

MAY 2022 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR

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May 2022 was overall near to warmer than average with below average precipitation, though with quite a few windy periods and fluctuating temperatures. Considerably warmer than average temperatures were reported on the 5th and 6th, with daytime highs that peaked into the 90's at the warmest locations. There was a brief period of rain with higher elevation snow on the 7th until the 10th with cooler than normal temperatures and increased winds. During this period, strong winds occurred at times, or with each passage of upper-level disturbances that rotated around an upper-level low pressure system over Northern California. Afterward, much warmer temperatures returned, with highs mainly in the 90's at the hottest spots. By the 25th, further warming brought widespread triple digit heat that occurred in the San Joaquin Valley for the first time this year; Fresno and Madera reported record high maximum temperatures. The month ended a bit cooler with below average temperatures on the 27th-30th and near average temperatures for the 31st.

**Table 1 – May 2022 Summary Statistics–
NWS Hanford, CA ASOS Sites**

Location	Monthly Average Temp (deg F)	Departure from Average (deg F)	Temperature Rank	Total Monthly Precipit ation (inches)	Departure from Normal (inches)	Precipitation Rank *
Bakersfield	71.4	+0.3	41 st warmest	0.00	-0.25	Lowest
Fresno	71.5	+1.3	20 th warmest	0.00	-0.42	Lowest
Hanford	69.6	+0.4	39 th warmest	0.00	-0.35	Lowest
Madera	67.8	-0.3	40 th warmest	0.00	-0.47	Lowest
Merced	68.7	+1.3	26 th warmest	0.00	-0.55	Lowest

* Note: Zero precipitation for the month of May is not uncommon for these locations.

Number of Days with Maximum Temperature of 100 Degrees or Above for May 2022

Bakersfield – This May's total: 2 (average 1); total so far this year: 2 (average 1)

Fresno – This May's total: 2 (average 1); total so far this year: 2 (average 1)

Hanford – This May's total: 2 (average 1); total so far this year: 2 (average 1)

Madera – This May's total: 1 (average 1); total so far this year: 1 (average 1)

Merced – This May's total: 1 (average 1); total so far this year: 1 (average 1)

Seasonal temperatures prevailed for the first three days of the month, and a warming trend occurred on the 4th and 5th. Temperatures rose to around ten to twelve degrees above average during this warming trend. Breezy to gusty winds also developed during the afternoons and evenings in eastern Kern County along the Mojave Desert slopes, with gusts around 45 to 55 mph at times, including on the 1st through the 3rd and again on the 5th through the 7th. Gusts of this strength are typical in this area during May. Temperatures began to lower on the 6th, though were still several degrees above average. Further cooling occurred on the 7th prior to the arrival of a low pressure system.

Much cooler than average temperatures prevailed from the 8th until the 11th due to a series of impulses associated with a trough of low pressure that set up and remained over Northern California and brought light precipitation, mainly in the form of snow, to the Sierra Nevada high country. Gusty winds spread from the Mojave Desert Slopes to the southern Sierra Nevada and Tehachapi Mountains by the morning of the 8th. Even stronger winds developed during the early morning until the evening of the 8th along the desert slopes, as gusts reached around 65 mph with some isolated stronger gusts. Another round of winds occurred on the evening of the 9th until the 11th with gusts around 45 to 50 mph in quite a few location in eastern Kern County, including along the Mojave Desert Slopes. Highs during the 8th through the 11th were much cooler than average, or in the upper 60's to lower 70's at most San Joaquin Valley locations, and lows reached into the upper 30's to mid-40's in these areas, which is around 10 to 15 degrees below seasonal averages. Westerly winds were consistently around 15 to 20 mph with gusts around 25 to 30 mph in much of the San Joaquin Valley during this period. During this cooler period, showers developed along the Sierra Nevada crest at times, though were mainly light.

On the 12th and 13th, a warming trend occurred, though daytime highs were within a few degrees of seasonal averages. However, on the 14th and 15th, temperatures returned to above average, with highs reaching into the lower to mid-90's at the warmest locations, including in both the San Joaquin Valley and Kern County desert.

Another upper-level disturbance brought a brief cool down on the 16th and 17th, though highs remained at least a few degrees above average. The next warmup occurred on the 18th and 19th, and temperatures once again peaked well into the 90's at the warmest spots.

An upper-level low pressure system passed over Northern California and the Pacific Northwest on the night of the 19th into the 20th and brought increased winds and cooler temperatures. Daytime highs peaked just below average on the 20th; winds continued in the typical prone areas

in the Kern County mountain and desert areas, as well as the west side of the San Joaquin Valley and West Side Hills until the morning of the 20th. Gusts peaked at 45 mph to just over 60 mph at many Kern County mountain and desert locations on the 20th (except for stronger gusts at a few locations), and gusts of 35 mph to near 50 mph were reported in the West Side Hills and the western San Joaquin Valley, including a 49 mph gust at Lemoore NAS.

By the 21st, a warming trend commenced with highs steadily climbing each day until the 25th. Highs on the 22nd were slightly above average; however, temperatures warmed by a few degrees each day until the 25th, or when the first triple digit high temperatures were observed in the San Joaquin Valley. Highs on the 25th peaked at around 15 degrees above seasonal values and did set some record highs. Though temperatures began to lower on the 26th, triple digit highs persisted at Bakersfield, Fresno, and Hanford on the 26th, as the high temperature peaked at 100 degrees at each of these locations.

High temperatures lowered back to the lower to mid-80's on the 27th through the 30th throughout the San Joaquin Valley thanks to a persistent upper-level trough of low pressure. Elsewhere, temperatures lowered to near average or several degrees below. With this cooler pattern, winds became a daily occurrence throughout the forecast area, with the strongest gusts reported in eastern Kern County. Gusts over 40 mph were reported in the West Side Hills on the evening of the 26th into the morning of the 27th, these winds were associated with the cooler airmass that pushed into this area and the San Joaquin Valley. Gusts of 45 to 55 mph were reported in quite a few locations along the Mojave Desert slopes and into the desert floor in eastern Kern County beginning on the evening of the 27th, which prompted the issuance of a Wind Advisory. Isolated stronger gusts over 60 mph occurred in this area each night, including a gust of 73 mph reported in Mojave at around 2:00 AM on the 30th. Afterward, the winds decreased as high pressure began to move into the region, and the last day of the month began a warming trend with seasonal temperatures, including highs in the upper 80's at the warmest locations.

Table 2 – Seasonal Precipitation for ASOS locations (ending on May 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	1.85	-2.52	5.40	-0.91	5.40	-0.86
Fresno	1.08	-6.37	6.29	-4.46	6.29	-4.38
Hanford	1.74	-3.82	6.34	-1.72	6.34	-1.66
Madera	Missing	Missing	Missing	Missing	Missing	Missing
Merced	1.65	-6.41	7.44	-4.24	7.44	-4.19

Table 3 – Warmest High Temperatures and Coolest Low Temperatures of the Month for ASOS locations				
Location	High	Date(s)	Low	Date(s)
Bakersfield	102	25 th	43	9 th
Fresno	103	25 th	45	11 th
Hanford	102	25 th	43	11 th
Madera	101	25 th	37	10 th
Merced	103	25 th	40	10 th & 11 th

Daily Records Set During May 2022

Bakersfield – No daily records reached.

Fresno – 25th: Record high maximum temperature of 103 degrees set, which broke the old record high of 102 degrees last set for the date in 1890. Record high minimum temperature of 68 degrees tied, which also occurred on the date in 1890.

Hanford – No daily records reached.

Madera –

10th: Record low minimum temperature of 37 degrees set, which broke the record low temperature of 40 degrees set on the date in 2003.

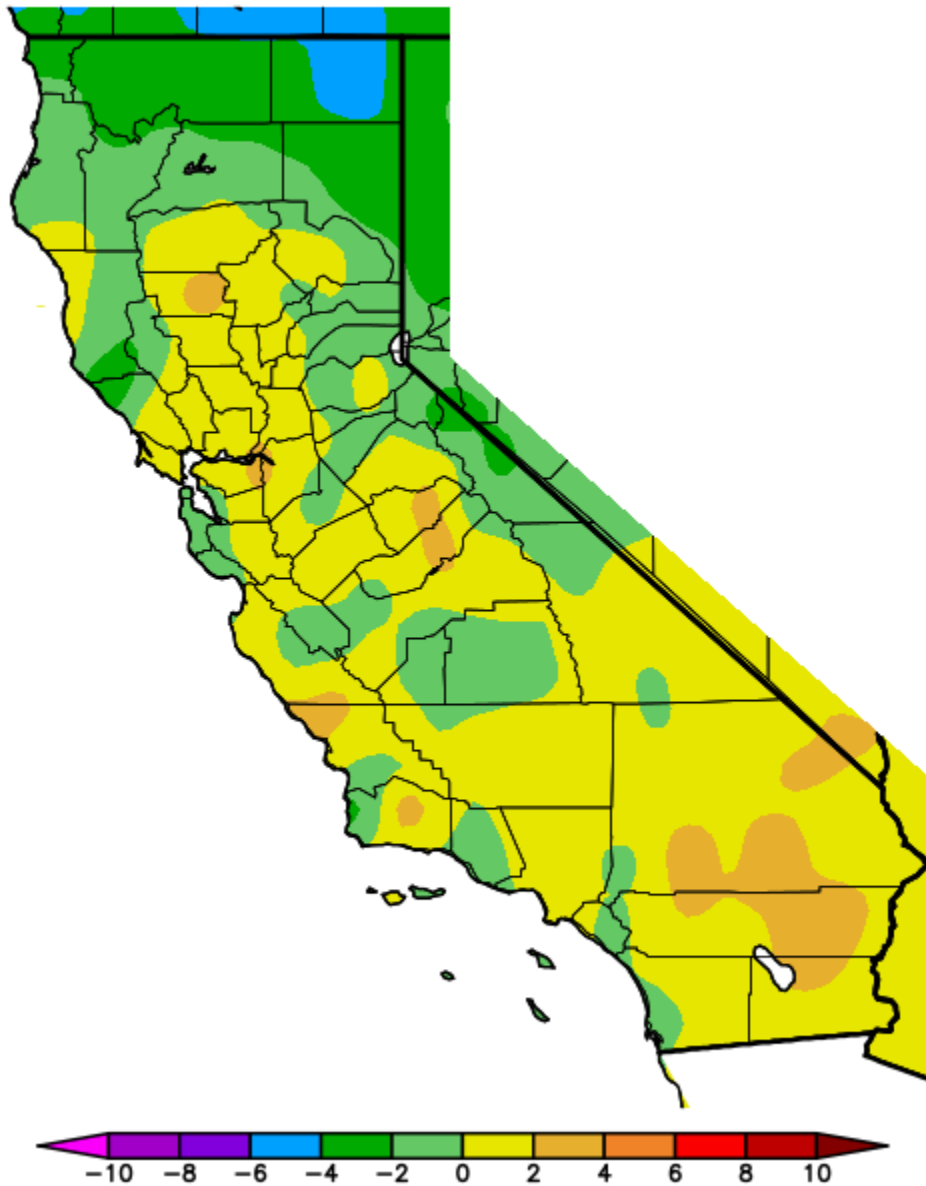
11th: Record low minimum temperature of 39 degrees tied, which last occurred on the date in 2010.

25th: Record high temperature of 101 degrees tied, which was last set for the date in 1982.

Merced – No daily records reached.

Fig 1 – Departure from Average Temperature for May 2022

Ave. Temperature dep from Ave (deg F)
5/1/2022 – 5/31/2022



Generated 6/ 1/2022 at WRCC using provisional data.
NOAA Regional Climate Centers

Fig 2 – Percent of Average Precipitation for May 2022

