OCTOBER 2016 WEATHER SUMMARY
FOR THE CENTRAL CALIFORNIA INTERIOR

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It was a relatively cool start to the month, as high temperatures were around 10 to 15 degrees below average throughout the region. A strong low pressure system brought breezy to locally gusty conditions to the west side of the San Joaquin Valley, as well as the Kern County mountain and desert areas. Occasional gusts to around 55 mph occurred in the Kern County mountain and desert areas during this period and around 35 to 40 mph through the passes along the west side of the San Joaquin Valley. This pattern continued for the next several days, as low pressure systems continued to bring cooler temperatures and increased winds to the wind-prone areas.

By the 6th, temperatures started to rise a few degrees, or to around average for early October, as high pressure returned to the area. Warmer than average temperatures prevailed by the following day and continued for the next few days. By the 8th, many locations reached into the lower 90s for daytime high temperatures, especially throughout the San Joaquin Valley. This warmth persisted until the 10th until the next low pressure system moved over northern California.

On the 11th, high temperatures cooled by around 10 degrees, compared to the previous day but were still a little above average. Similar temperatures continued until the 16th, although a series of low pressure systems brought significant precipitation to the Sierra Nevada. These low pressure systems mainly tracked over northern California and the Pacific Northwest, so this forecast area was on the southern end. As much as three to five inches of rain fell in Yosemite National Park in a three-day period, or the 14th through the 16th. Around six inches of snow fell on Tioga Pass during that period, although mostly on the 16th. Much lighter amounts of rain fell elsewhere during this period, as precipitation amounts rapidly declined from north to south and in the lower elevations. For example, a trace to around a quarter of an inch fell on the floor of the San Joaquin Valley, during the 15th and 16th. On the afternoon of the 15th, there was a brief period of blowing dust from around Lemoore to Visalia as some showers along the west side of the San Joaquin Valley weakened. The low pressure systems during the 13th through the 16th did not provide much cooler temperatures, except in the higher elevations of the Sierra Nevada where the snow fell, as the cooler air stayed mainly over Merced County and Yosemite and locations to the north, while a zonal, or westerly, flow prevailed over much of central California. Therefore, temperatures remained fairly constant, although several degrees above average, during the period, or the 11th-16th in most of the region.

On the 17th, cooler air finally arrived to the region, and both daytime high and nighttime low temperatures were also noticeably cooler or several degrees below average. Temperatures returned to above average on the 20th through the 22nd due to the return of high pressure.

On the 23rd into the 24th, a low pressure system brought showers and thunderstorms to the region. The thunderstorms occurred mainly over the Sierra Nevada on the afternoon and evening of the 23rd, and by the morning of the 24th, thunderstorms had spread in to the Kern County mountain and desert areas. During the overnight hours of the 23rd into the 24th, some rain fell in parts of the San Joaquin Valley due to showers and isolated thunderstorms, including in Fresno. Precipitation, or actually rainfall, amounts with this system were generally light throughout central California, or around a quarter inch or less. Some gusty winds occurred through the Grapevine pass along Interstate 5 during the daytime hours of the 24th; gusts reached as high as 56 mph due to southerly winds funneling through the pass.

On the following couple of days, a brief period of high pressure occurred, and drier air prevailed over the area. The primary effect was mostly clear skies along with warmer daytime high temperatures and cooler morning lows.

The next storm system arrived on the 27th and brought showers to Merced County starting in the morning hours. Rainfall amounts were generally light through the afternoon hours. More significant precipitation arrived by the afternoon and had spread southward overnight into the morning of the 28th. Rainfall in the San Joaquin Valley ranged from around 0.20 inch to 1.00 inch and was as high as two to three inches in Yosemite National Park.

After a brief break between storm systems on the 29th, another precipitation event started on the following evening and continued overnight into the 30th. Additional showers and isolated thunderstorms developed during the afternoon and evening hours on the 30th. Around one to two inches of rain fell in the Sierra Nevada from Yosemite to Sequoia National Forest just south of Sequoia National Park. A few hundredths of an inch to around a tenth of an inch fell in the San Joaquin Valley. A little snow fell but was not enough to measure; it fell mainly on the highest peaks above 10,000 feet.

The last day of the month was characterized with below average temperatures and partly cloudy skies. Patchy fog developed in the mountains around Tehachapi, as well as in parts of the San Joaquin Valley. Visibility was generally around a quarter mile in these locations but locally lower.

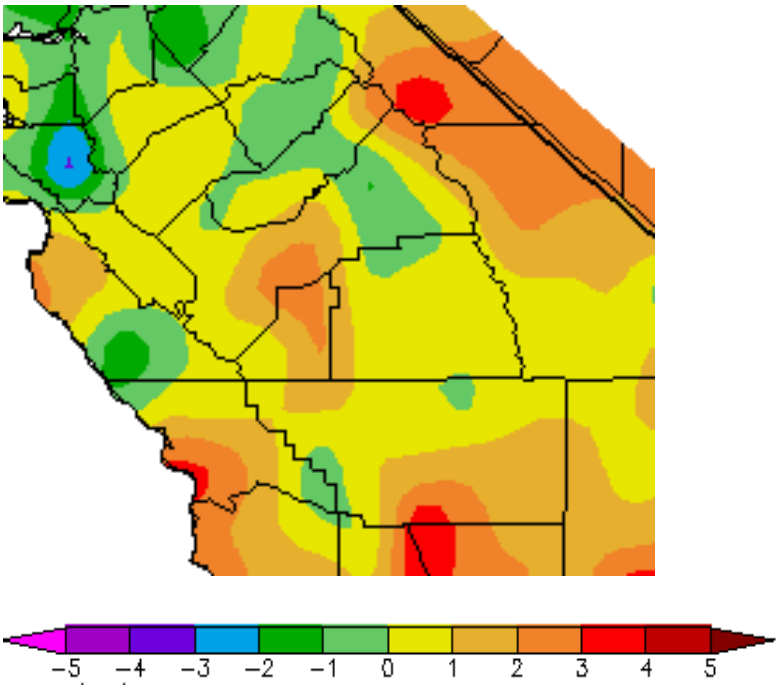
October 2016 was overall near average in terms of temperature (Fig 1). Precipitation was mainly below average in southern portions of the region, including in Kern and Tulare Counties, while precipitation ranged from near average to well above average elsewhere (Fig 2). The highest

precipitation amounts occurred in Yosemite National Park and nearby locations this month. Very little snow remained in the Sierra Nevada at the end this month, as most of the storms were relatively warm, and most of the snow melted.

Table 1 - October 2016 Summary Statistics for ASOS locations

Location	Monthly Avg Temp	Departure From Normal	Total Monthly Precipitation	Departure From Normal
Bakersfield	68.0	+0.9	0.24	-0.06
Fresno	66.4	+0.2	0.67	+0.04
Hanford	64.9	+1.4	0.64	+0.14
Madera	64.7	+0.7	0.62	-0.26
Merced	63.9	+0.5	1.43	+0.62

Fig 1 - Departure from average temperature for October 2016:



*Images above courtesy of Western Region Climate Center

Fig 2 - Percent of normal precipitation for October 2016: