JUNE 2022 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR

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The month was warmer than average (see also Table 1 below) with an above average number of days with highs in the triple digits. There were at 10-12 days with highs of 100 degrees or warmer this month, or roughly twice the average, at the ASOS sites listed below and on the following page. A much cooler than normal period was observed during the middle of the month and began on the 17th and lasted into the Juneteenth holiday weekend. There were some periods of gusty winds towards the Mojave Desert Slopes and into the nearby mountains in Kern County during the middle of the month; gusts reached around 60 to 70 mph in a few locations at times. Hot temperatures soon returned, although the 22nd was an active weather day, as strong thunderstorms produced frequent lightning and gusty winds along with some isolated storms that dumped brief heavy rainfall across Central California, including the San Joaquin Valley, the Sierra Nevada, Kern County mountains, and into the Mojave Desert. The hottest time of the month was mainly from the 25th until the 27th, and high temperatures reached 105 degrees or hotter in the San Joaquin Valley and Kern County desert. The month generally ended quiet, but still a bit warmer than average.

Table 1 – June 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	81.3	+2.6	17 th highest	0.01	-0.04	34 th highest		
Fresno	81.3	+3.7	6 th highest	Trace	-0.24	54 th lowest		
Hanford	78.5	+2.5	14 th highest	Trace	-0.07	38 th highest		
Madera *	77.1	+2.1	15 th highest	0.11	-0.05	22 nd highest		
Merced	77.9	+3.7	8 th highest	0.00	-0.12	Tied for lowest		

^{*}Madera is missing temperatures on June 6-8.

^{**}No measureable precipitation is common during June at these locations.

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

Bakersfield – This June's total: 11 (average 6); total so far this year: 13 (average 7)
Fresno – This June's total: 11 (average 7); total so far this year: 13 (average 8)
Hanford – This June's total: 12 (average 5); total so far this year: 14 (average 6)
Madera – This June's total: 10 (average 5); total so far this year: 11 (average 6)
Merced – This June's total: 11 (average 4); total so far this year: 12 (average 5)

The month began with warmer than average temperatures, though not unusually hot. The windy pattern that was observed in May resumed on the 3rd and continued until the morning of the 6th. Gusts of 50 to 60 mph, except for isolated gusts around 70 mph, were reported at times in the eastern Kern County mountain and desert areas. In addition, gusts of 30 to 35 mph occurred along the west side of the Central Valley and into the West Side Hills.

A warming trend began on the 7th and continued for several days, though winds became generally light. Widespread triple digit heat returned on the 10th in the San Joaquin Valley and continued through the 11th, as highs reached around 100 to 105 degrees. Highs in the Kern County desert reached near 110 degrees at the hottest locations, mainly in the Indian Wells Valley. These temperatures prompted the issuance of Heat Advisories and Warnings, and overnight lows were also rather warm, as lows were as warm as the mid to upper 70's. By the 12th, cooler air returned to the region and brought another round of increased winds at times until the early morning hours of the 14th. Gusts of 60 to 70 mph were observed along the Mojave Desert Slopes and prompted a High Wind Warning for this area on the 13th into the early morning of the 14th.

A warming trend occurred on the 14th and 15th, and above average temperatures once again returned. However, temperatures generally remained just below the century mark at most of the warmest locations. Over the next couple of days, temperatures lowered and cooled to well below average by the 17th due to a cold front and strong upper-level low that passed over Northern California. Daytime highs failed to reach above the 70's at the warmest San Joaquin Valley locations and set record low maximum temperatures for at least a couple of locations.

On the 18th and 19th below average temperatures continued with gusty winds at times in the typical prone areas. Gusts were mainly 45 to 50 mph along the Kern County desert slopes. By the 20th, highs in the warmest spots reached into the lower 90s, which was near seasonal averages. A warming trend continued for the next couple of days, although a significant weather change arrived by the morning of the 22nd due to a low pressure system that set up off the coast and brought some monsoonal moisture into our region.

Showers and thunderstorms began early on the morning of the 22nd across much of Central California, including the Kern County desert, Tehachapi Mountains, southern Sierra Nevada and foothills, and the San Joaquin Valley. Gusty winds, dangerous cloud to ground lightning, brief heavy rain, and small hail occurred with the strongest thunderstorms. Precipitation amounts were as much as 0.30 to 0.60 inch in some locales, including at Edwards Air Force Base and Frazier Park. The winds knocked down power lines, trees and branches in quite a few areas throughout the San Joaquin Valley (including in Fresno); most of the activity in this area occurred during the morning hours. In addition, lightning sparked some wildfires in the mountains and foothills, including a large one in Kern County along the Grapevine. Shower and thunderstorm activity redeveloped in the West Side Hills and over the Sierra Nevada and foothills during the afternoon and evening of the 22nd. Despite the active weather in the morning, triple digit heat occurred in the San Joaquin Valley on the afternoon of the 22nd. Afterward, there were some isolated storms that also developed during the late night of the 22nd into the morning hours of the 23rd in the west side of the San Joaquin Valley along Interstate 5 near the Fresno and Merced County line, or towards Dos Palos. A couple of storms in this vicinity generated wind gusts from 50 mph to over 60 mph on the evening of the 22nd. Otherwise, afternoon and early evening showers and thunderstorms were mainly confined to the mountain areas on the 23rd through the 25th, along with triple digit heat in the San Joaquin Valley.

From the 26th until the end of the month, warmer than average temperatures prevailed as high pressure remained in control over Central and Southern California. Triple digits prevailed in the San Joaquin Valley, except some locations lowered into the mid to upper-90's on the 30th, including Fresno and locations to the north (such as Madera and Merced). In addition, the warmest days of the year so far occurred in the San Joaquin Valley, with highs of 103 to 107 degrees at the ASOS sites during the 24th through the 27th.

Overall, near to above average temperatures (Fig 1) with below average precipitation (Fig 2) occurred throughout most of the region during June 2022, except for above average precipitation in the mountain and desert areas of Kern County, the West Side Hills in Fresno and Merced Counties, as well as the southern Sierra Nevada in both Kern and Tulare Counties. The rain year that began on July 1, 2021 ended much below average at most locations (Table 2).

Table 2 – Seasonal Precipitation for ASOS locations (ending on June 30th *)

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 Normal (inches)
Bakersfield	1.86	-2.56	5.41	-0.95	5.41	-0.90
Fresno	1.08	-6.61	6.29	-4.70	6.29	-4.62
Hanford	1.74	-3.89	6.34	-1.79	6.34	-1.73
Madera **	Missing	Missing	Missing	Missing	Missing	Missing
Merced	1.65	-6.53	7.44	-4.36	7.44	4.31

^{*}Note: Rain year 2021-2022 runs from July 1, 2021 to June 30, 2022.

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

Location	High	Date(s)	Low	Date(s)
Bakersfield	105	25 th , 26 th & 27 th	53	18 th
Fresno	107	25 th , 26 th & 27 th	55	18 th
Hanford	106	26 th & 27 th	51	14 th
Madera	106	26 th & 27 th	48	19 th
Merced	106	24 th	51	18 th

Daily Records Set During June 2022

Bakersfield -

17th: Record low maximum temperature of 73 degrees set, which broke the old record of 77 degrees set for the date in 2005.

22nd: Record high daily precipitation of 0.01 inch set; which broke the old record of trace set for the date in 1949.

^{**} Madera missing precipitation during December 2021 & March 2022.

Fresno -

11th: Record high minimum temperature of 75 degrees set, which tied the record last set for the date in 2019.

Hanford -

No daily records broken or tied.

Madera -

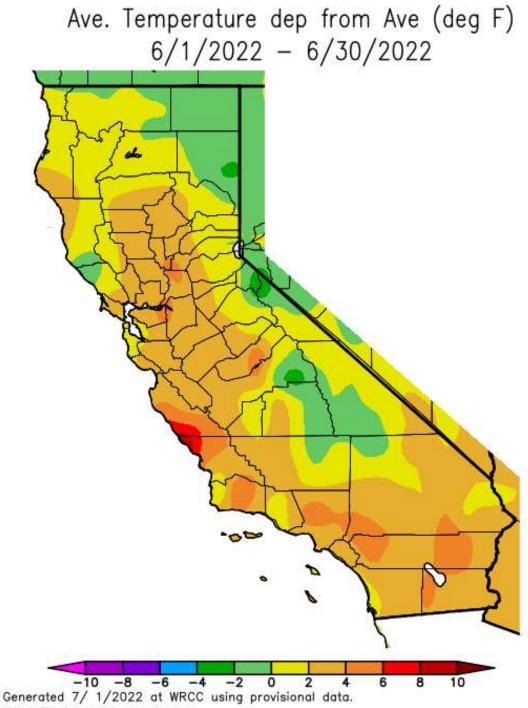
19th: Record low minimum temperature of 48 degrees tied, which last occurred on the date in 1929.

22nd: Record high daily precipitation of 0.11 inch set; no precipitation was previously recorded on this date in prior years since records began in 1928.

Merced -

23rd: Record high minimum temperature of 72 degrees set, which broke the old record of 71 degrees last set for the date in 2017.

Fig 1 – Departure from Average Temperature for June 2022



NOAA Regional Climate Centers

Fig 2 – Percent of Average Precipitation for June 2022

