

JANUARY 2025 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR

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Mainly dry conditions and seasonal temperatures prevailed for the first two days of the month. Some light rain showers and gusty winds occurred on the 3rd, and dry conditions prevailed thereafter. On the night of the 6th, strong and gusty Mono winds developed over the Sierra Nevada and adjacent foothills and continued until the early morning hours of the 8th with gusts around 50 to 70 mph over the ridge tops and high mountain peaks in the Sierra Nevada and into the Kern County desert. Colder overnight lows and a drier airmass arrived by the 9th, with freezing minimum temperatures in the Central Valley. Dry conditions with freezing temperatures in the Central Valley continued at times through the 24th. A storm brought precipitation to the region on the 25th through the 27th; snow fell at elevations as low as 3,000 feet from Yosemite to Kern County. Dry conditions with freezing overnight low temperatures returned to the Central Valley from the 28th until the 30th, and another storm brought precipitation to the region on the 31st.

Number of Days with Freezing Overnight Low Temperatures (Season - November 1st to March 31st)

Bakersfield: 3 for January (January average: 4). Season to date total: 3 (Average: 10).

Fresno: 0 for January (January average: 4). Season to date total: 0 (Average: 11).

Hanford: 16 for January (January average: 8). Season to date total: 17 (Average: 22).

Madera: 12 for January (January average: 7). Season to date total: 14 (Average: 19).

Merced: 14 for January (January average: 8). Season to date total: 15 (Average: 21).

| Table 1 – January 2025 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 | 49.3 | -0.2 | 41st highest | 0.26 | -0.93 | 18th lowest |
| Fresno | 49.2 | +1.2 | 24th highest | 0.13 | -2.03 | 5th lowest |
| Hanford | 48.3 | +1.5 | 24th highest | 0.28 | -1.28 | 14th lowest |
| Madera | 48.2 | +0.4 | 23rd highest | 0.43 | -1.65 | 14th lowest |
| Merced | 47.4 | +1.1 | 34th highest | 0.50 | -1.87 | 14th lowest |

On the first day of the month, high temperatures were generally seasonably cool to slightly above average, and calm, dry conditions prevailed. Patchy dense fog developed in the San Joaquin Valley that morning. This pattern continued until the 2nd.

A low pressure system brought mainly light rain and snow showers to the region on the afternoon and evening of the 3rd. Overall, precipitation amounts were a quarter of an inch or less with anywhere from a dusting to several inches of snow in the higher elevations (above 6,000 feet) of the Sierra Nevada. Dense fog redeveloped in the Central Valley later in the evening of the 3rd towards Merced and spread southward during the early morning hours of the 4th.

On the 5th and 6th, weather conditions were relatively quiet, except for some patchy dense fog in the Central Valley around Hanford and Visalia. Afterward, an upper-level low tracked over the Great Basin, so low and mid-level clouds developed with occasional light precipitation and drizzle. This pattern mitigated the development of dense fog in the valley until the 8th. High temperatures were seasonably cool during this period, except for warmer than average temperatures in areas where winds developed. By the late night hours of the 6th, gusty northeast winds developed over the Sierra Nevada and Kern County desert where gusts of 50 to 70 mph occurred. Mainly the high peaks and exposed ridge tops had the strongest gusts, and gusts in the desert were around 45 to 60 mph. These winds continued until the morning of the 8th, although the winds in a few desert locations persisted into the afternoon hours. On the 7th, a relatively

warm day occurred in the San Joaquin Valley, as highs reached into the mid-60's, which even tied a record at Merced.

In the wake of the upper-level low that brought the gusty winds to the mountains and desert, dry weather occurred on the 9th and 10th with a warming trend, although overnight lows reached near freezing in quite a few Central Valley locations on the morning of the 9th. Locations in the Kern County desert were below freezing, and some locations dropped below 20 degrees. Little to no fog developed in the San Joaquin Valley during this period. In addition, record high maximum temperatures were reached on the 10th at Bakersfield, Fresno, and Merced, as highs reached the mid 60s to lower 70s at these locations.

High temperatures lowered closer to seasonal averages on the 10th and 11th with some moderation in low temperatures as a low pressure system brought increased winds and drier air to the region. Gusty winds occurred at times along the Mojave Desert slopes during the 10th-15th, as northeast winds were around 25 to 35 mph with gusts around 45 to 55 mph. Warmer than average temperatures continued for several days, including from the 12th until the 17th. However, the drier air was parked over the region which allowed chilly overnight lows. Frost developed in the San Joaquin Valley each night while dry air remained over the area. Low temperatures were still in the lower to mid 30s throughout the Central Valley even with high temperatures mainly in the 60s during this period.

Chilly overnight low temperatures with lows reaching below freezing in the San Joaquin Valley occurred at times from the 18th until the 24th. Little fog developed in this area, although there were brief periods of patchy dense fog in rural areas.

A cold low pressure system that came from western Canada brought precipitation from the 25th until the 27th to much of the region. Precipitation amounts were generally light, or around 0.25 to 0.50 inch. In addition, several inches to near one foot of snow fell in the Sierra Nevada and adjacent foothills down to around 3,000 feet, as well as the Kern County mountains and Mojave Desert slopes. Snow shifted to mainly Kern County by the evening of the 26th, while a few showers continued in the Central Valley. Thunderstorms developed on the evening of the 25th in the Sierra Nevada and foothills as the initial wave of precipitation arrived. A few thunderstorms also developed in the Kern County desert and moved up the slopes into the Tehachapi Mountains and southern Sierra Nevada in the afternoon and early evening hours of the 26th. These storms brought small hail, brief heavy rain, and frequent dangerous lightning. There were also reports of lightning and thunder that accompanied some of the snow showers in the Sierra during the evening of the 25th. Significant snowfall impacted many roadways in Kern County from the night of the 26th until the following morning. Rain and mountain snow ended by the morning of the 27th.

On the 28th, dry conditions returned to the forecast area. Freezing overnight low temperatures occurred on this day until the 30th. On the 31st, a low pressure system brought light to moderate

rain to areas north of Kern County. Precipitation amounts were generally light in the Central Valley, while somewhat heavier amounts were observed in the Sierra Nevada and foothills. Overall, the month ended up with near to above average temperatures and below average precipitation (Figs 1-2).

Table 2 – Seasonal Precipitation for ASOS Locations (ending on January 31st, 2025)

| 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 | 0.26 | -0.93 | 1.85 | -1.28 | 1.85 | -1.23 |
| Fresno | 0.13 | -2.03 | 3.12 | -2.34 | 3.09 | -2.29 |
| Hanford | 0.28 | -1.28 | 2.93 | -1.13 | 2.91 | -1.09 |
| Madera | 0.43 | -1.65 | 3.69 | -1.61 | 3.69 | -1.57 |
| Merced | 0.50 | -1.87 | 3.41 | -2.58 | 3.41 | -2.53 |

| Table 3– Warmest High Temperatures and Coolest Low Temperatures of the Month for ASOS Locations | | | | |
|--|-------------|----------------|------------|----------------|
| Location | High | Date(s) | Low | Date(s) |
| Bakersfield | 74 | 24th | 31 | 21st & 22nd |
| Fresno | 68 | 23rd & 24th | 34 | 22nd & 27th |
| Hanford | 70 | 24th | 30 | 14th & 16th |
| Madera | 68 | 23rd | 30 | 13th & 14th |
| Merced | 69 | 7th | 28 | 27th |

Daily Records Set During January 2025

Bakersfield

10th: Record high maximum temperature of 72 degrees reached, which broke the previous record of 71 degrees last set for the date in 2012.

Fresno

10th: Record high maximum temperature of 68 degrees reached, which tied the previous record last set for the date in 1959.

Hanford

No daily records reached this month.

Madera

No daily records reached this month.

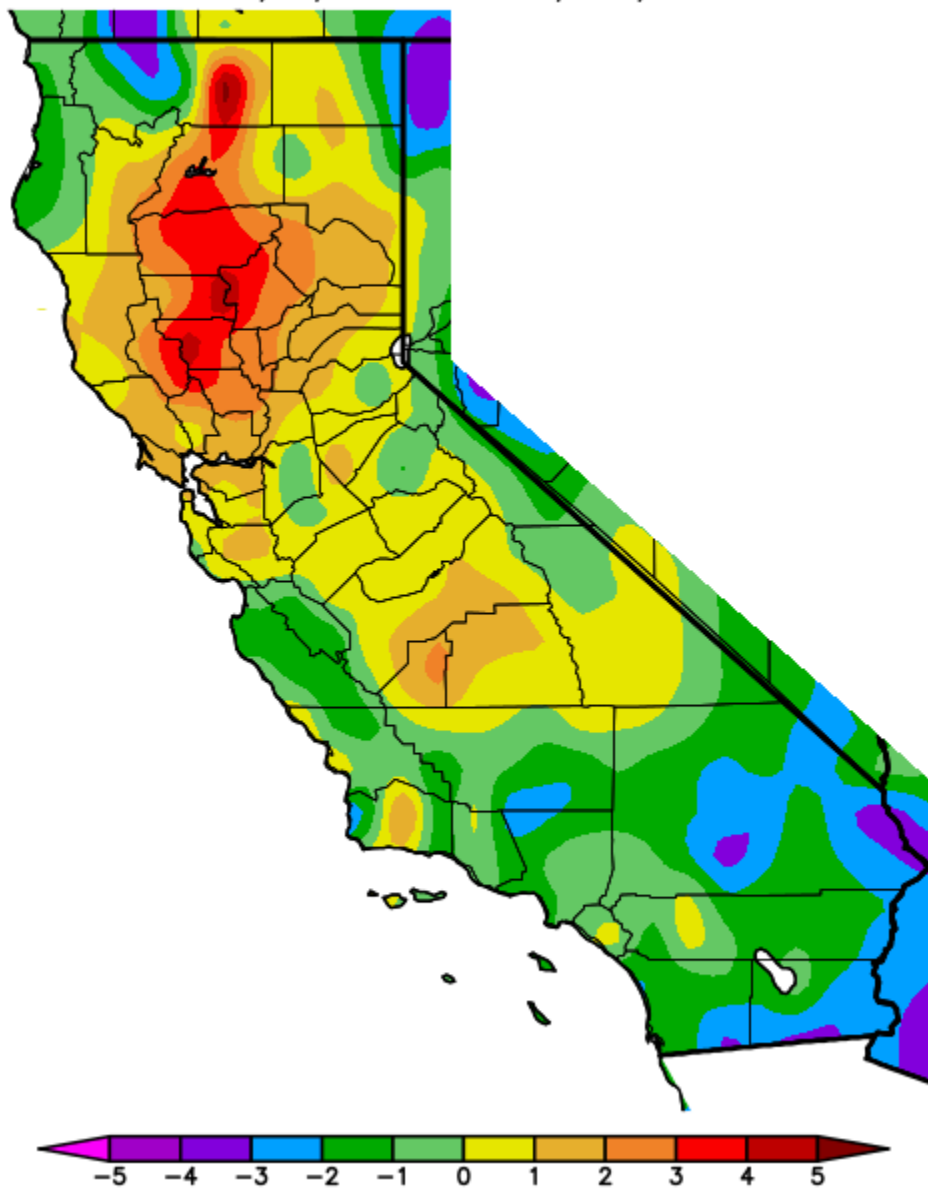
Merced

7th: Record high maximum temperature of 69 degrees reached, which tied the previous record last set for the date in 1950.

10th: Record high maximum temperature of 66 degrees reached, which tied the previous record last set for the date in 2015.

Fig 1 – Departure from Average Temperature for this month

Ave. Temperature dep from Ave (deg F)
1/1/2025 – 1/31/2025



Generated 2/ 1/2025 at WRCC using provisional data.
NOAA Regional Climate Centers

Fig 2 – Percent of Average Precipitation for this month

