

APRIL 2020 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR

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

On the 1st through the 3rd, the weather was generally quiet with mainly seasonal temperatures. Afterward, a low pressure system with abundant moisture brought clouds and showers to the region beginning on the 4th. Mainly light precipitation fell initially, with relatively high snow levels, or above 6,000 feet.

Widespread significant precipitation occurred on the 5th and into the overnight hours in much of Central California. About two to three inches of rain fell during the 5th through the morning of the 6th in the foothills in Mariposa and Madera Counties, while lesser amounts were reported to the south. Some locations had flooded roadways and downed trees in the Sierra Nevada, adjacent foothills, and the Temblor Range, or the higher terrain adjacent to the southwestern San Joaquin Valley in Kern County. Otherwise, the San Joaquin Valley received around 0.25 inch to over an inch from the morning of the 5th until the morning of the 6th. In our southern portion of the forecast area, Kern County received anywhere from 0.25 inch to 1.00 inch of precipitation in the San Joaquin Valley, as well as the mountain and desert areas. Snow amounts were as high as a foot in the mountains of Kern County at elevations above 6,000 feet and around two to three feet in the Sierra Nevada from Yosemite to Sequoia National Park above 6,000 feet. In addition, snow levels gradually lowered during this period, or were around 5,500 feet on the 5th and lowered to around 4,500 feet by the morning of the 6th in the Sierra Nevada and foothills. On the morning of the 6th, there was a brief period when a dusting of snow accumulated in the foothills at elevations around 3,000 feet. During the afternoon of the 6th, a cold air funnel cloud was reported several miles to the north of Hanford. Isolated thunderstorms also developed over portions of the Central Valley that afternoon.

Precipitation continued to fall in much of the southern part of our forecast area at times during the 7th through the 10th as the upper-level low was cut off from the jet stream. Its location was initially off the coast of Southern California to the southern Sierra Nevada and back offshore, or off the coast of northern Baja California. This was the storm system that arrived back on the 5th. Moderate to heavy rain fell in much of Kern County on the evening of the 7th, and minor nuisance flooding occurred in Bakersfield and other areas in the southern San Joaquin Valley. During the 7th and into the 8th, Bakersfield received record rainfall, or over 1.50 inches total. By the 9th, Bakersfield had already received over 2.50 inches, and rainfall occurred each day from the 5th through the 9th. Rainfall spread as far north as Fresno County by the late night hours of the 7th into the morning of the 8th and again on the evening of the 8th into the morning of the 9th,

while still impacting much of Kern County. Most locations in the San Joaquin Valley during the 5th through the 9th received over an inch of precipitation, mainly around 1.50 inches. Similar amounts of rain fell in the foothills and higher terrain below elevations of 5,000 feet. Snow levels were mainly around 5,000 feet and above during that period; however, there were brief periods on the 8th in some locales when the snow levels lowered just below 3,000 feet due to heavier rain, such as near Lake Isabella. At least several inches of snow fell near Pine Mountain Club, or to the west of the Grapevine along Interstate 5 during the 7th through the 9th. On the afternoon and evening of the 10th, most of the precipitation in our forecast area was confined mainly to the desert areas of southeastern Kern County. This low was cut off from the jet stream, so it was unable to progress much further inland, or beyond southeastern California, until the 11th.

A brief period of dry and slightly warmer weather occurred on the 12th before another system arrived on the 13th. Showers were generally light and confined mainly to the Sierra Nevada. Afterward, dry weather returned with well above average temperatures on the 14th through the 16th. Highs reached into the lower to mid-80s at the warmest locations, including in the San Joaquin Valley on the 15th and 16th.

On the 17th, a low pressure system brought scattered showers and thunderstorms to much of the higher mountains and foothills from Yosemite National Park to Kern County and in the hills along the west side of the San Joaquin Valley. Heavy rainfall was reported in Yosemite National Park due to thunderstorms with rain rates over an inch per hour and precipitation amounts of one to two inches. A few locations along the west side of the San Joaquin valley received around 0.25 to 0.50 inch. Elsewhere, rain amounts in the San Joaquin Valley were around a tenth of an inch or less.

Cool weather continued on the 18th, as showers remained in much of the Central California interior. A brief break from precipitation occurred on the 19th, while slightly warmer, or near seasonal average, temperatures returned. Yet another low pressure system arrived on the 20th and brought scattered light to moderate showers to the region until the early morning hours of the 21st. Where rain was not measured, cooler than average temperatures were observed, while a few spots reported gusty winds with gusts around 45 to 50 miles per hour, such as in the Kern County mountain and desert areas, or in the eastern side of the county.

Seasonal temperatures were reported on the 21st, but a dry period that lasted until the end of the month had begun. High pressure began to build along the West Coast for the next several days, although there were embedded impulses that increased winds at times. Gusty winds returned on the evenings of the 21st and 22nd in eastern Kern County, as local gusts around 45 to 55 miles per hour were observed. A relatively prolonged period of above average temperatures occurred starting on the 22nd, although gusty winds were once again reported during the afternoon and evening hours on the 23rd in eastern Kern County (local gusts of 50 to 60 miles per hour) and

even in the hills along the west side of the San Joaquin Valley (local gusts of 35 to 40 mph). Afterward, or on the 24th and 25th, further warming occurred with decreasing winds. High temperatures rose to around 6 to 10 degrees above average, with widespread highs in the mid-80s throughout the Central Valley and the eastern Kern County desert areas, while the warmest spots reached into the upper-80s. Highs reached into the 90s in these areas for the first time this year during these couple of days.

Daytime high temperatures lowered slightly on the 26th, but there were still locations reaching around 90 degrees in the Central Valley and into the mid-90's in parts of the eastern Kern County desert regions. A few spots in the Kern County mountain and desert areas reported gusts around 45 to 50 miles per hour. Noticeable cooling occurred on the 27th while locally gusty winds returned on this day during mainly the evening hours in the mountains and desert of eastern Kern County, though became more localized with the strongest gusts in the Mojave and Jawbone Canyon areas (around 40 to 50 mph).

Daytime highs warmed back up by a couple of degrees on the 28th and were even warmer on the 29th. Highs reached into the lower-90s in much of the San Joaquin Valley and the mid to upper 90s in the warmest spots in the Kern County desert. So far this calendar year, these highs were the warmest temperatures. The last day of the month remained at least several degrees above average, though with slightly lower temperatures. However, gusty winds spread into much of the Central Valley, and speeds increased even more in the eastern Kern County mountain and desert areas. Gusts reached around 25 to 35 miles per hour in the San Joaquin Valley during the daytime, with isolated stronger gusts in the hills along the west side. In eastern Kern County, gusts reached to about 60 to 65 miles per hour during the evening hours.

Overall, the month was warmer than average with a few exceptions in the Sierra Nevada, as well as the Kern County mountain and desert areas (Fig 1). Precipitation was mainly above average throughout Central California (Fig 2). Most the precipitation occurred during the 5th through the 9th at the reporting stations in the San Joaquin Valley, although there was significant rainfall due to thunderstorms in Yosemite National Park during the 17th. The warmest temperatures occurred during the last week of the month when the monthly average increased significantly.

Table 1 – April 2020 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	64.6	+2.0	2.61	+2.09
Fresno	64.1	+2.1	1.65	+0.70
Hanford	63.1	+2.4	1.15	0.36
Madera	61.3	+1.7	1.38	+0.43
Merced	61.9	+2.9	1.54	+0.59

Table 2 – Seasonal Precipitation for ASOS locations (ending on April 30th)						
Location	Since Jan 1st (inches)	Departure from Average (inches)	Since Jul 1st (inches)	Departure from Average (inches)	Since Oct 1st (inches)	Departure from Normal (inches)
Bakersfield	4.43	+0.30	7.04	+0.83	7.02	+0.93
Fresno	4.63	-2.57	7.51	-3.35	7.51	-3.16
Hanford	4.20	-1.99	6.51	-3.02	6.51	-2.81
Madera	3.55	-3.78	5.81	-5.54	5.81	-5.25
Merced	4.38	-3.59	9.34	-2.45	9.34	-2.14

Table 3 – Warmest High Temperatures and Coolest Low Temperatures of the Month for ASOS locations				
Location	High	Date	Low	Date
Bakersfield	92	29 th	42	3 rd
Fresno	91	25 th , 28 th & 29 th	43	2 nd , 3 rd
Hanford	93	29 th	37	3 rd
Madera	91	25 th & 29 th	35	3 rd
Merced	92	25 th & 28 th	37	3 rd , 7 th

Temperature/Precipitation Rankings for April 2020

Bakersfield – 32nd warmest April on record; 3rd highest precipitation on record for April.

Fresno – 27th warmest April on record; 25th highest precipitation on record for April.

Daily Records Set During April 2020

Bakersfield

8th: Record daily high precipitation of 0.67 inch reached; the old record was 0.59 inch, which was last set for the date in 1967).

9th: Record daily high precipitation of 0.62 inch reached; the old record was 0.61 inch, which was last set for the date in 1945).

29th: Record high minimum temperature of 65 degrees reached, which broke the record of 64 degrees that was last set for the date in 2007.

Fresno

29th: Record high minimum temperature of 67 degrees reached, which broke the record of 65 degrees that was last set for the date in 1992.

Fig 1 – Departure from Average Temperature for April 2020

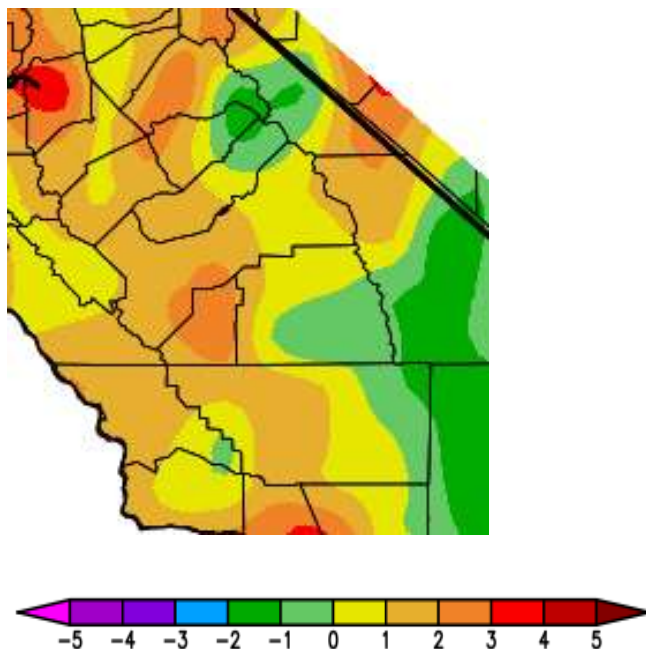
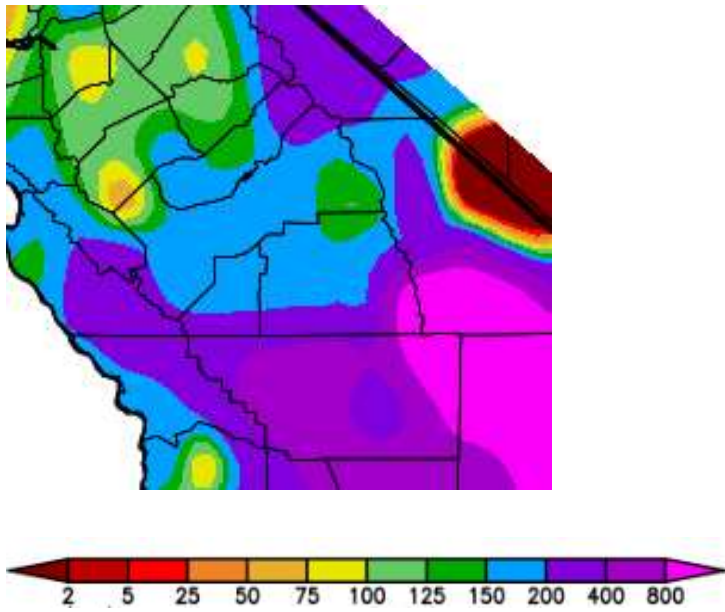


Fig 2 – Percent of Average Precipitation for April 2020



*Figs 1 & 2 images courtesy of Western Region Climate Center.