

DECEMBER 2023 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR

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Except on the 1st when light precipitation occurred in the Central Valley and mountains, dry conditions prevailed throughout the region until the 6th. Temperatures were unseasonably warm on the 5th and 6th, with highs reaching into the 70's to around 80 degrees at the warmest locations. Another relatively light precipitation event occurred on the evening of the 6th into the morning of the 7th. Afterward, a dry period with seasonably cool daytime temperatures and chilly overnight lows, including freezing temperatures in the Central Valley, occurred until the middle of the month before a wet period returned during the 18th-22nd. Mild temperatures were the general rule during the wet period and later, although Tule Fog developed in the San Joaquin Valley by the night of the 22nd and continued until Christmas Day. Unseasonably warm temperatures returned on the 26th through the 29th, with some record highs reached on the 27th and afterward. Some precipitation occurred on the evening of the 27th, mainly north of Fresno County. More widespread precipitation also occurred on the night of the 29th into the 30th.

**Table 1 – December 2023 Summary Statistics–
NWS Hanford, CA ASOS Sites**

Location	Monthly Average Temp (deg F)	Departure from Average (deg F)	Temperature Rank	Total Monthly Precipitation (inches)	Departure from Normal (inches)	Precipitation Rank
Bakersfield	53.5°	+4.3°	6th warmest	0.64	-0.44	55th driest
Fresno	53.2°	+5.7°	Warmest	0.68	-1.07	Tied for 41st driest
Hanford	52.1°	+6.1°	Warmest	1.15	-0.18	Tied for 55th wettest
Madera	51.9°	+5.0°	Tied for Warmest	1.46	-0.31	48th driest

Merced	51.8°	+5.8°	2nd warmest	2.00	+0.14	Tied for 53rd wettest
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This month began with light showers and seasonably cool temperatures due to a low pressure system that arrived on the afternoon of November 30th. Snow accumulated at elevations mainly above 4,000 feet in the Sierra Nevada and above 4,500 feet in the mountains to the south in Kern County by the morning of the 1st. Snow amounts were around a dusting up to an inch, while liquid precipitation amounts were a tenth of an inch or less throughout the region. A few San Joaquin Valley locations reported rainfall during the early morning. Gusty winds continued along the Mojave Desert slopes in eastern Kern County during the morning hours, with gusts of 45 to 50 mph recorded.

Relatively calm conditions occurred on the 2nd until the 6th, with a warming trend. Patchy dense fog developed on the morning of the 5th in the Central Valley; Hanford briefly reported visibility as low as 600 feet. A warm afternoon soon followed, as highs reached into the lower to mid-70's at the warmest valley locations. The warming trend continued into the 6th, as record high temperatures were reached at several San Joaquin Valley locations. High temperatures were as warm as 80 degrees at Bakersfield; highs elsewhere in the valley reached into the mid to upper-70s. On the evening of the 6th into the morning of the 7th, precipitation fell in parts of the Sierra Nevada and foothills. Locations in the San Joaquin Valley, including Fresno, also reported sprinkles. Gusty winds redeveloped in the Kern County mountains and desert on the afternoon of the 7th, where gusts reached mainly around 45 to 55 mph.

On the 8th a weak disturbance passed over Central California and brought low clouds that persisted into the afternoon in quite a few spots. Some locations in the Central Valley struggled to top 50 degrees that day as a result of this persistent cloudiness, or about 5 to 10 degrees below seasonal averages. Colder air flowed behind this system, and overnight lows dropped below freezing in most San Joaquin Valley locations. However, despite the presence of cold, relatively dry air, patchy dense fog developed in rural areas of the Central Valley on the evening of the 8th into the morning of the 9th. Dry conditions persisted until the 16th with overnight lows still falling to freezing in the coldest locations of the San Joaquin Valley. A warming trend began to occur on the 13th in terms of daytime high temperatures as high pressure strengthened over Central California, and highs rose to around 70 degrees at the warmest locations, including Bakersfield, on the 14th and 15th. On the morning of the 15th, easterly winds also developed in the Kern County mountains towards Tehachapi and the Grapevine with isolated gusts of around 45 to 50 mph.

Above normal temperatures with chilly nights continued on the 16th until the 17th, though overnight lows ticked up slightly. A wet pattern began on the 18th that lasted until the 22nd, and

daytime temperatures remained mild until the 20th. Snow levels were generally around 7,000 to 9,000 feet with this event. Precipitation was around 0.50 inch to 1.50 inches for the duration of the event throughout the San Joaquin Valley, as well as the Kern County desert and mountains. Rainfall amounts in the Sierra Nevada and foothills were around 1.50 to 3.00 inches below elevations of 7,000 feet, while snow amounts ranged from several inches up to around two feet above 7,000 feet. The heaviest precipitation occurred from the afternoon of the 20th until the 21st in much of the forecast area from Merced County to just north of Kern County, although the precipitation shifted southward into Kern County during the 21st into the 22nd. As areas began to clear during the evening of the 21st, dense fog (visibility at or below one quarter mile, with some areas as low as 300 to 500 feet) developed in the San Joaquin Valley. On the night of the 22nd into the morning of the 23rd, dense fog (with similar visibility as the previous morning) became more widespread and also developed into the Tehachapi Mountains. The desert areas of eastern Kern County even reported fog with visibility as low as one quarter of a mile at times during the early morning hours of the 23rd. High temperatures were seasonably cool on the 21st and 22nd, although overnight lows were mild and not as cold due to persistent fog and low clouds.

Seasonably cool to above average temperatures prevailed on the 23rd until the 28th. Patchy dense fog developed in the San Joaquin Valley each morning on the 23rd until the 25th. A weak storm system brought light precipitation on the afternoon and evening of the 27th, mainly north of Fresno County; however temperatures remained mild. Record high maximum temperatures were reported in Fresno, Madera, and Merced on the 28th, and a record high was reported in Madera on the 27th. Daytime high temperatures on the 27th through the 29th were in the upper-60's to the lower 70's. Rain returned late on the 29th into the 30th as a storm moved quickly through the area and brought high temperatures back down to the mid-50s. The 31st ended the year as temperatures began in the 40s with mostly cloudy skies.

**Table 2 – Seasonal Precipitation for ASOS Locations (ending on
December 31st, 2023)**

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	9.95	3.59	2.04	-1.07	0.96	-0.93
Fresno	13.64	2.65	1.08	-2.31	0.89	-2.33
Hanford	12.68	4.55	0.16	-1.14	1.28	-1.16
Madera	10.75	-0.28	2.02	-1.28	1.89	-1.29
Merced	17.75	5.95	3.12	-0.56	3.00	-0.57

Table 3– Warmest High Temperatures and Coolest Low Temperatures of the Month for ASOS Locations				
Location	High	Date(s)	Low	Date(s)
Bakersfield	80°F	December 6th	36°F	December 11th
Fresno	77°F	December 6th	35°F	December 9th
Hanford	78°F	December 6th	30°F	December 13th
Madera	74°F	December 6th	29°F	December 9th
Merced	68°F	December 29th	30°F	December 13th

Daily Records Set During December 2023

Bakersfield –

6th: Record high maximum temperature of 80 degrees which broke the old record of 77 degrees last set for the date in 1916.

29th: Record high maximum temperature of 75 degrees which broke the old record of 73 degrees last set for the date in 1956.

Fresno –

6th: Record high maximum temperature of 77 degrees which broke the old record of 70 degrees last set for the date in 2014.

28th: Record high maximum temperature of 67 degrees which broke the old record high maximum temperature of 68 degrees last set for the date in 1945.

29th: Record high maximum temperature of 69 degrees which tied the record last set for the date in 1949.

Hanford –

6th: Record high maximum temperature of 78 degrees which broke the old record of 70 degrees last set for the date in 2014.

29th: Record high maximum temperature of 71 degrees which broke the old record of 67 degrees last set for the date in 1977.

Madera –

6th: Record high maximum temperature of 74 degrees which broke the old record of 73 degrees last set for the date in 2014.

27th: Record high maximum temperature of 69 degrees tied the record last set for the date in 1999.

28th: Record high maximum temperature of 70 degrees broke the old record of 69 degrees last set for the date in 1945.

29th: Record high maximum temperature of 69 degrees which broke the old record of 65 degrees last set for the date in 1973.

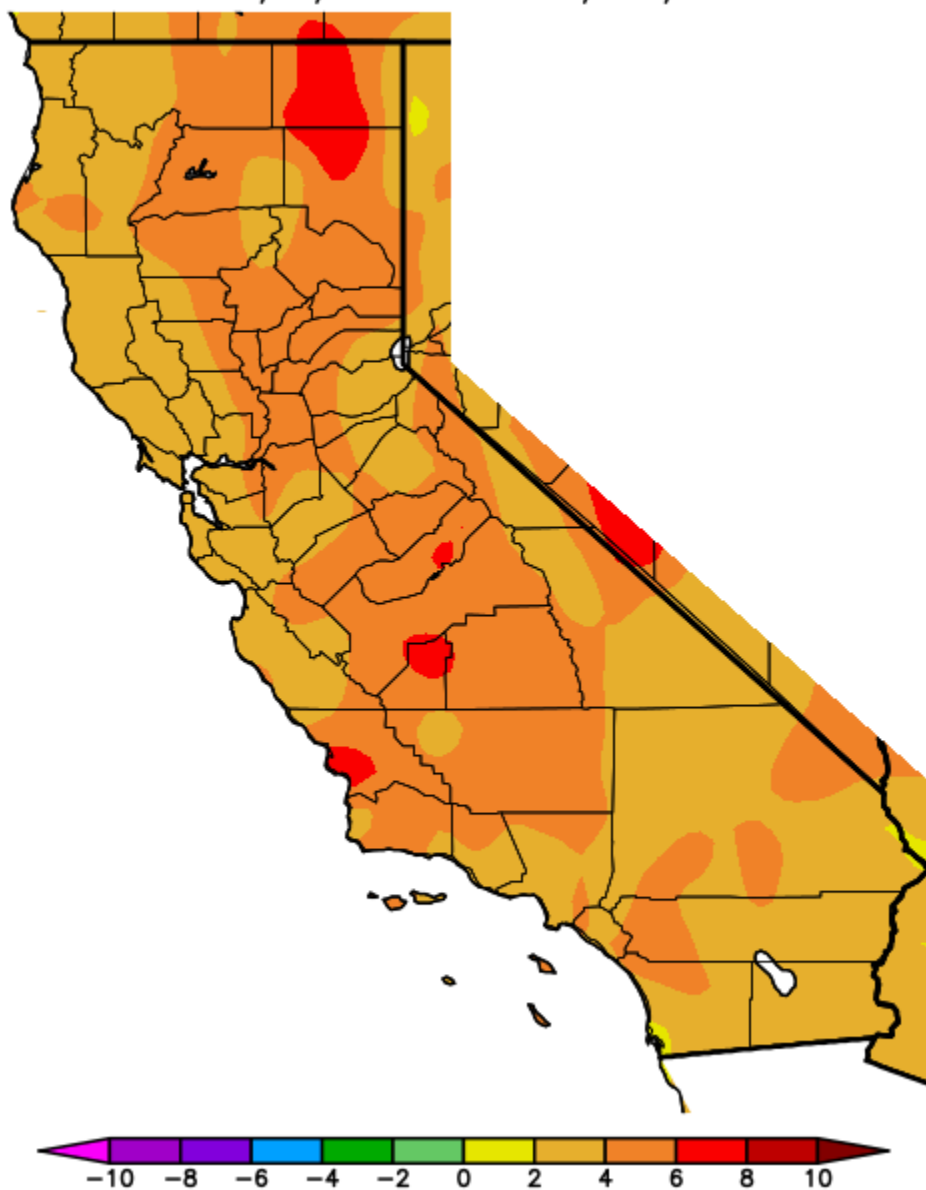
Merced –

28th: Record high maximum temperature of 67 degrees broke the old record of 66 degrees last set for the date in 1991.

29th: Record high maximum temperature of 69 degrees tied the record last set for the date in 1909.

Fig 1 – Departure from Average Temperature for this month

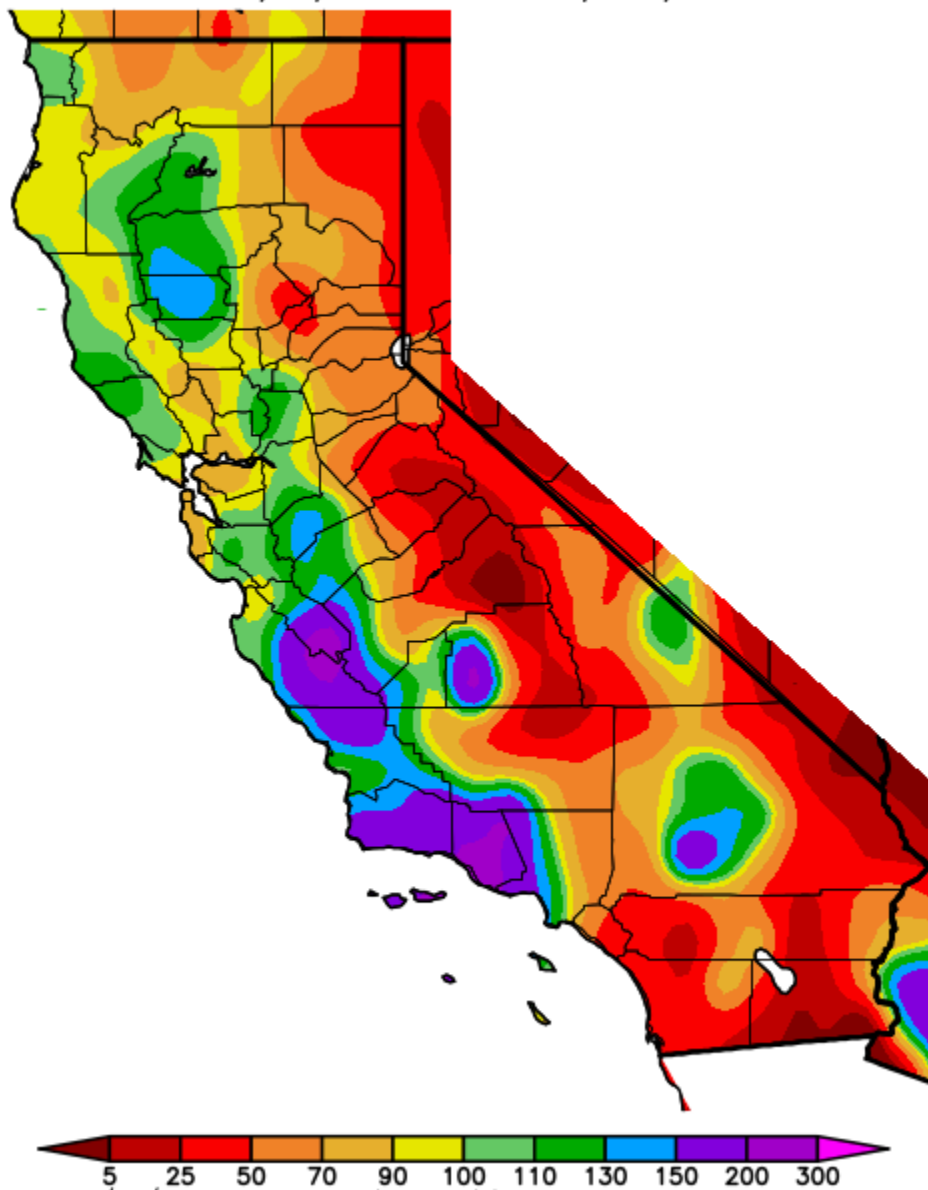
Ave. Temperature dep from Ave (deg F)
12/1/2023 – 12/31/2023



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Fig 2 – Percent of Average Precipitation for this month

Percent of Average Precipitation (%)
12/1/2023 – 12/31/2023



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