APRIL 2021 WEATHER SUMMARY
FOR THE CENTRAL CALIFORNIA INTERIOR

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Overall, April 2021 was warmer than average, except for an area of near to below average temperatures towards the west side of the San Joaquin Valley (Fig 1). Otherwise, precipitation was much below average across the region (Fig 2). Strong high pressure brought record breaking high temperatures on the 1st and 2nd, as afternoon highs reached near 90 degrees on both days at the warmest locations. Mainly dry weather with warmer than average temperatures persisted for much of the month. Warm temperatures like the ones that occurred on the 1st and 2nd were also reported on the 18th and 19th, except no records were tied or broken. However, there were a couple of brief periods with light precipitation over the Sierra Nevada towards the second and third weeks of the month, along with a late season cold storm that brought widespread rain and snow showers throughout Central California on the 24th through the 26th. Another rather warm period developed for the last couple of days of April, and maximum temperatures on the 30th reached the warmest so far this year as highs reached into the mid-90's in the Central Valley and up to 101 degrees in the Kern County desert areas (Inyokern). Only one location in the San Joaquin Valley (Madera) reached a record high maximum temperature on the 30th (tied the record of 94 degrees, last set in 1981). Otherwise, occasional breezy to gusty conditions coincided with passages of upper-level low pressure systems throughout the month, as is typical during April and the spring months.

Table 1 – April 2021 Summary Statistics – NWS Hanford, CA ASOS Sites

Location	Monthly Average Temp (deg F)	Departure from Average (deg F)	Temperature Rank	Total Monthly Precipitation (inches)	Departure from Normal (inches)	Precipitation Rank
Bakersfield	66.7	+4.1	17th warmest	0.19	-0.33	38th lowest
Fresno	65.9	+3.9	13th warmest	0.15	-0.80	27th lowest
Hanford	63.6	+2.8	26th warmest	0.16	-0.63	31st lowest
Madera	61.8	+2.2	29th warmest	0.01	-0.94	9th lowest
Merced	62.0	+3.0	26th warmest	0.03	-0.92	10th lowest

A strong ridge of high pressure that formed over Central California during the last few days of the previous month persisted into early April. A record high was set at Bakersfield on the 1st, when the temperature peaked at 89 degrees. Despite the heat, an isolated shower formed near

Arvin on the morning of the 1st, as mid-level clouds associated with an upper-level low pressure system centered off the coast of Baja California. Otherwise, mornings were generally cool, as is typical for early April. Additional records were also reached on the 2nd. Fresno's high temperature peaked at 88 degrees and set a new record for the 2nd, while Bakersfield tied their record at 90 degrees for the date. Records were also reached at Hanford and Merced that day.

Warmer than average temperatures continued for the next several days, though noticeably cooler beginning on the 4th. Daytime highs were still at least a few degrees above average during this period, while morning lows were relatively cool. Gusty winds developed at times in the Kern County mountains and desert near the passes during the 5th through the 9th when cooler air flowed into the region due to upper-level disturbances that passed over the Great Basin. Occasional gusts of around 50 to 55 mph with locally stronger gusts were reported during these periods. A warming trend returned on the 11th and 12th, but highs were not as warm as at the beginning of the month. The warmest locations reached into the lower to mid-80s by the 12th. On the 13th and 14th, an upper-level low pressure system brought another cooling trend, along with gusty winds through the passes in the eastern Kern County mountains and desert and the West Side Hills adjacent to the Central Valley. Gusts of 45 to 55 mph were reported in eastern Kern County on the afternoon and evening of the 13th, while gusts of 35 to 45 mph occurred in the West Side Hills, such as Pacheco Pass and nearby locations. Cooler than average daytime highs lasted from the 13th until the 15th. Highs were mainly in the 70's in the Central Valley and the Kern County desert during this period, with the coolest highs on the 13th that were generally in the lower 70's.

High pressure began to rebuild on the 16th through the 19th, and afternoon high temperatures trended warmer. On the 16th, highs reached around 80 degrees at the warmest locations, and temperatures peaked in the mid to upper 80s, or around 15 degrees above average, by the 18th. Some light showers fell in the Sierra Nevada on the afternoon and evening of the 16th, but amounts were isolated and below 0.10 inch due to a weak disturbance over the Great Basin. Daytime highs began to lower by the 20th, especially towards Merced County to Yosemite as a weak upper-level disturbance passed over Northern California into the Great Basin.

On the 21st through the 23rd, temperatures began to lower throughout the region, including south of Merced County and Yosemite, though remained above seasonal averages. A few showers and thunderstorms developed in the higher elevations of the Sierra Nevada during these three days, mainly in the afternoons, due to the passage of another weak upper-level disturbance. Little or no precipitation was reported due to these storms. Otherwise, increased winds funneled through the passes and canyons in eastern Kern County, with gusts around 45 to 55 miles per hour at times.

More significant cooling occurred on the 24th and 25th, as a storm system that originated in the Gulf of Alaska arrived. In addition, precipitation fell throughout much of our forecast area on the

25th until the early morning hours of the 26th. Rainfall amounts in the Central Valley and Sierra Nevada foothills were generally up to 0.30 inch, and slightly higher amounts (up to 0.50 inch) accumulated in the Sierra Nevada and Kern County mountains. Around three to seven inches of snow accumulated in the Sierra Nevada above 6,000 feet. As a result of this storm, cooler than average temperatures (by several degrees) occurred on the 25th into the 26th. A warming trend began on the 27th once high pressure began to rebuild over the region, although maximum temperatures remained slightly below average on the 27th with lingering isolated showers over the mountain areas (that brought light rain and sprinkles into the Sierra Nevada foothills and portions of Fresno). Afternoon highs peaked at the warmest on the 30th, and the daily maximum temperatures were the highest so far this year. Highs reached into the mid-90s in much of the Central Valley and around 100 degrees in the warmest locations of the Kern County desert, including a high of 100 degrees at China Lake NWTC and 101 degrees at Inyokern. A record high maximum temperature was also tied at Madera on the 30th (94 degrees, which also last occurred on the date in 1981).

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	2.03	-2.10	2.77	-3.44	2.77	-3.32
Fresno	5.17	-2.03	6.59	-4.27	6.59	-4.08
Hanford	3.62	-2.57	4.29	-5.24	4.29	-5.03
Madera *	M	M	M	M	M	M
Merced	4.72	-3.25	7.00	-4.79	7.00	-4.78

*Missing precipitation during January 2021 at Madera.

+ The reference period for the 30-year averages is 1981-2010 **(The 1991-2020 Normals will be available on May 4, 2021**, so these will be referenced in the May 2021 climate summary and future summaries for the next 10 years, unless otherwise noted**.)**

Table 3 – Warmest High Temperatures and Coolest Low Temperatures of the Month for ASOS locations				
Location	**High**	**Date(s)**	**Low**	**Date(s)**
Bakersfield	94	30th	47	4th
Fresno	95	30th	47	10th
Hanford	95	30th	41	9th
Madera	94	30th	39	10th
Merced	93	30th	40	14th

Daily Records Set During April 2021

Bakersfield –

1st: Record high maximum temperature of 89 degrees was reached (previous record of 88 degrees set in 2011).

2nd: Record high maximum temperature of 90 degrees tied for the date (last set in 1944).

Fresno –

2nd: Record high maximum temperature of 88 degrees was reached (previous record of 87 degrees set in 1985).

Hanford –

2nd: Record high maximum temperature of 89 degrees was reached (previous record of 88 degrees set in 1919).

Madera –

30th: Record high maximum temperature of 94 degrees was tied (previous record set in 1981).

Merced -

2nd: Record high maximum temperature of 86 degrees was reached (previous record of 85 degrees set in 1944).

Fig 1 – Departure from Average Temperature for April 2021

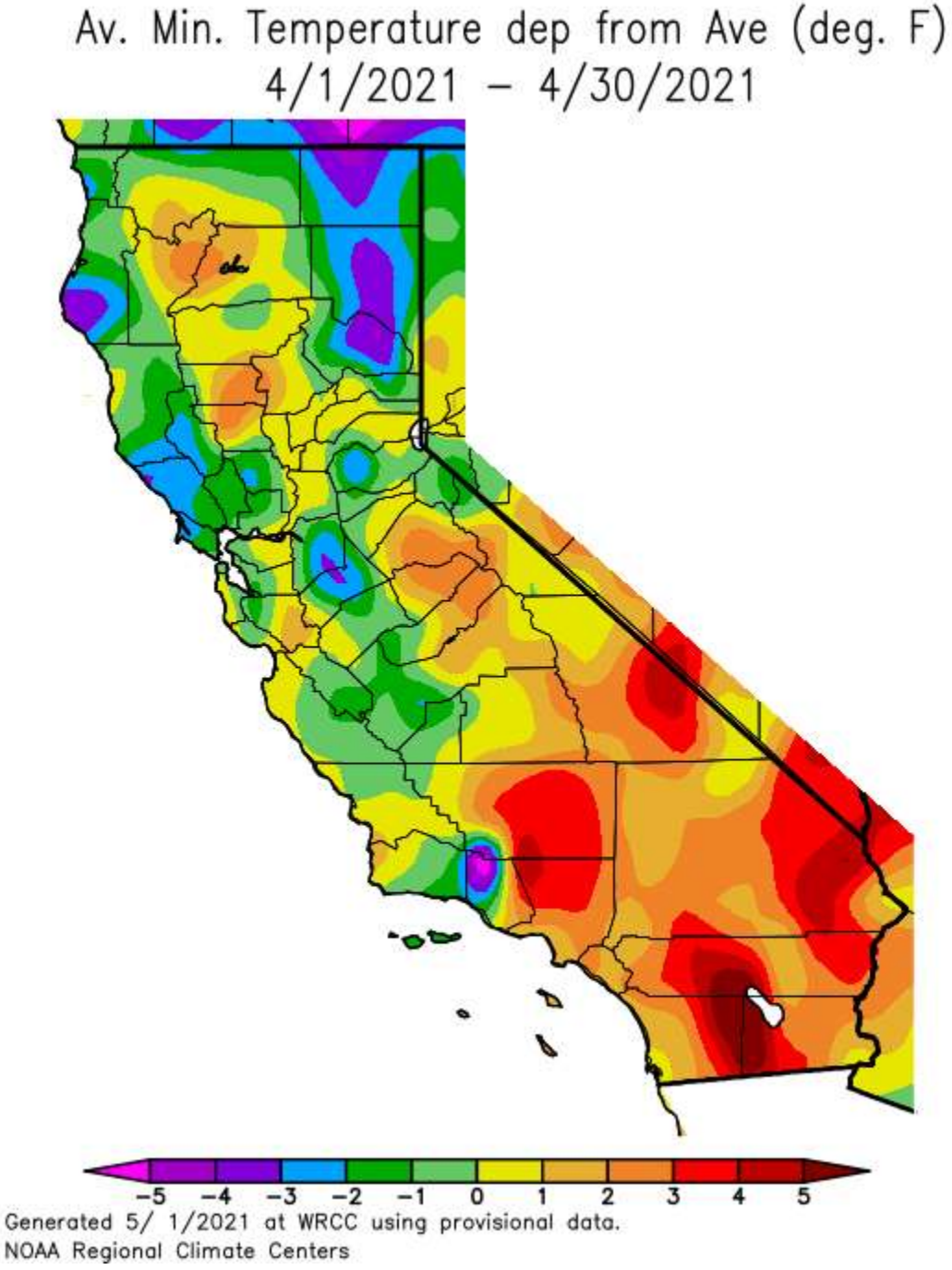
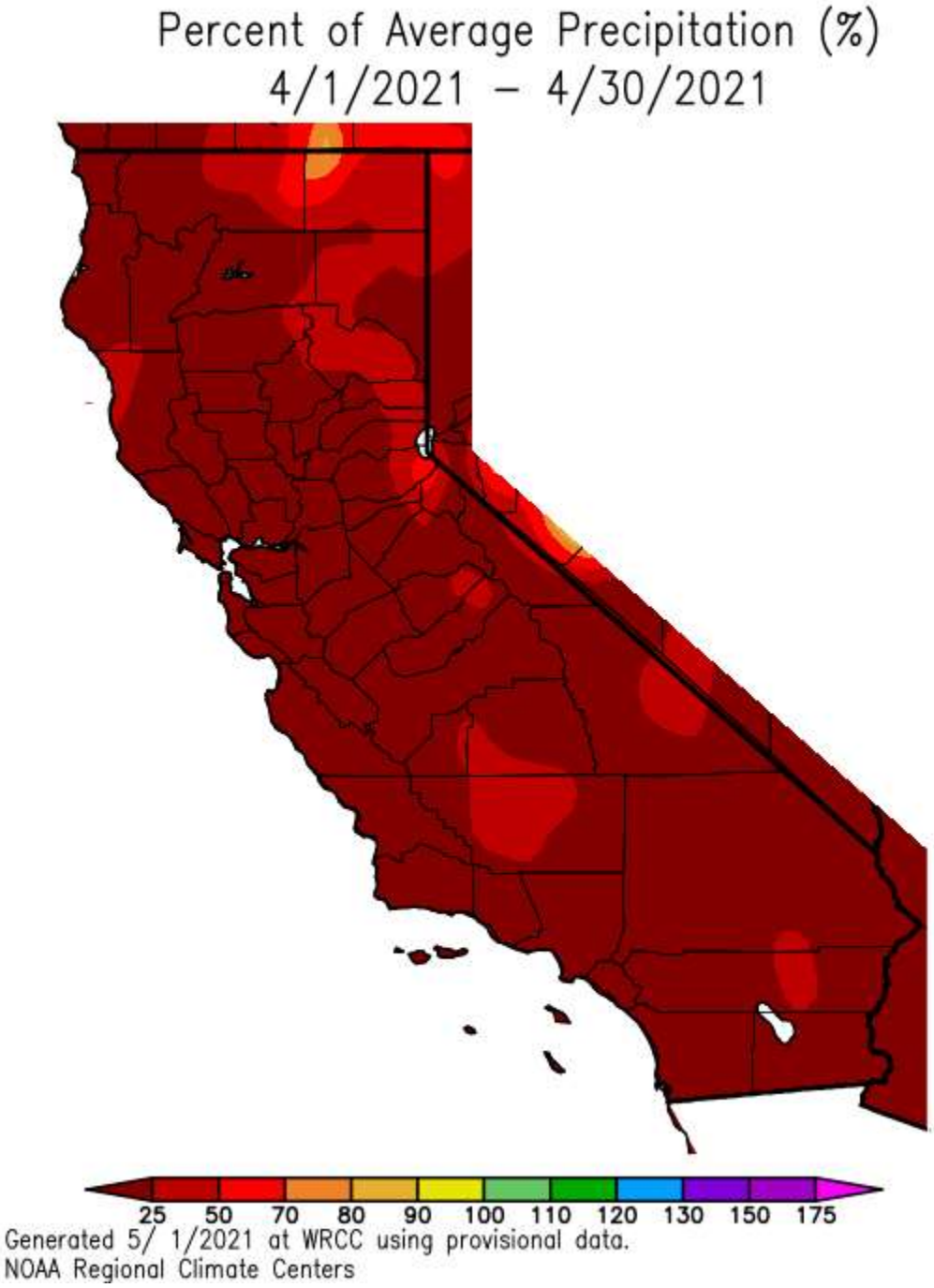


Fig 2 – Percent of Average Precipitation for April 2021



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