JUNE 2023 WEATHER SUMMARY
FOR THE CENTRAL CALIFORNIA INTERIOR

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Mainly seasonably warm weather prevailed for the first couple of days, but a brief warming trend soon followed. Cooler weather with unsettled conditions at times returned during the 5th until the 7th. Thunderstorms were a daily occurrence in at least the mountain areas until the 16th but formed in the desert, valley, and coastal ranges at times as upper-level disturbances affected the region's weather. Cooler than average temperatures prevailed for much of the month, but with some warmer periods at times. Some mountain thunderstorms returned on the 28th, as another low pressure system passed over the Great Basin and areas on the leeward side of the Sierra Nevada. High pressure began to build over the region on the 29th and continued to do so on the 30th, as above average daytime high temperatures occurred. The hottest temperatures of the year so far were reported on the 30th, including the first triple digit readings in much of the San Joaquin Valley.

Table 1 – June 2023 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	74.9	-3.8	24th coolest	0.37	+0.32	9th highest
Fresno	75.1	-2.5	52nd coolest	T	-0.24	54th lowest
Hanford	74.8	-1.2	49th coolest	0.02	-0.05	31st highest
Madera	72.3	-2.7	20th coolest	T	-0.16	49th lowest
Merced	71.8	-2.4	28th coolest	0.00	-0.12	Lowest *

*****Merced received no precipitation in 52 other Junes since records began in 1899.

Table 2 – Number of Days with High Temperatures of 100 Degrees and Above for NWS Hanford, CA ASOS Sites					
Location	**Number of 100 deg days**	**June average**	**Season to date Total Number of 100 deg days (since May 1st)**	**Season to date Average (since May 1st)**	**Total Seasonal Average (May 1 – Oct 31)**
Bakersfield	1	6	2	7	36
Fresno	1	7	1	8	38
Hanford	1	5	1	6	30
Madera	1	5	1	6	28
Merced	1	4	1	5	23

Mainly seasonably warm weather prevailed for the first couple of days, and a warming trend followed on the 3rd and 4th. Daytime highs topped into the upper 90's at the warmest locations in both the San Joaquin Valley and the Mojave Desert in eastern Kern County.

Cooler conditions returned for the 5th until the (7th); however, shower and thunderstorm activity spread into the San Joaquin Valley as a strong upper-level low pressure system approached from the Eastern Pacific Ocean. On the night of the 5th into the morning of the 6th, quite a few locations in the San Joaquin Valley received rainfall. Some of the stronger thunderstorms that developed in the mountains of Kern County on the evening of the 5th also produced large hail, including ping-pong ball sized hail at Stallion Springs near Tehachapi. More precipitation fell over Kern County and southern portions of the San Joaquin Valley on the night of the 6th into the morning of the 7th. As a result, some locations received over half an inch of rain on the 6th until the 7th, such as Bakersfield. In addition, minor street flooding was reported near Arvin and along Highway 99 to the south of Bakersfield due to brief heavy rainfall. Much cooler than average temperatures prevailed on the 7th in most of the area due to the increased cloud cover and recent rainfall. Otherwise, afternoon and evening thunderstorms developed each day since the 1st in the Sierra Nevada, mainly in the higher elevations.

The upper-level low pressure system finally moved east of our forecast area by the night of the 7th. However, thunderstorms remained over the Sierra Nevada on the 8th and 9th. Storm coverage increased once again on the 10th until the 14th (?) as upper-level impulses, including a low pressure system that brought cooling during the 10th until the 12th, passed over our region. High temperatures remained cooler than average to seasonably warm until the 14th. A warming trend soon followed, but mountain thunderstorms remained each afternoon and evening until the 16th.

Drier air arrived on the 17th, though high temperatures rose to several degrees above average. Afterward, another cooling trend arrived, with seasonal temperatures on the 18th and below normal temperatures on following days. On the night of the 18th, winds picked up across the region, though the strongest gusts were reported in the Kern County mountains and desert with gusts mainly around 45 to 55 mph. However, there were some isolated stronger gusts to 70 mph in the more prone areas, or along the Mojave Desert slopes. Temperatures remained cooler than average for the 19th and 20th. Bakersfield recorded its coolest high temperature of 79 degrees on the 20th.

Little change in temperatures occurred on the 21st, as temperatures remained several degrees below average. Another dry low pressure system arrived on the 22nd. This system brought some breezy conditions in some locales and allowed temperatures to slightly lower that day. Temperatures remained well below average until the 27th before a sharp warming trend began. Highs reached slightly above average on the 29th, then well above average for the 30th. Many locations observed the first triple digit day for the season by the 30th (except Bakersfield already had recorded a high above 100 degrees earlier this calendar year, which was 102 degrees back on May 14th).

For this month, mainly cooler than average temperatures prevailed (Fig 1). Precipitation was generally near to below average, except for an area of well above average precipitation, including over much of Kern County and just to the north, as well as portions of the Sierra Nevada from Yosemite to Fresno County (Fig 2).

Table 2 – Seasonal Precipitation for ASOS locations (ending on June 30th *)						
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	7.91	+3.49	10.26	+3.90	10.26	+3.95
Fresno	12.56	+4.87	17.92	+6.93	17.81	+6.90
Hanford	10.92	+5.29	14.61	+6.48	14.57	+6.50
Madera	8.73	+1.16	12.16	+1.37	11.62	+0.87
Merced	14.63	+6.45	21.04	+9.24	20.84	+9.09

*Note: Rain Year 2022-2023 runs from July 1, 2022 until June 30, 2023.

Rain Year 2022-2023 (July 1 – June 30) statistics:

Bakersfield: 7th highest rain year on record
Fresno: 9th highest rain year on record
Hanford: 6th highest rain year on record
Madera: 26th highest rain year on record
Merced: 5th highest rain year on record

Table 3 – Warmest High Temperatures and Coolest Low Temperatures of the Month for ASOS locations				
Location	**High**	**Date(s)**	**Low**	**Date(s)**
Bakersfield	104	30th	53	20th
Fresno	104	30th	55	20th
Hanford	104	30th	53	2nd
Madera	103	30th	46	20th
Merced	102	30th	50	21st

Daily Records Set During June 2023

Bakersfield – 20th: High temperature record set at 79 degrees which broke the old record low maximum temperature of 82 degrees set in 1944.

Fresno – No daily records reached.

Hanford – No daily records reached.

Madera – No daily records reached.

Merced – No daily records reached.

Fig 1 – Departure from Average Temperature for June 2023

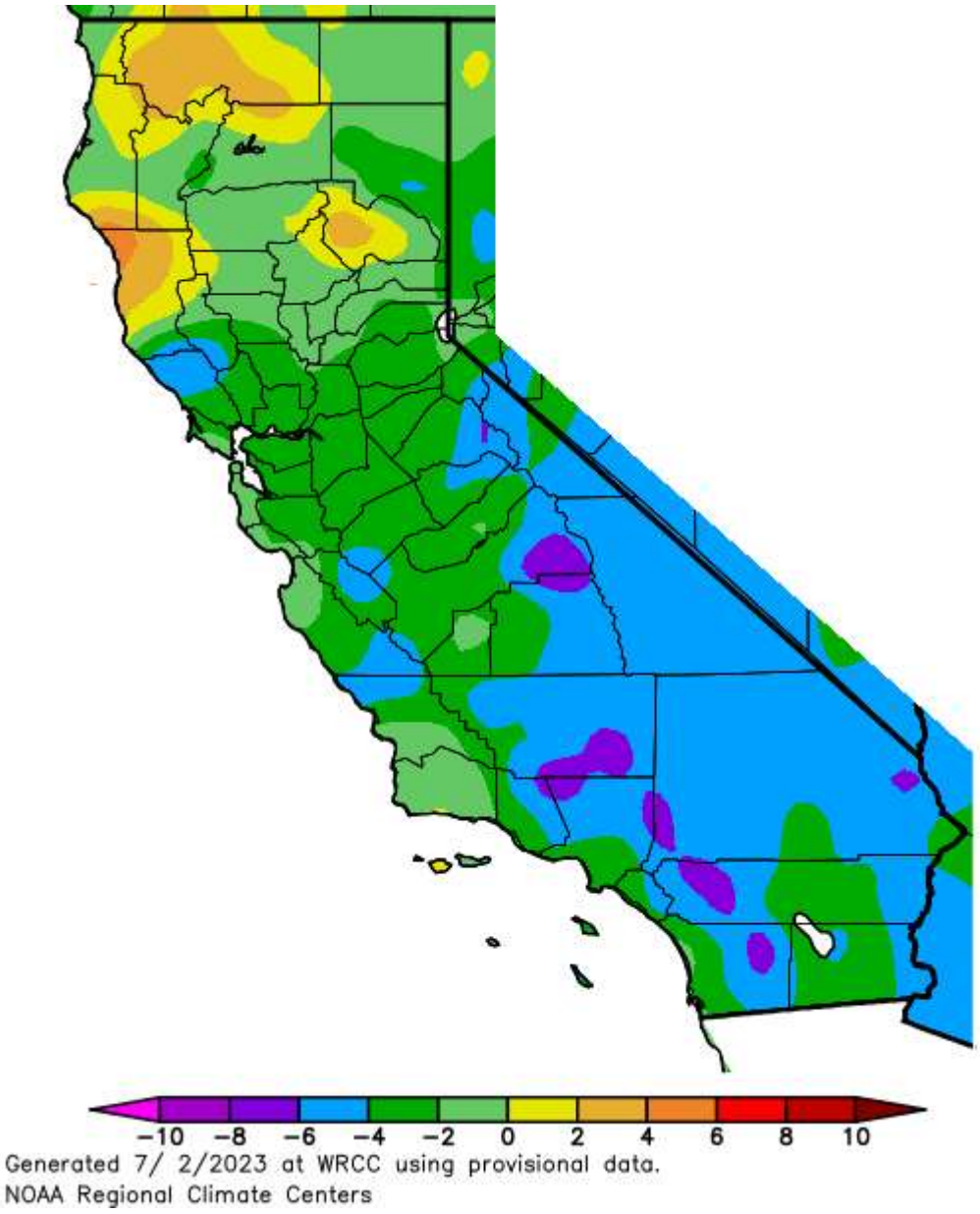

Fig 2 – Percent of Average Precipitation for June 2023