OCTOBER 2023 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR

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The month began with unsettled and cooler than normal weather, including rain and snow showers in the Sierra Nevada and foothills. Otherwise, dry and warm conditions prevailed for the first half of the month. Near record heat was reported on the 7th, while some records were reached on the 8th. Gusty winds were reported in the Kern County desert areas on the 10th until the 11th, although were much more widespread during the 11th, including in much of the Central Valley. Record heat occurred in a couple of locations (Hanford and Madera) on the 20th, as highs reached into the lower to mid-90's across much of the Central Valley. Another storm system brought mainly light precipitation to the region on the 22nd into the 23rd, which ushered in a cooler regime with occasional breeziness and increased winds for the remainder of the month. Very low humidity and cold nights prevailed by the end of the month. Overall, precipitation was below average with warmer than average temperatures.

Table 1 – October 2023 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	69.7	+2.0	21st highest	0.30	+0.02	39th highest	
Fresno	69.5	+2.8	10th highest	Т	-0.56	21st lowest	
Hanford	67.6	+3.0	11th highest	Т	-0.46	26th lowest	
Madera	66.6	+1.6	17th highest	0.02	-0.42	24th lowest	
Merced	66.6	+2.3	15th highest	0.16	-0.48	45th highest	

On the 1st, unsettled and cooler than normal weather continued from the last days of the previous month, including rain and snow showers in the Sierra Nevada and foothills. Mainly light amounts were reported for that day, as our region was in a cooler, post-frontal environment that followed the brunt of the system on the previous day.

Drying and a warming trend soon followed as high pressure returned to the West Coast, and temperatures rose to several degrees above average by the 3rd. The warm weather continued for the next several days before a cooldown occurred by the following week. Record heat occurred on the 7th at every San Joaquin Valley ASOS in our forecast area, with the exception of Madera. More record heat occurred on the 8th, although fewer locations reached records than on the 7th. Nevertheless, highs reached just below 100 degrees in the warmest spots of the Central Valley, which was similar to the temperatures recorded on the 7th.

Cooler temperatures began on the 9th, although daytime highs were still well above average. The cooling trend continued until the 11th, and highs remained below average until the 12th. A low pressure system dropped southward from Northern California and brought windy conditions to much of our forecast area during the morning and afternoon of the 11th. Gusts of 35 to 40 mph were reported in much of the Central Valley and around 50 to 65 mph in the Kern County desert and adjacent mountain slopes. A very chilly morning followed the windy day that occurred on the 11th, as lows dipped into the 40's at the coolest valley locations.

Warmer temperatures returned on the 13th through the 15th, although highs were mainly in the 80's in the warmest areas. Overnight lows remained quite cool, though gradually warmed during the period.

A strong ridge of high pressure arrived on the 18th and brought highs into the 90's at the warmest locations in the valley and desert regions. Near record heat occurred on the 19th, while a couple of locations set new record high temperatures on the 20th. Hanford had a high of 96 degrees and broke the old record high of 94 degrees in 1927. Madera recorded 94 degrees on that day, which broke the old record maximum temperature of 90 degrees last set for the date in 2022).

Lower temperatures returned, although highs were seasonably warm on the 21st, as the warmest locations reached into the 80's.

Unlike on the beginning day, dry weather prevailed for the following days until the 21st. However, a low pressure system arrived and brought showers to the region on the following day. Most locations received little precipitation, although a few locations in the Central Valley reported around 0.10 to 0.25 inch of rainfall on the 22nd into the early morning of the 23rd. Little or no snowfall was reported in the higher elevations of the Sierra Nevada. Cooler than normal temperatures prevailed on these days, with highs reaching near 70 degrees in the lower elevations. On the 24th and 25th, drying and warming occurred, and daytime highs reached into the lower 80's at the warmest locations.

Another cooling period began on the 26th and lasted until the 29th. An upper-level trough and cold front brought increased winds, including gusts around 45 to 55 mph in the desert areas and adjacent mountain slopes, as well as considerably cooler high temperatures on the 26th, as highs reached the upper 60's to lower 70's at the warmest locations. Lows dipped into the 30's in parts of the San Joaquin Valley by the morning of the 27th. Similarly chilly nights and mornings continued through the end of the month, although a minor warming trend began on the 30th with daytime high temperatures edging closer to seasonal averages.

Table 2 – Seasonal Precipitation for ASOS Locations (ending on October 31st, 2023)						
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	9.29	+4.54	1.38	+1.05	0.30	+0.02
Fresno	12.77	+4.42	0.19	-0.45	Т	-0.56
Hanford	11.41	+5.25	0.48	-0.04	Т	-0.46
Madera	8.88	+0.83	0.15	-0.33	0.02	-0.42
Merced	14.91	+6.04	0.28	-0.41	0.16	-0.48

T = Trace amount

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Table 3 – Warmest High Temperatures and Coolest Low Temperatures of the Month for ASOS Locations						
Location	High	Date(s)	Low	Date(s)		
Bakersfield	99	7th & 8th	41	30th		
Fresno	98	8th	44	28th, 29th, 30th and 31st		
Hanford	99	8th	35	31st		
Madera	99	8th	34	29th		
Merced	97	7th & 8th	36	27th & 29th		

Daily Records Set During October 2023

Bakersfield -

7th: High temperature of 99 degrees tied the record last set for the date in 1953.

8th: High temperature of 99 degrees broke the old record high maximum temperature of 98 degrees last set for the date in 1953.

Fresno –

7th: High temperature of 97 degrees tied the record last set for the date in 2014. Low temperature of 66 degrees broke the old record high minimum temperature of 65 degrees last set for the date in 2014.

8th: Low temperature of 66 degrees broke the old record high minimum temperature of 65 degrees last set for the date in 2015.

Hanford –

7th: High temperature of 98 degrees tied the record last set for the date in 1930.

8th: High temperature of 99 degrees broke the old record high maximum temperature of 97 degrees last set for the date in 1997.

Madera –

8th: High temperature of 99 degrees broke the old record high maximum temperature of 97 degrees last set for the date in 1953.

Merced –

7th: High of 97 degrees broke the old record high maximum temperature last set for the date in 1996.

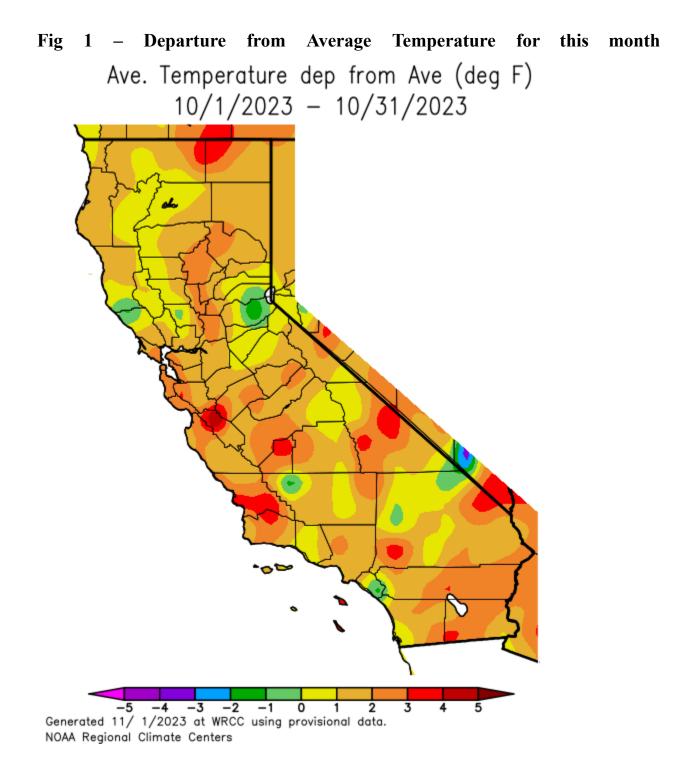


Fig 2 – Percent of Average Precipitation for this month

