JUNE 2015 WEATHER SUMMARY
FOR THE CENTRAL CALIFORNIA INTERIOR

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This month began with slightly cooler than average temperatures; this trend continued for much of the first week of the month. Remnant moisture of Hurricane Andres moved into the central California interior and brought thunderstorms and showers to the Sierra Nevada on the 4th and 5th. The more active weather day during this period was on the 5th; some thunderstorms developed over Coalinga and the surrounding Diablo Range in the late afternoon. Nearly 2 inches of rain fell in Coalinga during the late afternoon and early evening, or actually in about an hour! A Flash Flood Warning was issued for Coalinga and nearby locations; flooding was reported in the streets. Along the street gutters and around the storm drains, flood waters were at least 3-4 feet deep. Fewer showers and thunderstorms developed on the 6th, except there were some showers and thunderstorms in the Kern County desert areas, and they began to develop fairly early, or during the late morning hours (around 10:30 AM) and lasted until around 6:00 PM.

On the 7th, the temperatures warmed to several degrees above average; temperatures rose in the mid to upper 90s in the warmest locations, including in the San Joaquin Valley. By the following day, temperatures were much warmer; in fact, the entire San Joaquin Valley experienced high temperatures well above 100 degrees. Temperatures generally ranged from around 104 to 109 degrees in these locations on the 8th. Fresno had its first triple digit high temperature on the 8th; it reached 106 degrees. Bakersfield had its second 100 degree day; it also reached 106 degrees.

On the 9th and into the 10th, tropical moisture from the remnants of Hurricane Blanca that came from Baja California and the Gulf of California moved over California and brought mainly light showers to the San Joaquin Valley. Amounts were mainly below one tenth of an inch of rain; however, there were some locally higher amounts, such as in the Temblor Range in western Kern County and parts of the Sierra Nevada and Kern County mountains where some isolated thunderstorms developed. One location, a remote automated weather station at Twisselman Mountain, received just below 0.30 inch in western Kern County as the shower activity persisted in this area for much of the day on the 9th. During the 10th, there was an upper-level low pressure system off the coast of the San Francisco Bay Area that moved inland and was able to produce more showers and thunderstorms with heavy rain as plenty of moisture remained over central California. There was flooding in Taft (southwestern Kern County), as over an inch of rain fell in about an hour, or around 5:00 PM-6:00 PM; a Flash Flood Warning was issued during this time. More thunderstorms developed to the east and moved over parts of the southern end of the San Joaquin Valley, including Mettler (near the split of Interstate 5 and State Route 99 freeways) and Arvin. Some gusty winds produced some blowing dust and knocked down some trees and power lines in the southern end of the San Joaquin Valley, including in Mettler and Bakersfield just before 7:00 PM. In addition, the northwest side of Bakersfield received about a third of an inch in about 30 minutes as another thunderstorm cell approached from the northwest later in the evening. These storms cooled temperatures into the 60s as the rain was falling in the southern San Joaquin Valley; temperatures just prior to the rain were in the upper 80s to near 90 degrees.

On the 11th, temperatures warmed slightly or remained around the same as on the previous day. The airmass remained humid near the surface, especially in the San Joaquin Valley, although much less shower and thunderstorm activity was observed as the airmass became somewhat more stable. The only locations were in the Sierra Nevada in Fresno County, such as near Huntington Lake and in the mountains above this location, and in Yosemite along Highway 120 below Tioga Pass. A few small wildfires broke out in the Sierra Nevada and adjacent foothills due to lightning striking trees.

Temperatures were on the rise on the 12th and into the 13th as high pressure continued to build over the region. Humidity remained quite high on the 12th in the San Joaquin Valley, and the air felt quite muggy to most people. Low temperatures remained well above average due to this humidity. In addition, a severe thunderstorm warning was issued for the Tulare County mountains near Springville on the 12th, and some flash flood warnings were issued, especially in the Kern County mountains. There were reports of mudslides in the Kern County mountains along Highway 58.

Sufficient moisture remained until at least the 13th for mountain showers and thunderstorms, although the moisture gradually cleared out of the Central Valley over the next couple of days. However, there was another report of a mudslide along Kelso Creek in the Kern County mountains due to heavy rain from thunderstorms; this mudslide was in the form of a three-foot high wall of mud and water and washed out about 20 feet of roadway.

On the 14th until the 16th, conditions were generally dry and warm. Daytime temperatures trended slightly lower, especially in the lower elevations. Low temperatures were noticeably cooler during this time, as the airmass dried considerably. Shower and thunderstorm development ceased during this time over the mountains.

Mostly clear skies and above average temperature continued over the central California interior on the 17th and during the next several days as high pressure built over the area. The warmest temperatures in our warning area were over the Kern County desert where highs reached above 110 degrees. Besides the heat, there were gusty winds at times in the passes and canyons in eastern Kern County; local gusts were as high as 50-60 mph in the usual wind-prone spots.

By the 21st, temperatures trended down slightly as the ridge of high pressure shifted eastward. Strong winds and lenticular clouds were observed over of the mountain peaks of the Sierra Nevada as a trough of low pressure passed to over northern California. Dry southwest to west winds prevailed aloft during this time, so no storms were able to form over the mountains or anywhere in our forecast area. The strongest wind gust was 76 mph in the extreme southern Sierra Nevada in Kern County at Bird Springs Pass (to the northeast of Tehachapi) during the afternoon of the 21st; Mojave was gusting to over 50 mph around that time. Seasonal average temperatures continued for the next couple of days as high pressure remained well to the east.

Much warmer temperatures returned to the region on the 25th and into the 26th; some locations reached their hottest temperatures for the year so far (such as Fresno, which reached a high of 107 degrees). A hot and dry airmass prevailed and suppressed thunderstorm development over the southern Sierra Nevada.

Tropical moisture began flowing over the area during this time; however, it was in the form of mid-level and cirrus clouds. Low temperatures were also relatively warm during this period as there was sufficient cloud cover.

On the 27th, additional tropical moisture brought showers and sprinkles to the southern San Joaquin Valley, Kern County mountains, and parts of the southern Sierra Nevada. The air near the surface remained quite warm and dry, but high temperatures were not as warm, mainly due to increased cloud cover.

During the 28th and 29th, temperatures were slightly lower, or returned to near average for late June. While High pressure was centered over the Great Basin, it continued to dominate the weather over the central California interior and brought enough tropical moisture to maintain at least partly cloudy skies with mid-level and high clouds aloft. Some locations in the southern Sierra Nevada, including near the crest in Yosemite National Park, received showers and thunderstorms during the 29th.

By the last day of the month, temperatures returned to well above average and were around 5-10 degrees warmer than the previous day, as there was less cloud cover and slightly drier air. There was still plenty of unstable air in Yosemite National Park; a thunderstorm dumped almost one half of an inch of rain at Tuolumne Meadows.

Overall, June 2015 was an above average month for many locations in terms of precipitation; however, coverage was spotty due to the scattered nature of thunderstorm coverage in the early part of the month. The west side of the San Joaquin Valley received the highest precipitation anomaly (see Fig 1 on next page), while other locations received little or no rainfall for the month. In addition, much warmer than average temperatures prevailed throughout the central California interior (Fig 2, on next page); Bakersfield had its 4th warmest June on record, while Fresno had its 3rd warmest.

Fig 1 - Percent of normal precipitation for June 2015:

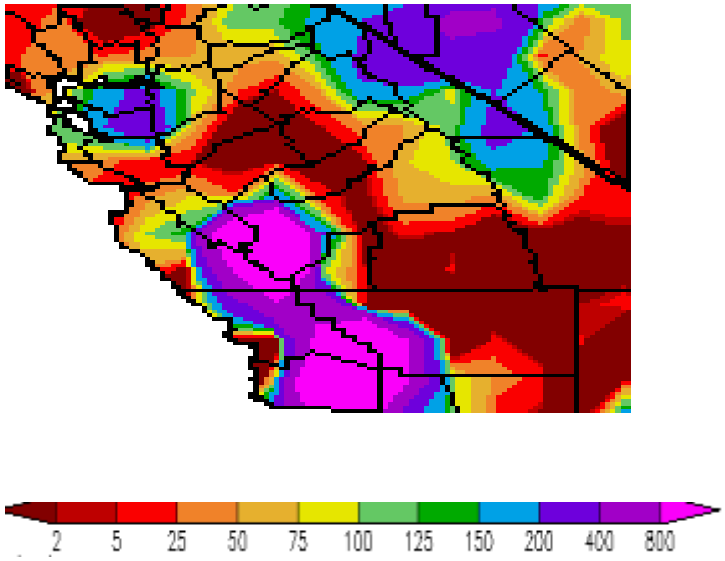

Fig 2 - Departure from average temperature for June 2015: