## MAY 2020 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR

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Mainly seasonal temperatures were the rule for the first of the month. Due to upper-level disturbances, gusty winds developed in the evening below the passes and canyons in eastern Kern County, including the mountain and desert areas. Gusts around 60 miles per hour occurred during the evening hours of the 1<sup>st</sup>. Slightly above average temperatures continued on the following day. Gusty winds redeveloped in the Kern County mountain and desert areas in the evening, although much warmer than average temperatures in the Indian Wells Valley.

Gusty winds in the Kern County mountain and desert areas with near seasonal or slightly above average temperatures also prevailed during the 3<sup>rd</sup> through the 4<sup>th</sup>. However, high pressure began to strengthen to the southeast during these days so that temperatures in the Kern County desert region were much warmer than average; highs reached into the 90s at quite a few locations. On the 5<sup>th</sup>, a more noticeable warming trend continued on this day and the following several days, or until the 9<sup>th</sup>, but winds were generally light. The warmest temperatures occurred on the 9<sup>th</sup>, as daytime highs and morning lows reached near record high values. Highs in the San Joaquin Valley and the Kern County desert reached into the mid to upper 90s with isolated spots at around 100 degrees (such as Ridgecrest, Inyokern, and Lemoore).

On the 10<sup>th</sup>, temperatures were slightly lower but well above average, as highs were still in the lower to mid-90s at the warmest locations in the San Joaquin Valley and the Kern County desert areas. As marine air began to filter through the passes along the west side of the Central Valley by the evening, wind speeds increased with gusts that reached around 35 to 40 miles per hour. Daytime highs in the valley cooled noticeably on the 11<sup>th</sup> and 12<sup>th</sup>, or slightly below average. Gusty winds also developed in the prone areas in Kern County and along the west side of the San Joaquin Valley; for example, gusts reached around 50 to 60 miles per hour through the Kern County mountain passes and around 40 miles per hour along the west side of the San Joaquin Valley.

On the 13<sup>th</sup> through the 15<sup>th</sup>, near average temperatures with relatively cool mornings continued. Gusty winds remained a daily occurrence in the eastern Kern County mountain and desert areas. Wind gusts were a bit stronger than on previous days, or reached around 60 to 70 miles per hour in localized areas through and below the mountain passes. On the afternoon of the 13<sup>th</sup>, there was an isolated gust of 70 miles per hour with sustained south to southwest winds around 20 to 30 mph for much of the afternoon and evening in Squirrel Canyon just south of Lake Isabella,

which was below a north-facing canyon, rather than the usual east-facing ones. This wind direction is not typical, though not unusual, for this portion of Kern County, as it was likely due to terrain influences.

A brief warmup occurred on the 16<sup>th</sup> and 17<sup>th</sup> before a rather strong and cold low pressure system arrived that produced widespread precipitation arrived by the evening of the 17<sup>th</sup>. There were some sprinkles and light rainfall ahead of the system, so some isolated locations did receive precipitation as early as the afternoon of the 17<sup>th</sup>. More showers with isolated embedded thunderstorms developed on the night of the 17<sup>th</sup> and redeveloped during the afternoon of the 18<sup>th</sup>. Rainfall amounts from the evening of the 17<sup>th</sup> through the evening of the 18<sup>th</sup> were as much as two to three inches in some locations the Sierra Nevada from Tulare County and northward to Yosemite, and quite a few spots reported amounts around an inch. Snow amounts were generally light (around 2 inches) and above elevations of 6,500 feet during this period, although a few spots picked up between 6 to 9 inches above 8,000 feet. Even some San Joaquin Valley locations reported near an inch, especially in Visalia and Sanger, due to afternoon and evening thunderstorms on the 18<sup>th</sup>. Otherwise, cooler than average to near seasonal temperatures prevailed. Daytime highs at many locations north of Kern County remained in the lower 70s in the Central Valley, and highs were near 80 degrees in Kern County, including near the southern end of the valley. Quite a few locations in Kern County also received precipitation, although amounts were generally around 0.30 inch or less, except for a couple of stations that reported higher amounts above 0.50 inch in the Tehachapi Mountains. Cool temperatures with a few showers continued on the 19<sup>th</sup>, although some spots received around 0.10 to 0.25 inch in the Sierra Nevada foothills.

Afterward, near seasonal temperatures returned for a couple of days, including on the 20<sup>th</sup> through the 23<sup>rd</sup>. In addition, gusty winds materialized in the hills along the west side of the San Joaquin Valley on the 21<sup>st</sup> as a low pressure system passed over Northern California and the Pacific Northwest. Local gusts reached around 40 mile per hour in these areas. As a result of these increased winds, slightly cooler air flowed into the San Joaquin Valley. On the following day, gusty winds developed in the Kern County mountains and desert with gusts around 45 to 60 miles per hour in a few locales. By the morning of the 23<sup>rd</sup>, the winds relaxed a bit.

High pressure returned on the 24<sup>th</sup>, and a significant warming trend occurred on Memorial Day. Highs reached near 100 degrees in the warmest spots on Memorial Day and warmed even more for the next few days. Readings were in the triple digits on the 26<sup>th</sup> through the 28<sup>th</sup> throughout the lower elevations, including the Central Valley and the Kern County desert. Highs reached 105 degrees and above in quite a few locations on the 27<sup>th</sup> and 28<sup>th</sup>. Morning lows were also very warm and reached record high values at quite a few locations from the 26<sup>th</sup> through the 28<sup>th</sup>. During the 26<sup>th</sup> through the 29<sup>th</sup>, some record high minimum temperatures were set (including at Fresno; record high minimum temperatures were tied or broken for these four days). A significant lowering trend in temperatures began on the 29<sup>th</sup>, but highs remained above average for the most part. However, cooling had begun along the west side of the San Joaquin Valley as winds increased at the passes, including Pacheco Pass. Breezy to locally gusty conditions spread into the Central Valley on the night of the 29<sup>th</sup>, and gusts reached as high as around 55 miles per hour over the west side hills and mountains. Cooling occurred on the 30<sup>th</sup> when daytime highs returned to around seasonal averages; breezy conditions continued at times. High temperatures were several degrees below average on this day and the last day of the month, as highs reached mainly into the 80s in the warmest locations. Isolated afternoon showers and thunderstorms developed at times over the highest elevations of the Sierra Nevada during the last few days of the month, although precipitation amounts were generally light.

Overall, the month was warmer than average (Fig 1) with variable amounts of precipitation that accumulated this month (Fig 2) due to scattered showers and thunderstorms over the Sierra Nevada and adjacent foothills on the 17<sup>th</sup> through the 19<sup>th</sup>.

Table 1 – May 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	73.2	+2.7	0.16	-0.02	
Fresno	73.4	+3.3	0.12	-0.31	
Hanford	71.3	+2.6	0.11	-0.31	
Madera	69.6	+2.3	0.22	-0.26	
Merced	70.3	+3.4	0.20	-0.38	

<b>Table 2 – Seasonal Frecibilation for ASOS locations</b> (ending on May 51)	Table 2 – Seasonal Preci	ipitation for ASOS	locations (ending	on May 31 <sup>st</sup>
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Location	Since Jan 1 <sup>st</sup> (inches)	Departure from Average (inches)	Since Jul 1 <sup>st</sup> (inches)	Departure from Average (inches)	Since Oct 1 <sup>st</sup> (inches)	Departure from Normal (inches)
Bakersfield	4.59	+0.28	7.20	+0.81	7.18	+0.91
Fresno	4.75	-2.88	7.63	-3.66	7.63	-3.47
Hanford	4.31	-2.30	6.62	-3.33	6.62	-3.12
Madera	3.76	-4.05	6.02	-5.81	6.02	-5.52
Merced	4.58	-3.97	9.54	-2.83	9.54	-2.52

Table 3 – Warmest High Temperatures and Coolest Low Temperatures of the Month for ASOS locations					
Location	High	Date(s)	Low	Date(s)	
Bakersfield	105	28 <sup>th</sup>	53	$4^{th}$ & $20^{th}$	
Fresno	106	$28^{\text{th}}$	51	19 <sup>th</sup>	
Hanford	106	$28^{\text{th}}$	46	4 <sup>th</sup>	
Madera	105	27 <sup>th</sup> & 28 <sup>th</sup>	42	4 <sup>th</sup>	
Merced	105	28 <sup>th</sup>	44	4 <sup>th</sup>	

## **Temperature/Precipitation Rankings for May 2020**

**Bakersfield** –  $20^{\text{th}}$  warmest;  $65^{\text{th}}$  lowest precipitation on record for the month of May. **Fresno** –  $8^{\text{th}}$  warmest;  $65^{\text{th}}$  lowest precipitation on record.

# **Daily Records Set During May 2020**

## Bakersfield

28<sup>th</sup> - Record high minimum temperature of 75 degrees, which broke the old record of 72 degrees that was last set for the date in 2009.

## Fresno

 $26^{\text{th}}$  – Record high minimum temperature of 72 degrees, which broke the old record of 68 degrees that was last set for the date in 2014.

27<sup>th</sup> – Record high maximum temperature of 105 degrees, which broke the old record of 104 degrees that was last set for the date in 1974. Record high minimum temperature of 74 degrees, which broke the old record of 69 degrees for the date in 1896.

28<sup>th</sup> - Record high minimum temperature of 73 degrees, which broke the old record of 69 degrees for the date in 2009.

29<sup>th</sup> - Record high minimum temperature of 72 degrees tied (previously on date in 1939).

## Number of Days with Maximum Temperature of 100 Degrees or Higher in May 2020

**Bakersfield** – 3 (average is 1 for May) **Fresno** – 3 (average is 1 for May) Fig 1 – Departure from Average Temperature for May 2020



Fig 2 – Percent of Average Precipitation for May 2020



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