OCTOBER 2020 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR

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This month was generally much warmer than average (Fig 2) with little precipitation (Fig 1) throughout the interior region of Central California. The San Joaquin Valley was mainly much warmer than average (Table 1), though triple digit heat was confined mainly to the Kern County desert areas during the first week of the month. Elsewhere, the month was warmer than average with below average precipitation due to a prevailing ridge high pressure, except for a weak lowpressure system that originated from the Gulf of Alaska that arrived on the 9th and brought a brief period of mainly seasonal temperatures. During the last week of the month, or on the 25th and 26th, there was a brief period of cooler than average temperatures throughout Central California and even some light showers over mainly the Sierra Nevada high country.

Table 1 – October 2020 StatisticsNWS 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	72.1	+4.9	5 th Warmest	Т	-0.30	2 nd Lowest	
Fresno	71.6	+5.4	2 nd Warmest	0.00	-0.63	Lowest	
Hanford	68.3	+4.8	7 th Warmest	0.00	-0.50	Lowest	
Madera	67.4	+3.4	9 th Warmest	0.00	-0.88	Lowest	
Merced	67.8	+4.4	6 th Warmest	0.00	-0.81	Lowest	

October began with warmer than average temperatures due to strong high pressure in control, though daily highs remained in the mid-to upper 90s in the San Joaquin Valley, Sierra Nevada foothills, West Side Hills, and the Kern County desert, including the 1st through the 5th. However, a few locations reached into the triple digits at times during this five-day period (including China Lake NAF, Edwards AFB, and Inyokern). Highs were 5 to 10 degrees above average across much of Central California. Elsewhere, very low daytime humidity persisted over the Sierra Nevada and continued to challenge firefighting efforts to the ongoing wildfires, including the SQF Complex and the Creek Fires. Temperatures gradually lowered on the 6th through the 8th, but daytime highs remained at least several degrees above seasonal values.

A weak low-pressure system brought some increased clouds and cooler, or closer to seasonal average, temperatures on the 9th through the 11th. Dry weather continued, but with higher relative humidity during the nights and mornings as a result of the cooler temperatures.

High pressure rebuilt along the West Coast and allowed daily high temperatures throughout much of Central California to warm back to several degrees above average during the 12th through the 14th, including in the San Joaquin Valley, the West Side Hills, the lower Sierra Nevada foothills, and the Kern County desert. On the 14th, smoke and haze returned to much of the Central Valley, as the wildfires continued to burn in the Sierra Nevada (largely due to the Creek and SQF Complex fires). Daytime highs were even warmer and peaked into the lower to mid-90s at most lower elevation locations by the 15th. Average maximum temperatures are mainly in the lower 80s in these areas during the middle part of October. Otherwise, cool mornings that are considered typical for this time of year continued for the next several days.

Temperatures remained in the upper 80s to lower 90s during the 16th through the 21st. Towards the end of this period, daytime highs gradually lowered. Daily maximum temperatures lowered to the mid-80s at the warmest locations on the 22nd, but were still about five to eight degrees above seasonal averages. Morning lows were also a bit cooler on the 22nd and 23rd. The strong ridge of high pressure along the West Coast finally had begun to weaken.

A further cooling occurred on the 23rd through the 26th. Seasonal averages prevailed on the 23rd and 24th, but on the following couple of days highs fell into the 60s even into the lower elevations, such as the San Joaquin Valley, Sierra Nevada foothills, and the Kern County desert as an upper-level low pressure system moved from the Great Basin to over Northern Arizona. This low produced light showers and sprinkles in the Sierra Nevada and the foothills with precipitation up to a tenth of an inch in the high country near the crest, although a lot of stations reported trace amounts. There was also some drizzle and sprinkles reported in portions of Kern

County, such as the Tehachapi Mountains and towards the Grapevine. Even Bakersfield received a trace of rain during the early morning hours of the 26th. Otherwise, this system brought gusty northeasterly winds and very low humidity over the mountain areas with gusts around 35 to 45 miles per hour during the 25th and 26th. Some gusty north winds also occurred in the Kern County desert and mountain areas on the afternoon and early evening hours of the 25th. Gusts reached mainly around 50 to 60 miles per hour in these areas. Very low humidity and chilly nights prevailed on the 27th and 28th, although daytime temperatures rose back towards seasonal averages on the afternoon of the 28th. Lows bottomed out just below 40 degrees at some locations in the Central Valley on the mornings of the 27th and 28th and near 30 degrees in the Kern County desert.

Relatively warm temperatures and dry weather continued until the end of the month, and daytime highs remained around 3-5 degrees above average. Little or no precipitation occurred in much of the region during this month. October 2020 ended up much warmer than average.

Table 2 – Seasonal Precipitation for ASOS locations (ending on October 31 st)							
Location	Since Jan 1 st (inches)	Departure from Average (inches)	Since Jul 1 st (inches)*	Departure from Average (inches)	Since Oct 1 st (inches)**	Departure from Average (inches)	
Bakersfield	4.61	-0.20	Т	-0.42	Т	-0.30	
Fresno	4.75	-3.91	Т	-0.82	0.00	-0.63	
Hanford	4.31	-3.16	0.00	-0.71	0.00	-0.50	
Madera	3.76	-5.42	Т	-1.17	0.00	-0.88	
Merced	4.58	-5.22	0.00	-1.12	0.00	-0.81	

* Rain Year 2020-2021: July 1st, 2020 thru Jun 30th, 2021, T = trace amount of precipitation

**Water Year 2020-2021: Oct 1st, 2020 thru Sep 30th, 2021

Table 3 – Warmest High Temperatures and Coolest Low Temperatures of the Month for ASOS locations							
Location	High	Date(s)	Low	Date(s)			
Bakersfield	97	1 st	47	27 th			
Fresno	96	1 st & 2 nd	45	28 th & 31 st			
Hanford	96	1 st & 2 nd	38	28 th			
Madera	96	$1^{st} \& 4^{th}$	39	28^{th}			
Merced	98	4 th	39	29 th & 30 th			

Daily Records Set During October 2020

Bakersfield – No daily records set.

Fresno – No daily records set.

Hanford – No daily records set.

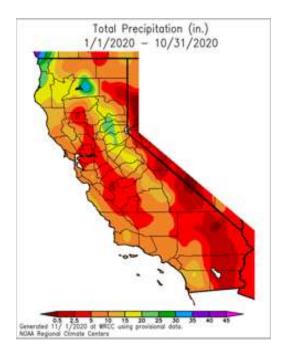
Madera – No daily records set.

Merced – No daily records set.

Fig 1 – Departure from Average Temperature for October 2020



Fig 2 – Percent of Average Precipitation for October 2020



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