

Storm Data and Unusual Weather Phenomena - January 2015

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

(CA-Z089) W CENTRAL S.J. VALLEY, (CA-Z090) E CENTRAL S.J. VALLEY, (CA-Z091) SW S.J. VALLEY, (CA-Z092) SE S.J. VALLEY, (CA-Z093) S SIERRA FOOTHILLS, (CA-Z094) TULARE CTY FOOTHILLS, (CA-Z095) KERN CTY MTNS, (CA-Z096) S SIERRA MTNS, (CA-Z097) TULARE CTY MTNS, (CA-Z098) INDIAN WELLS VLY, (CA-Z099) SE KERN CTY DESERT

01/01/15 00:00 PST	0	Drought
01/31/15 23:59 PST	0	

The California drought continued in full force during the month of January, 2015. Precipitation fell on only a few days of the month, and mostly across Kern County. Snowfall in the Sierra Nevada was limited to the highest elevations due to the warm nature of the storms that did move through. Temperatures remained well above normal throughout central California.

The U.S. Drought Monitor continued to report exceptional drought conditions across the entire Central California region. This extent of exceptional drought is extremely unusual for California. The 2013-2014 water year (July 1 - June 30) concluded with Fresno setting its second driest on record (4.81 inches) and Bakersfield setting its third driest (2.41 inches). For the calendar year, 2014 was the warmest year on record for Fresno and Bakersfield. The trend of below normal precipitation and above normal temperatures continued into 2015.

There continues to be significant media coverage on the on-going drought conditions. These reports include discussion of significant re-allocation of water resources from the east to west side of the San Joaquin Valley, farmers forgoing planting of some crops, a decrease in the snow-related tourism activity in the Southern Sierra Nevada, reduction in air quality due to persistent stagnant air, loss or reduction of ground water, wells drying up in several communities leaving them with no water, and an unprecedented increase in fire danger across the Southern Sierra Nevada and Tehachapi Mountains.

(CA-Z089) W CENTRAL S.J. VALLEY, (CA-Z090) E CENTRAL S.J. VALLEY, (CA-Z091) SW S.J. VALLEY, (CA-Z092) SE S.J. VALLEY

01/01/15 02:00 PST	0	Frost/Freeze
01/01/15 09:00 PST	0	

Cold air that moved into the San Joaquin Valley at the end of December continued to bring below freezing temperatures on the 1st of January. Kern, Tulare, Kings, Fresno, Madera and Merced counties all experienced temperatures dropping below 32 degrees with many areas dropping to 26-28 degrees in areas without protection for an hour or two. A few locations had minimum temperatures of 24-25 degrees for a brief period. According to Citrus Mutual, utilization of wind machines and water raised grove temperatures on average by three to four degrees thereby assuring no significant fruit damage for any of the major varieties, navel oranges, lemons and mandarins.

KERN COUNTY --- BAKERSFIELD [35.37, -119.00]

01/11/15 02:00 PST	0	Heavy Rain
01/11/15 18:00 PST	0	Source: Public

Rainfall amounts of 0.5 to 1 inch in 24 hours over the Kern county produced ponding of water/flooding on roadways in the south end of the San Joaquin Valley, in and south of Bakersfield. The flooded areas included part of Highway 99 between Rosedale Highway and Olive Drive in Bakersfield and Highway 119 near Buena Vista.

KERN COUNTY --- 7.4 NNE EDISON [35.44, -118.80]

01/11/15 06:55 PST	0	Heavy Rain
01/11/15 10:30 PST	0	Source: Law Enforcement

Heavy rain resulted in a rock slide on the eastbound side of Highway 178 near the mouth of the Kern Canyon. The road was blocked by baseball sized rocks.

KERN COUNTY --- 9.6 E ONYX [35.67, -118.06]

01/11/15 07:00 PST	0	Heavy Rain
01/11/15 11:00 PST	0	Source: Law Enforcement

Heavy rain contributed to rocks sliding across the roadway.

KERN COUNTY --- WOFFORD HGTS [35.70, -118.45]

01/11/15 07:00 PST	0	Heavy Rain
01/11/15 17:42 PST	0	Source: Public

Rainfall of 0.93 inches in less than 24 hours at Wofford Heights, elevation 4800 feet.

A series of disturbances moved into Southern California on January 10 and 11, 2015, and brushed across Kern county and the Tulare county portion of the Sierra Nevada. Only light precipitation occurred on January 10, but the system that moved through on the 11th was

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stronger and produced locally heavy rain. This resulted in some street flooding in the Bakersfield area along with some rock slides along Highway 178 in the Kern county mountains, and along Redrock-Randsburg Road in the Kern county desert.

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01/11/15 19:15 PST		0	Dense Fog
01/16/15 03:04 PST		0	

Plenty of low level moisture and stable conditions under high pressure allowed dense fog to form each night and morning from January 11 to 16, 2015. In the days prior to this, there had been patchy fog, but it became more widespread throughout the San Joaquin Valley after a weak weather disturbance brought rain across Kern county on the January 10-11.

The dense fog formed in Kings and Tulare counties in the evening of January 11, then spread into Fresno, Madera, and Merced counties as well as south into Kern county by early morning on January 12. Visibilities dropped to less than 500 feet in many areas. The fog lifted in most areas by noon on January 12. Dense fog also developed on parts of the Kern county desert areas near Edwards AFB and Ridgecrest.

The fog quickly redeveloped in the early evening of January 12 and continue through the morning of January 13 with widespread visibilities below 1/4 mile and many areas reporting visibility below 800 feet. The fog cleared between 10 AM and noon.

The worst of the fog occurred on January 14, with dense fog developing around midnight, but not clearing until nearly 2 pm. There were numerous school bus delays due to the dense fog and California Highway Patrol was pacing traffic on area highways. A major traffic accident occurred in Visalia involving three vehicles and resulting in major injuries to two people.

The dense fog redeveloped on the evening of January 14 and continue through noon on January 15. It then quickly redeveloped early evening on the 15th, but lifted above 1/4 mile by 3 am on the 16th as a weak disturbance moving by to the north helped to lift the fog into a stratus deck.

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01/22/15 23:35 PST		0	Dense Fog
01/26/15 10:00 PST		0	

An upper trough moved through California on January 22, scouring out the low stratus deck that had been over the San Joaquin Valley for several days. However, the trough was not strong enough to completely scour out the low level moisture. A ridge of high pressure over the eastern Pacific began to build into northern California creating stable conditions with good radiational cooling. This led to areas of dense fog developing just after midnight on January 23. Visibility improved above 1 mile as the fog lifted into a low stratus deck by noon and remained through the remainder of the day.

Dense fog redeveloped by early morning of January 24. The fog was particularly bad in Kern County where the California Highway Patrol reported areas of visibility less than 200 feet with pacing on many parts of Highway 99 and Highway 58 through Bakersfield. The fog once again lifted into a low stratus deck by afternoon. Then dense fog developed again late in the evening and persisted through noon on January 25. The fog lifted into a low stratus deck which persisted through the afternoon before clearing in the evening. This allowed areas of dense fog to redevelop in the early morning hours of January 26. This time, the dense fog was the worst on the west side of the San Joaquin Valley with visibility of 200 to 500 feet along parts of Interstate 5. The weather pattern began to change on January 26, allowing the fog to clear by mid morning as a low pressure system off the northern Baja coast began spreading clouds across central California and spreading some rain as far north as Kern county.

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01/28/15 02:30 PST		0	Dense Fog
01/31/15 10:53 PST		0	

A storm system brought precipitation to central California on January 27, 2015, and was followed by an area of high pressure and stable conditions which led to dense fog development in the San Joaquin Valley each late night and morning on January 28-31. Widespread visibility below 1/4 mile occurred each day, with the visibility dropping below 500 feet in some areas. The dense fog led to airport delays in Fresno, numerous school bus delays each day, and numerous traffic accidents, two of which resulted in fatalities.