DECEMBER 2024 WEATHER SUMMARY
FOR THE CENTRAL CALIFORNIA INTERIOR

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This month began with seasonal temperatures and dry conditions. Nighttime and morning dense fog developed in the San Joaquin Valley each day from the 1st until the 11th. Precipitation occurred due to a series of storms from the 12th until the 16th, though was relatively light. Valley fog returned on the 17th until the 21st. Another active weather period with precipitation occurred from the 22nd until the 26th, with the bulk of the rain and mountain snow during the 24th and strong, gusty winds in Kern County on the night of the 24th, or Christmas Eve, into the following morning. One more storm brought precipitation and strong winds on the 29th. Otherwise, the month was generally much warmer than average with below average precipitation (Fig 1-2).

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

Bakersfield: 0 for December (December average: 5). Season to date total: 0 (Average: 6).

Fresno: 0 for December (December average: 5). Season to date total: 0 (Average: 6).

Hanford: 0 for December (December average: 11). Season to date total: 1 (Average: 14).

Madera: 0 for December (December average: 9). Season to date total: 2 (Average: 12).

Merced: 0 for December (December average:10). Season to date total: 1 (Average: 13).

Table 1 – December 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	52.0	+2.8	15th highest	0.41	-0.69	40th lowest
Fresno	51.4	+3.9	3rd highest	1.01	-0.78	54th lowest
Hanford	51.5	+5.5	2nd highest	0.89	-0.47	48th lowest
Madera	51.5	+4.6	4th highest	1.26	-0.56	36th lowest
Merced	50.9	+4.9	4th highest	1.40	-0.51	50th lowest

This month began with dry, though seasonably cool weather. Dense fog and low clouds were a daily occurrence in the San Joaquin Valley until the 9th that sometimes lasted for an entire day as a persistent ridge of high pressure remained in control. In addition, warmer than normal daytime high temperatures prevailed over the mountain areas, as well as the desert, although with overnight low temperatures reaching below freezing.

On the 9th, locally gusty easterly winds developed in portions of Kern County, including from the Mojave Desert slopes to the Grapevine as a dry, upper-level trough with strong north to northeast winds aloft passed to the north of this area. Otherwise, nighttime and morning dense fog and low clouds persisted in the San Joaquin Valley until the 11th.

A low pressure system arrived and brought precipitation for the first time this month on the 12th. Isolated thunderstorms were observed near Hanford on the morning of the 12th as the cold front passed. Precipitation amounts were relatively light, or around 0.10 to 0.30 inch. Another system arrived on the 14th and brought showers and isolated thunderstorms to areas mainly north of Fresno. Precipitation amounts were also relatively light in most locations, or about 0.10 to 0.40 inch; areas from Fresno southward received no precipitation. Light snow occurred in the higher elevations of the Sierra with each system, but it was mainly up to a few inches. Fog and low clouds returned to the Central Valley by the morning of the 15th, with very low visibility (or 300 feet and lower) reported near Hanford, Visalia, and Selma due to patchy dense fog. Otherwise, mostly clear skies with seasonal temperatures prevailed that day.

Another system brought light precipitation on the 16th, mainly north of Fresno County. Amounts were generally 0.25 to 0.60 inch in the Sierra Nevada and 0.10 to 0.40 inch in the northern portions of the San Joaquin Valley, while snow amounts of up to a few inches accumulated in the higher elevations of the Sierra Nevada, or above 7,000 feet.

Fog and low clouds returned to the San Joaquin Valley on the 17th through the 21st. Dense fog, with visibility at or below one quarter mile, was reported throughout the valley mainly during the nights and mornings. Although, dense fog redeveloped by the early evening of the 20th.

Precipitation fell throughout Central California from the night of the 21st into the morning of the 22nd. Mainly light amounts were reported, including a tenth of an inch or less in most Central Valley locations. Some mountain and foothills communities received from 0.25 to 0.70 inch of rain, including 0.60 inch at Yosemite Valley. Otherwise, a few inches of snow accumulated in the Sierra Nevada, including at elevations above 7,000 feet.

A brief break from precipitation occurred on the 23rd, and some Central Valley locations reached record high maximum temperatures, as highs were in the upper 60s and lower 70s. Highs in the Kern County desert were slightly warmer, or in the lower to mid-70's. A stronger storm arrived on the morning of the 24th and brought light to moderate precipitation (or around 0.25 to 0.50 inch in the Central Valley and slightly higher amounts into the Sierra foothills, as well as several inches of snow in the Sierra Nevada above 6,000 feet) through the afternoon and strong, gusty winds to the Kern County mountain areas. Gusts were as strong as 60-75 mph at many locations with this particular system. Another system arrived on the 26th, and unsettled conditions lasted until the 27th. Precipitation was relatively light, as most valley and foothills locations received around 0.10 to 0.40 inch of rain and up to a few inches of snow in the Sierra Nevada. The final storm system of the month arrived on the 29th and brought light to moderate precipitation along with gusty winds to the Kern County mountain passes (gusts 50 to 65 mph). Precipitation amounts were also relatively light, including up to a tenth of an inch in the San Joaquin Valley. Calm, dry weather returned for the last two days of the month and year with high temperatures near to slightly above average.

Table 2 – Seasonal Precipitation for ASOS Locations (ending on December 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	7.46	+1.10	1.59	-0.35	1.59	-0.30
Fresno	12.09	+1.10	2.99	-0.31	2.96	-0.26
Hanford	10.03	+1.90	2.65	+0.15	2.63	+0.19
Madera	11.34	+0.55	3.26	+0.04	3.26	+0.08
Merced	15.11	+3.31	2.91	-0.71	2.91	-0.66

Table 3– Warmest High Temperatures and Coolest Low Temperatures of the Month for ASOS Locations				
Location	**High**	**Date(s)**	**Low**	**Date(s)**
Bakersfield	71	14th	34	20th
Fresno	69	23rd	37	11th & 15th
Hanford	69	21st & 23rd	34	11th
Madera	70	23rd	33	11th
Merced	69	23rd	34	11th

Daily Records Set During December 2024

Bakersfield

No daily records reached.

Fresno

23rd: Record high maximum temperature of 69 degrees reached, which broke the old record of 68 degrees last set for the date in 1919.

Hanford

23rd: Record high maximum temperature of 69 degrees reached, which tied the previous record last set for the date in 1964.

Madera

23rd: Record high maximum temperature of 70 degrees reached, which broke the old record of 68 degrees last set for the date in 1940.

Merced

23rd: Record high maximum temperature of 69 degrees reached, which tied the previous record last set for the date in 1964.

28th: Record high maximum temperature of 67 degrees reached, which tied the record for the date in 2023.

Fig 1 – Departure from Average Temperature for this month

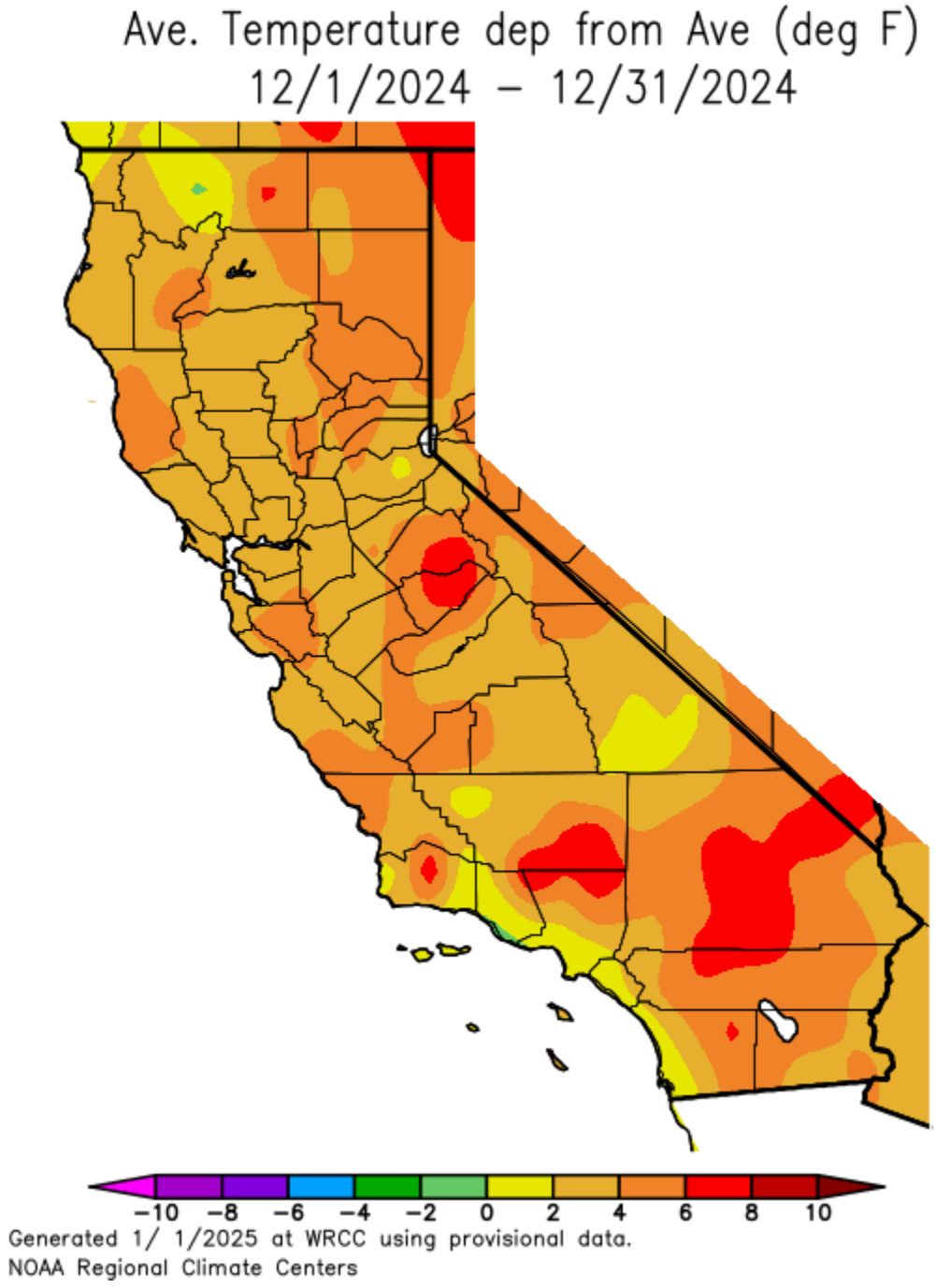

Fig 2 – Percent of Average Precipitation for this month