

NOVEMBER 2024 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR

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This month began with relatively cool weather and a light precipitation event. Calm, dry weather and seasonal temperatures prevailed throughout the forecast area from the 4th until the 8th, except for gusty winds on the 6th and 7th in the mountain and desert portions of Kern County. Towards the middle of the month, a couple of systems brought light precipitation with strong, gusty winds in the Central Valley on the 11th. Gusts reached over 45 mph in Fresno and Hanford; strong winds also kicked up a haboob, or a wall of blowing dust, near Los Banos that afternoon that briefly brought visibility near zero. Much cooler temperatures prevailed on the 17th until the 19th, and some locations in the San Joaquin Valley dipped to freezing on the morning of the 19th. Another upper-level disturbance brought light showers towards Merced and Mariposa Counties on the 20th. Otherwise, a brief warm period occurred on the 20th until the 22nd. Stronger systems with abundant precipitation and high elevation snow arrived on the nights of the 22nd into the morning of the 23rd, as well as the night of the 25th into the 26th. Nighttime and morning fog with low clouds prevailed over the Central Valley from the 27th until the 30th. Above average precipitation and near average temperatures prevailed for the month.

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

Bakersfield: 0 for November (Season to date average: 1)

Fresno: 0 for November (Season to date average: 1)

Hanford: 1 for November (Season to date average: 3)

Madera: 2 for November (Season to date average: 3)

Merced: 1 for November (Season to date average: 3)

Table 1 – November 2024 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	55.0	-1.3	47th coolest	1.18	+0.67	17th highest
Fresno	54.9	-0.2	Tied for 58th warmest	1.95	+1.08	18th highest
Hanford	53.6	+0.4	Tied for 41st warmest	1.74	+1.12	13th highest
Madera	53.8	-0.3	Tied for 39th warmest	2.00	+1.08	23rd highest
Merced	53.8	+0.3	Tied for 46th warmest	1.51	+0.49	45th highest

This month began with cooler than normal temperatures. On the morning of the 2nd, a low pressure system brought light precipitation to the San Joaquin Valley and the Sierra Nevada. Rainfall amounts were generally up to around one third of an inch throughout the region, although much lower amounts were recorded in Kern County. Snow fell at elevations mainly above 7,000 feet, with around one to two inches of accumulation. Even though this system passed over the region, afternoon temperatures managed to warm a few degrees compared to the 1st., and morning lows on the 2nd were milder due to the increased cloud cover.

Seasonal temperatures prevailed from the 3rd until the 11th. For most of this period, calm, dry conditions occurred throughout the forecast area. However, on the 6th and 7th, gusty easterly winds developed in the mountain and desert areas of Kern County. Gusts of 45 to 60 mph were observed in these areas.

On the afternoon of the 11th, a low pressure system brought a strong cold front with gusty winds, including to the San Joaquin Valley. The gusts were strong enough to knock down trees and briefly lowered visibility to less than one quarter mile to near zero in some locations. A haboob, or a wall of blowing dust, was observed near Los Banos with near zero visibility and caused a shutdown of Highway 152 for a little while. Gusts of 45 to near 55 mph were reported with this

front that passed over the Central Valley; similar gusts also occurred in eastern Kern County along the Mojave Desert slopes. Mainly light to moderate precipitation also occurred that day, and then cooler conditions prevailed afterward. Most locations in the San Joaquin Valley, coastal ranges, and the Sierra Nevada foothills received a tenth of an inch up to around 0.50 inch with this system. Snow amounts in the higher elevations of the Sierra Nevada were around an inch up to a few inches.

Another low pressure system brought light to moderate precipitation on the night of the 14th into the 15th. Some isolated thunderstorms developed in the Central Valley on the afternoon of the 15th. Most locations also received a tenth of an inch up to a quarter inch of rain with this system, except for the south end of the San Joaquin Valley (Kern County), a few Sierra Nevada locations, and the Tehachapi Mountains received around 0.50 to 0.75 inch. Strong winds were also reported along the Mojave Desert slopes in eastern Kern County with gusts of 45 to 70 mph.

Otherwise, colder temperatures arrived on the 16th. Low temperatures dipped to near freezing in the San Joaquin Valley on the mornings of the 17th until the 19th. High temperatures also remained below average during the period, as maximum temperatures were in the lower 60's at the warmest locations.

On the 20th until the 22nd, well above average temperatures and dry conditions prevailed, although a few light showers briefly passed over Merced and Mariposa Counties on the night of the 20th. A record high maximum temperature was tied at Madera on the 21st, which was 78 degrees. The warmest locations were generally in the 70's during the 20th to 22nd. However, Bakersfield's maximum temperature topped out at 80 degrees on the 22nd, which tied a record high for the date that was last reached in 1945.

For the night of the 22nd into the morning of the 23rd, abundant precipitation fell over northern portions of our forecast area, mainly Fresno County northward. About 1 to 2 inches of rain accumulated in the Sierra Nevada foothills and lower Sierra Nevada below 7,000 feet. Several inches up to two feet of snow fell in the higher elevations of the Sierra.

Another system brought more widespread precipitation on the night of the 25th into the 26th. About one to two inches of rain accumulated in much of the San Joaquin Valley with heavier amounts in the Sierra Nevada foothills, or around 2 to 4 inches. About two to three feet of snow accumulated in the higher elevations of the Sierra Nevada, or above 7,000 feet. Snow levels were around 6,000 to 6,500 feet during the period.

On the night of the 26th into the morning of the 27th, low clouds formed over the San Joaquin Valley and into the Kern County mountain areas. Otherwise, mainly dry conditions occurred during this period. Dense fog also accompanied the low clouds over the Grapevine near Tejon Pass as well as towards Tehachapi and the nearby areas along Highway 58. As the ridge of high pressure developed over the region and provided an inversion layer (layer of rising temperature

with increasing height, or altitude) in the lower levels of the atmosphere (or from just above the surface to roughly 4,000 feet above ground level) with plenty of near surface moisture due to the recent rainfall, the Tule Fog became more prevalent over the Central Valley beginning on the night of the 27th and lasted through much of the morning hours of the 28th. Dense fog and stratus clouds developed once again by the evening of the 28th and lasted until the following morning. Although, low clouds persisted into the afternoon of the 29th. The dry weather and nighttime fog and low clouds over the San Joaquin Valley continued until the end of the month.

Overall, the month ended up with near average temperatures and above average precipitation. Preliminary estimates show the Sierra Nevada snowpack already at around 20 to 30 percent of average by the time we reach April 1st, 2025, while season to date (ending November 30th) values range from 150 to 250 percent of average.

Table 2 – Seasonal Precipitation for ASOS Locations (ending on November 30, 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	7.05	+1.79	1.18	+0.34	1.18	+0.39
Fresno	11.08	+1.88	1.98	+0.47	1.95	+0.52
Hanford	9.14	+2.37	1.76	+0.62	1.74	+0.66
Madera	10.08	+1.11	2.00	+0.60	2.00	+0.64
Merced	13.71	+3.82	1.51	-0.20	1.51	-0.15

Table 3– Warmest High Temperatures and Coolest Low Temperatures of the Month for ASOS Locations

Location	High	Date(s)	Low	Date(s)
Bakersfield	80	22nd	36	17th
Fresno	76	21st	35	19th
Hanford	76	21st & 22nd	31	19th
Madera	78	21st	31	19th
Merced	77	21st	31	19th

Daily Records Set During November 2024

Bakersfield

22nd: Record high maximum temperature of 80 degrees tied, which last occurred on the date in 1945.

26th: Record high daily precipitation of 0.89 inch broke the old record of 0.80 inch set for the date in 1926.

Fresno

No daily records reached.

Hanford

26th: Record high daily precipitation of 1.00 inch broke the old record of 0.97 inch set for the date in 1931.

Madera

21st: Record high maximum temperature of 78 degrees tied, which last occurred on the date in 1932.

22nd: Record high maximum temperature of 76 degrees tied, which last occurred on the date in 1936.

Merced

No daily records reached.

Fig 1 – Departure from Average Temperature for this month

Ave. Temperature dep from Ave (deg F)
11/4/2024 – 12/3/2024

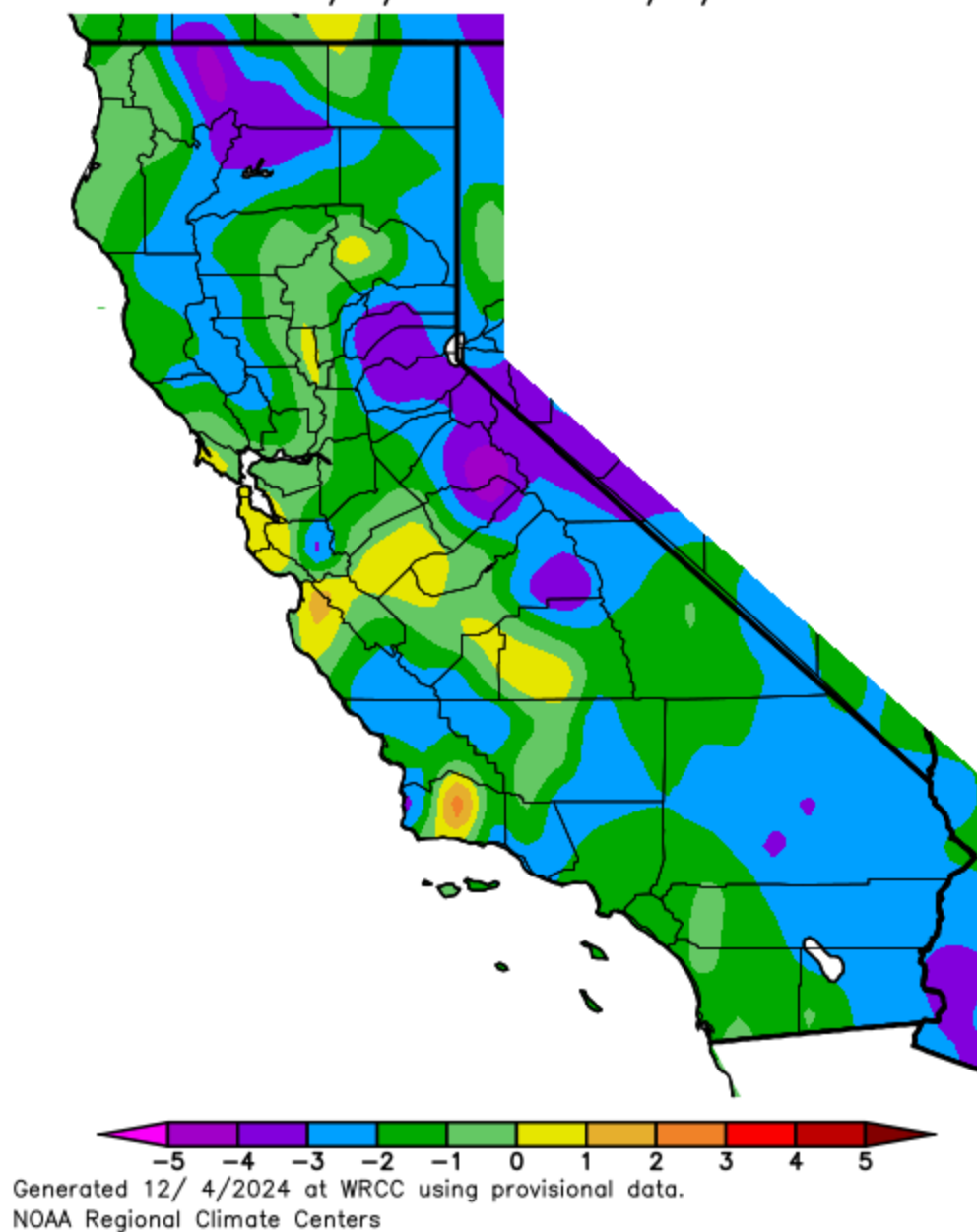
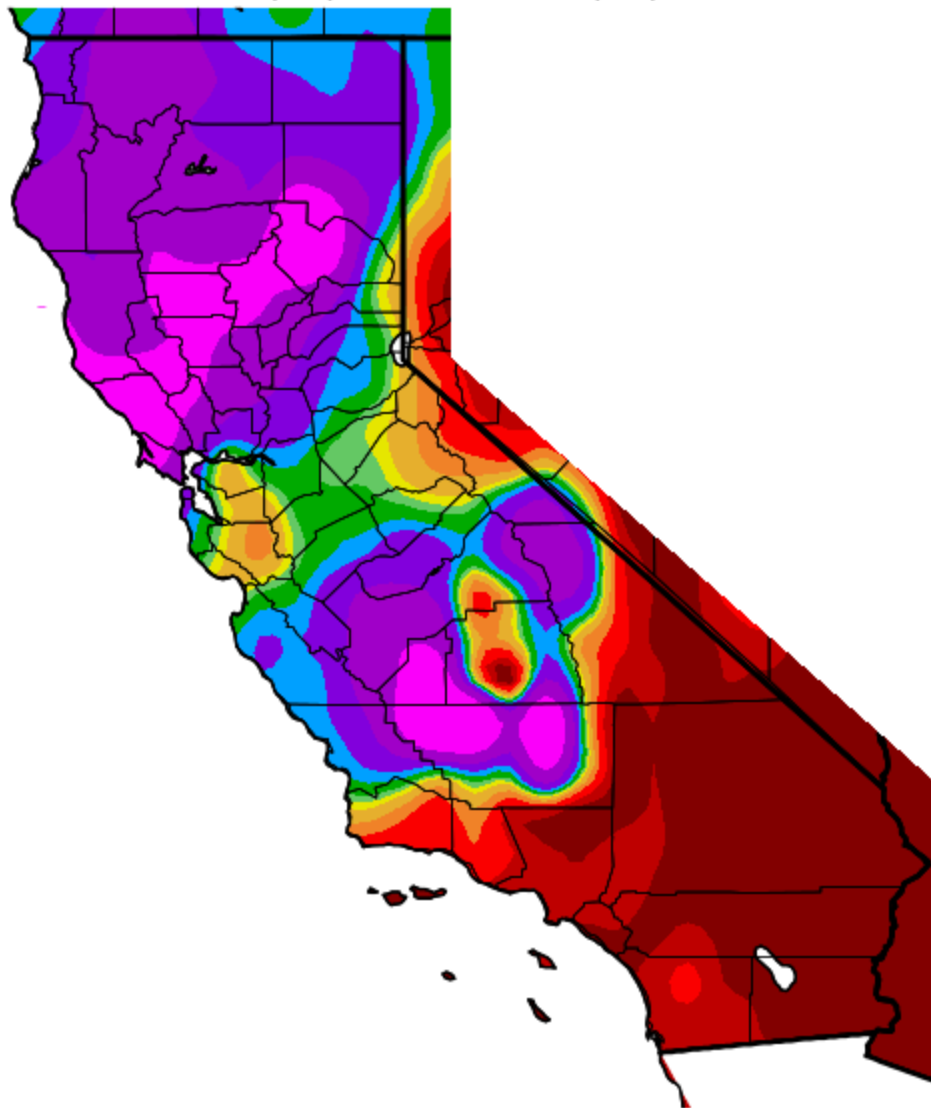


Fig 2 – Percent of Average Precipitation for this month

Percent of Average Precipitation (%)
11/4/2024 – 12/3/2024



Generated 12/ 4/2024 at WRCC using provisional data.
NOAA Regional Climate Centers