

JULY 2024 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR

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Above average and occasional record breaking temperatures reigned from July 1st to 12th with a long, persistent Excessive Heat Warning. Beginning on the 11th, moisture flowed into the region and brought thunderstorms to the Sierra Nevada through the 14th. There were a few severe thunderstorm warnings on the 13th with hail of up to an inch being reported in Yosemite. A Red Flag Warning was in effect from the 12th to the 14th due to the thunderstorms in the Sierra Nevada. Conditions cooled to about to slightly above average from the 15th through the 19th. Another Excessive Heat Warning and near record temperatures occurred between the 20th and the 26th. Cooler than average temperatures finally returned on the 27th and lasted until the 30th. Temperatures warmed to around seasonal averages by the 31st, although some triple digits returned to the San Joaquin Valley.

Number of Days with Triple Digit Temperatures (Season from May 1-Oct 31st)

Bakersfield: 24 for July (July average: 13 days. Season to date total of 37 days; average of 20 days)

Fresno: 26 for July (July average: 14 days. Season to date total of 37 days; average of 22 days)

Hanford: 26 for July (July average: 11 days. Season to date total of 39 days; average of 17 days)

Madera: 24 for July (July average: 11 days. Season to date total of 34 days; average of 17 days)

Merced: 23 for July (July average: 9 days. Season to date total of 32 days; average of 14 days)

Table 1 – July 2024 Summary Statistics– NWS Hanford, CA ASOS Sites						
Location	Monthly Average Temp (deg F)	Departure from Average (deg F)	Temperature Rank	Total Monthly Precipi- tation (inches)	Departure from Normal (inches)	Precipitation Rank
Bakersfield	90.8	+6.0	Highest	0.00	0.00	Lowest
Fresno	90.0	+6.5	Highest	0.01	-0.02	14th Highest
Hanford	87.6	+6.5	2nd Highest	0.02	0.00	14th Highest
Madera	85.5	+5.3	Highest	Trace	-0.01	12th Highest
Merced	85.4	+6.4	Highest	0.00	0.00	Lowest

Note: The locations above typically observe no measurable precipitation during July.

The first day of the month was warmer than average, though not considered unseasonably hot. Some Central Valley locations remained below the century mark that day. However, much hotter temperatures prevailed from the 2nd until the middle of the month. An Excessive Heat Warning continued until the 12th in much of Central California. Highs were above 110 degrees for much of the period from the 3rd until the 12th, including in the San Joaquin Valley and the desert portion of eastern Kern County .Daily record high maximum and minimum temperatures were set on quite a few of these days due to persistent strong high pressure. Daytime highs reached 114 degrees on the 7th in Fresno (just shy of the record of 115 degrees for the date) and both the 7th and 8th in Bakersfield. Low temperatures were as warm as the 80's during this period of excessive heat.

Showers and thunderstorms occurred in the San Joaquin Valley during the night of the 13th until the 14th. Most locations received a trace to a few hundredths of an inch of rain and mainly less than a tenth of an inch in the mountains. Locations in the Kern County desert also received up to around a quarter of an inch. A few locations along the Sierra Nevada crest in Yosemite reported

heavier amounts of 0.50 inch up to around an inch. In addition, Severe Thunderstorm Warnings were issued in Yosemite National Park and locations along the Sierra Nevada crest on the 13th and 14th due to large hail (up to one inch reported in Yosemite) and strong winds. Otherwise, very hot temperatures persisted in the lower elevation locations.

Another period with very hot temperatures occurred on the 20th until the 26th, as highs reached around 105 to 110 degrees in the Central Valley. Morning low temperatures failed to drop below the 80's in Bakersfield and Fresno during this period. Otherwise, minimum temperatures remained well into the 70's at many locations.

Some relief from the triple digit heat began on the 27th, as highs dropped mainly into the 90's for the remainder of the month, at least for most locations in the San Joaquin Valley. However, the Indian Wells Valley in northeastern Kern County remained relatively hot as highs were at or just above 100 degrees. On the 31st, some locations, including Fresno and Hanford, did reach 100 degrees on the last day of the month as yet another upper-level ridge began to build back into Central California.

The month ended up with well above average temperatures (Fig 1), and many locations reported their highest average temperatures for July since records began. In addition, some locations reached near all-time high maximum temperatures on the 7th and 8th. Precipitation was generally below average in the Sierra Nevada with little or no precipitation in most of the region (Fig 2), except for near average precipitation in the higher elevations of the Sierra Nevada towards Yosemite National Park.

Table 2 – Seasonal Precipitation for ASOS Locations (ending on July 31st, 2024)						
Location	Since Jan 1st (inches)	Departure From Average (inches)	Since Jul 1st (inches)	Departure From Average (inches)	Since Oct 1st (inches)	Departure From Normal (inches)
Bakersfield	5.87	+1.45	0.00	0.00	6.83	+0.52
Fresno	9.11	+1.39	0.01	-0.02	10.00	-0.94
Hanford	7.40	+1.75	0.02	0.00	8.68	+0.59
Madera	8.08	+0.50	Trace	-0.01	9.97	-0.79
Merced	12.20	+4.02	0.00	0.00	15.20	+3.45

Note: Rain Year begins on July 1st; Water Year begins on October 1st.

Table 3– Warmest High Temperatures and Coolest Low Temperatures of the Month for ASOS Locations				
Location	High	Date(s)	Low	Date(s)
Bakersfield	114	7th & 8th	64	28th
Fresno	114	7th	61	28th
Hanford	113	6th & 7th	60	27th
Madera	111	8th & 23rd	56	28th
Merced	111	11th & 23rd	58	28th

Daily Records Set During July 2024

Bakersfield

7th: High temperature of 114 degrees ties the record last set in 1905 and record high minimum temperature of 82 degrees breaks the record of 81 degrees set in 1968.

8th: High temperature of 114 degrees ties record last set for the date in 1905.

11th: High temperature of 111 degrees tying the record last set for the date in 2021.

12th: Record high minimum temperature of 83 degrees set, which broke the old record of 82 degrees set for the date in 2021.

15th: Record precipitation of a trace ties the record last set for the date in 1922.

24th: Record high minimum temperature of 84 degrees breaks the record of 83 degrees last set for the date in 2006.

Fresno

3rd: High temperature of 110 degrees. This ties the record set for the date in 1889.

5th: Record high minimum temperature of 77 degrees ties the record last set for the date in 1909.

6th: High temperature of 112 degrees breaks the record of 111 degrees set in 1905 and record high minimum temperature of 81 degrees breaks the record of 78 degrees set in 2007.

7th: High temperature of 114 degrees breaks the record of 111 degrees set in 1905 and record high minimum temperature of 81 degrees breaks the record of 76 degrees set in 2014.

12th: High temperature of 112 degrees breaking the record of 109 degrees last set for the date in 1983.

13th: Record high minimum temperature of 84 degrees breaks the record of 83 degrees last set for the date in 1999 and record precipitation of trace measure ties the record last set for the date in 1954.

14th: Record precipitation of 0.01 inches breaks the record of trace last set for the date in 1942.

20th: Record high minimum temperature of 78 degrees ties the record last set for the date in 1938.

Hanford

6th: High temperature of 113 degrees breaks the record of 111 degrees set in 1905.

7th: High temperature of 113 degrees breaks the record of 112 degrees set in 1905 and record high minimum temperature of 72 degrees ties the record last set in 2001.

8th: High temperature of 112 degrees ties the record last set in 1905.

12th: High temperature of 110 degrees ties the record last set for the date in 1906.

13th: Record high minimum temperature of 84 degrees ties the record last set for the date in 1999.

24th: Record high minimum temperature of 80 degrees breaks the record of 77 degrees last set for the date in 1915.

Madera

4th: High temperature of 109 degrees breaking the record of 108 degrees last set for the date in 1970.

6th: High temperature of 110 degrees ties the record last set in 1970 and record high minimum temperature of 72 degrees ties the record last set in 2007.

7th: High temperature of 111 degrees breaks the record of 109 degrees set in 1941 and record high minimum temperature of 73 degrees ties the record last set in 1936.

8th: High temperature of 111 degrees breaking the record of 107 degrees last set for the date in 1932.

14th: Record precipitation of a trace sets the record for the date.

Merced

4th: High temperature of 108 degrees tying the record last set for the date in 1991.

6th: High temperature of 111 degrees breaks the record of 108 degrees set in 1931.

7th: High temperature of 110 degrees breaks the record of 109 degrees set in 1921.

8th: High temperature of 109 degrees breaking the record of 108 degrees last set for the date in 1921.

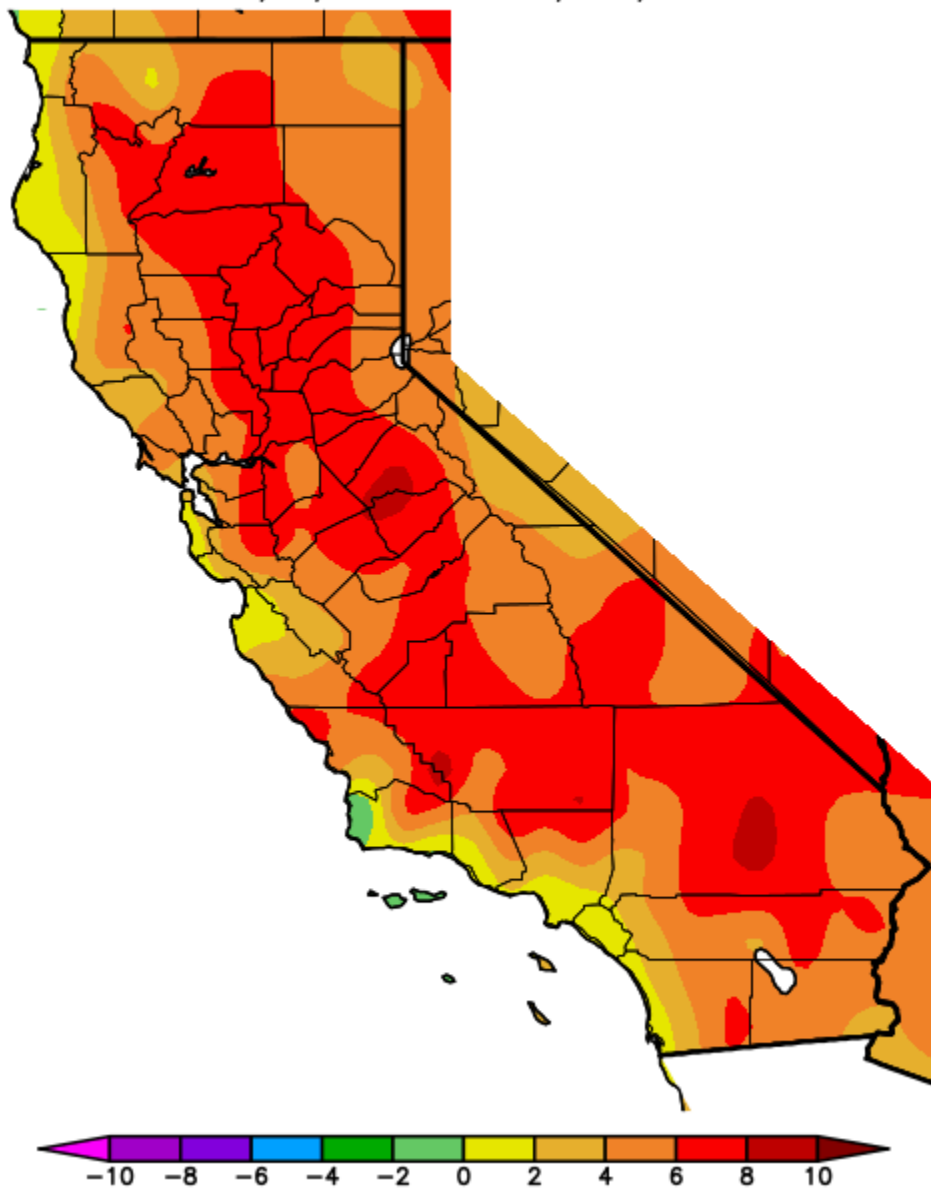
11th: High temperature of 111 degrees breaking the record of 110 degrees last set for the date in 2021.

12th: High temperature of 110 degrees breaking the record of 109 degrees last set for the date in 1906.

24th: Record high minimum temperature of 79 degrees ties the record last set for the date in 1906.

Fig 1 – Departure from Average Temperature for this month

Ave. Temperature dep from Ave (deg F)
7/1/2024 – 7/31/2024



Generated 8/ 1/2024 at WRCC using provisional data.
NOAA Regional Climate Centers

Fig 2 – Percent of Average Precipitation for this month

Percent of Average Precipitation (%)
7/1/2024 – 7/31/2024

