

APRIL 2018 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR

*By Brian Ochs, Climate Services Focal Point
Jim Andersen, Assistant Climate Services Focal Point
WFO San Joaquin Valley-Hanford*

April 2018 began with warm, but otherwise benign weather in much of Central California. Daytime high temperatures were around 10 to 15 degrees above average until the 4th. A transition to cooler, unsettled weather began on the 5th when cloud cover ahead of an incoming low pressure system with abundant subtropical moisture increased. This system arrived by the morning of the 6th into northern portions of the forecast area (i.e., Yosemite National Park, as well as Merced and Mariposa Counties). Daytime high temperatures decreased by a few degrees on this day and lowered a bit thereafter, although nighttime lows were rather mild due to cloud cover.

The main impacts from precipitation began during the night of the 6th. This system was classified as an atmospheric river, though the main effects, including heavy rainfall above 11,000 feet in the Sierra Nevada took place. Thus, this was a very warm system, even for early April, and the warm rain accelerated the snow melt a bit earlier than is typical (or sometime during May-June), including at the 5,000 to 8,000 foot elevation and higher. The heavy rain continued into the morning hours of the 7th in these areas, and the main band of rain progressed southward during the afternoon of the 7th. River flooding along the Merced River at Pohono Bridge in Yosemite Valley began during the morning hours of the 7th and continued until at least the morning of the 8th. The highest crest of 13.73 feet occurred during the afternoon of the 7th, and the river receded thereafter. Storm total rain in the San Joaquin Valley ranged from a few hundredths of an inch to three tenths from the southern portion to around Fresno and up to 1.25 inches near Merced. The heaviest rain fell in the Sierra Nevada foothills in Mariposa County (including near the Detwiler burn scar) and in Yosemite National Park, including the high country, where two to three inches fell during the course of the event, or the 6th and 7th. Most of this rain fell late at night on the 6th into the morning of the 7th. Outside of the flooding and high flows of the Merced River in Yosemite, there were relatively few impacts due to the heavy rain. There was some minor roadway flooding and rockslides near Mariposa, and most of the flooding in this area occurred on roads that were already closed. There was also a report of a rock slide on Highway 168 near the Tamarack Snow Park above Shaver Lake in Sierra National Forest in Fresno County (elevation around 7,500 feet).

Relatively quiet weather with a warming trend was the main theme for the 8th through the 10th, as high pressure returned to the area. Much above average temperatures, or as much as 15 to 20 degrees above average, were prevalent over much of the southern San Joaquin Valley and into

the Kern County desert by the 10th, as high temperatures reached into the 90s for the first time this year in quite a few locations in these areas. A low pressure system passed over central California during the afternoon and evening of the 10th, so high temperatures were not nearly as warm in central portions of the San Joaquin Valley, or in Merced County where highs only reached into the upper 70s. Much cooler air and isolated light showers pushed southward during the evening hours.

Dry and mainly seasonal temperatures occurred on the 11th, although another low pressure system brought a return to below average temperatures and gusty winds at times on the 12th. Wind gusts reached around 40 mph in parts of the San Joaquin Valley on the night of the 11th into the 12th. During the 12th, some locales received light precipitation, including some snow showers in the Sierra Nevada above 7,000 feet. On the 13th through the 15th, high pressure briefly returned and brought dry and warmer conditions.

Temperatures briefly warmed to above average on the 15th ahead of the next low pressure system. On the night of the 15th into the morning of the 16th, the system brought light showers to the district. A very cold and unstable airmass arrived behind the upper-level low on the 16th, so isolated thunderstorms developed over the San Joaquin Valley and Sierra Nevada foothills by the afternoon hours. Small hail fell in a few locales, including here at the WFO in Hanford, Mariposa, and Mendota (west of Fresno). Rainfall amounts in the San Joaquin Valley were around a tenth of an inch to about three quarters of an inch due to the isolated nature of the thunderstorms and heavier showers. Snow amounts in the Sierra Nevada were anywhere from a couple of inches to just above a foot. The highest amount was 14 inches of snow reported was at Tuolumne Meadows Ranger Station in Yosemite National Park that fell during mostly during the 16th. A dusting to around an inch of snow fell to the south in some of the Kern County mountain areas, such as Frazier Park/Pine Mountain Club and Walker Pass (west of Ridgecrest, or east of Lake Isabella; elevation around 5,000 feet) during the night of the 16th and the early morning hours of the 17th.

Cooler than average temperatures continued until the 19th, due to another low pressure system that moved over the region. Gusty winds developed in a few locales in the Kern County desert by the morning hours; gusts reached around 60 mph at times. Otherwise, mainly light rain and snow showers fell down to around 4,000 feet. However, high pressure returned by the 20th and continued over the district until the 26th. Above average temperatures once again prevailed during this period, or up to around 10 to 15 degrees above average. The warmest temperatures of the month occurred during this period, or on the 24th.

During the 27th through the 30th, a series of low pressure systems brought much cooler temperatures, along with breezy conditions and local strong, gusty winds at times. Temperatures lowered to around 10 degrees below average on these days. During the night of the 29th through

the early morning hours of the 30th, winds gusted around 60 to 70 mph below the passes and canyons in eastern Kern County, including gusts above 60 mph at Mojave and the nearby California Highway Patrol Station at Cache Creek that is located about five miles to the west along Highway 58.

The month was overall characterized with above average temperatures (Fig 1) and below average precipitation in most locations. However, above average precipitation fell in the Sierra Nevada and adjacent foothills from Mariposa County southward to Fresno County and in the San Joaquin Valley in Merced County (Fig 2).

Table 1 – April 2018 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	66.7	+4.1	0.20	-0.32
Fresno	64.9	+2.9	0.64	-0.31
Hanford	64.2	+3.5	0.29	-0.50
Madera	61.5	+1.9	0.71	-0.24
Merced	60.3	+1.3	1.25	+0.30

Temperature/Precipitation Rankings for April

Bakersfield – 16th warmest April on record; 37th driest April on record

Fresno – 21st warmest April on record; 67th driest April on record.

Records Tied or Broken

Bakersfield:

23rd...Record high minimum temperature of 63 degrees, which broke the record for the date of 62 degrees previously established in 2012.

24th...Record high minimum temperature of 63 degrees, which broke the record for the date of 62 degrees previously established in 1981.

Fresno:

6th...Record high minimum temperature of 58 degrees, which tied the record for the date last set in 1939.

Figure 1 – Departure from Average Temperature for April 2018

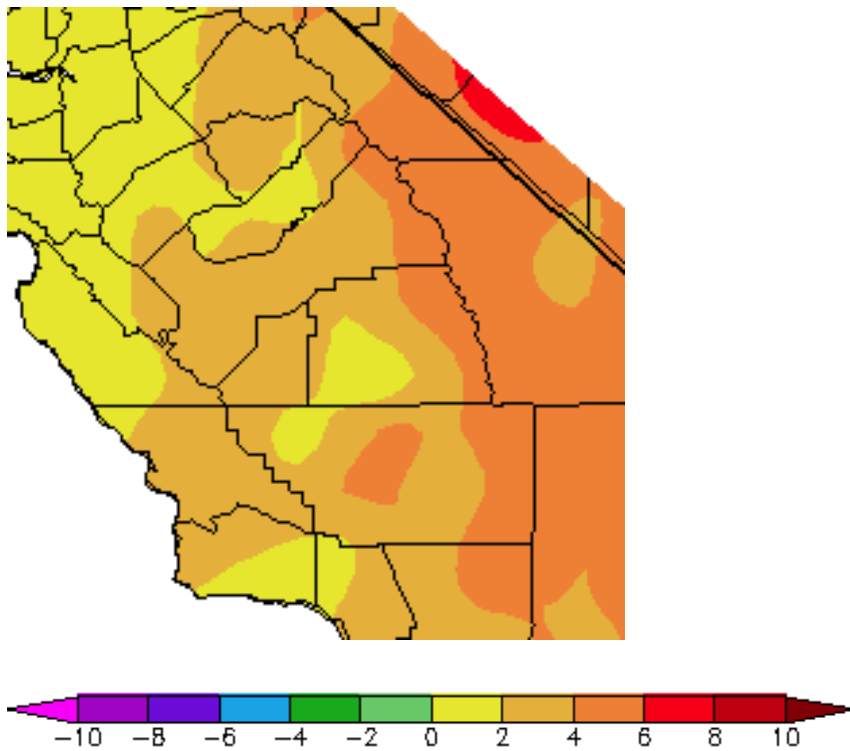
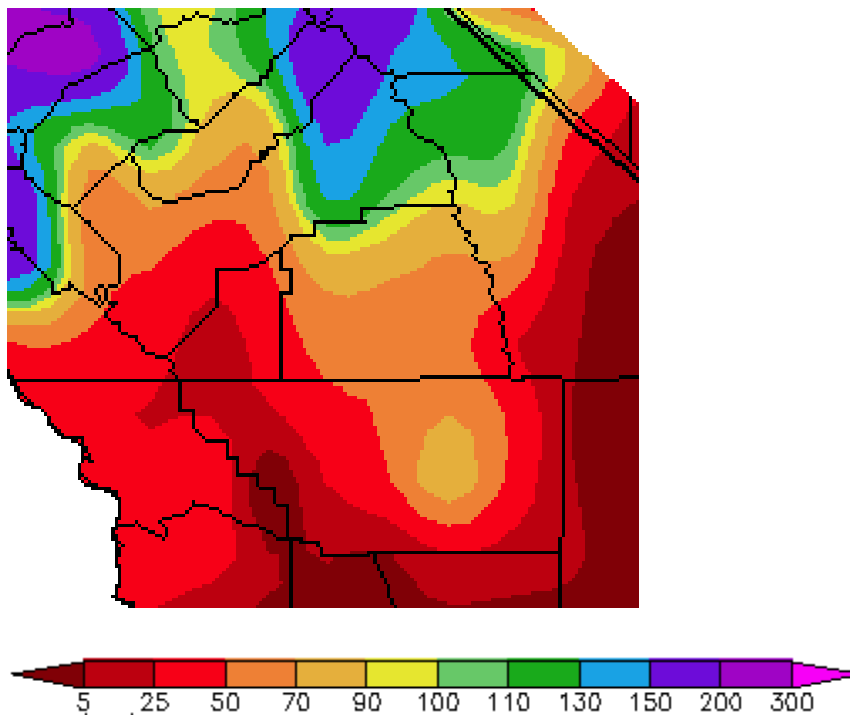


Figure 2 – Percent of Average Precipitation for April 2018



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