | 64 | 1978 | 59 | 45 | 1898 | 73 | 1944 | 0.26 | 1985 |
| Sep 10 | 89 | 105 | 1888 | 67 | 1952 | 59 | 46 | 1985 | 67 | 1953** | 0.27 | 1895 |
| Sep 11 | 89 | 106 | 1888 | 70 | 1893 | 59 | 49 | 1911 | 70 | 1888 | 0.49 | 1976 |
| Sep 12 | 89 | 104 | 1983 | 64 | 1895 | 59 | 44 | 1893 | 69 | 1953 | 3.13 | 1918 |
| Sep 13 | 88 | 104 | 1971 | 67 | 1939 | 59 | 45 | 1910 | 70 | 1983** | 0.29 | 1918 |
| Sep 14 | 88 | 104 | 1979 | 68 | 1931 | 59 | 46 | 1939 | 71 | 1953 | 0.44 | 1955 |
| Sep 15 | 88 | 104 | 1979** | 69 | 1977 | 59 | 47 | 1939 | 69 | 1922 | 0.43 | 1888 |
| Sep 16 | 88 | 105 | 1979 | 60 | 1977 | 58 | 48 | 1960 | 69 | 1922** | 1.75 | 1989 |
| Sep 17 | 88 | 106 | 1984 | 63 | 1921 | 58 | 48 | 1892** | 71 | 1923 | 0.62 | 1950 |
| Sep 18 | 87. | 104 | 1984 | 65 | 1989 | 58 | 44 | 1882 | 77 | 1984 | 1.46 | 1959 |
| Sep 19 | 87 | 101 | 1936 | 62 | 1896 | 58 | 46 | 1947** | 72 | 1939 | 0.80 | 1956 |
| Sep 20 | 87 | 101 | 1994** | 68 | 1945** | 58 | 48 | 1986** | 72 | 1939 | 0.06 | 1896 |
| Sep 21 | 87 | 103 | 1987 | 66 | 1901 | 58 | 48 | 1960 | 73 | 1939 | 0.15 | 1916 |
| Sep 22 | 86 | 102 | 1949 | 60 | 1917 | 58 | 46 | 1895 | 74 | 1939 | 0.50 | 1917 |
| Sep 23 | 86 | 102 | 1939 | 61 | 1901 | 57 | 46 | 1945 | 70 | 1939 | 1.74 | 1904 |
| Sep 24 | 86 | 102 | 1936 | 66 | 1986** | 57 | 45 | 1920 | 66 | 1982** | 0.61 | 1904 |
| Sep 25 | 86 | 100 | 1952 | 62 | 1909 | 57 | 44 | 1934 | 66 | 1991** | 1.15 | 1904 |
| Sep 26 | 86 | 103 | 1963 | 64 | 1986 | 57 | 46 | 1923 | 70 | 1952 | 0.41 | 1972 |
| Sep 27 | 85 | 102 | 1963 | 64 | 1965 | 57 | 46 | 1986 | 67 | 1963 | 0.62 | 1957 |
| Sep 28 | 85 | 100 | 1966 | 63 | 1919 | 57 | 46 | 1986** | 67 | 1966 | 0.37 | 1989 |
| Sep 29 | 84 | 103 | 1966** | 62 | 1919** | 57 | 48 | 1955** | 68 | 1966 | 0.80 | 1890 |
| Sep 30 | 84 | 102 | 1991 | 58 | 1930** | 56 | 46 | 1894 | 66 | 1988 | 0.74 | 1883 |
| MONTHLY SUMMARY |  |  |  |  |  |  |  |  |  |  |  |  |
| Max | Extreme | 109 | Sep 02 | 1955* | Min | Extreme | 44 | Sep 25 | 1934* |  |  |  |
|  | ow Max | 58 | Sep 30 | 1930** |  | High Min | 77 | Sep 18 | 1984 |  |  |  |
| Aver | gage Max | 87.7 |  |  | Ave | rage Min | 58.3 |  |  | Ave | ge Temp | 73 |
|  | ax Pcpn | 3.13 | Sep 12 | 1918 |  |  |  |  |  |  |  |  |
| *Also occurred prior dates in month |  |  |  |  |  | **Also occurred prior years |  |  |  |  |  |  |


| SACRAMENTO CLIMATE <br> MONTH: OCTOBER |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Norma Max | Record Max | Record <br> Max <br> Year | Record <br> Low <br> Max | Record <br> Low Max Year | Normal <br> Min | Record <br> Min | Record <br> Min <br> Year | Record <br> High <br> Min | Record <br> High Min <br> Year | Grtst <br> Pcpn | Grtst <br> Pcpn Year |
| Oct 01 | 84 | 101 | 1980 | 56 | 1909 | 56 | 43 | 1950 | 63 | 1980** | 0.79 | 1909 |
| Oct 02 | 84 | 102 | 1980** | 61 | 1916 | 56 | 44 | 1903 | 64 | 1980** | 0.34 | 1898 |
| Oct 03 | 84 | 102 | 1987** | 58 | 1909 | 56 | 42 | 1884 | 66 | 1980 | 1.82 | 1882 |
| Oct 04 | 83 | 102 | 1987** | 61 | 1900 | 56 | 42 | 1881 | 68 | 1980 | 0.45 | 1994 |
| Oct 05 | 83 | 102 | 1987 | 56 | 1924 | 55 | 42 | 1916 | 66 | 1933 | 1.12 | 1924 |
| Oct 06 | 83 | 102 | 1987 | 60 | 1882 | 55 | 44 | 1913 | 62 | 1987** | 0.41 | 1923 |
| Oct 07 | 82 | 100 | 1980 | 60 | 1973 | 55 | 41 | 1881 | 65 | 1996** | 0.60 | 1889 |
| Oct 08 | 82 | 101 | 1996 | 62 | 1922 | 55 | 42 | 1881 | 65 | 1996 | 0.63 | 1904 |
| Oct 09 | 82 | 96 | 1980 | 63 | 1924** | 55 | 43 | 1930 | 70 | 1899 | 0.79 | 1947 |
| Oct 10 | 81 | 100 | 1991 | 57 | 1924 | 54 | 44 | 1941** | 64 | 1991** | 0.98 | 1926 |
| Oct 11 | 81 | 96 | 1992** | 57 | 1925 | 54 | 40 | 1886 | 66 | 1991 | 1.44 | 1948 |
| Oct 12 | 80 | 97 | 1991 | 55 | 1899 | 54 | 42 | 1924 | 64 | 1991 | 2.17 | 1962 |
| Oct 13 | 80 | 94 | 1991 | 50 | 1899 | 54 | 40 | 1879 | 62 | 1991** | 3.63 | 1962 |
| Oct 14 | 80 | 98 | 1991 | 56 | 1878 | 54 | 36 | 1881 | 63 | 1979 | 0.75 | 1935 |
| Oct 15 | 79 | 94 | 1961 | 57 | 1938 | 53 | 38 | 1881 | 64 | 1991** | 0.78 | 1969 |
| Oct 16 | 79 | 95 | 1961 | 49 | 1984 | 53 | 41 | 1984** | 61 | 1933 | 0.69 | 1984 |
| Oct 17 | 78 | 96 | 1988 | 60 | 1892 | 53 | 38 | 1984** | 61 | 1974 | 0.43 | 1914 |
| Oct 18 | 78 | 94 | 1988 | 59 | 1984 | 53 | 39 | 1905 | 60 | 1988 | 0.42 | 1958 |
| Oct 19 | 78 | 91 | 1991** | 55 | 1908 | 53 | 43 | 1949** | 59 | 1991 | 0.24 | 1900 |
| Oct 20 | 77 | 92 | 1991** | 58 | 1961** | 52 | 37 | 1949** | 62 | 1940 | 1.14 | 1889 |
| Oct 21 | 77 | 90 | 1929 | 59 | 1985 | 52 | 38 | 1886 | 60 | 1982** | 1.94 | 1899 |
| Oct 22 | 76 | 89 | 1988** | 56 | 1897 | 52 | 40 | 1914 | 62 | 1982 | 1.32 | 1889 |
| Oct 23 | 76 | 90 | 1965 | 56 | 1897 | 52 | 40 | 1885 | 62 | 1982 | 1.18 | 1897 |
| Oct 24 | 75 | 91 | 1959 | 57 | 1962 | 51 | 37 | 1956 | 60 | 1959 | 0.94 | 1951 |
| Oct 25 | 75 | 89 | 1965 | 57 | 1919 | 51 | 40 | 1900 | 61 | 1917 | 1.19 | 1979 |
| Oct 26 | 74 | 88 | 1993** | 58 | 1883 | 51 | 39 | 1939 | 60 | 1901 | 1.02 | 1950 |
| Oct 27 | 74 | 86 | 1906 | 56 | 1922 | 51 | 40 | 1921 | 60 | 1987 | 1.00 | 1901 |
| Oct 28 | 73 | 88 | 1983 | 57 | 1971 | 50 | 34 | 1946 | 60 | - 1987 | 1.09 | 1981 |
| Oct 29 | 72 | 84 | 1965 | 57 | 1996 | 50 | 37 | 1916 | 60 | 1983 | 0.80 | 1992 |
| Oct 30 | 72 | 84 | 1993** | 50 | 1886 | 50 | 34 | 1935 | 61 | 1983 | 0.95 | 1945 |
| Oct 31 | 71 | 86 | 1966 | 56 | 1886 | 50 | 38 | 1971** | 61 | 1983 | 0.63 | 1944 |
|  |  |  |  |  | MO | NTHLY S | UMMARY |  |  |  |  |  |
|  | Extreme | 102 | Oct 06 | 1987* |  | Extreme | 34 | Oct 30 | 1935* |  |  |  |
|  | Low Max | 49 | Oct 16 | 1984 |  | High Min | $70$ | Oct 09 | 1899 |  |  |  |
|  | age Max | 78.5 |  |  | Ave | rage Min | 53.1 |  |  | Ave | ge Temp | 65.8 |
|  | ax Pcpn | 3.63 | Oct 13 | 1962 |  |  |  |  |  |  |  |  |
| *Also oc | urred prior | dates in | month |  |  | **Also occ | urred prio | r years | - |  |  |  |


| SACRAMENTO CLIMATE <br> MONTH: NOVEMBER |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Normal Max | Record <br> Max | Record <br> Max <br> Year | $\begin{gathered} \text { Record } \\ \text { Low } \\ \text { Max } \\ \hline \end{gathered}$ | Record <br> Low Max <br> Year | Normal <br> Min | $\begin{gathered} \text { Record } \\ \text { Min } \\ \hline \end{gathered}$ | Record <br> Min <br> Year | $\begin{aligned} & \text { Record } \\ & \text { High } \\ & \text { Min } \\ & \hline \end{aligned}$ | Record <br> High Min <br> Year | $\begin{aligned} & \text { Grtst } \\ & \text { Pcpn } \end{aligned}$ | Grtst <br> Pcpn <br> Year |
| Nov 01 | 71 | 86 | 1997** | 50 | 1935 | 49 | 34 | 1886 | 60 | 1992 | 0.67 | 1935 |
| Nov 02 | 70 | 86 | 1966 | 53 | 1935 | 49 | 36 | 1936 | 57 | 1988** | 0.80 | 1882 |
| Nov 03 | 70 | 85 | 1976 | 52 | 1935 | 49 | 35 | 1935 | 58 | 1988** | 1.16 | 1882 |
| Nov 04 | 69 | 84 | 1980 | 52 | 1918 | 49 | 30 | 1935 | 58 | 1941 | 1.37 | 1970 |
| Nov 05 | 69 | 85 | 1976 | 52 | 1973** | 48 | 34 | 1935 | 59 | 1891 | 1.29 | 1994 |
| Nov 06 | 68 | 84 | 1976 | 53 | 1922 | 48 | 35 | 1920 | 56 | 1913 | 1.40 | 1966 |
| Nov 07 | 68 | 83 | 1931 | 53 | 1920 | 48 | 36 | 1897** | 58 | 1973 | 1.00 | 1885 |
| Nov 08 | 67 | 82 | 1955 | 53 | 1942** | 48 | 34 | 1897 | 58 | 1970** | 0.99 | 1954 |
| Nov 09 | 66 | 83 | 1976** | 50 | 1982 | 48 | 36 | 1920 | 57 | 1976** | 1.28 | 1924 |
| Nov 10 | 66 | 80 | 1990** | 47 | 1920 | 47 | 35 | 1946 | 59 | 1976 | 1.64 | 1983 |
| Nov 11 | 65 | 79 | 1990 | 46 | 1985 | 47 | 31 | 1911 | 56 | 1976** | 0.81 | 1877 |
| Nov 12 | 65 | 81 | 1990 | 49 | 1985** | 47 | 30 | 1938 | 57 | 1981 | 1.84 | 1981 |
| Nov 13 | 65 | 78 | 1995 | 46 | 1955 | 47 | 30 | 1985** | 56 | 1981** | 2.25 | 1981 |
| Nov 14 | 64 | 78 | 1995 | 48 | 1982 | 46 | 30 | 1916 | 57 | 1981 | 0.87 | 1934 |
| Nov 15 | 64 | 80 | 1923 | 48 | 1994*** | 46 | 29 | 1880 | 59 | 1981 | 1.27 | 1954 |
| Nov 16 | 63 | 76 | 1995 | 46 | 1982** | 46 | 32 | 1880 | 58 | 1981 | 1.95 | 1888 |
| Nov 17 | 63 | 84 | 1932 | 48 | 1881 | 46 | 30 | 1958 | 56 | 1966** | 3.02 | 1885 |
| Nov 18 | 62 | 78 | 1932 | 52 | 1946 | 45 | 32 | 1881 | 60 | 1996 | 2.20 | 1885 |
| Nov 19 | 62 | 77 | 1932 | 47 | 1922 | 45 | 30 | 1985 | 58 | 1966 | 1.39 | 1966 |
| Nov 20 | 61 | 78 | 1932 | 45 | 1985 | 45 | 30 | 1985 | 62 | 1950 | 1.33 | 1903 |
| Nov 21 | 61 | 74 | 1936 | 49 | 1977 | 45 | 31 | 1985** | 59 | 1903 | 2.32 | 1900 |
| Nov 22 | 61 | 75 | 1959 | 48 | 1918** | 44 | 30 | 1880 | 57 | 1996** | 1.07 | 1978 |
| Nov 23 | 60 | 80 | 1930 | 45 | 1985 | 44 | 28 | 1931 | 58 | 1981** | 1.60 | 1896 |
| Nov 24 | 60 | 73 | 1959 | 44 | 1985 | 44 | 30 | 1931 | 56 | 1909 | 2.27 | 1985 |
| Nov 25 | 59 | 75 | 1995** | 44 | 1908 | 44 | 30 | 1880 | 54 | 1970 | 1.09 | 1989 |
| Nov 26 | 59 | 76 | 1923 | 46 | 1931 | 44 | 29 | 1883 | 55 | 1901 | 1.07 | 1997 |
| Nov 27 | 59 | 72 | 1959 | 45 | 1960 | 43 | 28 | $1887^{\circ}$ | 53 | 1923** | 1.19 | 1984 |
| Nov 28 | 58 | 71 | 1932 | 45 | 1880 | 43 | 27 | 1880 | 58 | 1932 | 2.20 | 1970 |
| Nov 29 | 58 | 71 | 1929 | 47 | 1905 | 43 | 31 | 1952 | 56 | 1901 | 1.28 | 1970 |
| Nov 30 | 58 | 71 | 1995 | 46 | 1919 | 43 | 30 | 1880 | 55 | 1926 | 3.26 | 1892 |
|  |  |  |  |  | MO | NTHLY SU | UMMARY |  |  |  |  |  |
| Max | Extreme | 86 | Nov 02 | 1966* | Min | Extreme | 27 | Nov 28 | 1880 |  |  |  |
|  | ow Max | 44 | Nov 25 | 1908* |  | High Min | 62 | Nov 20 | 1950 |  |  |  |
| Aver | ge Max | 63.7 |  |  | Ave | rage Min | $46$ |  |  | Ave | e Temp | 54.9 |
|  | ax Pcpn | 3.26 | Nov 30 | 1892 |  |  |  |  |  |  |  |  |
| - Also occ | urred prior | dates in | month |  |  | *Also occ | urred prio | r years |  |  |  |  |

MONTH: DECEMBER


## IV. TEMPERATURE RECORDS

## HIGHEST AND LOWEST AVERAGE MAXIMUM TEMPERATURE BY MONTH AND YEAR OF OCCURRENCE

(July 1877-August 1998)

| Month | Normal* <br> Monthly <br> Maximum | Highest Average Maximum | Year | Lowest <br> Average <br> Maximum | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| January | 54.1 | 62.1 | 1976 | 45.9 | 1937 |
| February | 61.7 | 68.1 | 1991 | 52.5 | 1887 |
| March | 66.1 | 73.3 | 1997 | 56.7 | 1897 |
| April | 72.8 | 80.8 | 1987 | 60.2 | 1967 |
| May | 80.9 | 89.7 | 1997** | 68.6 | 1915 |
| June | 88.1 | 94.6 | 1985 | 76.3 | 1884 |
| July | 93.4 | 99.6 | 1988 | 84.4 | 1903 |
| August | 92.1 | 97.8 | 1967 | 81.9 | 1899 |
| September | 87.7 | 94.0 | 1984 | 78.1 | 1911 |
| October | 78.5 | 84.8 | 1991 | 68.6 | 1882 |
| November | 63.7 | 72.7 | 1995 | 57.8 | 1882 |
| December | 54.0 | 68.0 | 1958 | 47.0 | 1924 |

## HIGHEST AND LOWEST AVERAGE MINIMUM TEMPERATURE BY MONTH AND YEAR OF OCCURRENCE <br> (July 1877-August 1998)

| Month | Normal* <br> Monthly <br> Minimum | Highest <br> Average <br> Minimum | Year | Lowest <br> Average <br> Minimum | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| January | 40.1 | 48.0 | 1995 | 30.4 | 1949 |
| February | 44.0 | 49.1 | 1963 | 36.4 | 1880 |
| March | 46.0 | 50.9 | 1978 | 38.9 | 1880 |
| April | 48.7 | 53.9 | 1926 | 42.3 | 1929 |
| May | 53.4 | 59.2 | 1997 | 47.2 | 1899 |
| June | 57.9 | 63.8 | 1981 | 52.1 | 1910 |
| July | 60.4 | 64.1 | 1996 | 54.3 | 1887 |
| August | 60.3 | 63.9 | 1998 | 53.5 | 1911 |
| September | 58.3 | 62.0 | 1979 | 52.0 | 1910 |
| October | 53.1 | 56.7 | 1992 | 46.2 | 1916 |
| November | 46.0 | 50.4 | 1997** | 38.0 | 1880 |
| December | 40.2 | 46.6 | 1950 | 33.4 | 1932 |

* Climatological Normals from the years 1961-1990.
** Also occurred earlier years.

HIGHEST AND LOWEST MONTHLY AVERAGE TEMPERATURES
(July 1877-August 1998)


[^0]HIGHEST AND LOWEST MONTHLY AVERAGE TEMPERATURES (July 1877-August 1998)

| JULY | $\frac{\text { Normal }^{*}}{76.9}$ | Highest Monthly Average Temperature |  | Lowest Monthly Average Temperature |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Temp | Year | Temp | Year |
|  |  | 81.6 | 1988 | 69.4 | 1903 |
|  | 76.2 | 81.2 | 1996 | 70.2 | 1887 |
|  |  | 80.7 | 1984 | 70.7 | 1907 |
| AUGUST |  | 79.5 | 1931 | 71.0 | 1914 |
|  |  | 79.0 | 1990 | 71.2 | 1904 |
|  |  | 80.7 | 1998 | 68.0 | 1899 |
|  |  | 80.2 | 1996 | 68.8 | 1911 |
|  | 73.0 | 79.9 | 1967 | 69.8 | 1887 |
|  |  | 79.6 | 1969 | 70.2 | 1900 |
| SEPTEMBER |  | 79.4 | 1992 | 70.4 | 1881 |
|  |  | 77.3 | 1979 | 65.4 | 1893 |
|  |  | 77.2 | 1984 | 65.5 | 1911 |
|  |  | 76.9 | 1991 | 65.6 | 1930 |
| OCTOBER | 65.8 | 76.8 | 1997 | 66.0 | 1907 |
|  |  | 76.5 | 1974 | 66.4 | 1925 |
|  |  | 70.7 | 1991 | 57.6 | 1881 |
|  |  | 70.1 | 1976 | 58.2 | 1916 |
|  |  | 69.5 | 1983,1987 | 58.6 | 1920 |
|  |  | 69.0 | 1988,1992 | 58.8 | 1882,1886 |
| NOVEMBER | 54.9 | 68.9 | 1990 | 59.0 | 1883 |
|  |  | 61.6 | 1995 | 49.3 | 1880 |
|  |  | 59.2 | 1976 | 49.6 | 1882 |
|  |  | 59.0 | 1932 | 49.8 | 1994* |
|  | 47.1 | 58.7 | 1997 | 50.2 | 1881 |
| DECEMBER |  | 58.6 | 1926 | 50.4 | 1985 |
|  |  | 52.6 | 1958 | 41.5 | 1932 |
|  |  | 52.4 | 1996 | 42.1 | 1908 |
|  |  | 52.3 | 1995 | 42.2 | 1924 |
|  |  | 51.3 | 1976 | 42.5 | 1963 |
|  |  | 51.1 | 1969 | 42.6 | 1985 |

[^1]
## WARMEST AND COLDEST

 WINTER, SPRING, SUMMER, FALL (December 1877 - August 1998)WINTER
(December - February)
Average $=49.0^{*}$

Warmest

| Temp | $\underline{\text { Year }}$ | Temp | Year |
| :---: | :---: | :---: | :---: |
| 52.7 | $1995-96$ | 43.1 | $1948-49$ |
| 52.6 | $1969-70$ | 43.6 | $1932-33$ |
| 52.4 | $1996-97$ | 44.0 | $1936-37$ |
| 52.2 | $1979-80$ | 44.1 | $1879-80$ |
| 52.1 | $1975-76$ | 44.9 | $1928-29$ |
| 51.7 | $1980-81$ | 45.1 | $1909-10$ |
| 51.4 | $1994-95$ | 45.2 | $1954-55$ |
| 51.2 | $1997-98$ | 45.2 | $1882-83$ |
| 51.1 | $1977-78$ | 45.3 | $1902-03$ |
| 51.1 | $1958-59$ | 45.5 | $1916-17$ |

> SPRING
> (March - May)
> Average $=61.4^{*}$

## Warmest

| Temp | $\underline{\text { Year }}$ | Temp | Year |
| :---: | :---: | :---: | :---: |
| 66.8 | 1997 | 55.4 | 1880 |
| 66.4 | 1992 | 55.5 | 1948 |
| 65.0 | 1984 | 56.1 | 1917 |
| 64.7 | 1934 | 56.2 | 1902 |
| 64.0 | 1996 | 56.2 | 1896 |
| 64.0 | 1987 | 56.4 | 1912 |
| 63.9 | 1966 | 56.7 | 1963 |
| 63.6 | 1931 | 57.0 | 1911 |
| 63.5 | 1993 | 57.1 | 1893 |
| 63.4 | 1994 | 57.2 | 1906 |
| 63.4 | 1990 | 57.2 | 1899 |

[^2]
# WARMEST AND COLDEST WINTER, SPRING, SUMMER, FALL <br> (December 1877 - August 1998) 

$$
\begin{gathered}
\text { SUMMER } \\
\text { (June - August) } \\
\text { Average }=75.4^{*}
\end{gathered}
$$

Warmest

| Temp | $\underline{\text { Year }}$ | Temp | $\underline{\text { Year }}$ |
| :---: | :---: | :---: | :---: |
| 79.0 | 1996 | 69.3 | 1970 |
| 77.8 | 1981 | 69.6 | 1911 |
| 77.5 | 1988 | 69.8 | 1914 |
| 77.4 | 1974 | 70.2 | 1910 |
| 77.0 | 1990 | 70.3 | 1887 |
| 77.0 | 1984 | 70.4 | 1899 |
| 76.9 | 1985 | 70.5 | 1905 |
| 76.7 | 1992 | 70.5 | 1881 |
| 76.4 | 1998 | 70.5 | 1880 |
| 76.4 | 1994 | 70.6 | 1909 |

FALL
(September - November) Average $=64.6^{*}$

Warmest
Coldest

| Temp | $\underline{\text { Year }}$ | Temp | Year |
| :---: | :---: | :---: | :---: |
| 68.5 | 1991 | 58.9 | 1881 |
| 68.3 | 1995 | 59.0 | 1920 |
| 68.2 | 1976 | 59.4 | 1882 |
| 67.2 | 1997 | 59.6 | 1916 |
| 66.9 | 1990 | 59.7 | 1893 |
| 66.7 | 1992 | 60.1 | 1931 |
| 66.7 | 1974 | 60.1 | 1886 |
| 66.6 | 1979 | 60.3 | 1911 |
| 66.5 | 1983 | 60.3 | 1880 |
| 66.4 | 1988 | 60.4 | 1897 |

[^3]
## HIGHEST AND LOWEST ANNUAL TEMPERATURE (1878-1997)

| Highest Annual Average |  | Lowest Annual Average |  |
| :---: | :---: | :---: | :---: |
| Temp | $\underline{\text { Year }}$ | $\underline{\text { Temp }}$ | $\underline{\text { Year }}$ |
| 65.6 | 1997 | 58.1 | 1880 |
| 65.3 | 1996 | 58.4 | 1911 |
| 65.1 | 1976 | 58.8 | 1893 |
| 64.8 | 1992 | 59.2 | 1902 |
| 64.7 | 1981 | 59.3 | 1912 |
| 64.5 | 1995 | 59.3 | 1919 |

## Average Annual <br> Temperature 62.6*

*Averages based on Climatological Normals 1961-1990

|  | 90 or Higher ${ }^{1}$ |  | 100 or Higher ${ }^{2}$ |  | 105 or Higher ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Days | Year | Days | Year | Days | Year |
| 110 | 1984 | 41 | 1988 | 18 | 1988 |
| 104 | 1992 | 38 | 1984, 1996 | 15 | 1996 |
| 104 | 1988, 1992 | 33 | 1987 | 14 | 1984 |
| 103 | 1974 | 30 | 1936 | 13 | 1990 |
| 101 | 1997 | 27 | 1981 | 11 | 1985, 1961, 1950 |
| 96 | 1996 | 26 | 1985 | 9 | 1987, 1931 |
| 95 | 1967 | 24 | 1967, 1966 | 8 | 1933 |
| 94 | 1970 | 23 | $\begin{aligned} & 1976,1969,1950, \\ & 1931,1929 \end{aligned}$ | 6 | $\begin{aligned} & 1972,1966,1960, \\ & 1935,1934 \end{aligned}$ |
| 92 | 1981, 1966 | 22 | 1990, 1979. 1961 | 5 | 1995, 1981, 1978, |
| 91 | 1987 | 21 | $\begin{aligned} & 1995,1992,1970, \\ & 1960,1939 \end{aligned}$ |  | $\begin{aligned} & 1976,1936,1929 \\ & 1925,1923,1891 \end{aligned}$ |
| 89 | 1991, 1990, 1969 | 20 | $\begin{aligned} & 1993,1986,1933, \\ & 1888 \end{aligned}$ |  |  |
| 87 | 1936 |  |  |  |  |
| 86 | 1986 |  |  |  |  |

# AVERAGE NUMBER OF DAYS PER YEAR WITH MAXIMUM TEMPERATURES 90, 100 AND 105 DEGREES OR HIGHER 

$$
\begin{array}{rr}
90 \text { Degrees or higher } & 82 \text { days } \\
100 \text { Degrees or higher } & 19 \text { days } \\
105 \text { Degrees or higher } & 4 \text { days }
\end{array}
$$

[^4]
# GREATEST NUMBER OF CONSECUTIVE DAYS WITH MAXIMUM TEMPERATURES 90 DEGREES OR HIGHER (July 1877-August 1998) 

| Days | Period | Year |  | Days |  |
| :---: | :--- | :---: | :---: | :--- | :---: |
| 40 | July 13-August 21 | 1992 |  | Period |  |
| 35 | July 24-August 27 | 1967 |  | August 2-20 | 1990 |
| 29 | June 22-July 20 | 1984 |  | 19 | July 26-August 13 |
| 25 | July 17-August 10 | 1974 | 18 | Jugust 27-September 14 | 1988 |
| 24 | July 25-August 17 | 1969 | 18 | June 19-July 6 | 1945 |
| 23 | July 26-August 17 | 1983 | 17 | July 19-August 4 | 1929 |
| 22 | June 15-July 6 | 1981 | 17 | July 6-22 | 1996 |
| 22 | July 7-28 | 1961 | 17 | June 17-July 3 | 1990 |
| 21 | July 12-August 1 | 1988 | 17 | July 29-August 14 | 1988 |
| 21 | July 29-August 18 | 1971 | 17 | July 26-August 11 | 1978 |
| 21 | July 29-August 18 | 1920 | 17 | July 1-17 | 1953 |
| 20 | July 15-August 3 | 1959 | 17 | July 9-25 | 1917 |

Only periods with 17 or more days tabulated.

## GREATEST NUMBER OF NON-CONSECUTIVE DAYS WITH MAXIMUM TEMPERATURES 90 DEGREES OR HIGHER IN ONE MONTH

| $\frac{\text { Days }}{}$ | $\underline{\text { Period }}$ | Days |
| :---: | :--- | :---: |
| 30 | August 1967 | 27 |
| 29 | August 1994 | 27 |
| 29 | July 1988 | 27 |
| 28 | July 1997 | 27 |
| 28 | August 1969 | 27 |
| 28 | July 1969 | 26 |
| 28 | July 1967 | 26 |
| 28 | July 1953 | 26 |
| 28 | July 1945 | 26 |
| 27 | July 1996 | 26 |

$\frac{\text { Period }}{\text { August } 1985}$
August 1931
July 1970
July 1967
August 1958
August 1998
August 1992
July 1984
July 1981
August 1966

Only months with 26 or more days tabulated.

# GREATEST NUMBER OF CONSECUTIVE DAYS WITH MAXIMUM TEMPERATURES 100 DEGREES OR HIGHER 

(July 1877-August 1998)

| Days | Period | $\underline{y e a r}$ | Days |  | Period |
| :---: | :--- | :---: | :---: | :--- | :---: |
| 9 | August 8-16 | 1996 | 6 | July 30-August 4 | 1986 |
| 9 | July 10-18 | 1984 | 6 | July 1-6 | 1985 |
| 9 | June 19-27 | 1981 | 6 | August 28-September 2 | 1976 |
| 9 | August 1-9 | 1966 | 6 | July 16-21 | 1960 |
| 8 | August 4-11 | 1990 | 6 | June 28-July 3 | 1950 |
| 8 | June 9-16 | 1985 | 6 | September 5-10 | 1944 |
| 7 | July 21-27 | 1980 | 6 | August 3-8 | 1936 |
| 7 | August 12-18 | 1967 | 6 | September 19-24 | 1936 |
| 7 | June 20-26 | 1929 | 6 | September 4-9 | 1923 |
| 7 | June 29-July 5 | 1929 | 6 | June 15-20 | 1917 |
| 7 | August 10-16 | 1920 | 6 | July 4-9 | 1905 |
| 6 | August 1-6 | 1998 | 6 | July 25-30 | 1898 |
| 6 | July 14-19 | 1998 | 6 | August 9-14 | 1898 |
| 6 | August 15-20 | 1992 | 6 | September 6-11 | 1888 |

Only periods with 6 or more days tabulated.

## GREATEST NUMBER OF NON-CONSECUTIVE DAYS WITH MAXIMUM TEMPERATURES 100 DEGREES OR HIGHER IN ONE MONTH

| Days | Period | Days | Period |
| :---: | :---: | :---: | :---: |
| 17 | July 1988 | 12 | August 1967 |
| 16 | August 1998 | 12 | August 1966 |
| 16 | July 1984 | 11 | July 1980 |
| 16 | July 1931 | 11 | July 1979 |
| 15 | August 1996 | 11 | July 1933 |
| 14 | July 1996 | 10 | August 1988 |
| 14 | August 1969 | 10 | June 1985 |
| 13 | July 1985 | 10 | July 1936 |
| 13 | August 1992 | 10 | June 1985 |
| 12 | June 1981 |  |  |

Only months with 10 more days tabulated.

# GREATEST NUMBER OF CONSECUTIVE DAYS WITH MAXIMUM TEMPERATURES 105 DEGREES OR HIGHER 

(July 1877-August 1998)

| Days | Period | Year | Days | Period | Year |
| :---: | :--- | :---: | :---: | :--- | :---: |
| 7 | August 5-11 | 1990 | 3 | August 30-September 1 | 1976 |
| 6 | August 9-14 | 1996 | 3 | June 24-26 | 1925 |
| 6 | June 11-16 | 1985 | 3 | July 24-26 | 1975 |
| 5 | August 11-16 | 1920 | 3 | June 14-16 | 1961 |
| 4 | July 16-19 | 1988 | 3 | July 17-19 | 1961 |
| 4 | July 1-4 | 1984 | 3 | July 19-21 | 1960 |
| 4 | July 12-15 | 1972 | 3 | June 23-25 | 1957 |
| 4 | June 29-July 2 | 1950 | 3 | September 2-4 | 1955 |
| 4 | September 1-4 | 1950 | 3 | August 18-20 | 1950 |
| 4 | June 29-July 2 | 1934 | 3 | July 27-29 | 1943 |
| 4 | August 10-13 | 1898 | 3 | July 15-17 | 1935 |
| 3 | August 3-5 | 1998 | 3 | July 25-27 | 1933 |
| 3 | July 2-4 | 1991 | 3 | August 11-13 | 1933 |
| 3 | July 8-10 | 1988 | 3 | July 3-5 | 1931 |
| 3 | September 3-5 | 1988 | 3 | June 23-25 | 1929 |
| 3 | August 7-9 | 1984 | 3 | July 14-16 | 1926 |
| 3 | July 25-27 | 1980 | 3 | September 6-8 | 1923 |

Only periods with 3 or more days tabulated.

## GREATEST NUMBER OF NON-CONSECUTIVE DAYS WITH MAXIMUM

 TEMPERATURES 105 DEGREES OR HIGHER IN ONE MONTH| $\underline{\text { Days }}$ | $\underline{\text { Period }}$ | $\underline{\text { Days }}$ | $\underline{\text { Period }}$ |
| :---: | :--- | :---: | :--- |
| 10 | July 1988 | 5 | July 1961 |
| 7 | August 1996 | 5 | July 1933 |
| 7 | August 1990 | 5 | August 1923 |
| 7 | July 1984 | 5 | August 1920 |
| 7 | July 1931 | 4 | August 1978 |
| 6 | August 1998 | 4 | July 1972 |
| 6 | July 1996 | 4 | July 1960 |
| 6 | July 1985 | 4 | September 1950 |
| 6 | June 1985 | 4 | July 1935 |
| 6 | June 1961 | 4 | August 1913 |
| 5 | August 1987 | 4 | August 1898 |
| 5 | August 1966 |  |  |
| Only months with 4 or more days tabulated. |  |  |  |

## AVERAGE NUMBER OF DAYS PER MONTH WITH <br> MAXIMUM TEMPERATURES <br> 90, 100 AND 105 DEGREES OR HIGHER (1961-1990)

| Month | 90 or Above | 100 or Above | 105 or Above |
| :---: | :---: | :---: | :---: |
| April | 1 | 0 | 0 |
| May | 7 | 1 | * |
| June | 13 | 4 | 1 |
| July | 22 | 7 | 2 |
| August | 20 | 5 | 1 |
| September | 13 | 2 | * |
| October | 3 | * | 0 |
| Annual Average | 79 Days | 19 Days | 4 Days |

* Less than one day


# GREATEST NUMBER OF CONSECUTIVE DAYS WITH MINIMUM TEMPERATURES 32 DEGREES OR LOWER 

(December 1877-August 1998)

| Days | Period | Days | Period |
| :---: | :---: | :---: | :---: |
| 13 | December 20, 1990 - January 1, 1991 | 7 | January 18-24, 1922 |
| 10 | December 29, 1960 - January 7, 1961 | 7 | January 5-11, 1913 |
| 10 | December 21-30, 1930 | 6 | Dec 29, 1959-January 3, 1960 |
| 10 | December 15-24, 1928 | 6 | January 2-7, 1950 |
| 10 | December 27, 1918 - January 5, 1919 | 6 | January 6-11, 1937 |
| 9 | December 15-23, 1965 | 6 | January 10-15, 1926 |
| 9 | December 25, 1962 - January 2, 1963 | 6 | January 15-20, 1917 |
| 9 | January 23-31, 1949 | 6 | December 17-22, 1908 |
| 9 | February 2-10, 1883 | 6 | January 9-14, 1898 |
| 8 | December 10-17, 1985 | 6 | January 6-11, 1888 |
| 8 | December 8-15, 1972 | 6 | January 13-18, 1888 |
| 8 | January 11-18, 1963 | 6 | January 18-23, 1883 |
| 8 | January 8-15, 1949 | 6 | February 2-9, 1883 |
| 8 | January 7-14, 1929 | 6 | December 10-15, 1883 |
| 8 | February 7-14, 1884 | 6 | January 27-February 1, 1880 |
| 7 | December 9-15, 1932 | 6 | December 14-19, 1878 |
| 7 | January 1-7, 1924 |  |  |

Only periods with 6 or more days tabulated.

## GREATEST NUMBER OF NON-CONSECUTIVE DAYS WITH MINIMUM TEMPERATURES 32 DEGREES OR LOWER IN ONE MONTH

| $\underline{\text { Days }}$ | Period | Days | $\underline{\text { Period }}$ |
| :---: | :--- | :---: | :--- |
| 24 | January 1949 | 13 | January 1922 |
| 17 | January 1947 | 13 | January 1888 |
| 16 | January 1963 | 13 | January 1883 |
| 16 | January 1898 | 12 | November 1880 |
| 14 | December 1930 | 12 | December 1956 |
| 14 | December 1878 | 12 | December 1898 |
| 14 | January 1937 | 11 | January 1929 |
| 13 | December 1990 | 11 | December 1949 |
| 13 | February 1883 | 11 | December 1918 |

Only months with 11 or more days tabulated.

Latest Date in Spring
March 27, 1898

Earliest Date in Fall
November 4, 1935

## LONGEST FREEZE-FREE PERIODS

| Days | Period |
| :---: | :---: |
| 765 | December 9, 1994 - January 13, 1997 |
| 743 | December 15, 1980 - December 29, 1982 |
| 732 | January 2, 1991 - January 2, 1993 |
| 720 | January 1, 1983 - December 21, 1984 |
| 712 | January 2, 1979 - December 13, 1980 |
| 689 | February 11, 1933 - December 31, 1934 |

## SHORTEST FREEZE-FREE PERIOD

Days Period
241 March 28, 1898 - Nov 23, 1898

## NUMBER OF DAYS WITH TEMPERATURES 32 DEGREES OR LOWER IN ANY ONE YEAR

Least Number of Days

## Days Year

$0 \quad 1885,1904,1934,1976,1981$, 1983, 1995, 1996
1 1881, 1892, 1900, 1907, 1966
1974, 1977, 1980, 1991, 1992.
1994, 1997
$21909,1915,1925,1973,1979$,
1982, 1984, 1986

Greatest Number of Days
Days Year
391949
27 1883, 1898
221947
191985
18 1880, 1963
$17 \quad 1962$
16 1922, 1987, 1989
15 1878, 1929, 1950, 1956. 1990
V. PRECIPITATION RECORDS

## MAXIMUM AND MINIMUM PRECIPITATION BY MONTHS <br> WITH YEAR OF OCCURRENCE

(July 1849-August 1998)


* Also occurred earlier years.
** T is less than 0.01 inch.


## MAXIMUM AND MINIMUM PRECIPITATION BY MONTHS <br> WITH YEAR OF OCCURRENCE

(July 1849-August 1998)


* Also occurred earlier years.
** Normals are based on the Climatological Normals 1961-1990.
Note - Prior to the establishment of the Signal Corps Station July 1, 1877, precipitation records were taken as early as 1849 by Dr. F.M. Hatch, retired Army Surgeon, and his associate, Dr. T.M. Logan. Their records are believed reliable.


# GREATEST NUMBER OF DAYS WITH 0.01 INCH OR MORE AND 0.10 INCH OR MORE BY MONTH AND YEAR OF OCCURRENCE 

(July 1877-August 1998)

|  | 0.01 Inch or More |  |  | 0.10 Inch or More |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | Average* <br> \# of Days | Greatest <br> \# of Days | Year | Average* <br> \# of Days | Greatest \# of Days | Year |
| January | 10 | 25 | 1995** | 6 | 20 | 1909 |
| February | 8 | 20 | 1998 | 5 | 15 | 1936 |
| March | 8 | 19 | 1989** | 6 | 16 | 1983 |
| April | 5 | 16 | 1948 | 3 | 13 | 1948 |
| May | 2 | 14 | 1998 | -- | 7 | 1915 |
| June | 1 | 7 | 1884 | -- | 4 | 1884 |
| July | -- | 3 | 1974 | -- | 1 | 1980** |
| August | -- | 5 | 1976 | -- | 3 | 1976 |
| September | 2 | 8 | 1982 | 1 | 5 | 1982 |
| October | 4 | 11 | 1889 | 2 | 10 | 1889 |
| November | 8 | 17 | 1984** | 6 | 14 | 1984 |
| December | 9 | 23 | 1889 | 5 | 18 | 1889 |
| Annual | 59 | 98 | 1983 | 37 | 69 | 1983 |

## GREATEST NUMBER OF DAYS WITH 0.50 INCH OR MORE AND 1.00 INCH OR MORE BY MONTH AND YEAR OF OCCURRENCE

 (July 1877-August 1998)|  | 0.50 Inch or More |  |  | 1.00 Inch or More |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | Average* \# of Days | Greatest \# of Days | Year | Average* <br> \# of Days | Greatest <br> \# of Days | Year |
| January | 3 | 11 | 1911 | 1 | 5 | 1993** |
| February | 2 | 9 | 1878 | 1 | 5 | 1958 |
| March | 2 | 8 | 1991 | -- | 3 | 1907 |
| April | -- | 6 | 1880 | -- | 3 | 1880 |
| May | -- | 3 | 1883 | 0 | 1 | 1992** |
| June | 0 | 1 | 1991** | 0 | 0 | ---- |
| July | 0 | 1 | 1974 | 0 | 0 | -- |
| August | 0 | 1 | 1965** | 0 | 0 | ---- |
| September | -- | 3 | 1904 | 0 | 2 | 1904 |
| October | -- | 5 | 1889 | -- | 3 | 1889 |
| November | 2 | 6 | 1973** | -- | 4 | 1885 |
| December | 2 | 10 | 1880 | -- | 5 | 1955 |
| Annual | 13 | 31 | 1983 | 4 | 11 | 1940 |

* Averages based on Climatological Normals 1961-1990
** Also recorded earlier years
-- Less than one day.

GREATEST NUMBER OF CONSECUTIVE DAYS WITH 0.01 INCH OR MORE (1878-August 1998)

| Days | Period | Total <br> Rainfall |
| :---: | :--- | :---: |
| 16 | February 6-February 21, 1992 | 6.78 |
| 15 | February 10-February 24, 1936 | 8.00 |
| 15 | November 24-December 8, 1970 | 7.12 |
| 14 | January 3-January 16, 1955 | 9.30 |
| 14 | January 23-February 5, 1911 | 7.01 |
| 14 | November 29-December 12, 1889 | 5.34 |
| 13 | December 13-December 25, 1880 | 7.75 |
| 13 | January 18-January 30, 1969 | 6.45 |
| 12 | December 31, 1939-January 11, 1940 | 6.65 |
| 12 | March 15-March 26, 1907 | 5.94 |
| 12 | February 26-March 9, 1911 | 4.78 |
| 12 | January 24-February 4, 1915 | 2.59 |

Only periods with 12 or more days tabulated

## GREATEST NUMBER OF CONSECUTIVE DAYS WITH 0.25 INCH OR MORE

(1878-August 1998)

| Days | Period | Total <br> Rainfall |
| :---: | :--- | :---: |
| 10 | December 17-December 26, 1884 | 10.34 |
| 9 | February 8-February 16, 1992 | 5.04 |
| 8 | February 14-February 21, 1980 | 6.95 |
| 8 | January 11-January 18, 1906 | 6.52 |
| 8 | December 20-December 27, 192 | 3.58 |
| 7 | February 12-February 18, 1986 | 9.44 |
| 7 | December 17-December 23, 1955 | 8.13 |
| 7 | December 21-December 27, 1940 | 7.09 |
| 7 | November 28-December 4, 1970 | 6.02 |
| 7 | March 10-March 16, 1889 | 4.76 |
| 6 | March 29-April 3, 1958 | 5.47 |
| 6 | January 13-January 18, 1896 | 4.56 |
| 6 | January 9-January 14, 1980 | 4.12 |
| 6 | February 20-February 25, 1902 | 3.65 |
| 6 | February 25-March 2, 1983 | 3.41 |

Only periods with six or more days tabulated

## GREATEST NUMBER OF CONSECUTIVE DAYS WITH 0.50 INCH OR MORE (1878-August 1998)

Total Rainfall 10.09

6 December 21-December 26, 1940

$$
0
$$

$$
6.75
$$

5 February 14-February 18,1986
8.12

4 February 25-February 28, 1940
6.75

4 January 11-January 14, 1911
5.03

4 January 13-January 16, 1978
4 February 14-February 17, 1980
4.59

4 January 15-January 18, 1896
4.02

4 January 15-January 18, 1906
4 December 5-December 8, 18893.34
4 November 19-November 22, 1978
4 January 8-January 11, 1936
3.96
3.54

Days Period
9 December 17-December 25, 1884
3.00 2.18

Only periods with 4 or more days tabulated

# GREATEST NUMBER OF CONSECUTIVE DAYS WITH 1.00 INCH OR MORE (1878-August 1998) 

| Days | Period | Total <br> Rainfall |
| :---: | :--- | :---: |
| 3 | February 16-February 18, 1986 | 6.85 |
| 3 | January 8-January 10, 1995 | 5.63 |
| 3 | January 20-January 22, 1943 | 5.45 |
| 3 | February 26-February 28, 1940 | 4.66 |
| 3 | October 20-October 22, 1889 | 3.48 |

Only periods with 3 or more days tabulated

# GREATEST NUMBER OF CONSECUTIVE DAYS WITHOUT* MEASURABLE RAIN DURING AN ENTIRE YEAR <br> (July 1877-August 1998) 

| Days | Period | $\underline{\text { Days }}$ | $\underline{\text { Period }}$ |
| :---: | :--- | :---: | :--- |
| 194 | May 13-November 22, 1880 | 147 | May 7-September 30, 1926 |
| 174 | April 18-October 8, 1903 | 145 | May 13-October 4, 1924 |
| 162 | May 25-November 2, 1960 | 143 | May 21-October 10, 1987 |
| 160 | May 9-October 15, 1886 | 143 | April 27-September 16, 1959 |
| 155 | May 31-November 1, 1932 | 140 | May 31-October 17, 1990 |
| 153 | May 27-October 26, 1905 | 140 | May 12-September 28, 1890 |
|  |  |  |  |
| GREATEST NUMBER OF CONSECUTIVE DAYS WITHOUT* MEASURABLE |  |  |  |

## Days Period

44 November 15-December 28, 1976
42 January 17-February 27, 1899
41 December 18, 1962-January 27, 1957
38 November 4-December 11, 1959
38 November 8-December 15, 1940
38 February 15-March 24, 1883
36 November 26-December 31, 1989

## Days Period

36 December 18, 1960-January 22, 1961
November 15-December 20, 1958
34 December 5, 1956-January 7, 1957
November 2-December 3, 1956
31 November 1-December 1, 1933

30 November 15-December 14, 1936

[^5]
# WATER YEAR* HAVING 11 MONTHS OF MEASURABLE RAIN <br> (July 1849-August 1998) 

Season Season1860-611962-63
1896-97 ..... 1979-80
1897-98 ..... 1983-84
1949-50 ..... 1984-85
1961-62 ..... 1997-98
WATER YEAR* HAVING 5 OR MORE MONTHS WITHOUT MEASURABLE RAIN(July 1849-August 1998)

Season
1852-53
1856-57
1872-73
1880-81

Season
1886-87
1902-03
1929-30
1995-96

* Water Year is the 12-month period from July 1 through June 30.
** No Water Year has ever had measurable rain for the entire 12 months

Prior to the establishment of the U. S. Signal Corps station on July 1, 1877, precipitation records were kept from 1849 by Dr. F. M. Hatch, retired Army Surgeon, and his associate, Dr. T. M. Logan. Their records are believed to be reliable.

## MAXIMUM AMOUNTS OF PRECIPITATION FOR 5, 10, AND 30 MINUTES 1, 2 AND 24 HOURS BY MONTHS WITH DATES AND YEARS OF OCCURRENCES

 (January 1903-December 1995)| Month | 5 Minutes |  | $\underline{10 \text { Minutes }}$ |  | 30 Minutes |  | 1 Hour |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

* Also occurred earlier years.

24-hour amounts are from July 1877 through December 1985. These amounts are from any 24 -hour period and are not confined to a midnight-midnight period such as the figures on pages 37-38.

## TOTAL PRECIPITATION BY PERIODS

|  |  | 48 Hours |  | 24 Hours |  | 2 Hours |  | 1 Hour |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Month | Date | Total | Date | Total | Date | Total | Date | Total |
| 1962 | October | 12-13 | 6.42 | 12-13 | 5.07 | 13 | 0.85 | 12 | 0.57 |
| 1986 | February | 16-17 | 5.05 | 16-17 | 3.54 | 17 | 0.72 | 17 | 0.40 |
| 1986 | February | 17-18 | 5.01 | 17 | 3.21 | 18 | 1.01 | 18 | 0.52 |
| 1995 | January | 09-10 | 4.55 | 09-10 | 4.47 | 09 | 1.74 | 09 | 1.44 |
| 1943 | January | 20-21 | 4.29 | 20-21 | 3.52 | 20 | 1.09 | 20 | 0.63 |
| 1981 | November | 12-13 | 4.09 | 12-13 | 2.61 | 13 | 0.57 | 12 | 0.32 |
| 1967 | January | 20-21 | 4.09 | 20-21 | 3.12 | 21 | 0.86 | 21 | 0.61 |
| 1982 | January | 3-5 | 4.00 | 4-5 | 3.50 | 5 | 0.45 | 4 | 0.25 |
| 1936 | February | 11-12 | 3.89 | 11 | 2.34 | 12 | 0.85 | 12 | 0.77 |
| 1935 | December | 18-19 | 3.81 | 18-19 | 3.28 | 18 | 0.59 | 18 | 0.31 |
| 1937 | December | 9-11 | 3.67 | 9-10 | 2.22 | 11 | 0.52 | 10 | 0.39 |
| 1940 | February | 26-27 | 3.65 | 26-27 | 3.32 | 27 | 0.53 | 27 | 0.28 |
| 1944 | February | 2-3 | 3.56 | 2-3 | 2.82 | 2 | 0.39 | 2 | 0.20 |
| 1911 | January | 13-14 | 3.53 | 13-14 | 3.31 | 14 | 0.38 | 14 | 0.21 |
| 1958 | April | 1-2 | 3.48 | 1-2 | 2.24 | 2 | 0.85 | 2 | 0.74 |
| 1970 | November | 28-29 | 3.48 | 28-29 | 2.45 | 28 | 0.54 | 28 | 0.30 |
| 1962 | February | 9-10 | 3.45 | 9-10 | 2.21 | 9 | 0.82 | 9 | 0.52 |
| 1916 | January | 2-3 | 3.41 | 2-3 | 3.21 | 3 | 0.74 | 3 | 0.36 |
| 1935 | April | 7 | 3.35 | 7 | 3.35 | 7 | 2.62 | 7 | 1.65 |
| 1955 | December | 22-23 | 3.25 | 22-23 | 2.36 | 22 | 0.58 | 22 | 0.38 |
| 1983 | December | 24-25 | 3.24 | 24-25 | 2.85 | 25 | 0.45 | 25 | 0.27 |
| 1931 | December | 26-27 | 3.23 | 26-27 | 2.98 | 26 | 0.38 | 26 | 0.20 |
| 1940 | December | 21-22 | 3.22 | 21 | 2.38 | 21 | 0.55 | 21 | 0.32 |
| 1918 | September | 12-13 | 3.17 | 12-13 | 3.14 | 12 | 0.72 | 12 | 0.38 |
| 1990 | January | 12-13 | 2.93 | 12-13 | 2.73 | 12 | 1.41 | 12 | 0.86 |
| 1958 | February | 18-19 | 2.93 | 18-19 | 2.66 | 18 | 0.39 | 18 | 0.22 |
| 1964 | December | 21-22 | 2.92 | 21-22 | 1.89 | 22 | 0.40 | 22 | 0.23 |
| 1952 | January | 11-12 | 2.90 | 11-12 | 2.73 | 12 | 0.43 | 11 | 0.33 |
| 1964 | January | 20-21 | 2.86 | 20-21 | 2.30 | 20 | 0.83 | 20 | 0.49 |
| 1983 | March | 12-13 | 2.78 | 12-13 | 2.63 | 13 | 0.66 | 13 | 0.52 |
| 1978 | January | 13-14 | 2.65 | 13-14 | 1.98 | 13 | 0.61 | 13 | 0.43 |
| 1973 | February | 26-27 | 2.62 | 27 | 2.11 | 27 | 1.19 | 27 | 1.01 |
| 1950 | November | 17-18 | 2.58 | 17-18 | 2.08 | 18 | 0.48 | 18 | 0.29 |

[^6]MONTHLY PRECIPITATION BY SEASON, WITH SEASONAL TOTAL AND THE

| Season | Jul | Aug | Sep | Oct | Nov | Dec | Pcpn to <br> Dec 31 | Jan | Feb | Mar | Apr | May | Jun | Total <br> Pcpn |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Normal* | 0.05 | 0.07 | 0.37 | 1.12 | 2.97 | 2.76 | 7.34 | 3.85 | 2.98 | 2.79 | 1.24 | 0.29 | 0.12 | 18.61 |
| 1849-50 | 0.00 | 0.00 | 0.25 | 1.50 | 2.25 | 12.50 | 16.50 | 4.50 | 0.50 | 10.00 | 4.25 | 0.25 | 0.00 | 36.00 |
| 1850-51 | 0.00 | 0.00 | 0.14 | 0.05 | 0.69 | 2.67 | 3.55 | 0.65 | 0.35 | 1.88 | 1.14 | 0.69 | 0.00 | 8.26 |
| 1851-52 | 0.00 | 0.00 | 1.00 | 0.18 | 2.14 | 7.07 | 10.39 | 0.58 | 0.12 | 6.40 | 0.19 | 0.30 | 0.00 | 17.98 |
| 1852-53 | 0.00 | 0.00 | T | 0.00 | 6.00 | 13.40 | 19.40 | 3.00 | 2.00 | 7.00 | 3.50 | 1.45 | T | 36.35 |
| 1853-54 | T | 0.00 | T | T | 1.50 | 1.54 | 3.04 | 3.25 | 8.50 | 3.25 | 1.50 | 0.21 | 0.31 | 20.06 |
| 1854-55 | 0.00 | T | T | 1.01 | 0.65 | 1.15 | 2.81 | 2.67 | 3.46 | 4.20 | 4.32 | 1.15 | 0.01 | 18.62 |
| 1855-56 | 0.00 | 0.00 | T | 0.00 | 0.75 | 2.00 | 2.75 | 4.92 | 0.69 | 1.40 | 2.13 | 1.84 | 0.03 | 13.76 |
| 1856-57 | 0.00 | 0.00 | T | 0.20 | 0.65 | 2.40 | 3.25 | 1.38 | 4.80 | 0.68 | T | T | 0.35 | 10.46 |
| 1857-58 | 0.00 | T | 0.00 | 0.66 | 2.41 | 2.63 | 5.70 | 2.44 | 2.46 | 2.88 | 1.21 | 0.20 | 0.10 | 14.99 |
| 1858-59 | 0.01 | T | T | 3.01 | 0.15 | 4.34 | 7.51 | 0.96 | 3.91 | 1.64 | 0.98 | 1.04 | 0.00 | 16.04 |
| 1859-60 | 0.00 | 0.00 | 0.02 | 0.00 | 6.48 | 1.83 | 8.33 | 2.31 | 0.93 | 5.11 | 2.87 | 2.49 | 0.02 | 22.06 |
| 1860-61 | 0.63 | 0.00 | 0.06 | 0.91 | 0.18 | 4.28 | 6.06 | 2.67 | 2.92 | 3.32 | 0.48 | 0.59 | 0.14 | 16.18 |
| 1861-62 | 0.55 | 0.00 | 0.00 | T | 2.17 | 8.64 | 11.36 | 15.04 | 4.26 | 2.80 | 0.82 | 1.81 | 0.01 | 36.10 |
| 1862-63 | 0.00 | 0.01 | 0.00 | 0.36 | T | 2.33 | 2.70 | 1.73 | 2.75 | 2.36 | 1.69 | 0.36 | 0.00 | 11.59 |
| 1863-64 | 0.00 | 0.00 | T | 0.00 | 1.49 | 1.82 | 3.31 | 1.08 | 0.19 | 1.30 | 1.08 | 0.74 | 0.09 | 7.79 |
| 1864-65 | 0.00 | 0.08 | T | 0.12 | 6.72 | 7.87 | 14.79 | 4.78 | 0.71 | 0.48 | 1.37 | 0.46 | 0.00 | 22.59 |
| 1865-66 | T | 0.00 | 0.08 | 0.48 | 2.43 | 0.36 | 3.35 | 7.70 | 2.01 | 2.02 | 0.48 | 2.25 | 0.10 | 17.91 |
| 1866-67 | 0.02 | 0.00 | 0.00 | T | 2.43 | 9.51 | 11.96 | 3.44 | 7.10 | 1.01 | 1.80 | 0.01 | 0.00 | 25.32 |
| 1867-68 | 0.00 | 0.00 | 0.01 | 0.00 | 3.81 | 12.85 | 16.67 | 6.04 | 3.15 | 4.35 | 2.31 | 0.27 | T | 32.79 |
| 1868-69 | 0.00 | 0.00 | 0.00 | 0.00 | 0.77 | 2.61 | 3.38 | 4.79 | 3.63 | 2.94 | 1.24 | 0.65 | 0.01 | 16.64 |
| 1869-70 | 0.00 | 0.00 | T | 2.12 | 0.85 | 1.96 | 4.93 | 1.37 | 3.24 | 1.64 | 2.12 | 0.27 | T | 13.57 |
| 1870-71 | T | T | 0.00 | 0.02 | 0.58 | 0.97 | 1.57 | 2.08 | 1.92 | 0.69 | 1.45 | 0.76 | T | 8.47 |
| 1871-72 | 0.00 | 0.00 | T | 0.21 | 1.22 | 10.59 | 12.02 | 4.04 | 4.74 | 1.94 | 0.61 | 0.28 | 0.02 | 23.65 |
| 1872-73 | 0.00 | 0.00 | T | 0.22 | 1.93 | 5.39 | 7.54 | 1.23 | 4.36 | 0.55 | 0.51 | 0.00 | T | 14.19 |
| 1873-74 | 0.02 | T | 0.00 | 0.31 | 1.21 | 10.01 | 11.55 | 5.20 | 1.86 | 3.05 | 0.89 | 0.37 | T | 22.92 |
| 1874-75 | T | 0.00 | 0.05 | 2.26 | 3.80 | 0.44 | 6.55 | 8.70 | 0.55 | 0.80 | T | T | 1.10 | 17.70 |
| 1875-76 | 0.00 | 0.00 | 0.00 | 0.44 | 6.20 | 5.52 | 12.16 | 4.99 | 3.75 | 4.15 | 1.10 | 0.15 | 0.00 | 26.30 |
| 1876-77 | 0.21 | 0.02 | T | 3.45 | 0.30 | 0.00 | 3.98 | 2.77 | 1.04 | 0.56 | 0.19 | 0.64 | 0.01 | 9.19 |
| 1877-78 | 0.00 | 0.00 | 0.00 | 0.73 | 1.07 | 1.43 | 3.23 | 9.26 | 8.04 | 3.09 | 1.07 | 0.17 | 0.00 | 24.86 |
| 1878-79 | 0.00 | 0.00 | 0.29 | 0.55 | 0.51 | 0.47 | 1.82 | 3.18 | 3.88 | 4.88 | 2.66 | 1.30 | 0.13 | 17.85 |
| 1879-80 | T | T | 0.00 | 0.88 | 2.05 | 3.41 | 6.34 | 1.64 | 1.83 | 1.70 | 14.20 | 0.76 | 0.00 | 26.47 |
| precipitation is for the period 1961-1990 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Season | Jul | Aug | Sep | Oct | Nov | Dec | Pcpn to <br> Dec 31 | Jan | Feb | Mar | Apr | May | Jun | Total Pcpn |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Normal* | 0.05 | 0.07 | 0.37 | 1.12 | 2.97 | 2.76 | 7.34 | 3.85 | 2.98 | 2.79 | 1.24 | 0.29 | 0.12 | 18.61 |
| 1880-81 | T | 0.00 | 0.00 | 0.00 | 0.05 | 11.81 | 11.86 | 6.14 | 5.06 | 1.37 | 1.64 | T | 0.50 | 26.57 |
| 1881-82 | T | 0.00 | 0.30 | 0.55 | 1.88 | 3.27 | 6.00 | 1.89 | 2.40 | 3.78 | 1.99 | 0.35 | 0.10 | 16.51 |
| 1882-83 | T | 0.00 | 0.57 | 2.63 | 3.22 | 1.13 | 7.55 | 2.23 | 1.11 | 3.70 | 0.67 | 2.85 | 0.00 | 18.11 |
| 1883-84 | 0.00 | 0.00 | 0.90 | 0.97 | 0.61 | 0.44 | 2.92 | 3.43 | 4.46 | 8.14 | 4.42 | 0.06 | 1.45 | 24.78 |
| 1884-85 | 0.00 | T | 0.60 | 2.01 | 0.00 | 10.45 | 13.06 | 2.16 | 0.49 | 0.08 | 0.68 | T | 0.11 | 16.58 |
| 1885-86 | T | 0.00 | 0.08 | 0.02 | 11.34 | 5.76 | 17.20 | 7.95 | 0.29 | 2.68 | 4.08 | 0.07 | 0.00 | 32.27 |
| 1886-87 | 0.00 | 0.00 | 0.00 | 0.68 | 0.21 | 2.21 | 3.10 | 1.12 | 6.28 | 0.94 | 2.53 | 0.00 | 0.00 | 13.97 |
| 1887-88 | 0.00 | T | 0.02 | 0.00 | 0.45 | 2.09 | 2.56 | 4.81 | 0.57 | 3.04 | 0.10 | 0.40 | 0.08 | 11.56 |
| 1888-89 | T | T | 0.55 | 0.00 | 4.28 | 4.63 | 9.46 | 0.15 | 0.33 | 6.25 | 0.26 | 3.25 | 0.25 | 19.95 |
| 1889-90 | 0.00 | 0.00 | 0.00 | 6.02 | 3.15 | 7.82 | 16.99 | 6.62 | 4.06 | 3.00 | 1.33 | 1.80 | 0.00 | 33.80 |
| 1890-91 | 0.00 | T | 0.80 | T | 0.00 | 3.34 | 4.14 | 0.53 | 6.61 | 1.78 | 2.04 | 0.66 | 0.05 | 15.81 |
| 1891-92 | T | 0.00 | 0.10 | 0.10 | 0.48 | 3.28 | 3.96 | 1.78 | 2.84 | 3.02 | 1.20 | 2.38 | T | 15.18 |
| 1892-93 | 0.00 | 0.00 | 0.18 | 0.70 | 6.60 | 4.90 | 12.38 | 3.27 | 2.66 | 3.51 | 1.08 | 1.05 | 0.00 | 23.95 |
| 1893-94 | T | 0.00 | 0.22 | 0.12 | 2.92 | 1.76 | 5.02 | 4.17 | 3.92 | 0.74 | 0.34 | 1.70 | 0.46 | 16.35 |
| 1894-95 | T | T | 0.88 | 1.06 | 0.48 | 8.86 | 11.28 | 8.42 | 1.84 | 1.20 | 0.86 | 0.51 | 0.00 | 24.11 |
| 1895-96 | 0.04 | T | 1.26 | 0.17 | 1.54 | 1.54 | 4.55 | 9.79 | 0.09 | 2.57 | 5.34 | 0.92 | 0.00 | 23.23 |
| 1896-97 | T | 0.20 | 0.31 | 0.55 | 3.56 | 1.76 | 6.38 | 3.66 | 4.15 | 2.54 | 0.25 | 0.30 | 0.04 | 17.32 |
| 1897-98 | 0.00 | 0.01 | 0.16 | 1.96 | 0.61 | 1.64 | 4.38 | 0.98 | 3.19 | 0.04 | 0.28 | 1.50 | 0.14 | 10.51 |
| 1898-99 | 0.00 | 0.00 | 0.36 | 0.64 | 0.61 | 2.30 | 3.91 | 3.94 | 0.04 | 6.02 | 0.10 | 0.54 | 0.49 | 15.04 |
| 1899-00 | 0.00 | 0.02 | 0.00 | 4.46 | 2.62 | 2.91 | 10.01 | 3.54 | 0.32 | 1.61 | 1.88 | 2.88 | 0.00 | 20.24 |
| 1900-01 | T | 0.00 | 0.06 | 1.74 | 4.50 | 1.38 | 7.68 | 3.70 | 5.32 | 0.48 | 2.23 | 0.80 | 0.00 | 20.21 |
| 1901-02 | T | T | 0.56 | 1.56 | 2.68 | 1.19 | 5.99 | 0.95 | 6.52 | 1.99 | 1.36 | 0.45 | 0.01 | 17.27 |
| 1902-03 | 0.00 | T | 0.00 | 1.67 | 2.02 | 2.91 | 6.60 | 3.05 | 1.70 | 4.81 | 0.46 | T | T | 16.62 |
| 1903-04 | 0.00 | 0.00 | 0.00 | 0.12 | 3.44 | 1.12 | 4.68 | 0.45 | 5.26 | 5.43 | 1.02 | 0.03 | T | 16.87 |
| 1904-05 | T | 0.07 | 3.62 | 1.86 | 2.05 | 1.20 | 8.80 | 3.33 | 2.47 | 3.75 | 1.18 | 2.45 | 0.00 | 21.98 |
| 1905-06 | 0.00 | T | 0.03 | 0.00 | 1.20 | 0.56 | 1.79 | 6.63 | 3.02 | 8.45 | 1.21 | 2.24 | 0.59 | 23.93 |
| 1906-07 | 0.00 | T | 0.20 | T | 0.99 | 7.37 | 8.56 | 4.63 | 2.37 | 7.28 | 0.25 | 0.10 | 0.85 | 24.04 |
| 1907-08 | 0.00 | 0.00 | T | 1.20 | 0.04 | 3.33 | 4.57 | 3.84 | 2.75 | 0.42 | 0.08 | 0.54 | T | 12.20 |
| 1908-09 | T | 0.00 | 0.05 | 0.26 | 1.23 | 2.04 | 3.58 | 9.65 | 6.68 | 1.84 | T | T | 0.03 | 21.78 |
| 1909-10 | 0.00 | 0.00 | 0.21 | 1.27 | 1.32 | 3.87 | 6.67 | 1.48 | 0.83 | 3.06 | 0.11 | 0.03 | T | 12.18 |


| Season | Jul | Aug | Sep | Oct | Nov | Dec | Pcpn to <br> Dec 31 | Jan | Feb | Mar | Apr | May | Jun | Total <br> Pcpn |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Normal* | 0.05 | 0.07 | 0.37 | 1.12 | 2.97 | 2.76 | 7.34 | 3.85 | 2.98 | 2.79 | 1.24 | 0.29 | 0.12 | 18.61 |
| 1910-11 | T | 0.00 | 0.20 | 0.28 | 0.17 | 1.62 | 2.27 | 12.72 | 1.88 | 4.30 | 0.66 | 0.03 | 0.12 | 21.98 |
| 1911-12 | 0.00 | 0.00 | T | 0.18 | 0.15 | 1.07 | 1.40 | 2.74 | 0.23 | 1.97 | 1.69 | 0.94 | 0.58 | 9.55 |
| 1912-13 | T | 0.00 | 1.25 | 0.58 | 0.80 | 0.23 | 2.86 | 2.52 | 0.16 | 1.34 | 0.53 | 0.51 | 0.11 | 8.03 |
| 1913-14 | T | 0.01 | T | 0.13 | 4.58 | 4.40 | 9.12 | 5.97 | 2.96 | 0.59 | 0.70 | 0.50 | 0.60 | 20.44 |
| 1914-15 | 0.00 | 0.00 | T | 0.82 | 0.47 | 3.44 | 4.73 | 3.76 | 4.26 | 1.20 | 0.50 | 2.75 | 0.00 | 17.20 |
| 1915-16 | T | 0.01 | T | T | 0.83 | 4.42 | 5.26 | 9.35 | 2.45 | 1.06 | 0.06 | 0.10 | 0.01 | 18.29 |
| 1916-17 | 0.07 | T | 0.16 | 0.79 | 0.49 | 3.73 | 5.24 | 1.30 | 4.97 | 0.70 | 0.62 | 0.12 | 0.00 | 12.95 |
| 1917-18 | T | T | 0.51 | T | 0.25 | 0.45 | 1.21 | 0.97 | 3.36 | 4.00 | 1.06 | 0.01 | T | 10.61 |
| 1918-19 | 0.00 | T | 3.58 | 0.40 | 1.84 | 1.70 | 7.52 | 1.77 | 6.29 | 1.50 | 0.11 | 0.01 | 0.00 | 17.20 |
| 1919-20 | T | T | 0.53 | 0.01 | 0.36 | 2.22 | 3.12 | 0.29 | 0.81 | 3.27 | 1.36 | 0.00 | 0.05 | 8.90 |
| 1920-21 | 0.00 | T | 0.01 | 1.29 | 3.39 | 4.32 | 9.01 | 4.61 | 0.54 | 1.45 | 0.39 | 0.75 | 0.05 | 16.80 |
| 1921-22 | 0.00 | 0.00 | T | 0.80 | 1.09 | 3.81 | 5.70 | 2.16 | 4.18 | 1.29 | 0.40 | 0.43 | T | 14.16 |
| 1922-23 | T | T | 0.00 | 0.72 | 3.03 | 6.12 | 9.87 | 2.05 | 0.30 | 0.43 | 2.87 | 0.08 | 0.09 | 15.69 |
| 1923-24 | 0.00 | T | 0.50 | 0.58 | 0.62 | 0.94 | 2.64 | 1.80 | 2.00 | 1.19 | 0.30 | 0.06 | 0.00 | 7.99 |
| 1924-25 | T | T | T | 2.10 | 1.59 | 3.63 | 7.32 | 1.02 | 4.45 | 1.14 | 1.61 | 2.11 | 0.05 | 17.70 |
| 1925-26 | 0.01 | 0.01 | 0.02 | T | 1.13 | 1.50 | 2.67 | 3.20 | 5.52 | 0.05 | 4.25 | 0.36 | 0.00 | 16.05 |
| 1926-27 | 0.00 | T | T | 2.14 | 4.48 | 0.58 | 7.20 | 2.30 | 4.99 | 1.01 | 1.47 | 0.21 | 0.57 | 17.75 |
| 1927-28 | 0.00 | T | 0.01 | 1.45 | 1.81 | 1.55 | 4.82 | 1.17 | 1.38 | 3.39 | 0.78 | 0.02 | 0.04 | 11.60 |
| 1928-29 | T | 0.00 | T | 0.15 | 2.98 | 2.66 | 5.79 | 0.88 | 1.44 | 0.78 | 0.44 | 0.04 | 1.02 | 10.39 |
| 1929-30 | T | 0.00 | 0.00 | 0.15 | 0.00 | 4.06 | 4.21 | 3.65 | 1.62 | 2.86 | 0.94 | 0.34 | T | 13.62 |
| 1930-31 | 0.00 | T | 0.29 | 0.47 | 1.11 | 0.56 | 2.43 | 2.50 | 1.35 | 1.14 | 0.05 | 0.67 | 0.29 | 8.43 |
| 1931-32 | T | T | T | 0.18 | 1.30 | 6.84 | 8.32 | 1.09 | 1.76 | 0.34 | 0.76 | 0.30 | T | 12.57 |
| 1932-33 | T | 0.00 | 0.00 | 0.00 | 0.36 | 2.11 | 2.47 | 2.85 | 0.95 | 1.44 | 0.03 | 0.30 | 0.08 | 8.12 |
| 1933-34 | T | 0.00 | 0.03 | 0.66 | 0.00 | 5.74 | 6.43 | 1.33 | 2.97 | 0.13 | 0.16 | 0.26 | 0.30 | 11.58 |
| 1934-35 | 0.00 | T | 0.01 | 0.45 | 2.61 | 2.50 | 5.57 | 4.81 | 1.97 | 2.93 | 5.81 | 0.01 | 0.00 | 21.10 |
| 1935-36 | T | T | T | 1.22 | 0.77 | 2.18 | 4.17 | 3.80 | 8.59 | 1.33 | 1.69 | 0.68 | 0.27 | 20.53 |
| 1936-37 | T | 0.00 | T | 0.35 | 0.03 | 2.62 | 3.00 | 2.92 | 6.18 | 6.37 | 1.10 | 0.01 | 0.18 | 19.76 |
| 1937-38 | T | 0.00 | 0.00 | 0.87 | 2.69 | 4.06 | 7.62 | 3.50 | 8.24 | 3.92 | 1.51 | 0.04 | T | 24.83 |
| 1938-39 | T | 0.00 | 0.30 | 1.29 | 0.88 | 0.71 | 3.18 | 1.91 | 1.06 | 2.42 | 0.25 | 0.92 | T | 9.74 |
| 1939-40 | T | 0.00 | 0.35 | 0.45 | 0.07 | 1.15 | 2.02 | 7.98 | 9.25 | 4.22 | 0.68 | 0.92 | T | 25.07 |


| Season | Jul | Aug | Sep | Oct | Nov | Dec | Pcpn to Dec 31 | Jan | Feb | Mar | Apr | May | Jun | Total Pcpn |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Normal* | 0.05 | 0.07 | 0.37 | 1.12 | 2.97 | 2.76 | 7.34 | 3.85 | 2.98 | 2.79 | 1.24 | 0.29 | 0.12 | 18.61 |
| 1940-41 | 0.00 | 0.00 | 0.01 | 0.93 | 1.32 | 9.40 | 11.66 | 5.78 | 5.40 | 2.86 | 4.76 | 1.35 | 0.02 | 31.83 |
| 1941-42 | 0.00 | T | T | 0.86 | 1.17 | 6.29 | 8.32 | 4.68 | 2.98 | 3.31 | 4.58 | 1.07 | 0.00 | 24.94 |
| 1942-43 | T | 0.00 | 0.03 | 0.27 | 2.22 | 3.16 | 5.68 | 7.04 | 1.26 | 3.60 | 1.91 | 0.14 | 0.35 | 19.98 |
| 1943-44 | T | 0.00 | T | 0.16 | 0.62 | 2.02 | 2.80 | 3.08 | 7.27 | 1.42 | 1.66 | 0.83 | 0.52 | 17.58 |
| 1944-45 | 0.00 | 0.00 | T | 1.39 | 3.54 | 2.31 | 7.24 | 1.82 | 4.49 | 2.83 | 0.08 | 0.55 | 0.05 | 17.06 |
| 1945-46 | T | T | 0.00 | 2.53 | 1.60 | 5.50 | 9.63 | 0.77 | 0.90 | 1.94 | 0.06 | 0.61 | 0.00 | 13.91 |
| 1946-47 | T | 0.00 | 0.04 | 0.75 | 2.42 | 1.56 | 4.77 | 0.60 | 2.34 | 3.28 | 0.15 | 0.17 | 0.28 | 11.59 |
| 1947-48 | 0.00 | 0.00 | T | 2.60 | 1.02 | 0.65 | 4.27 | 0.51 | 0.88 | 3.68 | 3.05 | 3.04 | 0.01 | 15.44 |
| 1948-49 | 0.00 | 0.00 | 0.10 | 1.45 | 0.59 | 4.88 | 7.02 | 1.47 | 1.91 | 4.15 | T | 0.32 | T | 14.87 |
| 1949-50 | T | 0.01 | 0.03 | 0.14 | 1.10 | 1.90 | 3.18 | 4.41 | 3.27 | 2.00 | 1.03 | 0.37 | 0.05 | 14.31 |
| 1950-51 | T | 0.00 | 0.62 | 2.35 | 5.50 | 4.72 | 13.19 | 2.45 | 1.57 | 0.84 | 0.85 | 0.64 | T | 19.54 |
| 1951-52 | 0.00 | T | 0.25 | 1.33 | 3.18 | 5.11 | 9.87 | 8.65 | 1.65 | 4.50 | 1.41 | 0.05 | 0.45 | 26.58 |
| 1952-53 | 0.01 | 0.00 | 0.05 | 0.00 | 2.04 | 7.27 | 9.37 | 3.51 | 0.21 | 1.42 | 2.69 | 0.52 | 0.61 | 18.33 |
| 1953-54 | 0.00 | 0.67 | 0.00 | 0.18 | 1.79 | 0.56 | 3.20 | 3.26 | 3.70 | 3.29 | 1.88 | 0.21 | T | 15.54 |
| 1954-55 | 0.00 | 0.35 | 0.00 | 0.02 | 3.35 | 4.93 | 8.65 | 3.14 | 1.33 | 0.37 | 2.75 | 0.67 | 0.01 | 16.92 |
| 1955-56 | 0.00 | 0.00 | 0.95 | 0.57 | 1.16 | 12.20 | 14.88 | 7.58 | 2.43 | 0.03 | 1.86 | 0.96 | T | 27.74 |
| 1956-57 | 0.00 | 0.00 | 0.84 | 1.32 | 0.06 | 0.22 | 2.44 | 2.47 | 4.18 | 2.23 | 1.66 | 1.78 | T | 14.76 |
| 1957-58 | 0.00 | 0.00 | 1.35 | 1.35 | 0.33 | 3.07 | 6.10 | 5.38 | 9.13 | 5.93 | 4.41 | 0.72 | 0.27 | 31.94 |
| 1958-59 | 0.00 | 0.02 | 0.12 | 0.42 | 0.16 | 0.72 | 1.44 | 4.62 | 3.64 | 0.46 | 0.30 | T | 0.00 | 10.46 |
| 1959-60 | T | T | 1.54 | T | 0.01 | 1.28 | 2.83 | 3.25 | 2.91 | 1.62 | 1.26 | 0.41 | 0.00 | 12.28 |
| 1960-61 | T | 0.00 | T | T | 4.38 | 0.70 | 5.08 | 3.11 | 1.19 | 2.02 | 0.49 | 0.13 | 0.02 | 12.04 |
| 1961-62 | T | 0.01 | 0.17 | 0.03 | 2.96 | 1.44 | 4.61 | 0.95 | 7.60 | 1.84 | 0.19 | 0.06 | 0.01 | 15.26 |
| 1962-63 | 0.00 | 0.13 | 0.11 | 6.85 | 0.40 | 1.74 | 9.23 | 3.65 | 1.75 | 3.56 | 3.43 | 0.64 | 0.02 | 22.28 |
| 1963-64 | 0.00 | T | 0.35 | 1.27 | 3.92 | 0.38 | 5.92 | 3.35 | 0.19 | 0.83 | 0.16 | 0.18 | 0.41 | 11.04 |
| 1964-65 | 0.01 | 0.06 | 0.00 | 1.55 | 2.64 | 5.69 | 9.95 | 3.66 | 0.48 | 1.61 | 2.97 | 0.07 | T | 18.74 |
| 1965-66 | 0.00 | 0.59 | 0.00 | 0.11 | 3.25 | 2.89 | 6.84 | 2.11 | 1.58 | 0.22 | 0.59 | 0.24 | T | 11.58 |
| 1966-67 | 0.09 | 0.00 | 0.05 | 0.00 | 5.48 | 3.33 | 8.95 | 7.94 | 0.40 | 4.15 | 3.85 | 0.12 | 0.68 | 26.09 |
| 1967-68 | 0.00 | 0.00 | 0.04 | 0.26 | 1.25 | 0.94 | 2.49 | 3.34 | 1.97 | 2.42 | 0.40 | 0.32 | 0.23 | 11.17 |
| 1968-69 | 0.00 | 0.08 | 0.00 | 0.68 | 2.74 | 3.10 | 6.60 | 8.90 | 7.61 | 1.13 | 1.32 | 0.09 | 0.01 | 25.66 |
| 1969-70 | 0.00 | 0.00 | 0.03 | 0.80 | 0.81 | 5.36 | 7.00 | 7.05 | 1.45 | 1.83 | 0.14 | 0.00 | 0.24 | 17.71 |

MONTHLY PRECIPITATION BY SEASON, WITH SEASONAL TOTAL AND THE

| Season | Jul | Aug | Sep | Oct | Nov | Dec | Pcpn to <br> Dec 31 | Jan | Feb | Mar | Apr | May | Jun | Total <br> Pcpn |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Normal* | 0.05 | 0.07 | 0.37 | 1.12 | 2.97 | 2.76 | 7.34 | 3.85 | 2.98 | 2.79 | 1.24 | 0.29 | 0.12 | 18.61 |
| 1970-71 | 0.00 | 0.00 | 0.00 | 0.95 | 7.44 | 3.73 | 12.12 | 1.10 | 0.33 | 2.34 | 0.54 | 0.94 | 0.05 | 17.42 |
| 1971-72 | 0.00 | 0.00 | 0.00 | 0.27 | 0.88 | 4.84 | 5.99 | 1.07 | 1.15 | 0.37 | 1.27 | 0.34 | 0.15 | 10.34 |
| 1972-73 | 0.00 | 0.00 | 0.99 | 1.70 | 5.08 | 2.25 | 10.02 | 7.29 | 6.47 | 2.89 | 0.41 | 0.06 | 0.00 | 27.14 |
| 1973-74 | 0.00 | 0.00 | 0.44 | 1.56 | 6.69 | 3.05 | 11.74 | 3.80 | 1.57 | 3.72 | 1.34 | 0.00 | 0.66 | 22.83 |
| 1974-75 | 0.90 | 0.01 | 0.00 | 1.22 | 0.86 | 3.42 | 6.41 | 1.15 | 5.16 | 4.73 | 1.10 | 0.00 | 0.00 | 18.55 |
| 1975-76 | 0.02 | 0.16 | 0.00 | 2.32 | 0.40 | 0.30 | 3.20 | 0.37 | 1.49 | 0.61 | 1.53 | 0.00 | 0.05 | 7.25 |
| 1976-77 | 0.00 | 0.57 | 0.81 | 0.00 | 0.62 | 0.62 | 2.62 | 1.36 | 1.10 | 1.33 | 0.36 | 0.76 | 0.00 | 7.53 |
| 1977-78 | 0.01 | 0.00 | 0.55 | 0.27 | 2.00 | 3.65 | 6.48 | 9.61 | 2.77 | 4.24 | 2.26 | 0.00 | 0.00 | 25.36 |
| 1978-79 | 0.00 | 0.00 | 0.37 | 0.01 | 3.45 | 0.87 | 4.70 | 5.81 | 5.24 | 2.67 | 0.88 | 0.09 | 0.00 | 19.39 |
| 1979-80 | 0.22 | 0.00 | 0.01 | 1.79 | 1.66 | 3.96 | 7.64 | 5.33 | 8.08 | 2.19 | 1.04 | 0.47 | 0.04 | 24.79 |
| 1980-81 | 0.31 | 0.00 | 0.00 | 0.04 | 0.26 | 2.25 | 2.86 | 4.97 | 1.00 | 3.55 | 0.71 | 0.34 | 0.00 | 13.43 |
| 1981-82 | 0.00 | 0.00 | 0.32 | 2.64 | 7.13 | 3.91 | 14.00 | 5.40 | 2.90 | 6.82 | 3.36 | 0.00 | 0.17 | 32.65 |
| 1982-83 | 0.00 | 0.00 | 1.54 | 2.69 | 5.83 | 3.44 | 13.50 | 5.54 | 5.28 | 8.30 | 4.36 | 0.23 | 0.28 | 37.49 |
| 1983-84 | 0.00 | 0.01 | 0.61 | 0.53 | 5.83 | 6.65 | 13.63 | 0.23 | 1.52 | 1.47 | 0.44 | 0.01 | 0.10 | 17.40 |
| 1984-85 | 0.00 | 0.08 | 0.08 | 1.87 | 5.46 | 1.75 | 9.24 | 1.07 | 1.85 | 2.79 | 0.11 | 0.02 | 0.14 | 15.22 |
| 1985-86 | 0.00 | 0.01 | 0.71 | 0.69 | 4.64 | 3.19 | 9.24 | 4.88 | 10.30 | 4.23 | 1.02 | 0.08 | 0.00 | 29.75 |
| 1986-87 | 0.00 | 0.00 | 0.80 | 0.33 | 0.22 | 1.30 | 2.65 | 2.55 | 3.77 | 3.57 | 0.26 | 0.01 | 0.00 | 12.81 |
| 1987-88 | 0.00 | 0.00 | 0.00 | 1.30 | 3.22 | 3.75 | 8.27 | 3.61 | 0.74 | 0.31 | 1.46 | 0.75 | 0.23 | 15.37 |
| 1988-89 | 0.01 | 0.00 | 0.00 | 0.22 | 2.08 | 3.32 | 5.63 | 0.70 | 1.38 | 6.73 | 0.39 | 0.04 | 0.26 | 15.13 |
| 1989-90 | 0.00 | 0.37 | 3.15 | 1.47 | 1.26 | 0.00 | 6.25 | 5.49 | 3.14 | 1.16 | 0.75 | 2.61 | 0.00 | 19.40 |
| 1990-91 | 0.00 | 0.00 | 0.00 | 0.28 | 0.56 | 1.66 | 2.50 | 0.37 | 3.18 | 7.48 | 0.38 | 0.26 | 0.56 | 14.73 |
| 1991-92 | 0.00 | 0.01 | 0.05 | 1.22 | 0.32 | 2.04 | 3.64 | 1.68 | 6.89 | 3.32 | 0.93 | 0.00 | 0.22 | 16.68 |
| 1992-93 | 0.00 | 0.00 | 0.00 | 1.26 | 0.38 | 6.23 | 7.87 | 9.37 | 5.11 | 2.43 | 0.75 | 1.23 | 0.94 | 27.70 |
| 1993-94 | 0.00 | 0.00 | 0.00 | 0.43 | 2.70 | 2.04 | 5.17 | 2.16 | 3.17 | 0.07 | 0.80 | 1.65 | 0.00 | 13.02 |
| 1994-95 | 0.00 | 0.00 | 0.00 | 0.45 | 3.96 | 3.54 | 7.95 | 12.35 | 0.19 | 7.84 | 1.90 | 1.01 | 0.53 | 31.77 |
| 1995-96 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 5.14 | 5.15 | 3.30 | 6.09 | 2.30 | 1.93 | 2.22 | 0.00 | 20.99 |
| 1996-97 | 0.00 | 0.00 | 0.00 | 0.76 | 1.49 | 5.82 | 8.07 | 7.68 | 0.26 | 0.58 | 0.28 | 0.35 | 0.53 | 17.75 |
| 1997-98 | 0.00 | 0.21 | 0.18 | 1.01 | 4.67 | 2.64 | 8.71 | 6.79 | 9.43 | 2.55 | 1.44 | 3.04 | 0.29 | 32.25 |
| $\begin{aligned} & 1998-99 \\ & 1999-00 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## NUMBER OF DAYS WITH MEASURABLE RAIN BY MONTH, WITH TOTAL PRECIPITATION FOR THE WATER YEAR*

(July 1877-June 1998)

| Year | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | $\begin{aligned} & \text { \# of } \\ & \text { Days } \end{aligned}$ | Total Rain |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average** | -- | -- | 2 | 4 | 8 | 9 | 10 | 8 | 9 | 5 | 2 | 1 | 59 | 18.61 |
| 1877-78 | 0 | 0 | 0 | 5 | 7 | 5 | 17 | 17 | 14 | 3 | 4 | 0 | 72 | 24.86 |
| 1878-79 | 0 | 0 | 3 | 1 | 2 | 3 | 11 | 9 | 15 | 12 | 5 | 1 | 62 | 17.86 |
| 1879-80 | 0 | 0 | 0 | 4 | 8 | 12 | 7 | 10 | 7 | 15 | 3 | 0 | 66 | 26.47 |
| 1880-81 | 0 | 0 | 0 | 0 | 2 | 21 | 9 | 13 | 6 | 6 | 0 | 2 | 59 | 26.57 |
| 1881-82 | 0 | 0 | 1 | 6 | 4 | 11 | 8 | 6 | 10 | 8 | 1 | 1 | 56 | 16.51 |
| 1882-83 | 0 | 0 | 2 | 6 | 7 | 9 | 5 | 3 | 6 | 7 | 9 | 0 | 54 | 18.11 |
| 1883-84 | 0 | 0 | 2 | 6 | 3 | 6 | 9 | 10 | 13 | 9 | 3 | 7 | 68 | 24.78 |
| 1884-85 | 0 | 0 | 3 | 4 | 0 | 11 | 8 | 5 | 2 | 7 | 0 | 2 | 42 | 16.58 |
| 1885-86 | 0 | 0 | 1 | 2 | 17 | 10 | 13 | 3 | 12 | 12 | 2 | 0 | 72 | 32.27 |
| 1886-87 | 0 | 0 | 0 | 3 | 1 | 7 | 7 | 14 | 5 | 8 | 0 | 0 | 45 | 13.97 |
| 1887-88 | 0 | 0 | 1 | 0 | 3 | 8 | 14 | 5 | 8 | 2 | 2 | 4 | 47 | 11.56 |
| 1888-89 | 0 | 0 | 2 | 0 | 7 | 15 | 3 | 4 | 13 | 6 | 8 | 1 | 59 | 19.95 |
| 1889-90 | 0 | 0 | 0 | 11 | 7 | 23 | 17 | 9 | 14 | 4 | 5 | 0 | 90 | 33.80 |
| 1890-91 | 0 | 0 | 1 | 0 | 0 | 5 | 5 | 13 | 10 | 8 | 4 | 1 | 47 | 15.81 |
| 1891-92 | 0 | 0 | 3 | 2 | 4 | 11 | 5 | 7 | 9 | 7 | 7 | 0 | 55 | 15.18 |
| 1892-93 | 0 | 0 | 2 | 4 | 7 | 9 | 5 | 7 | 13 | 4 | 4 | 0 | 55 | 23.95 |
| 1893-94 | 0 | 0 | 2 | 1 | 7 | 6 | 8 | 9 | 7 | 2 | 7 | 2 | 51 | 16.35 |
| 1894-95 | 0 | 0 | 2 | 5 | 1 | 20 | 15 | 4 | 6 | 4 | 4 | 0 | 61 | 24.11 |
| 1895-96 | 1 | 0 | 4 | 3 | 7 | 8 | 13 | 2 | 13 | 10 | 6 | 0 | 67 | 23.23 |
| 1896-97 | 0 | 1 | 3 | 2 | 8 | 10 | 10 | 13 | 13 | 2 | 1 | 1 | 64 | 17.32 |
| 1897-98 | 0 | 1 | 1 | 4 | 4 | 6 | 6 | 9 | 1 | 2 | 5 | 1 | 40 | 10.51 |
| 1898-99 | 0 | 0 | 1 | 3 | 4 | 4 | 12 | 1 | 11 | 2 | 3 | 2 | 43 | 15.04 |
| 1899-00 | 0 | 1 | 0 | 9 | 13 | 10 | 11 | 4 | 9 | 8 | 4 | 0 | 69 | 20.24 |
| 1900-01 | 0 | 0 | 1 | 7 | 9 | 7 | 13 | 10 | 2 | 4 | 6 | 0 | 59 | 20.21 |
| 1901-02 | 0 | 0 | 1 | 3 | 9 | 4 | 7 | 19 | 8 | 7 | 4 | 1 | 63 | 17.27 |
| 1902-03 | 0 | 0 | 0 | 4 | 7 | 5 | 10 | 7 | 14 | 5 | 0 | 0 | 52 | 16.62 |
| 1903-04 | 0 | 0 | 0 | 1 | 9 | 5 | 6 | 16 | 19 | 10 | 1 | 0 | 67 | 16.87 |
| 1904-05 | 0 | 0 | 5 | 7 | 4 | 8 | 13 | 7 | 13 | 4 | 6 | 0 | 67 | 21.98 |
| 1905-06 | 0 | 0 | 1 | 0 | 3 | 7 | 11 | 14 | 17 | 6 | 6 | 5 | 70 | 23.93 |
| 1906-07 | 0 | 0 | 2 | 0 | 5 | 13 | 17 | 9 | 19 | 4 | 2 | 2 | 73 | 24.04 |
| 1907-08 | 0 | 2 | 0 | 4 | 1 | 12 | 14 | 9 | 3 | 3 | 5 | 0 | 53 | 12.20 |
| 1908-09 | 0 | 0 | 1 | 3 | 4 | 12 | 25 | 17 | 11 | 0 | 0 | 1 | 74 | 21.78 |
| 1909-10 | 0 | 0 | 3 | 5 | 14 | 13 | 12 | 9 | 8 | 1 | 1 | 0 | 66 | 12.18 |

* Water Year is the 12 -month period beginning July 1 and ending June 30.
** Averages based on Climatological Normals 1961-1990
-- Less than one day.


# NUMBER OF DAYS WITH MEASURABLE RAIN BY MONTH, WITH TOTAL PRECIPITATION FOR THE WATER YEAR* <br> (July 1877-June 1998) 

| Year | Jul | $\underline{\text { Aug }}$ | $\underline{\text { Sep }}$ | $\underline{\text { Oct }}$ | $\underline{\text { Nov }}$ | $\underline{\text { Dec }}$ | $\underline{\text { Jan }}$ | $\underline{\text { Feb }}$ | $\underline{\text { Mar }}$ | $\underline{\text { Apr }}$ | $\underline{\text { May }}$ | $\underline{\text { Jun }}$ | $\underline{3}$Days | Total <br> Average** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| -- | -- | 2 | 4 | 8 | 9 | 10 | 8 | 9 | 5 | 2 | 1 | 59 | 18.61 |  |
| $1910-11$ | 0 | 0 | 2 | 2 | 4 | 6 | 17 | 12 | 9 | 3 | 2 | 1 | 58 | 21.98 |
| $1911-12$ | 0 | 0 | 0 | 1 | 2 | 6 | 11 | 2 | 6 | 7 | 3 | 3 | 41 | 9.95 |
| $1912-13$ | 0 | 0 | 4 | 6 | 7 | 3 | 10 | 3 | 6 | 4 | 5 | 1 | 49 | 8.03 |
| $1913-14$ | 0 | 1 | 0 | 1 | 12 | 11 | 16 | 6 | 2 | 6 | 2 | 4 | 61 | 20.44 |
| $1914-15$ | 0 | 0 | 0 | 4 | 4 | 15 | 15 | 18 | 5 | 5 | 10 | 0 | 76 | 17.20 |
| $1915-16$ | 0 | 1 | 0 | 0 | 5 | 9 | 20 | 15 | 5 | 2 | 3 | 1 | 61 | 18.29 |
| $1916-17$ | 1 | 0 | 2 | 5 | 4 | 11 | 14 | 9 | 3 | 4 | 3 | 0 | 56 | 12.95 |
| $1917-18$ | 0 | 0 | 2 | 0 | 4 | 2 | 2 | 14 | 13 | 3 | 1 | 0 | 41 | 10.61 |
| $1918-19$ | 0 | 0 | 6 | 2 | 9 | 4 | 7 | 18 | 8 | 4 | 1 | 0 | 59 | 17.20 |
| $1919-20$ | 0 | 0 | 5 | 1 | 4 | 10 | 3 | 6 | 9 | 3 | 0 | 2 | 43 | 8.90 |
| $1920-21$ | 0 | 0 | 1 | 6 | 11 | 16 | 12 | 7 | 8 | 2 | 3 | 1 | 67 | 16.80 |
| $1921-22$ | 0 | 0 | 0 | 3 | 4 | 12 | 7 | 14 | 14 | 2 | 5 | 0 | 61 | 14.16 |
| $1922-23$ | 0 | 0 | 0 | 7 | 5 | 19 | 9 | 3 | 2 | 11 | 2 | 1 | 59 | 15.69 |
| $1923-24$ | 0 | 0 | 5 | 4 | 3 | 6 | 7 | 4 | 7 | 2 | 1 | 0 | 39 | 7.99 |
| $1924-25$ | 0 | 0 | 0 | 7 | 3 | 13 | 7 | 12 | 5 | 8 | 8 | 2 | 65 | 17.70 |
| $1925-26$ | 1 | 1 | 1 | 0 | 7 | 4 | 8 | 10 | 1 | 7 | 2 | 0 | 42 | 16.05 |
| $1926-27$ | 0 | 0 | 0 | 4 | 11 | 7 | 12 | 16 | 9 | 7 | 3 | 1 | 70 | 17.75 |
| $1927-28$ | 0 | 0 | 1 | 4 | 9 | 10 | 8 | 8 | 11 | 5 | 1 | 1 | 58 | 11.60 |
| $1928-29$ | 0 | 0 | 0 | 3 | 6 | 8 | 5 | 6 | 5 | 5 | 1 | 3 | 42 | 10.39 |
| $1929-30$ | 0 | 0 | 0 | 2 | 0 | 8 | 14 | 8 | 7 | 6 | 4 | 0 | 49 | 13.62 |
| $1930-31$ | 0 | 0 | 4 | 3 | 6 | 3 | 8 | 7 | 6 | 2 | 3 | 3 | 45 | 8.43 |
| $1931-32$ | 0 | 0 | 0 | 2 | 8 | 16 | 10 | 5 | 7 | 5 | 5 | 0 | 58 | 12.57 |
| $1932-33$ | 0 | 0 | 0 | 0 | 5 | 7 | 12 | 4 | 10 | 1 | 4 | 1 | 44 | 8.12 |
| $1933-34$ | 0 | 0 | 2 | 3 | 0 | 12 | 4 | 13 | 3 | 2 | 3 | 3 | 45 | 11.58 |
| $1934-35$ | 0 | 0 | 1 | 4 | 8 | 8 | 11 | 8 | 9 | 11 | 1 | 0 | 61 | 21.10 |
| $1935-36$ | 0 | 0 | 0 | 4 | 5 | 11 | 12 | 16 | 3 | 4 | 3 | 3 | 58 | 20.53 |
| $1936-37$ | 0 | 0 | 0 | 2 | 1 | 9 | 15 | 10 | 14 | 5 | 1 | 1 | 58 | 19.76 |
| $1937-38$ | 0 | 0 | 0 | 4 | 9 | 9 | 13 | 16 | 13 | 6 | 3 | 0 | 73 | 24.83 |
| $1938-39$ | 0 | 0 | 2 | 6 | 4 | 7 | 10 | 8 | 5 | 3 | 4 | 0 | 49 | 9.74 |
| $1939-40$ | 0 | 0 | 3 | 4 | 1 | 7 | 18 | 14 | 7 | 4 | 2 | 0 | 60 | 25.07 |

* Water Year is the 12 -month period beginning July 1 and ending June 30.
** Averages based on Climatological Normals 1961-1990
-- Less than one day.


## NUMBER OF DAYS WITH MEASURABLE RAIN BY MONTH, WITH TOTAL PRECIPITATION FOR THE WATER YEAR*

\# of Total
Year Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Days Rain

| Average** | -- | -- | 2 | 4 | 8 | 9 | 10 | 8 | 9 | 5 | 2 | 1 | 59 | 18.61 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1940-41$ | 0 | 0 | 1 | 3 | 4 | 14 | 16 | 15 | 9 | 10 | 5 | 1 | 78 | 31.83 |
| $1941-42$ | 0 | 0 | 0 | 3 | 6 | 17 | 13 | 8 | 5 | 13 | 5 | 0 | 70 | 24.94 |
| $1942-43$ | 0 | 0 | 1 | 3 | 9 | 9 | 10 | 7 | 12 | 5 | 1 | 3 | 60 | 19.98 |
| $1943-44$ | 0 | 0 | 0 | 3 | 6 | 8 | 8 | 13 | 4 | 10 | 3 | 3 | 58 | 17.58 |
| $1944-45$ | 0 | 0 | 0 | 4 | 12 | 8 | 6 | 8 | 9 | 1 | 6 | 2 | 56 | 17.06 |
| $1945-46$ | 0 | 0 | 0 | 6 | 8 | 12 | 4 | 8 | 10 | 1 | 2 | 0 | 51 | 13.91 |
| $1946-47$ | 0 | 0 | 1 | 3 | 4 | 8 | 4 | 7 | 9 | 3 | 3 | 4 | 46 | 11.59 |
| $1947-48$ | 0 | 0 | 0 | 6 | 4 | 6 | 4 | 7 | 9 | 16 | 6 | 1 | 59 | 15.44 |
| $1948-49$ | 0 | 0 | 1 | 2 | 6 | 14 | 4 | 9 | 11 | 0 | 3 | 0 | 50 | 14.87 |
| $1949-50$ | 0 | 1 | 1 | 1 | 4 | 9 | 15 | 7 | 8 | 6 | 2 | 1 | 55 | 14.31 |
| $1950-51$ | 0 | 0 | 1 | 8 | 14 | 12 | 12 | 9 | 4 | 2 | 3 | 0 | 65 | 19.54 |
| $1951-52$ | 0 | 0 | 2 | 5 | 11 | 12 | 14 | 11 | 11 | 4 | 1 | 3 | 74 | 26.58 |
| $1952-53$ | 1 | 0 | 1 | 0 | 4 | 15 | 12 | 4 | 5 | 8 | 5 | 2 | 57 | 18.33 |
| $1953-54$ | 0 | 1 | 0 | 3 | 11 | 3 | 10 | 7 | 10 | 4 | 1 | 0 | 50 | 15.54 |
| $1954-55$ | 0 | 2 | 0 | 1 | 5 | 12 | 15 | 4 | 3 | 9 | 1 | 1 | 53 | 16.92 |
| $1955-56$ | 0 | 0 | 2 | 2 | 7 | 19 | 17 | 7 | 3 | 6 | 6 | 0 | 69 | 27.74 |
| $1956-57$ | 0 | 0 | 2 | 5 | 1 | 1 | 9 | 13 | 11 | 4 | 9 | 0 | 55 | 14.76 |
| $1957-58$ | 0 | 0 | 2 | 7 | 5 | 10 | 14 | 15 | 17 | 6 | 2 | 2 | 80 | 31.94 |
| $1958-59$ | 0 | 1 | 1 | 1 | 2 | 5 | 10 | 11 | 6 | 2 | 0 | 0 | 39 | 10.46 |
| $1959-60$ | 0 | 0 | 3 | 0 | 1 | 3 | 12 | 9 | 11 | 5 | 2 | 0 | 46 | 12.28 |
| $1960-61$ | 0 | 0 | 0 | 0 | 14 | 7 | 6 | 6 | 10 | 3 | 4 | 1 |  | 12.04 |
| $19611-62$ | 0 | 1 | 1 | 2 | 5 | 5 | 2 | 15 | 5 | 2 | 2 | 1 | 41 | 15.04 |
| $1962-63$ | 0 | 1 | 2 | 4 | 3 | 4 | 4 | 7 | 11 | 14 | 3 | 1 | 54 | 22.28 |
| $1963-64$ | 0 | 0 | 2 | 6 | 12 | 4 | 8 | 2 | 6 | 1 | 5 | 4 | 50 | 11.04 |
| $1964-65$ | 1 | 1 | 0 | 3 | 12 | 20 | 10 | 4 | 6 | 13 | 1 | 0 | 71 | 18.74 |
| $1965-66$ | 0 | 2 | 0 | 1 | 11 | 8 | 5 | 9 | 3 | 3 | 2 | 0 | 44 | 11.58 |
| $1966-67$ | 2 | 0 | 2 | 0 | 9 | 7 | 11 | 2 | 12 | 14 | 2 | 4 | 65 | 26.09 |
| $1967-68$ | 0 | 0 | 1 | 2 | 7 | 6 | 10 | 10 | 7 | 1 | 2 | 1 | 47 | 11.17 |
| $1968-69$ | 0 | 1 | 0 | 5 | 10 | 12 | 18 | 16 | 8 | 5 | 1 | 1 | 77 | 25.66 |
| $1969-70$ | 0 | 0 | 2 | 2 | 3 | 11 | 19 | 6 | 5 | 1 | 0 | 2 | 51 | 17.71 |

* Water Year is the 12 -month period beginning July 1 and ending June 30
** Averages based on Climatological Normals. 1961-1990
-- Less than one day.


## NUMBER OF DAYS WITH MEASURABLE RAIN BY MONTH, WITH TOTAL PRECIPITATION FOR THE WATER YEAR*

(July 1877-June 1998)

| Year | $\underline{\text { Jul }}$ | $\underline{\text { Aug }}$ | $\underline{\text { Sep }}$ | $\underline{\text { Oct }}$ | $\underline{\text { Nov }}$ | $\underline{\text { Dec }}$ | $\underline{\text { Jan }}$ | $\underline{\text { Feb }}$ | $\underline{\text { Mar }}$ | $\underline{\text { Apr }}$ | $\underline{\text { May }}$ | $\underline{\text { Jun }}$ | $\underline{\text { Days }}$ | $\underline{\text { Rain }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average** | -- | -- | 2 | 4 | 8 | 9 | 10 | 8 | 9 | 5 | 2 | 1 | 59 | 18.61 |
| $1970-71$ | 0 | 0 | 0 | 4 | 13 | 19 | 10 | 4 | 8 | 8 | 7 | 1 | 74 | 17.42 |
| $1971-72$ | 0 | 0 | 0 | 2 | 5 | 13 | 6 | 8 | 5 | 6 | 3 | 1 | 49 | 10.34 |
| $1972-73$ | 0 | 0 | 3 | 9 | 12 | 11 | 16 | 15 | 12 | 2 | 2 | 0 | 82 | 27.14 |
| $1973-74$ | 0 | 0 | 3 | 4 | 15 | 13 | 13 | 6 | 11 | 8 | 0 | 1 | 74 | 22.83 |
| $1974-75$ | 3 | 1 | 0 | 3 | 4 | 8 | 11 | 13 | 15 | 9 | 0 | 0 | 67 | 18.55 |
| $1975-76$ | 0 | 2 | 0 | 7 | 7 | 8 | 1 | 8 | 4 | 4 | 0 | 1 | 42 | 7.25 |
| $1976-77$ | 0 | 5 | 4 | 0 | 3 | 2 | 4 | 4 | 6 | 2 | 9 | 0 | 39 | 7.53 |
| $1977-78$ | 1 | 0 | 4 | 4 | 3 | 14 | 16 | 9 | 11 | 9 | 0 | 0 | 71 | 25.36 |
| $1978-79$ | 0 | 0 | 3 | 1 | 7 | 4 | 13 | 11 | 9 | 6 | 2 | 0 | 56 | 19.39 |
| $1979-80$ | 1 | 0 | 1 | 6 | 7 | 8 | 13 | 13 | 7 | 5 | 2 | 1 | 63 | 24.79 |
| $1980-81$ | 2 | 0 | 0 | 1 | 4 | 6 | 14 | 11 | 9 | 2 | 1 | 0 | 50 | 13.43 |
| $1981-82$ | 0 | 0 | 1 | 7 | 12 | 13 | 10 | 4 | 15 | 8 | 0 | 2 | 72 | 32.65 |
| $1982-83$ | 0 | 0 | 8 | 8 | 14 | 11 | 13 | 13 | 19 | 11 | 1 | 2 | 100 | 37.49 |
| $1983-84$ | 0 | 1 | 3 | 4 | 14 | 17 | 4 | 9 | 4 | 4 | 1 | 2 | 63 | 17.40 |
| $1984-85$ | 0 | 1 | 1 | 7 | 17 | 7 | 6 | 2 | 10 | 2 | 1 | 2 | 56 | 15.22 |
| $1985-86$ | 0 | 1 | 4 | 2 | 12 | 9 | 15 | 12 | 8 | 5 | 3 | 0 | 71 | 29.75 |
| $1986-87$ | 0 | 0 | 5 | 3 | 1 | 7 | 8 | 8 | 11 | 1 | 1 | 0 | 45 | 12.81 |
| $1987-88$ | 0 | 0 | 0 | 6 | 8 | 15 | 12 | 2 | 1 | 5 | 3 | 3 | 55 | 15.37 |
| $1988-89$ | 1 | 0 | 0 | 2 | 9 | 12 | 7 | 8 | 19 | 4 | 1 | 2 | 65 | 15.13 |
| $1989-90$ | 0 | 2 | 5 | 4 | 2 | 0 | 11 | 7 | 5 | 3 | 8 | 0 | 47 | 19.40 |
| $1990-91$ | 0 | 0 | 0 | 2 | 3 | 3 | 3 | 5 | 16 | 5 | 3 | 1 | 41 | 14.73 |
| $1991-92$ | 0 | 1 | 1 | 2 | 2 | 7 | 9 | 17 | 11 | 2 | 0 | 2 | 54 | 16.68 |
| $1992-93$ | 0 | 0 | 0 | 4 | 5 | 14 | 14 | 14 | 12 | 4 | 6 | 4 | 77 | 27.70 |
| $1993-94$ | 0 | 0 | 0 | 5 | 7 | 7 | 8 | 9 | 1 | 4 | 4 | 0 | 45 | 13.02 |
| $1994-95$ | 0 | 0 | 0 | 1 | 9 | 13 | 25 | 4 | 18 | 13 | 6 | 3 | 92 | 31.77 |
| $1995-96$ | 1 | 0 | 0 | 0 | 0 | 13 | 14 | 15 | 7 | 5 | 5 | 0 | 60 | 20.99 |
| $1996-97$ | 0 | 0 | 0 | 5 | 8 | 18 | 11 | 4 | 3 | 3 | 1 | 2 | 55 | 17.75 |
| $1997-98$ | 0 | 2 | 1 | 4 | 14 | 5 | 20 | 20 | 12 | 8 | 14 | 3 | 103 | 32.25 |
| $1998-99$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $1999-00$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1020 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^7]15 WETTEST WATER YEARS*
(JULY 1849-JUNE 1998)

| Rank | Amount | Year |
| :---: | :---: | :---: |
| 1 | 37.49 | 1982-83 |
| 2 | 36.35 | 1852-53 |
| 3 | 36.10 | 1861-62 |
| 4 | 36.00 | 1849-50 |
| 5 | 33.80 | 1889-90 |
| 6 | 32.79 | 1867-68 |
| 7 | 32.65 | 1981-82 |
| 8 | 32.27 | 1885-86 |
| 9 | 32.25 | 1997-98 |
| 10 | 31.94 | 1957-58 |
| 11 | 31.83 | 1940-41 |
| 12 | 31.77 | 1994-95 |
| 13 | 29.75 | 1985-86 |
| 14 | 27.74 | 1955-56 |
| 15 | 27.70 | 1992-93 |

15 DRIEST WATER YEARS* (JULY 1849-JUNE 1998)

| $\underline{\text { Rank }}$ | Amount | Year |
| :---: | :---: | :---: |
| 1 | 7.25 | 1975-76 |
| 2 | 7.53 | 1976-77 |
| 3 | 7.79 | 1863-64 |
| 4 | 7.99 | 1923-24 |
| 5 | 8.03 | 1912-13 |
| 6 | 8.12 | 1932-33 |
| 7 | 8.26 | 1850-51 |
| 8 | 8.43 | 1930-31 |
| 9 | 8.47 | 1870-71 |
| 10 | 8.90 | 1919-20 |
| 11 | 9.19 | 1876-77 |
| 12 | 9.74 | 1938-39 |
| 13 | 9.95 | 1911-12 |
| 14 | 10.34 | 1971-72 |
| 15 | 10.39 | 1928-29 |

[^8]SNOWFALL<br>IN SACRAMENTO<br>(January 1878-August 1998)

| Year | $\underline{\text { Date }}$ | Total <br> Snow | $\underline{\text { Year }}$ | Date | $\underline{\text { Sotal }}$ |
| :--- | :--- | :---: | :---: | :--- | :---: |
| 1879 | January 13 | T | 1935 | March 8 | T |
| 1880 | January 26 | 0.2 | 1937 | January 10, 11, 24, 30 | T |
| 1882 | February 17, 18 | T | 1942 | March 14 | 2.0 |
| 1883 | February 1,6 | T | 1949 | February 11 | T |
| 1888 | January 4 | 1.0 | 1952 | January 12 | T |
| 1888 | January 5 | 2.5 | 1952 | February 20 | T |
| 1888 | January 16 | 0.5 | 1952 | March 15 | T |
| 1896 | March 2 | T | 1954 | March 19 | T |
| 1899 | February 2 | T | 1955 | April 18,26 | T |
| 1907 | January 6 | 0.4 | 1957 | January 25, 26 | T |
| 1911 | February 26, 27 | T | 1962 | January 21 | T |
| 1911 | December 29 | T | 1964 | January 21 | T |
| 1913 | January 9 | 0.1 | 1968 | December 19, 20, 23 | T |
| 1916 | January 1 | 3.0 | 1972 | December 6, 12 | T |
| 1916 | January 27 | 0.5 | 1974 | January 4 | T |
| 1925 | April 20 | T | 1976 | February 5 | 2.0 |
| 1930 | January 12 | 1.0 | 1982 | March 17 | T |
| 1932 | January 12 | 1.0 | 1988 | December 27, 28 | T |
| 1932 | February 01 | 0.5 | 1996 | February 27 | T |
| 1932 | December 9 | T |  |  |  |
| 1933 | January 18 | T |  |  |  |

Snowfall data is based on the city office records from January 1878 through December 1950. Executive Airport data is used from then on.

Sleet and ice pellets were included in snowfall totals beginning July 1948. Ice pellets is a term that is internationally recognized and includes solid grains of ice (sleet) and particles consisting of snow pellets encased in a thin layer of ice.
"Snow" in April of 1925 and 1955 was actually a mixture of hail and sleet. The observer's weather log for April 20,1925 , indicated that there was a mixture of rain and sleet "...with an occasional flake of snow." The "Trace" recorded April 18, 1955, was during a brief hailstorm, with hail measuring one half-inch in diameter. Small hail was observed on April 26, 1955.

In most instances, snowfall at Sacramento is estimated as the snow usually melts as it reaches the ground.

| Month | Amount | Date | Year |
| :---: | :---: | :---: | :---: |
| January | 3.5 | 04, 05 | 1888 |
| February | 2.0 | 05 | 1976 |
| March | 2.0 | 14 | 1942 |
| April | T | 18, 26 | 1955* |
| May | 0 | N/A | N/A |
| June | 0 | N/A | N/A |
| July | 0 | N/A | N/A |
| August | 0 | N/A | N/A |
| September | 0 | N/A | N/A |
| October | 0 | N/A | N/A |
| November | 0 | N/A | N/A |
| December | T | 27, 28 | 1988* |

Annual $\quad 4.0 \quad$ 04, 05, $16 \quad$ January 1888

## AVERAGE AND GREATEST NUMBER OF DAYS WITH THUNDERSTORMS BY MONTH WITH YEAR OF OCCURRENCE

(January 1948-August 1998)

| Month | Average \# Days with Thunderstorms | Greatest \# Days with Thunderstorms | Year |
| :---: | :---: | :---: | :---: |
| January | 0.4 | 3 | 1970 |
| February | 0.5 | 4 | 1992 |
| March | 0.8 | 4 | 1983 |
| April | 0.7 | 3 | 1967 |
| May | 0.3 | 3 | 1956 |
| June | 0.2 | 2 | 1989 |
| July | 0.2 | 2 | 1991* |
| August | 0.2 | 2 | 1989* |
| September | 0.5 | 2 | 1989* |
| October | 0.3 | 2 | 1979* |
| November | 0.3 | 3 | 1970 |
| December | 0.2 | 2 | 1970 |
| Annual | 4.7 | 10 | 1970* |

*Also occurred in earlier years.
Downtown Sacramento data used from January 1948-December 1962. Sacramento Executive Airport Used thereafter. The average days with thunderstorms is based on airport data from 1948-1991.
RAINFALL CHART
PROBABILITY OF RAIN (BY PERCENTAGE) ON ANY GIVEN DAY.
BASED ON NATIONAL WEATHER SERVICE RECORDS FOR DOWNTOWN SACRAMENTO
(PRECIPITATION 0.01 INCHES OR MORE, BASED ON RECORDS FROM 1878-1987)


VI. MISCELLANEOUS STATISTICS

## AVERAGE RELATIVE HUMIDITY BY TIME PERIODS

|  | 4 AM | 10 AM | 4 PM | 10 PM |
| :---: | :---: | :---: | :---: | :---: |
| January | 90 | 85 | 70 | 86 |
| February | 87 | 78 | 59 | 81 |
| March | 85 | 69 | 53 | 77 |
| April | 81 | 58 | 43 | 73 |
| May | 81 | 50 | 35 | 69 |
| June | 78 | 47 | 31 | 64 |
| July | 76 | 47 | 28 | 61 |
| August | 78 | 50 | 29 | 64 |
| September | 77 | 50 | 31 | 64 |
| October | 80 | 57 | 38 | 70 |
| November | 86 | 74 | 58 | 81 |
| December | 90 | 84 | 70 | 86 |
| Annual | 82 | 62 | 45 | 73 |

Data based on the average humidities for the Sacramento Executive Airport (1961-1990).

## AVERAGE SEA-LEVEL PRESSURE WITH THE HIGHEST AND LOWEST BY MONTH WITH DATE AND YEAR OF OCCURRENCE

(July 1877-November 1993)

|  | $\frac{\text { Average }}{}$ |  | $\underline{\text { Highest }}$ |  | $\underline{\text { Date }}$ | $\underline{Y e a r}$ |  | $\underline{\text { Lowest }}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

** Occurred on earlier dates and years.
Downtown Sacramento used until July 1, 1939. Executive Airport used until November 1993.

# AVERAGE SUNSHINE, CLOUDINESS AND FOG 

(Sacramento Executive Airport 1949-1997)

|  | Sunshine* | Sky Cover (Sunrise-Sunset) |  |  |  | Dense Fog |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Avg Number of Days |  |  |  |  |  |  |  |
|  | Avg Percent Possible Sunshine | Avg Amnt of Sky Cover | Clear | Partly <br> Cloudy | Cloudy | Avg Number of Days | Days | Year |
| January | 47\% | 7.0 | 6.6 | 5.9 | 18.5 | 9.9 | 23 | 1961 |
| February | 64\% | 6.2 | 7.9 | 7.0 | 13.3 | 5.3 | 13 | 1963** |
| March | 73\% | 5.5 | 10.3 | 8.5 | 12.3 | 1.7 | 6 | 1986 |
| April | 82\% | 4.7 | 12.0 | 9.6 | 8.3 | 0.3 | 2 | 1965** |
| May | 89\% | 3.5 | 17.3 | 8.4 | 5.2 | 0.2 | 2 | 1971 |
| June | 93\% | 2.2 | 21.8 | 5.8 | 2.4 | 0.0 | 0 | ---- |
| July | 97\% | 1.1 | 26.9 | 3.2 | 0.9 | 0.0 | 0 | ---- |
| August | 96\% | 1.5 | 25.3 | 4.3 | 1.3 | 0.0 | 1 | 1966 |
| September | 93\% | 1.8 | 23.4 | 4.4 | 2.2 | 0.2 | 2 | 1963 |
| October | 86\% | 3.1 | 19.4 | 6.2 | 5.4 | 1.4 | 11 | 1962 |
| November | 65\% | 5.7 | 9.8 | 7.2 | 13.0 | 5.3 | 11 | 1982 |
| December | 48\% | 6.6 | 7.9 | 5.9 | 17.2 | 9.5 | 22 | 1989** |
| Annual | 78\% | 4.1 | 188.6 | 76.4 | 100.0 | 33.8 | 64 | 1962 |

* Sunshine data recording ceased in 1995.
** Also occurred in previous years.

Dense fog is when the visibility is restricted to $1 / 4$ mile or less for at least part of the day. Sky cover is expressed in a range from $0-10$, with 0 standing for no clouds or obscuring phenomena, and 10 representing a complete sky cover. Beginning July 1996, sky cover has been recorded in fractions of eights in order to conform to international standards. A further break-down is as follows:

July 1996 and Later
Clear
Partly Cloudy
Cloudy $\quad 7 / 8$ or $8 / 8$ sky cover $\quad 8 / 10$ to $10 / 10$ sky cover

## GREATEST NUMBER OF CONSECUTIVE DAYS WITH DENSE FOG DURING NOVEMBER, DECEMBER, JANUARY AND FEBRUARY (November 1949-August 1998)

| Days | Period | Year | Days | Period | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17 | December 12-December 28 | 1985 | 9 | January 17-January 25 | 1961 |
| 13 | January 13-January 25 | 1975 | 9 | November 25-December 3 | 1949 |
| 11 | December 3-December 13 | 1962 | 9 | February 3-February 11 | 1954 |
| 10 | December 2-December 11 | 1977 | 8 | February 3-February 10 | 1991 |
| 10 | December 27, 1962-January 5 | 1963 | 8 | December 23-December 30 | 1989 |
| 9 | January 6-January 14 | 1986 | 8 | January 29-February 5 | 1962 |
| 9 | February 6-February 14 | 1971 | 8 | December 14-December 21 | 1956 |
| 9 | January 12-January 20 | 1965 | 8 | December 14-December 21 | 1954 |

Only periods with 8 or more days are tabulated.

## GREATEST NUMBER OF DAYS WITH DENSE FOG BY MONTHS (Non-Consecutive) - (November 1949-August 1998)

| $\underline{\text { Days }}$ | $\underline{\text { Period }}$ | $\underline{\text { Days }}$ | $\underline{\text { Period }}$ |
| :--- | :--- | :--- | :--- |
| 23 | January 1961 | 15 |  |
| 22 | December 1989 | 15 | January 1975 |
| 22 | December 1985 | 15 | January 1972 |
| 20 | December 1962 | 14 | January 1965 |
| 19 | December 1963 | 14 | December 1986 |
| 19 | January 1958 | 14 | January 1986 |
| 18 | January 1985 | 14 | January 1983 |
| 16 | December 1977 | 14 | January 1964 |
| 16 | January 1955 | 14 | January 1963 |
|  |  |  | January 1962 |

Only periods with 14 or more days are tabulated.

Dense fog is defined as a heavy fog that restricts visibility to $1 / 4$ mile or less during any period of the 24hour day from midnight to midnight.

## AVERAGE WIND SPEED, PREVAILING DIRECTION AND FASTEST MILE BY MONTHS WITH DATE AND YEAR OF OCCURRENCE <br> (July 1877-December 1997)

| Month | Average Speed* | Prevailing <br> Direction | Fastest Mile | Direction | Date | Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| January | 7.2 | Southeast | 60 | Southeast | 17 | 1954 |
| February | 7.6 | S-Southeast | 58 | Southeast | 9 | 1938 |
| March | 8.6 | Southwest | 66 | South | 14 | 1952 |
| April | 8.7 | Southwest | 45 | Southwest | 25 | 1955 |
| May | 9.2 | Southwest | 40 | Southeast | 6 | 1912 |
| June | 9.7 | Southwest | 47 | Southwest | 23 | 1950 |
| July | 9.0 | S-Southwest | 36 | Southwest | 12 | 1956 |
| August | 8.6 | Southwest | 38 | Southwest | 19 | 1954 |
| September | 7.5 | Southwest | 42 | Northwest | 16 | 1965 |
| October | 6.4 | Southwest | 68 | Southeast | 26 | 1950 |
| November | 6.0 | N -Northwest | 70 | Southeast | 13 | 1953 |
| December | 6.6 | S-Southeast | 70 | Southeast | 7 | 1952 |
| Annual Average | 7.9 | Southwest |  |  |  |  |

*Average wind speed and direction is for the Executive Airport (1948-1990).

Wind extremes are the fastest 1-minute observed wind speed (in miles per hour). City office records were used from July 1877-January 1950. Executive airport wind data thereafter.

The "Fastest Mile" is the fastest 1-minute observed wind speed taken from a multiple register with a time-record of the passing of each mile of wind.

NOTE: Stronger peak gusts of wind have been observed but only as a sudden and brief increase in the wind speed, usually less than 20 seconds. An official record of the measurement of peak wind gusts requires the use of an instantaneous wind speed recorder. This type of instrument was not available for use in Sacramento during the period of record. A formula to derive the estimated peak gust from the fastest mile, according to the American Standard Association, is as follows:

Estimated Peak Gust $=($ Fastest Mile $) \times(1.3)$
For example, the estimated peak gust with a fastest mile of 70 mph would be 91 mph , or
Estimated peak gust $=(70) \times(1.3)=91 \mathrm{mph}$

# NORMAL HEATING DEGREE DAYS WITH HIGHEST AND LOWEST BY MONTHS AND YEAR OF OCCURRENCE 

SACRAMENTO EXECUTIVE AIRPORT
(July 1960-December 1997)

| Month | Normal* | Highest | Year | Lowest | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| July | 0 | 7 | 1974 | 0 | Most |
| August | 0 | 4 | 1964 | 0 | Most |
| September | 16 | 53 | 1986 | 0 | 1996** |
| October | 78 | 191 | 1971 | 7 | 1983 |
| November | 351 | 532 | 1982 | 145 | 1981 |
| December | 611 | 749 | 1972 | 421 | 1995 |
| January | 614 | 736 | 1963 | 411 | 1986 |
| February | 400 | 496 | 1989 | 249 | 1963 |
| March | 357 | 449 | 1975 | 192 | 1986 |
| April | 230 | 456 | 1967 | 71 | 1990 |
| May | 80 | 187 | 1977 | 0 | 1992 |
| June | 12 | 40 | 1982 | 0 | 1987** |
| Season | 2749 | 3149 | 1982-1983 | 1851 | 1995-1996 |

* Normals based on 1961-1990 temperature data.
** Also occurred in previous years

A heating degree day is a measure of the departure of the average daily temperature from 65 degrees. Each degree that the daily average temperature is below 65 degrees is equal to one degree day. For example, if the average daily temperature on a particular day was 55 degrees the heating degree day would then be:

$$
\begin{aligned}
\text { Heating Degree Day } & =65-55 \\
& =10
\end{aligned}
$$

Each day of the month would be computed in the same fashion with negative differences counted as zero.

# NORMAL COOLING DEGREE DAYS WITH HIGHEST AND LOWEST BY MONTHS AND YEAR OF OCCURRENCE 

SACRAMENTO EXECUTIVE AIRPORT
(January 1969-December 1997)

| Month | Normal* | Highest | Year | Lowest | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| January | 0 | 0 | ---- | 0 | All |
| February | 0 | 0 | ---- | 0 | All |
| March | 0 | 10 | 1986 | 0 | Most |
| April | 29 | 60 | 1989 | 0 | 1983** |
| May | 89 | 227 | 1997 | 19 | 1977 |
| June | 210 | 319 | 1985 | 83 | 1982 |
| July | 332 | 484 | 1988 | 220 | 1987 |
| August | 313 | 422 | 1996 | 207 | 1980 |
| September | 211 | 375 | 1975 | 95 | 1986 |
| October | 53 | 208 | 1991 | 9 | 1982 |
| November | 0 | 11 | 1997 | 0 | Most |
| December | 0 | 0 | ---- | 0 | All |
| Season | 1237 | 1654 | 1975 | 737 | 1982 |

* Normals based on 1961-1990 temperature data.
** Also occurred in previous years

A cooling degree day is a measure of the departure of the base temperature of 65 degrees from the average daily temperature. Each degree that the average daily temperature is above 65 degrees is equal to one degree day. For example, if the average daily temperature on a particular day was 72 degrees, the cooling degree day would then be:

$$
\begin{aligned}
\text { Cooling Degree Day } & =72-65 \\
& =7
\end{aligned}
$$

Again, each day of the month would be computed with negative differences counted as zero.
Heating and cooling degree days are useful in the computation of fuel and power consumption and are used by utility companies to determine heating and cooling requirements.

## WEATHER EXTREMES FOR SACRAMENTO COMPARED TO CALIFORNIA, THE UNITED STATES, NORTH AMERICA AND THE WORLD

| HIGHEST TEMP | ${ }^{\circ} \mathrm{F}$ |
| :---: | :---: |
| Sacramento | 114 |
| California | 134 |
| United States | 134 |
| North America | 134 |
| World | 136 |
| LOWEST TEMP | ${ }^{\circ} \mathrm{F}$ |
| Sacramento | 17 |
| California | -45 |
| United States | -80 |
| North America | -81 |
| World | -129 |

## LOCATION AND DATE

July 17, 1925
Greenland Ranch (Death Valley)- July 10, 1913
Greenland Ranch (Death Valley)- July 10, 1913
Greenland Ranch (Death Valley)- July 10, 1913
Azizia, Tripolitania Libya, Africa- September 13, 1922

## LOCATION AND DATE

December 11, 1932
Boca (Nevada County, Elev. 5532 Ft)- January 20, 1937
Prospect Creek (25 SE Bettles, Alaska)-January 23, 1971
Snag (Yukon Territory), Canada- Feb. 3, 1947
Vostok, Antarctica (Elev. 11220 Ft)-July 21, 1983

## GREATEST PRECIPITATION IN ONE HOUR (Inches)

| Sacramento | 1.65 | April 7, 1935 |
| :--- | ---: | :--- |
| California | 4.41 | Forni Ridge (El Dorado County, Elev. 7600 Ft)-June 18, 1982* |
| United States | 12.00 | Kilauea Sugar Plantation, Kauai, Hawaii-January 24-25, 1956 <br> and also at Holt, Missouri-June 22, 1947 |
| North America | 12.00 | Holt, Missouri-June 22,1947 |
| World | 12.00 | Same as the United States and North America |

* This extreme rainfall event occurred between 4 p.m. and 5 p.m. during an intense thunderstorm. A rainfall rate of 1.81 inches in six minutes was registered during the height of the storm. Breaking the rainfall rates down even further during this storm, 3.07 inches fell in 18 minutes and 4.06 inches in a 27-minute period. Flooding and debris flow caused the closure of Highway 50 between Sacramento and Lake Tahoe for five hours. Forni Ridge is located approximately 65 miles east of Sacramento at the 7600 Ft elevation. Various record books list Campo (San Diego county, just north of the border) with 11.50 inches of rain in an 80minute period, August 12, 1981.


## WEATHER EXTREMES FOR SACRAMENTO COMPARED TO CALIFORNIA, THE UNITED STATES, NORTH AMERICA AND THE WORLD

GREATEST PRECIPITATION IN 24 HOURS (Inches)

| Sacramento | 7.24 | April 20-21, 1880 <br> California |
| :--- | ---: | :--- |
| Hoegee's Camp Ivy (Los Angeles County, Elev.2750 Ft)- |  |  |
| January 22-23, 1943 |  |  |

## GREATEST PRECIPITATION IN ONE CALENDAR MONTH (Inches)

| Sacramento | 15.04 | January 1862 |
| :--- | ---: | :--- |
| California | 81.90 | Camp Six (Del Norte County, Elev. 3778 Ft)-December 1981 |
| United States | 107.00 | Puu Kukui, Maui, Hawaii- March 1942 |
| North America | 88.01 | Swanson Bay, British Columbia- November 1917 |
| World | 366.14 | Cherrapunji, India- July 1861 |

GREATEST PRECIPITATION IN ONE YEAR (Seasonal or Calendar Year)
Sacramento 37.49 Seasonal Year- July 1982-June 1983
California
United States
North America
World
254.90 Camp Six- October 1981-September 1982
704.83 Puu Kukui, Maui, Hawaii- Calendar Year 1982
332.29 Mac Leod Harbor, Alaska- Calendar Year 1976
905.12 Cherrapunji, India- Calendar Year 1861
1041.78 Cherrapunji, India- August 1860-July 1861

## LEAST PRECIPITATION IN ONE YEAR (Seasonal or Calendar Year)

| Sacramento | 7.25 | Seasonal Year- July 1975-June 1976 |
| :--- | :--- | :--- |
| California | 0.00 | Bagdad (San Bernardino County)- Calendar Year 1913 |
|  | 0.00 | Greenland Ranch (Death Valley)- Calendar Year 1929 |
| United States | 0.00 | Same as California |
| North America | 0.00 | Same as California |
| World | 0.00 | Iquique, Chile- November 1945 thru May 1957 |
|  | 0.00 | Arica, Chile- October 1903 thru December 1917 |
|  | 0.00 | Kharga, Egypt- December 1957 thru March 1960 |
|  | 0.00 | Wadi Halfa, Sudan- June 1945 thru April 1949 |
|  | 0.00 | Bagdad (San Bernardino County)- Calendar Year 1913 |
|  | 0.00 | Greenland Ranch (Death Valley)- Calendar Year 1929 |

## WEATHER EXTREMES FOR SACRAMENTO COMPARED TO CALIFORNIA, THE UNITED STATES, NORTH AMERICA AND THE WORLD

## GREATEST SNOWFALL IN 24 HOURS (Inches)

| Sacramento | 3.5 | January 4-5, 1888 |
| :--- | ---: | :--- |
| California | 67.0 | Echo Summit (Sierra Ski Ranch, El Dorado County, <br> Elev. 7350 Ft)- January 5, 1982 |
| United States | 75.8 | Silver Lake, Colorado- April 14-15, 1921 |
| North America | 75.8 | Silver Lake, Colorado - April 14-15, 1921 |
| World | ---- | Not Available |
| GREATEST SNOWFALL IN ONE CALENDAR MONTH (Inches) |  |  |
|  |  |  |
| Sacramento | 4.0 | January 1888 |
| California | 390.0 | Tamarack (Alpine County, Elev. 8000 Ft)-January 1911 |
| United States | 390.0 | Same as California |
| North America | 390.0 | Same as California |
| World | ---- | Not available |

GREATEST SNOWFALL IN ONE SEASON (Inches)

| Sacramento | 4.0 | $1887-1888$ |
| :--- | ---: | :--- |
| California | 884.0 | Tamarack-1906-1907 |
| United States | 1122.0 | Rainier Paradise Ranger Station, Washington- |
|  |  | $1971-1972$ |
| North America | 1122.0 | Same as the United States |
| World | ----- | Not Available |

## GREATEST SNOW DEPTH (Inches)

| Sacramento | 3.0 | January 1, 1911 |
| :--- | ---: | :--- |
| California | 451.0 | Tamarack-March 11, 1911 |
| United States | 451.0 | Same as California |
| North America | 451.0 | Same as California |
| World | ---- | Not Available |
| LOWEST SEA LEVEL PRESSURE (Millibars/Inches) |  |  |
|  | $980.4 / 28.95$ | January 27, 1916 |
| Sacramento | $975.6 / 28.81$ | Point Reyes- January 27, 1916 |
| California | $892.3 / 26.35$ | Matecumbe Key, Florida- September 2, 1935 |
| United States | $892.3 / 26.35$ | Same as the United States <br> North America |
| World | $870.0 / 25.69$ | Measured by Dropsonde, 520 miles north- west of Guam <br> in the eye of Typhoon "Tip", October 12, 1979 |
|  |  |  |

## WEATHER EXTREMES FOR SACRAMENTO COMPARED TO CALIFORNIA, THE UNITED STATES, NORTH AMERICA AND THE WORLD

## HIGHEST SEA LEVEL PRESSURE (Millibars/Inches)

| Sacramento | $1041.0 / 30.74$ | February 17, 1883 |
| :--- | :--- | :--- |
| California | $1041.0 / 30.74$ | Sacramento--February 17, 1883 |
| United States | $1078.6 / 31.85$ | Northway Airport, Alaska-January 31, 1989 |
| North America | $1078.6 / 31.85$ | Northway Airport, Alaska-January 31, 1989 |
| World | $1083.8 / 32.01$ | Agata, Siberia USSR-December 1968 |

## HIGHEST WIND SPEED (Miles Per Hour)

| Sacramento | 70 | *Fastest Mile-November 13, 1953 and December 7, 1952 |
| :--- | :--- | :--- |
| California | 115 | Monterey Naval Air Station (Month and Date unknown) 1950 |
| United States | 231 | Peak Gust-Mount Washington, New Hampshire-April 12, 1934 |
| North America | 231 | Same as the United States |
| World | 231 | Same as the United States |

*The Fastest Mile is the fastest one-minute observed wind speed taken from a multiple register with a time-record of the passing of each mile. Stronger peak gusts have been observed, but official records of peak wind gusts are not available.

## NOTE:

Most information on Weather Extremes, other than the data for Sacramento, was extracted from the Weather Burcau Western Region Technical Memorandum WR-28, entitled WEATHER EXTREMES, by Robert J. Schmidli, dated April 1968 (Revised October 1991), and The USA Today Weather Almanac, dated 1995.

Temperature, precipitation or other extremes of any place on the surface of the earth are determined by a number of factors. Important among these are altitude, latitude, and the physical characteristics of the surface. For an extreme to be recorded, an observation must be made at the precise time and place of occurrence. There is little doubt that more extreme values have occurred than have been recorded, not only because of relatively short periods of record for many observing stations, but also because the very areas where extremes do occur are often the most sparsely settled.
Astronomical Applications Dept．

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U. S. DEPARTMENT OF COMMERCE

5285 PORT ROYAL ROAD
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[^0]:    *Monthly Normals based on Climatological Normals 1961-1990.

[^1]:    *Monthly Normals based on Climatological Normals 1961-1990.

[^2]:    *Averages based on Climatological Normals 1961-1990

[^3]:    *Averages based on Climatological Normals 1960-1991

[^4]:    ${ }^{1}$ Only years with 85 or more days tabulated
    ${ }^{2}$ Only years with 20 or more days tabulated
    ${ }^{3}$ Only years with 5 or more days tabulated

[^5]:    *Less than 0.01 inch of rainfall

[^6]:    * Excessive storms that provided 2.50 inches or more precipitation in a 48-hour period.

[^7]:    * Water Year is the 12 -month period beginning July 1 and ending June 30 .
    ** Averages based on Climatological Normals 1961-1990
    -- Less than one day.

[^8]:    * Water Year is the 12-month period beginning July 1 and ending June 30.

