

OCTOBER 2019 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR

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The first couple of days were a relatively cool start for the month, as wind flow was generally from the northwest behind the low pressure system that arrived at the end of September. During the first two days, temperatures were several degrees below average, with afternoon highs only reaching into the 70s in the warmest locations, while nighttime lows dipped into the 40s in many locations in the San Joaquin Valley. Temperatures briefly warmed back towards average on the 3rd; however, another low pressure system brought increased winds and at least a few degrees of cooling on the 4th.

High pressure returned to the region on the 5th, and daytime highs warmed back to near seasonal average. Even more warming occurred on the following few days. Above average temperatures prevailed afterward, or during the 6th-8th, as the high pressure remained in control. Highs in the warmest locations topped above 90 degrees during this period.

On the 9th, a low pressure system passed mainly over inland regions of Northern California, but it was strong enough to increase winds in much of our forecast area and lower temperatures back to several degrees below average. Daytime highs struggled to reach 80 degrees for the next couple of days, while lows reached into the 40s once again, including in the Central Valley. Temperatures were slow to cool in the Kern County desert on the 9th and 10th, as highs remained well into the 80s to near 90 degrees. Winds increased on the evening of the 10th in these areas, as local gusts reached around 45-50 miles per hour (mph).

A warming trend commenced on the 12th and lasted until the 16th, as high pressure built along the West Coast. Highs were around seasonal averages or slightly warmer with relatively calm conditions.

A low pressure system brought a cooling trend that began on the 17th. As more cool air flowed into the region, winds began to increase. Winds picked up during the afternoon and evening of the 17th, and gusts reached around 35 to 40 miles per hour along the west side of the San Joaquin Valley and around 45 to 60 miles per hour with local gusts exceeding 65 miles per hour in the Kern County desert and mountains, especially near and below the passes and canyons. Relatively cool temperatures with generally light winds lasted during 18th through the 20th, with daytime high temperatures that reached around 5 to 10 degrees below average.

High pressure returned on the 21st, and a warming trend began once again. Daytime highs warmed back to around 10-15 degrees above average over the next few days. The warmest temperatures occurred on the 24th and 25th, as highs reached into the mid to upper 80s, with a few spots that reached 90 degrees, including in the San Joaquin Valley and the Kern County desert. In addition, a dry airmass prevailed over the Kern County mountains during the 24th and 25th, as daytime humidity percentages reached into the single digits. Gusty winds from the east also affected portions of the Tehachapi Mountains and the Grapevine with speeds around 35 to 45 miles per hour. Thus, a Red Flag warning was issued for this area. Temperatures moderated a little on the 26th but were still several degrees above average, with quite a few spots that reported highs in the mid to upper 80s.

Some light rain and snow fell in the Sierra Nevada on the afternoon of the 27th as a cold upper-level low passed over the Great Basin. Precipitation amounts were around a tenth of an inch or less, while a dusting of snow accumulated in the higher elevations. Otherwise, a very windy pattern occurred for much of the 27th with much cooler temperatures; highs reached about 10 degrees below average. Some spots remained below 70 degrees in the San Joaquin Valley due to the wind and cooler air, including a high of 68 degrees at Fresno. Gusts reached around 35 to 50 miles per hour along the west side of the San Joaquin Valley and over the Sierra Nevada and adjacent foothills. Over the Sierra Nevada and foothills, the winds came from the northeast, so this particular wind pattern is also known locally as a Mono wind event; similar gusts as to what occurred in the west side of the San Joaquin Valley were reported. This wind event prompted a shutdown of power lines that serve tens of thousands of customers in the Sierra and foothills. Also, some downed trees were reported in Yosemite Valley.

Relatively cool days continued through the end of the month, except a strong easterly wind event occurred in the Kern County mountains on the 30th. Easterly gusts of 50 to 60 mph were recorded, although with some isolated gusts above 65 mph near the Grapevine and Tehachapi. Very low humidity (less than 5% in quite a few spots) prevailed in these areas, coincident with the gusts, so a Red Flag Warning was issued. Some strong gusts were even reported in Bakersfield (46 mph) and the south end of the San Joaquin Valley (over 50 mph) with blowing dust that reduced visibility to less than a mile at times in some locales.

Very chilly mornings prevailed on the 30th and 31st, as lows reached into the teens in the Kern County desert and the lower 30s in the San Joaquin Valley due to the dry airmass in place. Otherwise, daytime highs were near to slightly below average. No precipitation fell in much of the region during the entire month, except for the light precipitation that fell on a portion of the Sierra Nevada around Yosemite during the 27th.

Overall, the month was near to below average in terms of temperatures (Fig 1). Almost no precipitation accumulated anywhere in Central California during this month (Fig 2).

Table 1 – October 2019 Summary Statistics for ASOS locations

Location	Monthly Average Temp (deg F)	Departure From Average (deg F)	Total Monthly Precipitation (inches)	Departure From Normal (inches)
Bakersfield	65.5	-1.7	0.00	-0.30
Fresno	65.5	-0.7	0.00	-0.63
Hanford	62.3	-1.2	0.00	-0.50
Madera	61.6	-2.4	0.00	-0.88
Merced	61.4	-2.0	0.00	-0.81

Table 2 – Seasonal Precipitation for ASOS locations (ending on October 31st)

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	6.52	+1.71	0.02	-0.40	0.00	-0.30
Fresno	9.52	+0.86	0.00	-0.82	0.00	-0.63
Hanford	7.63	+0.16	0.00	-0.71	0.00	-0.50
Madera	8.43	-0.74	0.00	-1.17	0.00	-0.88
Merced	9.40	-0.40	0.00	-1.12	0.00	-0.81

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

Location	High	Date(s)	Low	Date(s)
Bakersfield	91	8 th	42	28 th
Fresno	91	7 th	40	31 st
Hanford	92	7 th , 8 th	31	31 st
Madera	91	8 th	34	30 th , 31 st
Merced	91	8 th	30	28 th

Temperature/Precipitation Rankings for October 2019

Bakersfield – 44th coolest October on record (tied with 1911); tied for driest October on record (with 17 other Octobers).

Fresno – 60th coolest October on record (tied with 1931); tied for driest October on record (with 17 other Octobers).

Daily Records Set During October 2019

Bakersfield – No records set (as of 10/29)

Fresno – No records set (as of 10/29)

Fig 1 – Departure from Average Temperature for October 2019

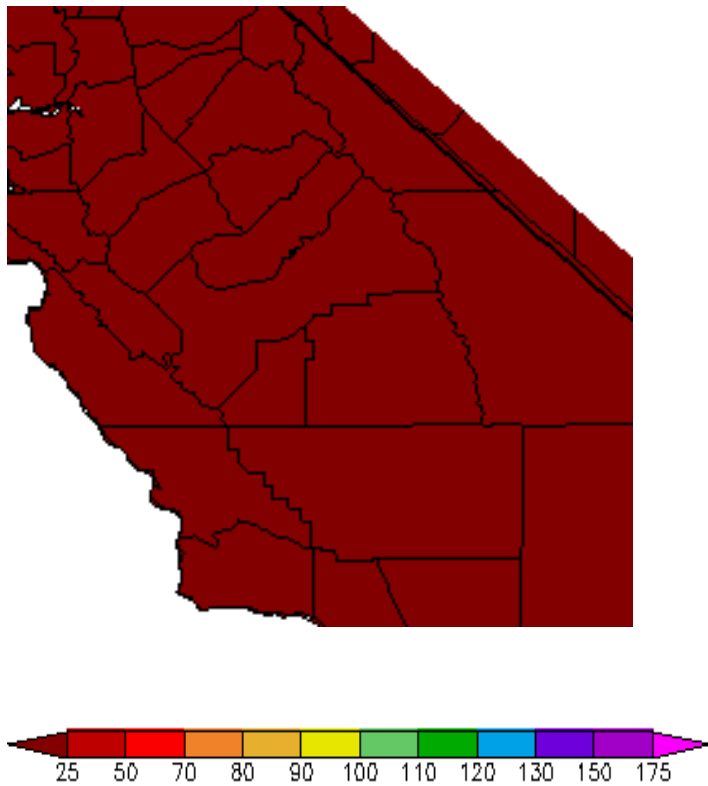
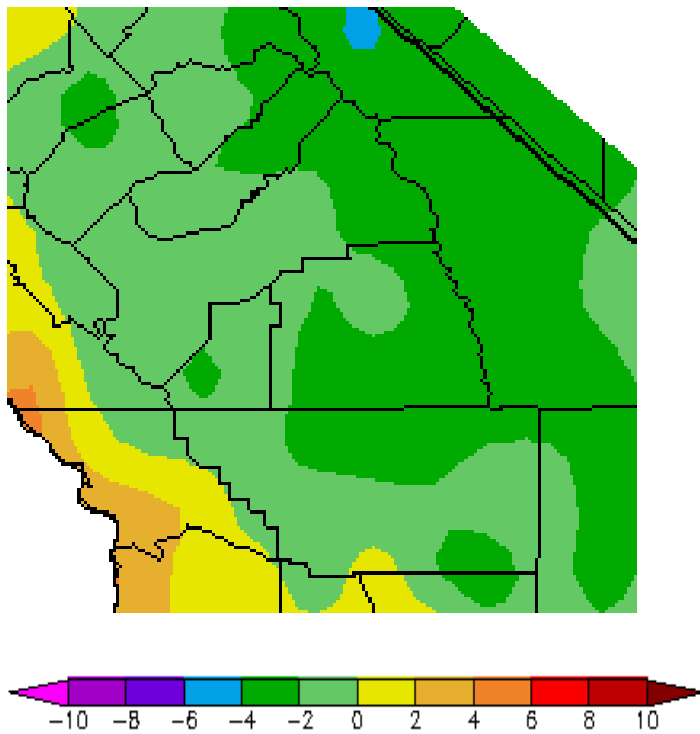


Fig 2 – Percent of Average Precipitation for October 2019



*Images above (i.e., Figures 1-2) courtesy of Western Region Climate Center