

MAY 2014 WEATHER SUMMARY FOR THE CENTRAL CALIFORNIA INTERIOR

*By Gary Sanger, Climate Services Focal Point
And Brian Ochs, Assistant Climate Focal Point
WFO San Joaquin Valley-Hanford*

May began with a strong ridge of high pressure that began to influence the region during the last two days of the previous month, and well above average temperatures prevailed throughout the region. On the 1st and the 2nd, high temperatures reached into the 90s throughout the central and southern San Joaquin Valley, as well as the desert in eastern Kern County. Relative humidity was quite low (minimum values below 10 percent) during the first day of the month over the Kern County Mountains; the low humidity coupled with gusty winds and low moisture in the local vegetation prompted a Red Flag Warning for this area.

The high pressure began to weaken on the 3rd as a low-pressure system approached California. Marine air began spilling into the San Joaquin Valley, cooling temperatures several degrees, although temperatures continued well above normal.

The low-pressure system reached central California on May 4th, with a deep marine layer spilling through the passes and canyons of the Temblors and Diablo Range, as well as surging through the Sacramento Delta. The cold front arrived the next day, bringing light rain to the San Joaquin Valley, with heavier showers over the Southern Sierra Nevada foothills. The computer models had indicated the potential for several inches of snow over the Sierra Nevada high country, and due to the lateness of the storm a Winter Weather Advisory had been issued for May 5th-6th. SNOTEL gages in Madera, Fresno and Tulare Counties estimated that as much as 14 inches of snow had fallen on the highest elevations. Lodgepole, at 6690 feet in Sequoia National Park, reported 3 inches of new snow.

Precipitation spread south into Kern County, with snow falling to around 5000-5500 feet during the morning of May 6th. Bakersfield received 0.04 inch of rain from the storm, four times Fresno's paltry 0.01 inch. For Bakersfield, this was the only measurable rain for the month of May.

The storm brought gusty winds to the mountains and desert areas of Kern County, with gusts as high as 68 mph at Indian Wells Canyon on the early morning of May 6th and more widespread gusts of 45-55 mph during the day of the 6th.

A trailing impulse brought light showers to the region on May 8th-9th. In its wake, strong winds developed over the region. In the southeastern Kern County desert, the California Highway

Patrol reported visibilities down to 100 feet in blowing dust on Highway 14 south of Mojave during the afternoon of May 9th. At the time of the report, winds were gusting to 59 mph at the Mojave Air and Space Port.

Shortly before midnight on May 9th-10th, winds gusted to 74 mph at Cache Creek along the southern flank of the Piutes, and to 90 mph at the National Test Pilots School in Mojave. Winds in the central and southern San Joaquin Valley increased during the afternoon of May 10th, with several gusts to 35-40 mph, including a gust to 37 mph at the Fresno-Yosemite International Airport.

A dust storm hit Ridgecrest during the early evening of May 10th. Winds gusted to 69 mph, and there was a report of roof damage. The California Highway Patrol reported zero visibility at times during the event.

After diminishing somewhat overnight, winds in the San Joaquin Valley increased again during the morning of May 11th, with gusts to 35-45 mph. There were reports of trees blown down on the 11th, including a tree around a foot in diameter near Merced, and a house in Frazier Park was damaged by a falling tree.

High pressure developed off the California coast on May 12th and built eastward into the state. This brought rapid warming to the region, and the warmest spots in the central and southern San Joaquin Valley hit triple digits on the 14th. Both Bakersfield and Fresno had their first 100-degree day of the year on May 15th. Fresno tied its record high for that date of 102 degrees, last set in 1927. The combination of well-above-normal temperatures, extremely dry fuels and low humidities prompted the issuance of a Red Flag Warning for the Sequoia National Forest and all of the Kern County Mountains. Red Flag conditions persisted for three days, from May 13th-15th.

High pressure continued over the region on May 16th, with Fresno hitting 100. The high pressure began to weaken on the 17th. Temperatures moderated each day through the 18th as an upper-level trough moved over the region. Fresno cooled by 8 degrees both days, with its high dropping from 100 on the 16th to 84 on May 18th.

Temperatures reached around normal for mid-May on the 18th and 19th and cooled even more by the 20th as a relatively cold low pressure system influenced the region's weather. The upper-level low produced showers and thunderstorms during the night of the 19th, as well as on the 20th as the low lifted northeastward into the Great Basin. Rain and snow showers fell over the Sierra Nevada from Yosemite to Tulare County on the 20th, and a few showers developed over the west side hills during the afternoon. As much as 8 inches of snow fell at Tioga Pass through this day, and this caused a shutdown of Highway 120 through the pass. Several inches of snow fell in quite a few locations in the southern Sierra Nevada. Ponderosa, in Tulare County (above Camp

Nelson, northeast of Springville) received 6 inches, and some remote stations picked up around 3 to 6 inches. The low had moved very little by the 21st and 22nd continued to produce scattered showers and a few thunderstorms over the Southern Sierra Nevada.

During May 22nd the flow around the upper level low over central Nevada turned northeasterly and allowed thunderstorms to develop in the Sierra Nevada foothills and even the San Joaquin Valley in the afternoon and evening. Fresno picked up 0.03 inch of rain due to a thunderstorm that moved down from the nearby Sierra Nevada foothills late in the evening of the 22nd. Earlier in the afternoon on the 22nd, Bakersfield had a gust to near 40 mph due to outflow from a dissipating thunderstorm to the north of Meadows Field. Porterville even had a gust to around 30 mph from another thunderstorm that briefly moved over the city. Isolated thunderstorms developed along the west side of the southern San Joaquin Valley, including near Avenal and Lost Hills, and into the Diablo Range near Avenal.

The upper-level low slowly moved southward into southeastern California on the 23rd and then pushed eastward into Arizona by the morning of the 24th. Showers and isolated thunderstorms developed on the 23rd in the Kern County mountains and desert, as well as the southern Sierra Nevada in Fresno County due to lingering moisture and a relatively unstable atmosphere. Instability over the mountains gradually declined as a ridge of high pressure strengthened over the region.

The high pressure allowed warm, benign weather to return. Temperatures reached well above average during the 25th through the 27th, although daytime highs reached 100 degrees or just slightly lower in the warmest locations during this period throughout the San Joaquin Valley and the Kern County desert areas.

A slow moving upper-level trough brought cooler air and 35 to 40 mph gusts to locations in the western San Joaquin Valley on the 28th. The gusty winds prompted a wind advisory and also brought some areas of blowing dust. High temperatures fell around 10 degrees compared to the previous day throughout much of NWS Hanford's warning and forecast area. The trough lingered over the area on May 29th, then gave way to a short-lived high pressure system. High temperatures in the central and southern San Joaquin Valley warmed into the mid 90s on May 30th, then fell back a few degrees on the last day of the month as a weak low-pressure trough brought a shallow influx of marine air into the Valley.

For the month of May, both Bakersfield and Fresno only received 0.04 inch of rain. Bakersfield had 22.2 percent of its normal rainfall of 0.18 inch, while Fresno had a mere 9.3 percent of its normal rainfall for May of 0.43 inch. The average temperature for the month for both cities was around 74 degrees. Fresno had its sixth warmest May on record, and Bakersfield tied for its 15th warmest May.

THE WARMEST MAYS ON RECORD
(AVERAGE TEMPERATURE IN FAHRENHEIT)

	BAKERSFIELD	FRESNO
1.	82.6...1909	77.3...2001
2.	76.9...2001	76.0...1992
3.	76.7...1973	75.3...2009
4.	76.6...1992	75.3...1997
5.	76.5...2009	74.8...1984
6.	76.2...1931	*74.2...2014*
7.	76.1...1982	73.6...1931
8.	75.2...1976	73.0...2013
9.	74.9...1979	73.0...1947
10.	74.8...1947	72.9...1973
11.	74.5...1940	72.5...1924
12.	74.5...1910	72.3...2012
13.	74.3...1969	72.2...1940
14.	74.0...1970	72.0...1928
15.	*73.8...2014*	71.9...2006
16.	73.8...1997	71.9...1897
17.	73.6...1924	71.8...1987
18.	73.5...1975	71.5...2007
19.	73.3...1928	71.4...1904
20.	73.2...1974	71.3...1934