

MARCH 2007 WEATHER SUMMARY

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In the wake of the storm that hit central California at the end of February, cold air filled the San Joaquin Valley. Temperatures in the Valley on the first two days of the month were only in the mid 50s to around 60. Bakersfield had a low of 32 degrees on the 1st. This was not only the last freezing night of the 2006-07 frost season, but also tied the record low for that date at Meadows Field (set in 1930). This cold air mixed out on the 3rd as high pressure built into the region; highs on March 3rd were as much as 14 degrees warmer than the previous day, and continued to warm the next few days as the upper-level ridge amplified ahead of a weak Pacific storm.

This storm brought a push of colder air into central California, with temperatures on March 8th cooler by 8-10 degrees from the 7th. Despite this cooling, high temperatures remained slightly above normal. Sporadic light showers accompanied the storm, but neither Bakersfield nor Fresno saw any rain. Only a few inches of snow fell in the high country of the Southern Sierra Nevada.

Strong high pressure built into California built in the wake of the storm. Temperatures warmed rapidly, with Fresno breaking 80 degrees for the first time this year, with a high of 82 degrees on March 12th; the high at Fresno on the 9th had been only 68.

Bakersfield set record high temperatures on March 12th and 13th, while Fresno saw record highs on the 13th and 14th. Bakersfield also set a record high minimum temperature on the 14th. This string of warm days, which saw Fresno hit 87 on March 16th, and Bakersfield reaching 88 degrees (also on the 13th), was a major factor in both Bakersfield and Fresno having their 8th warmest March on record.

After a mostly warm and dry first half of March, two strong Pacific storms moved through the central California interior. The first storm arrived on March 20th, and brought between a quarter and a half inch of rain to the central and southern San Joaquin Valley, with the heaviest rain over the south end of the Valley. Likewise, the heaviest snow fell in the Tulare County mountains, where Lodgepole recorded over 4 inches of new snow, while Grant Grove reported 2 inches. Three-quarters of an inch of snow fell as far south as Bear Valley Springs in the Tehachapi Mountains.

A short-lived upper-level ridge moved into California behind the storm, with temperatures warming back into the 80s on the 24th, albeit for only one day. Two days later, a strong and cold storm dropped out of the Gulf of Alaska into California.

The storm brought a strong surge of cold air into the region, with temperatures cooling around 15 degrees from the 26th to the 27th. The snow level was very low, with snow falling into the Sierra Nevada foothills down to the 2500-foot level at times. Strong winds

developed over the Kern County mountains and deserts, with frequent gusts to 60 mph. Mojave saw a few gusts to 75 mph as winds funneled through the Tehachapi Pass.

The high country of the Southern Sierra Nevada received up to 14 inches of new snow, while further south, up to 8 inches fell in the Tulare County mountains. A half foot of snow fell at Fish Camp, at an elevation of 5000 feet near Yosemite National Park. In the Kern County mountains, 9 inches of fresh snow fell on Alpine Valley (at 6000 feet) the night of March 26th-27th, and Bear Valley Springs in the Tehachapi Mountains reported 5 inches of snow. A mix of rain and snow was observed at Mountain Mesa, on the south shore of Lake Isabella at an elevation of 2800 feet.

In the San Joaquin Valley, the storm triggered several thunderstorms during the evening of March 26th. Outflow winds from collapsing cells generated gusts to 40 mph in Fresno, and downed power lines in Reedley. Although the 27th was relatively quieter, the combination of strong subsidence aloft and tight surface pressure gradients brought another round of gusty winds to the region. Gusts to 40 mph were recorded at Hanford Municipal Airport and at Meadows Field in Bakersfield. 38 mph gusts were observed in Fresno, toppling several trees. (The soil was already moist from the 0.65 inch of rain that fell in Fresno the previous day.) Gusts to 38 mph also were recorded in Visalia.

March ended on a warm and dry note, as high pressure returned to California and warmed temperatures in the central and southern San Joaquin Valley into the 80s.