

Storm Data and Unusual Weather Phenomena - November 2013

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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CALIFORNIA, South Central

MERCED COUNTY --- 1.5 NNE CREGAN [37.32, -120.47], 1.1 NNW CREGAN [37.31, -120.49], 1.2 NE CREGAN [37.31, -120.46], 1.9 NE CREGAN [37.32, -120.46]

	11/20/13 17:00 PST	0	Flood (due to Heavy Rain)
	11/20/13 17:30 PST	0	Source: Newspaper

The intersection of Olive and G Street were flooded out for about 30 minutes.

MERCED COUNTY --- 1.1 WNW (MER)CASTLE AFB [37.38, -120.59], 1.1 S (MER)CASTLE AFB [37.35, -120.57], 1.9 NNE FERGUS [37.36, -120.54], 0.9 NNW (MER)CASTLE AFB [37.38, -120.57]

	11/20/13 17:45 PST	5K	Flood (due to Heavy Rain)
	11/20/13 18:45 PST	0	Source: NWS Employee

NWS Meteorologist reported flooded streets around Castle airbase.

TULARE COUNTY --- 0.6 E PIXLEY [35.97, -119.29], 0.4 E PIXLEY [35.97, -119.29], 0.4 ENE PIXLEY [35.97, -119.29], 0.6 NE PIXLEY [35.98, -119.29]

	11/21/13 08:08 PST	0	Flood (due to Heavy Rain)
	11/21/13 09:08 PST	0	Source: Broadcast Media

Highway 99 was flooded out at Court Street.

KERN COUNTY --- 1.1 E RIDGECREST [35.63, -117.66], 1.5 ESE RIDGECREST [35.62, -117.66], 1.5 NNW RIDGECREST ARPT [35.62, -117.63], 1.7 N RIDGECREST ARPT [35.62, -117.62]

	11/21/13 17:39 PST	0	Flood (due to Heavy Rain)
	11/21/13 18:39 PST	0	Source: State Official

Flooding at E Spring Ave and Gateway Blvd.

KERN COUNTY --- 1.7 E OILDALE [35.42, -119.00], 1.6 W OIL CENTER [35.40, -119.01], 0.4 ENE OIL CENTER [35.40, -118.97], 2.1 NNE OIL CENTER [35.43, -118.97]

	11/21/13 17:39 PST	0	Flood (due to Heavy Rain)
	11/21/13 18:39 PST	0	Source: Law Enforcement

Hart street was flooded by heavy rain.

KERN COUNTY --- 1.3 WSW MAGUNDEN [35.36, -118.92], 2.4 SSW MAGUNDEN [35.34, -118.92], 1.0 SSW EDISON [35.34, -118.88], 0.2 ESE EDISON [35.35, -118.87]

	11/21/13 18:52 PST	0	Flood (due to Heavy Rain)
	11/21/13 19:52 PST	0	Source: Law Enforcement

Flooding on SR 58 and Washington St.

KERN COUNTY --- 0.7 S BAKERSFIELD [35.36, -119.00], 1.1 S BAKERSFIELD [35.35, -119.00], 0.9 SSE BAKERSFIELD [35.36, -118.99], 0.7 SE BAKERSFIELD [35.36, -118.99]

	11/21/13 19:12 PST	0	Flood (due to Heavy Rain)
	11/21/13 20:12 PST	0	Source: Law Enforcement

Law enforcement reported flooding at Tulare St and Columbus St.

KERN COUNTY --- 0.7 S BAKERSFIELD [35.36, -119.00]

	11/21/13 19:58 PST	0	Heavy Rain
	11/21/13 19:58 PST	0	Source: Broadcast Media

Downtown Bakersfield had heavy rain with a total of 0.45 inches reported by local media outlets.

TULARE COUNTY --- 2.4 NNE MILO [36.25, -118.80], 1.1 NE MILO [36.23, -118.81], 2.8 ENE MILO [36.23, -118.77], 3.9 NE MILO [36.26, -118.77]

	11/21/13 21:53 PST	0	Flood (due to Heavy Rain)
	11/21/13 22:53 PST	0	Source: Law Enforcement

Flooding along Road 192 and Ave 32.

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(CA-Z096) S SIERRA MTNS				
	11/22/13 18:59 PST		0	High Wind (MAX 62 kt)
	11/23/13 03:00 PST		0	

A stronger Pacific storm moved into northern California on the 19th, with precipitation spreading southward into the central California interior that evening. This was the first storm to bring significant precipitation to the central California interior and reached the region during the afternoon of November 20th, with the heaviest rain falling on the central and southern San Joaquin Valley during the early evening. Several Valley and foothill stations reported rainfall amounts in excess of a half inch from the storm and a few sites had an inch or more of rain. Flooding was reported in Atwater (Merced County) near the Castle Air Museum and Airpark. The rain gauge at the nearby Merced Regional Airport recorded 0.58 inch of rain.

Rain continued overnight and into the 21st. Runoff accumulated in low-lying roadways, and leaves clogging storm drains exacerbated the problem. Flooding was reported on southbound Highway 99 near Pixley (in Tulare County) during the morning commute.

In the Southern Sierra Nevada, estimates of new snow ranged as high as nine inches. Precipitation fell over the entire central California interior, including the desert of Kern County where Edwards AFB reported 0.35 inch of rain

The storm packed a 1-2 punch, as a second cold front intensified as it moved into central California on the 21st. This time, the heaviest precipitation was over the south end of the San Joaquin Valley. Heavy rains caused street flooding north of Bakersfield during the late afternoon. At Meadows Field, 0.45 inch of rain fell in a two-hour period (from 6 to 8 PM). Hail up to a half-inch in diameter fell on Rosamond shortly after sunset.

The upper-level low moved into southern California on November 22nd, and the easterly flow north of the low kept upslope precipitation continuing over parts of Kern and Tulare Counties. A spotter in Frazier Park reported around an inch of snow through the late evening of the 22nd, with light snow still falling. Bakersfield had a three day—November 20th-22nd—storm total of 0.94 inch of rain, 0.30 inch above the normal for the entire month of November.

Ground moisture meant the start of the 2013-2014 fog season. Patchy dense fog developed during the morning of November 23rd near Merced/Atwater and along the Highway 198 corridor between N.A.S. Lemoore and Visalia. These are favored locations for fog development, along with Highway 43 from Reedley to Corcoran, and fog occurred in these locations each day through the 27th around sunrise.

A low pressure system developed in the eastern Pacific and moved south, parallel to the California coast. The clockwise circulation around the low created a southerly flow over California. These winds funneled through Tejon Pass and downsloped into the southern San Joaquin Valley, warming temperatures to well above normal. Bakersfield had a high of 77 degrees on November 27th, 16 degrees above normal. Fresno also was 16 degrees above normal, with a high of 76 degrees.

Moisture entrained in the flow around the low triggered showers over the Tehachapi Mountains from the evening of November 28th into the 29th. Some of these showers moved northward off the mountains and into the south end of the San Joaquin Valley, including Bakersfield where a trace of rain fell on the 29th.

Both Bakersfield and Fresno had above normal mean temperatures for the month of November. Fresno had an average temperature of 58.5 degrees, 4.2 degrees above normal. November 2013 was the sixth warmest November on record for Fresno and was 0.2 degree warmer than November 2012. Bakersfield had an average temperature of 58.2 degrees, 3.1 degrees above normal. November 2013 tied with November 1907 for the 14th warmest November on record. November 2013 was 0.1 degree cooler than November 2012.

Bakersfield's rainfall for the month of 0.94 inch was 149.6 percent of the normal value of 0.64 inch. Fresno only received 0.54 inch, just over half (50.5 percent) of the normal of 1.07 inch. For the season through November 30th, Bakersfield had 0.97 inch (91.5 percent of normal), while Fresno had 0.58 inch (30.7 percent of normal). Since January 1s through the end of November, Bakersfield had 3.35 inches of rain (61.5 percent of normal), while Fresno had 2.86 inches (29.4 percent of normal).