MAY 2017 WEATHER SUMMARY
FOR THE CENTRAL CALIFORNIA INTERIOR

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At least well above average temperatures dominated for the first four days of the month due to a strong ridge of high pressure. The warmest days occurred on the 3rd-4th, as temperatures rose into the triple digits in the warmest locations of the San Joaquin Valley. A record high temperature was reached on the 4th in Bakersfield when the high reached 104 degrees (broke the old record of 101 degrees which was last reached for the date in 2004). Mild, but warm, overnight lows also prevailed in quite a few San Joaquin Valley locations when the lows only reached into the 60s to around 70 during the 3rd-4th. Some record high minimum temperatures were reached during the mornings on both of these days.

On the 5th, temperatures began to cool, as a cold front approached central California. Temperatures dropped noticeably, but remained warmer than average during the daytime hours. By the evening hours, gusty winds developed in much of the San Joaquin Valley. Quite a few locations reported gusts around 35 to 40 mph that evening, including in the San Joaquin Valley. The desert and mountain regions of Kern County reported gusts around 50 mph in the windiest locations by the late evening on the 5th and into early morning hours of the 6th, although winds briefly resurged during the afternoon of the 6th.

Temperatures were much cooler than average on the 6th and into the 7th as a cold upper-level low tracked southward just off the coast of California. Showers fell over much of the area on the night of the 5th and early morning hours of the 6th. Skies cleared by the afternoon while the atmosphere remained cold and unstable, so isolated thunderstorms developed over the mountain areas in Kern and Tulare Counties. One thunderstorm moved from the northeast into Bakersfield; some residents reported thunder and brief heavy rain as the storm moved over sections of the city. Bakersfield Meadows Field reported a trace of rainfall with this particular storm cell, as the storm moved mainly to the south of this location.

By the 8th, the upper-level low moved south towards Baja California; however, a few showers continued in the morning hours in the southern Sierra Nevada. Otherwise, high pressure returned to the area for the next three days, while near to above average temperatures prevailed.

On the 12th-17th, a series of low pressure systems brought much cooler temperatures and breezy to windy conditions at times. Temperatures in the San Joaquin Valley were generally in the 70s during this period. On the night of the 16th and into the 17th, gusts in the Kern County mountain

and desert areas reached above 50 mph, and a few locations reached around 70 mph or higher. One automated station (Bird Springs Pass) on an exposed ridge in the southern Sierra Nevada to the northeast of Tehachapi reported a gust of 94 mph during the night of the 16th. On the afternoon of the 17th, gusts in some locales along the west side of the San Joaquin Valley and around Merced reached about 35 mph for a brief period. Also on the 17th, the Kern County mountain areas reported almost a half inch of rain around Bear Valley Springs and around a few hundredths to a quarter of an inch in other locations in these mountain areas, such as in Tehachapi and Lebec. This precipitation was due to low clouds produced northwest flow that was forced over the mountain areas.

On the 18th-23rd, high pressure returned to the area, along with a warming trend. By the 20th, highs returned to the upper 80s to lower 90s in the warmest areas. The warming trend continued afterward, as highs reached into the triple digits in many areas, including the San Joaquin Valley, during the 21st through the 23rd. Fresno reached its first high temperature at 100 degrees or warmer (i.e., 101 degrees) for this calendar year on the 23rd. Most locations had highs of around the upper 90s to around 102 degrees, and the warmest locations reported highs around 105 degrees.

On the 24th, temperatures began to lower as a trough of low pressure moved over northern California. Highs lowered around 5-10 degrees compared to the previous day. By the 25th, additional cooler air had reached central California, and high temperatures lowered another 10-15 degrees. In fact, a very deep layer of marine air infiltrated into the San Joaquin Valley, so high temperatures only reached the upper 70s to lower 80s on the 25th and into the next couple of days. The cooler air persisted as westerly winds continued to move over the region during this period.

Weak high pressure returned during the 28th through the 30th. High temperatures were several degrees above average but not as warm as during the previous week. A few cumulus cloud buildups occurred over the Sierra Nevada during the afternoons, and a few isolated showers developed over the highest elevations.

On the 31st, a low pressure system brought scattered showers to the area and cooler air. Some locations in the San Joaquin Valley received a few hundredths of an inch of rain; otherwise, mostly sprinkles, or trace amounts of rain, occurred. High temperatures were once again several degrees below average.

Overall, the month was warmer than average with below average precipitation (see also Table 1 and Figures 1-2 below), although a few pockets, such as in the mountain and desert areas, had near to slightly below average temperatures.

Table 1 - May 2017 Summary Statistics for ASOS locations				
Location	**Monthly Average Temp (deg F)**	**Departure From Average (deg F)**	**Total Monthly Precipitation (inches)**	**Departure From Normal (inches)**
Bakersfield	72.8	+2.3	0.06	-0.12
Fresno	71.0	+0.9	0.12	-0.31
Hanford	70.2	+1.5	0.39	-0.03
Madera	69.5	+2.2	0.01	-0.47
Merced	68.4	+1.5	0.19	-0.39

Figure 1 – Departure from Average Temperature for May 2017

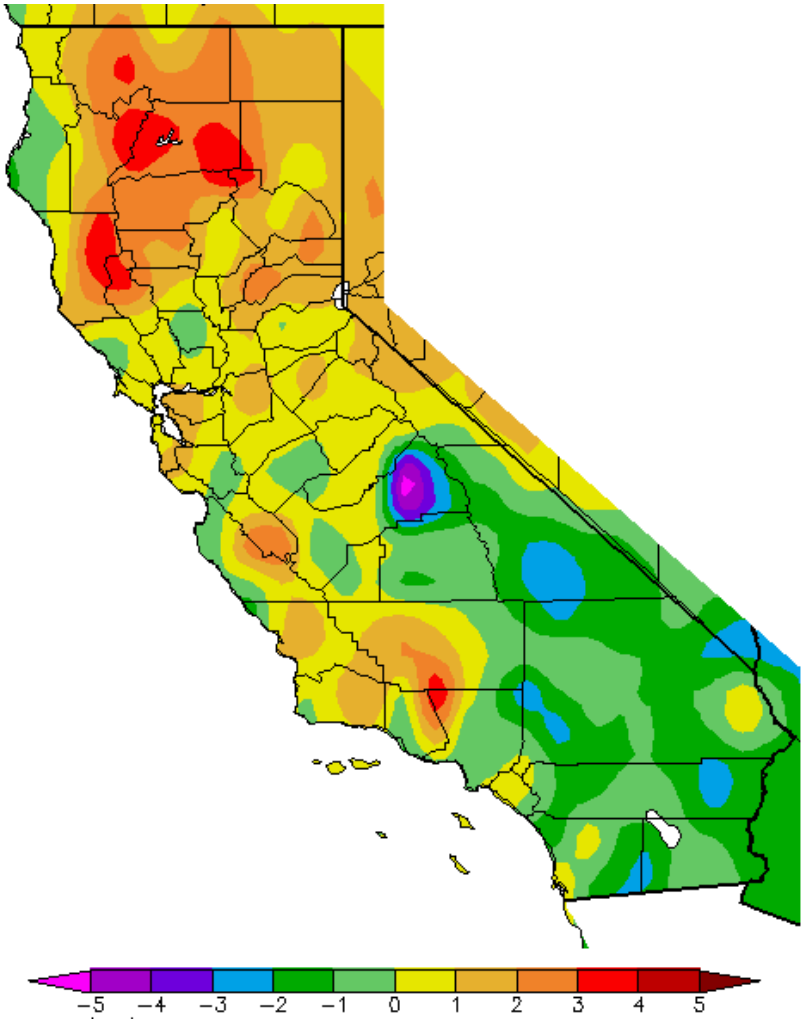
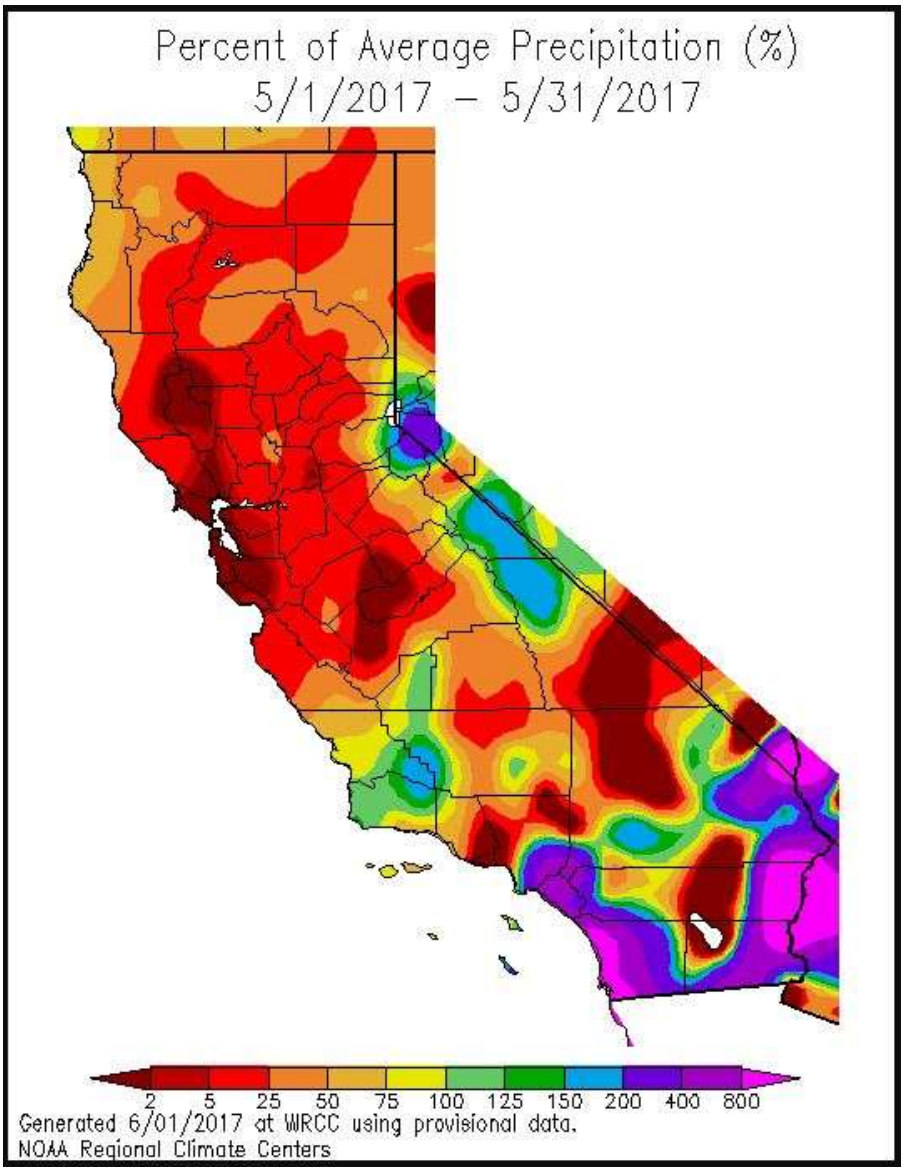


Figure 2 – Percent of Average Precipitation for May 2017



*Images above (i.e., Figures 1-2) courtesy of Western Region Climate Center