

## **JANUARY 2018 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR**

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The first day of the year 2018 was a day associated with mainly benign weather. Strong high pressure continued to dominate over central California, and stagnant air persisted over the San Joaquin Valley with very poor air quality. Morning lows in the Central Valley remained quite cool, though slightly below average. A warming trend soon began, even with the arrival of a weak low pressure system on the 4<sup>th</sup>.

During the 4<sup>th</sup>, generally light rainfall occurred in the region with most locations reported a quarter inch or less. However, a few locations did receive above a quarter inch. For example, Hanford reported almost 0.40 inch, while some Sierra Nevada locations in Tulare County reported just above 0.50 inch. A few inches of snow fell at the highest elevations, or mainly above 8,000 feet.

Another ridge of high pressure set up over central California, although it was not as strong and long lasting. This pattern was sufficient for the development of dense fog (visibility below ¼ mile) in the San Joaquin Valley during the mornings of the 6<sup>th</sup> and 7<sup>th</sup>. The fog dissipated by the late morning hours each day.

A stronger low pressure system arrived by the early morning hours of the 8<sup>th</sup> and continued through the evening of the 9<sup>th</sup>. This system was generally warm for much of the duration with primarily southerly flow. Precipitation also lasted for much of this duration. The heaviest amounts occurred in the Sierra Nevada and the Kern County mountain areas where around two to three inches of rain fell. Quite a few San Joaquin Valley locations reported around one to two inches, especially along the west side. The most favored areas for heavy precipitation were mainly along south facing slopes. Snow fell in the Sierra Nevada and the mountains of southern Kern County by the afternoon of the 9<sup>th</sup>; snow levels were around 5,000 to 5,500 feet. A couple of inches of snow fell in southern Kern County, mainly around Pine Mountain Club and Cuddy Valley. Snow in the Sierra Nevada was fairly light, or mainly around four to six inches for this event due to the nature of this low pressure system and arrival of the colder air towards the end of this event. Some strong winds occurred at times on the afternoon and evening of the 8<sup>th</sup>, as well as into the early morning hours of the 9<sup>th</sup> at the Grapevine in Kern County. Winds along Interstate 5 gusted around 60 mph, while an automated station reported as high as 94 miles per hour on an exposed ridgetop (Grapevine Peak) above the interstate.

By the 10<sup>th</sup>, the precipitation had ended, but low clouds lingered in much of the San Joaquin Valley, the lower Sierra Nevada foothills, and Tehachapi Mountains. Fewer clouds had remained by the 11<sup>th</sup>, except dense fog developed in the San Joaquin Valley underneath any clearing of the low cloud deck. Afterward, high pressure built over California for the next few days, and temperatures were actually warmer in the mountains than over the San Joaquin Valley, as persistent low clouds continued for much of the morning and early afternoon hours each day. More widespread dense fog developed by the morning hours of the 15<sup>th</sup> (i.e., the Martin Luther King, Jr. holiday) and the 16<sup>th</sup> - 18<sup>th</sup> in the Central Valley, as there was sufficient clearing during the previous afternoons and ample night-time cooling. On the 19<sup>th</sup> another system brought light to moderate precipitation across the San Joaquin Valley. Bakersfield ASOS reported 0.15” and the Fresno ASOS reported 0.13” on the 19<sup>th</sup>. This system allowed ample mixing and drying along with cooler temperatures to keep the valley fog from developing/becoming dense save some haze through the 25<sup>th</sup> when another system brought gusty winds and another shot of rainfall to the area. On the 25<sup>th</sup> Fresno ASOS reported 0.28” and Bakersfield ASOS reported 0.07”. Daytime high temperatures remained slightly cooler through the 27<sup>th</sup> when ridging again moved into the region and increased night-time fog development. Late morning and afternoon clearing allowed high temperatures from the 28<sup>th</sup> until the 31<sup>st</sup> to warm into the mid to upper 60s across many parts of the San Joaquin valley.

<b>Table 1 – January 2018 Summary Statistics for ASOS locations</b>				
<b>Location</b>	<b>Monthly Average Temp (deg F)</b>	<b>Departure From Average (deg F)</b>	<b>Total Monthly Precipitation (inches)</b>	<b>Departure From Normal (inches)</b>
Bakersfield	53.7	5.9	1.03	-0.13
Fresno	52.6	6.0	1.23	-0.96
Hanford	51.1	5.8	1.37	-0.67
Madera	51.0	5.4	1.14	-1.31
Merced	50.1	5.1	1.18	-1.43

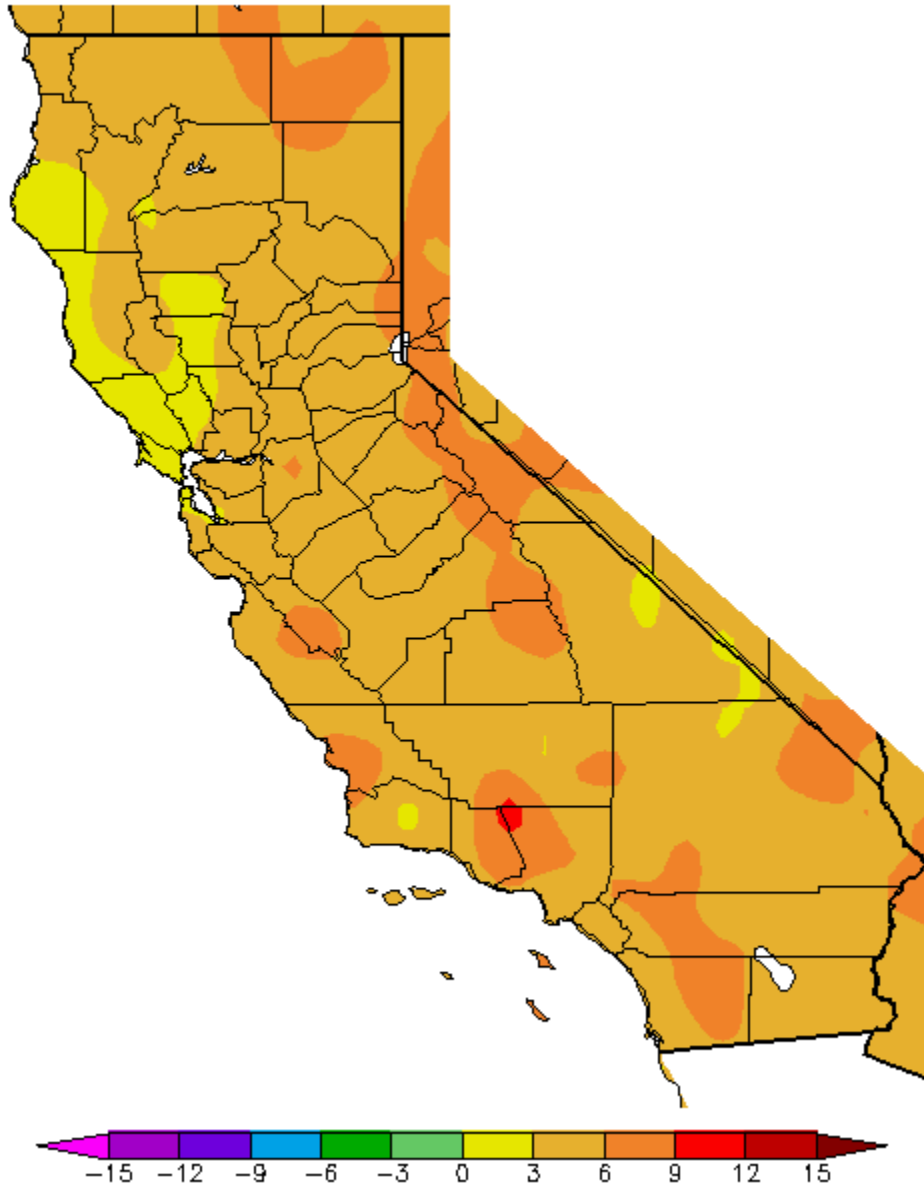
### **Temperature/Precipitation Rankings for January**

**Bakersfield** – 4th warmest January on record; 47th wettest January on record.

**Fresno** – 3rd warmest January on record; 55th driest January on record.

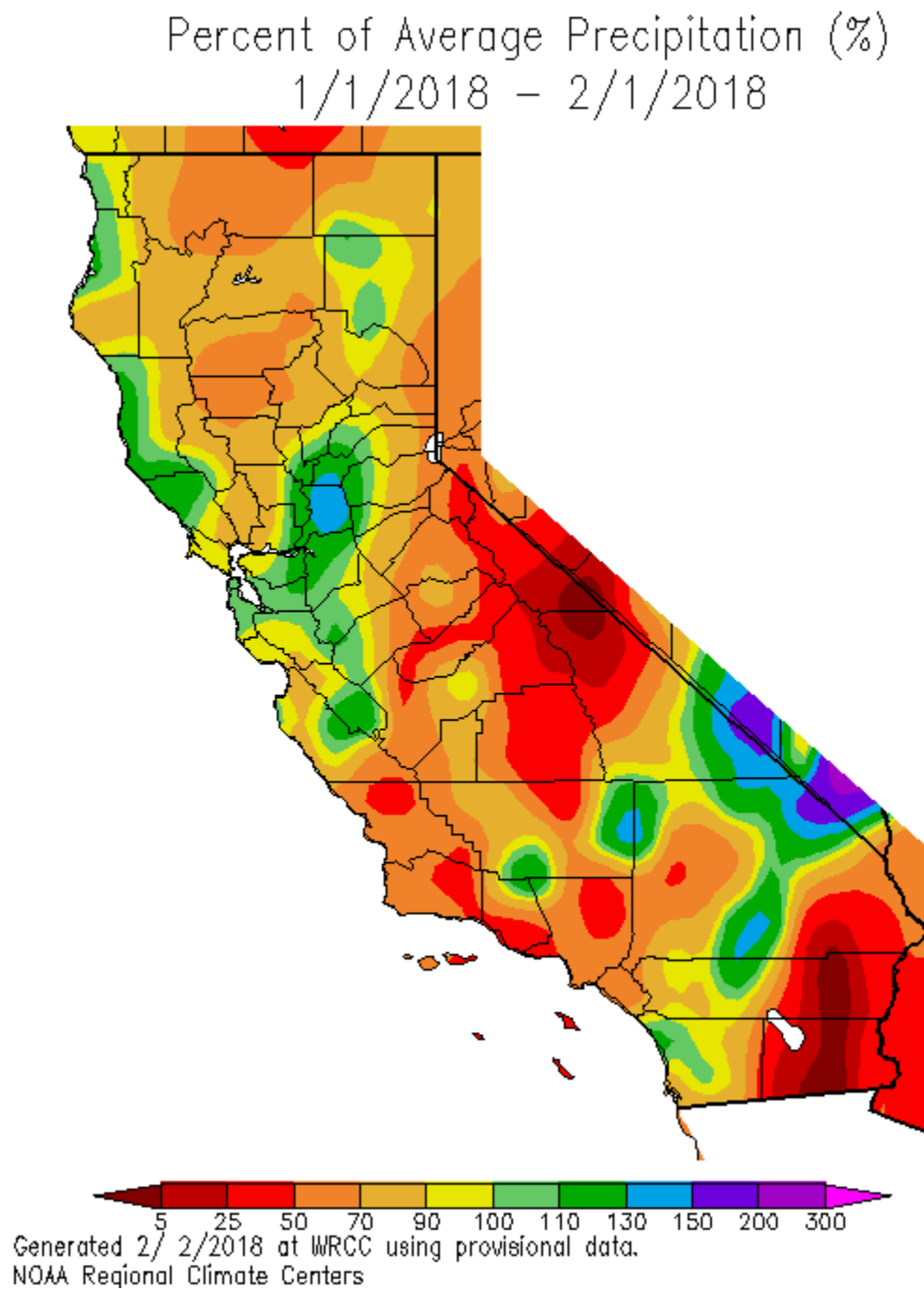
**Figure 1 – Departure from Average Temperature for January 2018**

Ave. Temperature dep from Ave (deg F)  
1/1/2018 – 2/1/2018



Generated 2/ 2/2018 at WRCC using provisional data.  
NOAA Regional Climate Centers

**Figure 2 – Percent of Average Precipitation for January 2018**



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