

Storm Data and Unusual Weather Phenomena - December 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

12/01/15 00:00 PST	0	Drought
12/31/15 23:59 PST	0	

The California drought continues in full force during the month of December, 2015. Fresno received 2.97 inch of rainfall while Bakersfield only received 0.58 of precipitation during the month of December. Even with these rainfall amount there has been little response in water storage across 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 general trend of below normal precipitation and above normal temperatures has continued this year.

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, 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. Also, communities in Central California interior face state mandated reductions in municipal water use.

(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

12/10/15 03:02 PST	0	Dense Fog
12/11/15 04:00 PST	0	

Surface high pressure built into the area after a wet rain event. This resulted in areas of fog development.

(CA-Z099) SE KERN CTY DESERT

12/11/15 10:00 PST	0	High Wind (MAX 58 kt)
12/11/15 22:00 PST	0	

Upper level trough moving through the area pushed a strong mid and upper level jet through the area. These jets moved across the mountains of Kern County which resulted in some gusty winds on the desert floor.

(CA-Z096) S SIERRA MTNS, (CA-Z097) TULARE CTY MTNS

12/13/15 12:00 PST	0	Heavy Snow
12/14/15 10:00 PST	0	

(CA-Z095) KERN CTY MTNS

12/13/15 16:00 PST	0	Winter Weather
12/14/15 12:00 PST	0	

KERN COUNTY --- 2.2 SSE GRAPE VINE [34.89, -118.91], 2.2 SSE GRAPE VINE [34.89, -118.91], 2.3 SSE GRAPE VINE [34.89, -118.91], 2.3 SSE GRAPE VINE [34.89, -118.91]

12/13/15 18:30 PST	0	Flash Flood (due to Heavy Rain)
12/13/15 21:11 PST	0	Source: Law Enforcement

California Highway Patrol reported debris and mud flowing on the northbound lanes of Interstate 5, which shutdown traffic for several hours.

An upper level trough and an associated cold front moved through the region bringing a round of mountain snow showers and valley rain. This system dropped snow levels to around 4000 ft, though the main impact remained in the higher elevations.

(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

12/15/15 02:00 PST	0	Frost/Freeze
12/16/15 08:00 PST	0	

Cold northerly flow developed after a cold system moved through the area days prior. This left the region under a fairly cold air mass, which resulted in sub freezing temperatures in the valley.

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(CA-Z090) E CENTRAL S.J. VALLEY, (CA-Z091) SW S.J. VALLEY, (CA-Z092) SE S.J. VALLEY				
	12/20/15 00:11 PST		0	Dense Fog
	12/20/15 19:00 PST		0	
Progressive systems moved through and continued to move through the area around the 20th, though deep soil moisture and overnight cooling lead to fog development.				
(CA-Z096) S SIERRA MTNS, (CA-Z097) TULARE CTY MTNS				
	12/21/15 10:00 PST		0	Heavy Snow
	12/22/15 16:00 PST		0	
(CA-Z099) SE KERN CTY DESERT				
	12/21/15 20:00 PST		0	Winter Storm
	12/22/15 20:00 PST		0	
KERN COUNTY --- 6.8 NE MAGUNDEN [35.45, -118.82], 3.8 NE DEMOCRAT SPGS [35.57, -118.63], 4.1 WNW HAVILAH [35.53, -118.59], 7.3 NE EDISON [35.42, -118.78]				
	12/22/15 10:04 PST		0	Flash Flood (due to Heavy Rain)
	12/22/15 15:00 PST		0	Source: Department of Highways
California highway department reported a mudslide on highway 178 in the Kern Canyon at 1004 PST, which closed the roadway for several hours.				
A strong upper level jet and associated trough moved through the area, bringing heavy rain and snow showers. This system also had a good moisture tap which enhanced the precipitation rates and amounts. The strong jet with this system also brought gusty winds as the system began to exit the region.				
(CA-Z090) E CENTRAL S.J. VALLEY, (CA-Z091) SW S.J. VALLEY, (CA-Z092) SE S.J. VALLEY				
	12/26/15 23:56 PST		0	Dense Fog
	12/27/15 10:06 PST		0	
(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				
	12/27/15 01:00 PST		0	Frost/Freeze
	12/27/15 09:00 PST		0	
Post frontal airmass resulted in clearing of skies, light winds, and relatively dry air. This lead to freezing temperatures across the valley. Areas that did not freeze during the overnight developed fog.				
(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				
	12/30/15 03:00 PST		0	Frost/Freeze
	12/31/15 09:00 PST		0	
Northwesterly flow aloft lead shortwave energy to only skirt the forecast area, though this did allow for cold air to settle into the valley. The shortwave also reinforced the cold air supply early on the 30th.				