

## AUGUST 2022 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR

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August 2022 began with an active weather pattern, including on the 1<sup>st</sup> and the 3<sup>rd</sup>-5<sup>th</sup>. Thunderstorms with heavy rain occurred in the mountain areas during this period. There were showers at times in many San Joaquin Valley locations, and some locations reported over 0.30 inch in the San Joaquin Valley on the 5<sup>th</sup>, mainly during the morning hours. Triple digit heat was persistent for much of the month, including on the 1<sup>st</sup> through the 4<sup>th</sup> and from the 12<sup>th</sup> onward. Another round of showers and thunderstorms returned towards the middle of the month, or the 17<sup>th</sup>, including sprinkles and light showers into the Central Valley. Otherwise, mainly hot temperatures persisted while dry conditions resumed afterward. This month ended up much warmer than average, with some locations reaching their hottest August on record (such as Fresno and Hanford). Precipitation was above average, though mainly because average precipitation is at or near zero at most locations outside of the mountains and desert portion of eastern Kern County.

Table 1 – August 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	87.4	+4.0	4 <sup>th</sup> highest	T	0.00	21 <sup>st</sup> highest
Fresno	86.7	+4.5	<b>Highest</b>	0.05	+0.05	9 <sup>th</sup> highest
Hanford	84.5	+4.6	<b>Highest</b>	0.02	+0.02	9 <sup>th</sup> highest
Madera	82.0	+3.0	4 <sup>th</sup> highest	T	0.00	17 <sup>th</sup> highest
Merced	81.5	+3.6	2 <sup>nd</sup> highest	0.00	0.00	<b>Lowest *</b>

\*Zero precipitation is common during August at this location (occurred in 80 other Augusts since records began in 1899).

### Number of Days with High Temperatures of At Least 100 Degrees Fahrenheit:

Bakersfield: 20 in August; 55 for year so far, or May-August (August average: 11; May-August average: 31).

Fresno: 22 in August; 57 for year so far, or May-August (August average: 12; May-August average: 34).

Hanford: 23 in August; 60 for year so far, or May-August (August average: 9; May-August average: 26).

Madera: 17 in August; 48 for year so far, or May-August (August average: 8; May-August average: 25).

Merced: 15 in August; 40 for year so far, or May-August (August average: 7; May-August average: 21).

August 2022 began with the active weather pattern that continued from the previous month, including on the 1<sup>st</sup> and the 3<sup>rd</sup>-5<sup>th</sup>. Fresno finally broke a three-week long streak (or July 11<sup>th</sup>-31<sup>st</sup>) of triple digit highs on the 1<sup>st</sup>, as the maximum temperature reached 98 degrees while cloud cover persisted for much of the day there. Other locations in the Central Valley still reached 100 degrees until the 4<sup>th</sup>, such as Bakersfield (with 25 consecutive days since July 11<sup>th</sup>) and Hanford (26 consecutive days since July 10<sup>th</sup>). Numerous mountain showers and scattered thunderstorms prevailed from Kern County to Yosemite National Park. In addition, some Mojave Desert locations in Kern County received over 0.10 inch of rain.

The 2<sup>nd</sup> was not as active, but isolated thunderstorms developed mainly in the higher elevations of the Sierra Nevada, as a drier southwest flow prevailed. Afterward, southerly flow brought abundant moisture to produce numerous showers and scattered thunderstorms. Thunderstorms with heavy rain occurred in the mountain areas during at times during the next few days, including into the Tehachapi Mountains, Frazier Park, and much of the Sierra Nevada. Around one to two inches of rain fell between by the 4<sup>th</sup> in some isolated locations in these areas. In addition, some locations in the Kern County desert received a few hundredths up to a tenth of an inch of rain, including on the 3<sup>rd</sup>-4<sup>th</sup>. A large number of Flash Flood Warnings were issued on the 4<sup>th</sup> due to heavy rain falling in the mountains and the threat of flooding and debris flows at and near recent burn areas.

On the 5<sup>th</sup>, record high rainfall was reported on the 5<sup>th</sup> at Hanford (0.02 inch, which hadn't occurred on this date since records began in 1898), and Madera tied a record high amount of a trace (that last occurred on the date in 1955). However, some nearby locations reported around 0.20 to 0.35 inch in the San Joaquin Valley (such as portions of Fresno, but not the ASOS which only reported 0.05 inch, as well as nearby areas) on the morning of the 5<sup>th</sup>. The Central Valley remained quite humid after the showers dissipated, and dewpoint temperatures topped 70 degrees for much of the day. Many of the warmest locations failed to reach the lower to mid-90s due to persistent cloud cover and a very moist airmass in place, except for the lower elevation areas in Kern County that did not receive rainfall or nearly the amount of cloud cover. Otherwise, generally seasonably warm temperatures prevailed outside of areas that received rainfall and

persistent cloud cover during the first five days of the month, except for widespread highs near or above 105 degrees in the San Joaquin Valley on the 4<sup>th</sup>.

On the 6<sup>th</sup> through the next several days, there was a break from the active wet pattern as southwest flow aloft returned to the region. Temperatures warmed back to near seasonal averages or remained slightly below; this trend continued until the 11<sup>th</sup> before a noticeable warmup occurred.

Widespread triple digit heat returned to the forecast area on the 12<sup>th</sup> and continued for the next several days. Shower and thunderstorm activity returned to the Sierra Nevada within the next few days.

On the 17<sup>th</sup>, more widespread showers and thunderstorms occurred, as more significant monsoonal moisture returned to the region by the morning. Many San Joaquin Valley locations reported at least sprinkles on this day. Any measurable precipitation amounts were generally spotty, though relatively light and were not as persistent as what occurred on the morning of the 5<sup>th</sup>. However, any increased cloud cover that moved into our area, including in the Central Valley, was gone by the afternoon, and triple digit heat persisted at most lower elevation locations.

On the 18<sup>th</sup> through at least the 27<sup>th</sup>, temperatures remained well above average with occasional isolated afternoon and evening thunderstorms over the Sierra Nevada and into the Kern County desert. Some record highs were reached on the 20<sup>th</sup> and 21<sup>st</sup>, as temperatures climbed above 105 degrees. Triple digit heat was prevalent in the valley and desert areas during this period.

On the 28<sup>th</sup>, there was a brief break from triple digits, at least in the San Joaquin Valley. However, temperatures remained in the upper 90's in many Central Valley locations; this is slightly above average, though generally considered seasonably warm for this time of year. For the remainder of the month, a warming trend returned, along with widespread triple digit heat. Overall, the month was much warmer than average (Fig 1), as there was a prolonged period of triple digit heat starting on the 12<sup>th</sup> and lasted for almost the entire remaining portion of the month. Precipitation ended up well above average in quite a few locations, as monsoonal moisture brought episodes of shower and thunderstorm activity towards the beginning and middle parts of the month (Fig 2).

<b>Table 2 – Seasonal Precipitation for ASOS locations (ending on August 31<sup>st</sup>)</b>						
<b>Location</b>	<b>Since Jan 1<sup>st</sup> (inches)</b>	<b>Departure From Average (inches)</b>	<b>Since Jul 1<sup>st</sup> (inches)</b>	<b>Departure From Average (inches)</b>	<b>Since Oct 1<sup>st</sup> (inches)</b>	<b>Departure From Normal (inches)</b>
Bakersfield	1.86	-2.56	T	0.00	5.41	-0.90
Fresno	1.13	-6.09	0.05	+0.02	6.34	-4.60
Hanford	1.76	-3.89	0.02	0.00	6.36	-1.73
Madera (*)	Missing	Missing	T	-0.01	Missing	Missing
Merced	1.65	-6.53	0.00	0.00	7.44	-4.31

\*Missing precipitation at Madera during December 2021 and March 2022.

<b>Table 3 – Warmest High Temperatures and Coolest Low Temperatures of the Month for ASOS locations</b>				
<b>Location</b>	<b>High</b>	<b>Date(s)</b>	<b>Low</b>	<b>Date(s)</b>
Bakersfield	108	20 <sup>th</sup>	68	15 <sup>th</sup>
Fresno	107	4 <sup>th</sup> , 16 <sup>th</sup> , 19 <sup>th</sup> & 20 <sup>th</sup>	67	10 <sup>th</sup> & 13 <sup>th</sup>
Hanford	108	17 <sup>th</sup> & 20 <sup>th</sup>	60	13 <sup>th</sup> & 14 <sup>th</sup>
Madera	107	16 <sup>th</sup>	56	13 <sup>th</sup>
Merced	106	20 <sup>th</sup>	58	13 <sup>th</sup>

## **Daily Records Set During August 2022**

### **Bakersfield –**

21<sup>st</sup>: Record high minimum temperature of 79 degrees set, which broke the old record of 78 degrees last set for the date in 1909.

**Fresno** – No daily records reached.

**Hanford –**

5<sup>th</sup>: Record high daily precipitation of 0.02 inch set for the date. Previously, no precipitation has been reported on this date, since records began in 1899.

20<sup>th</sup>: Record high maximum temperature of 108 degrees set, which broke the old record of 107 degrees last set for the date in 1950.

**Madera –**

1<sup>st</sup>: A trace of precipitation was reported, which sets a record high daily precipitation for this date. Previously, no precipitation was reported on this date, since records began in 1928.

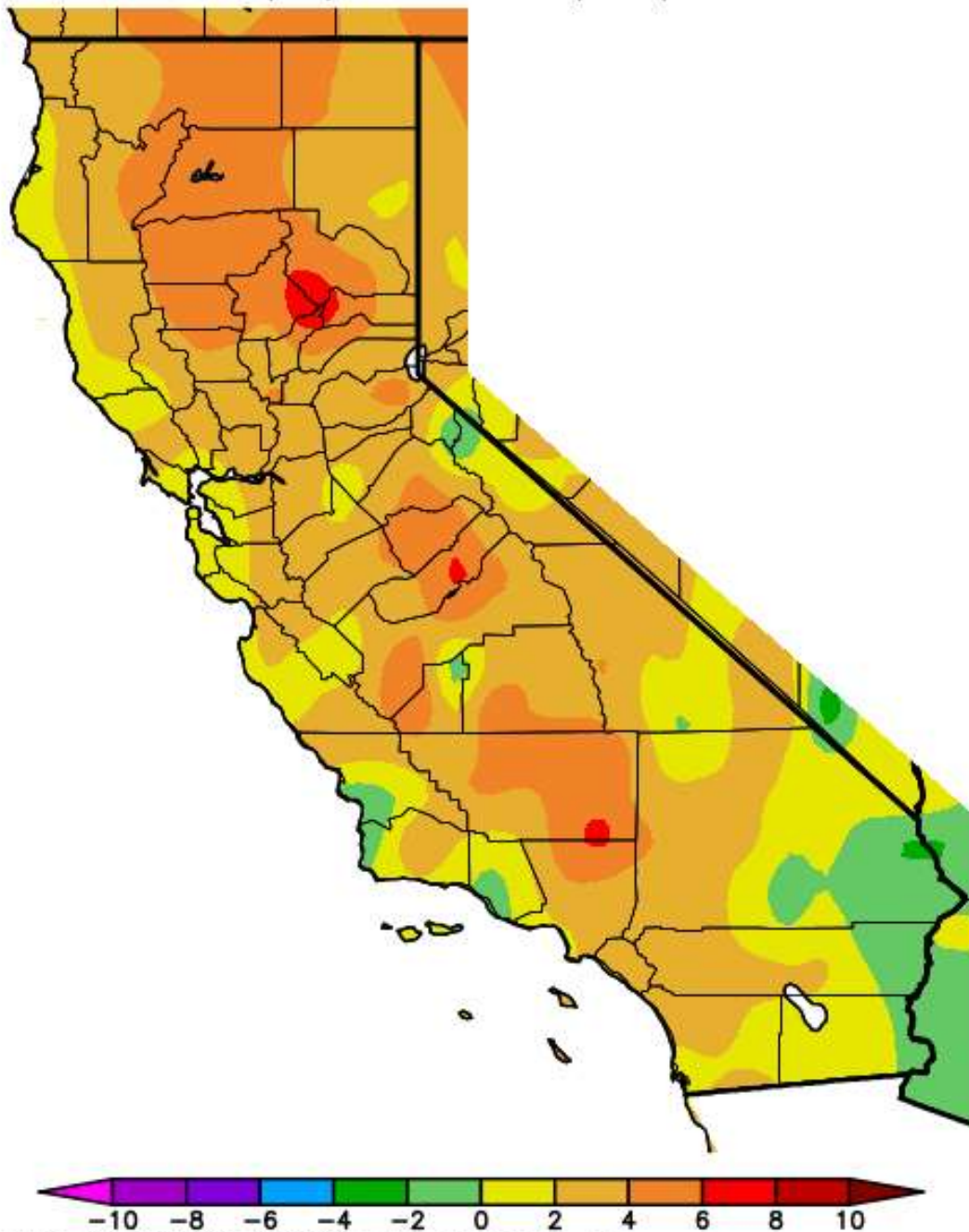
5<sup>th</sup>: A trace of precipitation was reported; this tied the record high daily precipitation which was last set for the date in 1955.

**Merced –**

20<sup>th</sup>: Record high maximum temperature of 106 degrees tied, which last occurred on the date in 1960.

**Fig 1 – Departure from Average Temperature for August 2022**

Ave. Temperature dep from Ave (deg F)  
8/1/2022 – 8/31/2022



Generated 9/ 1/2022 at WRCC using provisional data.  
NOAA Regional Climate Centers

**Fig 2 – Percent of Average Precipitation for August 2022**

