

Storm Data and Unusual Weather Phenomena - December 2007

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

(CA-Z095) KERN CTY MTNS, (CA-Z098) INDIAN WELLS VLY				
	12/01/07 14:32 PST		1K	Strong Wind (MAX 43 kt)
	12/02/07 20:00 PST		0	

High pressure moved into central and southern California on the first day of December, resulting in a period of strong winds across the Kern County Mountains and Deserts. Winds peaked between 45 to 50 mph at times during the morning of the 1st. Some of the locations that experienced the strong winds included Blue Max, Jawbone Canyon, and China Lake.

(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				
	12/01/07 02:00 PST		0	Frost/Freeze
	12/02/07 09:00 PST		0.11M	

High pressure moved into central and southern California during the first few days of December, resulting in a period of abnormally cold temperatures. Frost and freeze conditions were reported across much of the San Joaquin Valley during the mornings of the 1st and 2nd. The coldest temperatures occurred on the morning of the 2nd, when readings bottomed out in the mid 20s at locations such as Collins Corner, Hanford, Los Banos, Orisi, Allensworth, Alpaugh, and Lemoore Naval Air Station.

(CA-Z095) KERN CTY MTNS, (CA-Z098) INDIAN WELLS VLY, (CA-Z099) SE KERN CTY DESERT				
	12/06/07 14:56 PST		3K	Strong Wind (MAX 49 kt)
	12/07/07 16:32 PST		0	

(CA-Z096) S SIERRA MTNS, (CA-Z097) TULARE CTY MTNS				
	12/06/07 16:00 PST		0	Winter Storm
	12/07/07 22:00 PST		0	

(CA-Z095) KERN CTY MTNS				
	12/08/07 16:24 PST		0	Winter Weather
	12/09/07 02:50 PST		0	

The first major Pacific storm since late October reached interior central California beginning December 5th. Cold air pushing into the region dropped temperatures back to near normal, and precipitation from the storm finally reached the area during the afternoon of the 6th. There was abundant moisture with this storm, with the heaviest San Joaquin Valley rain during the late afternoon and early evening hours. Precipitation continued through December 7th, and very cold air behind the cold front dropped snow levels down into the higher Sierra foothills. Fresno received a total of 0.31 inch from the storm; in two days, the rainfall at Fresno Yosemite International Airport equaled that received during the months of September, October and November combined.

This storm caused strong winds to develop on the 6th and 7th at times across the Kern County Mountains and Desert. The highest winds measured by the mesonet weather network included 59 mph at Jawbone, 52 mph at Inyokern, 64 mph at Indian Wells Canyon, 70 mph at Laurel Mountain, and 47 mph at Mojave.

Locally heavy snowfalls were recorded by spotters and SNOTEL stations in the Southern Sierra Nevada. Chilkoat Meadow received an estimated 32 inches of new snow, with several stations above 7000 feet reporting between 1 and 2 feet of fresh snow.

As the storm dropped through California, a closed upper-level low formed. As this low moved south, an upper-level disturbance rotating around it triggered a few moderate showers over the west side of the San Joaquin Valley on December 8th, mainly from Coalinga south. By late afternoon, rain and snow was spreading into the Frazier Park area of the Tehachapi Mountains, and snow levels were falling, reaching around 3500 feet by Sunday morning. Up to 5 inches of snow fell on Frazier Park during the night of December 8th-9th, and accumulating snow closed the Grapevine (at 4300 feet, 1000 feet lower than Frazier Park, which includes the Interstate 5 passageway between northern and southern interior California) for a period of time.

(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				
	12/09/07 02:53 PST		0	Frost/Freeze
	12/16/07 08:00 PST		20K	

A large storm system moved east of the region on the 9th. As high pressure moved back into the region, cold air remained pooled over the central and southern San Joaquin Valley, trapped by the surrounding mountains. Valley temperatures during the morning of the 9th bottomed out mostly in the upper 20s to mid 30s, although a few sites cooled to the mid 20s for a couple of hours. This set the stage for a series of nightly frost events, with eight consecutive nights of near- to sub-freezing temperatures for the central and southern San Joaquin Valley.

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(CA-Z096) S SIERRA MTNS, (CA-Z097) TULARE CTY MTNS				
	12/18/07 06:00 PST		0	Winter Storm
	12/19/07 04:11 PST		0	
(CA-Z095) KERN CTY MTNS				
	12/18/07 15:00 PST		0	Winter Weather
	12/19/07 04:11 PST		0	
FRESNO COUNTY --- 0.9 NW HAMMOND [36.78, -119.79], 1.1 NNW HAMMOND [36.78, -119.79], 1.0 WNW FRESNO [36.79, -119.78], 0.4 WSW FRESNO [36.78, -119.78]				
	12/18/07 23:40 PST		25K	Flood (due to Heavy Rain)
	12/19/07 01:10 PST		0	Source: Law Enforcement
A home located near the intersection of Hampton and Buckingham was flooded, due a combination of persistent heavy rain and poor water drainage.				
FRESNO COUNTY --- 1.5 SSW FIG GARDEN [36.81, -119.83]				
	12/19/07 00:00 PST		5K	Heavy Rain
	12/19/07 09:00 PST		0	Source: NWS Employee
An employee of the NWS measured 1.44 inches of storm total rainfall in the New Fig Garden section.				
FRESNO COUNTY --- 1.7 S HAMMOND [36.74, -119.78], 1.3 N PINEDALE [36.85, -119.80], 1.5 WNW FIG GARDEN [36.84, -119.85], 0.7 WNW (FCH) CHANDLER AF [36.73, -119.83]				
	12/19/07 00:30 PST		0.15M	Flood (due to Heavy Rain)
	12/19/07 02:00 PST		0	Source: Law Enforcement
Local law enforcement reported street flooding along Olive Avenue just east of CA Highway 99. Several other reports of flooded city streets were received during this time frame as well. Media reports indicated some homes were reported flooded in the southwest section of the Fig Garden Village area. Some of this flooding was due to the combination of heavy rain, and poor drainage partially caused by power outages at an important pumping station.				
FRESNO COUNTY --- CLOVIS [36.82, -119.70], 1.3 NE PINEDALE [36.84, -119.78]				
	12/19/07 01:11 PST		0	Heavy Rain
	12/19/07 02:45 PST		0	Source: Trained Spotter
A trained weather spotter reported storm total rainfall of 0.75 inches in only 90 minutes.				
FRESNO COUNTY --- 0.9 NE CLOVIS [36.83, -119.69]				
	12/19/07 06:58 PST		0	Heavy Rain
	12/19/07 09:00 PST		0	Source: Trained Spotter
A trained weather spotter reported a storm total since the 18th of 2 inches.				
(CA-Z095) KERN CTY MTNS, (CA-Z098) INDIAN WELLS VLY				
	12/20/07 10:00 PST		10K	Strong Wind (MAX 49 kt)
	12/20/07 21:00 PST		0	
An area of high pressure developed in the eastern Pacific around mid December, centered near Hawaii. This high pressure feature caused a series of major Pacific storms to ride over the high pressure and into California, carried by very strong upper-atmosphere winds (jet stream winds). While the first storm brought only light rain to the San Joaquin Valley, and a few inches of snow to the higher elevations of the Southern Sierra Nevada, the main impact was to weaken the high pressure and allow a stronger and more potent storm to reach central California beginning the night of December 17th-18th.				
This second storm brought over a half-inch of rain to parts of the San Joaquin Valley floor. Flooding was reported in the Fresno metropolitan area, mainly due to the combination of locally heavy rains and poor drainage areas within the urban and suburban land.				
Very cold air accompanied the storm, settling into Yosemite Valley and resulting in over 4 inches of new snow to the Yosemite Valley floor at an elevation of 4000 feet. In the high country, between 2 and 3 feet of new snow fell, spreading as far south as the Tulare County mountains, where Lodgepole measured 28 inches of new snow. Further south, as much as 6 inches of snow fell near the crest of the Tehachapi Mountains, at Mount Pinos.				
The third storm reached interior central California during the night of December 19th. This storm brought up to a foot of snow to the				

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<p>high country of the Southern Sierra Nevada north of Kings Canyon, and gusty winds to the Kern County mountains and the Indian Wells Valley. Gusts as strong as 64 mph were recorded in the Piutes (at the south end of the Sierra Nevada range), and there were several reports of gusts up to 55 mph in the Tehachapi Mountains and the Kern County Desert.</p>				

(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

12/22/07 00:00 PST	0	Frost/Freeze
12/22/07 10:00 PST	0.14M	

The cold air that accompanied the series of Pacific storms between the 18th and 20th of the month, settled into the San Joaquin Valley, plunging lows into the mid to upper 20s during the morning of the 21st. Another round of near-freezing temperatures was seen in the central and southern San Joaquin Valley yet again on December 22.

(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

12/22/07 11:00 PST	0	Dense Fog
12/26/07 11:00 PST	0	

Behind the series of cold Pacific storms that rolled through California earlier in the month, high pressure slowly built into the Central Valley of California between the 22nd and 26th. As a result of this stable airmass in the region, areas of dense fog developed during the early hours of December 22nd, and lingered over the east side of the San Joaquin Valley into the afternoon. This pattern repeated itself nearly every morning until the 26th of the month. The persistent stable airmass conditions promoted areas of very dense fog where the visibility would fall to nearly zero in small areas.

During the evening of the 24th, a deadly traffic accident occurred, involving a recreational vehicle and a tractor-trailor. One child was killed and two adults were injured during this traffic accident.

(CA-Z095) KERN CTY MTNS, (CA-Z098) INDIAN WELLS VLY, (CA-Z099) SE KERN CTY DESERT

12/26/07 10:14 PST	52K	Strong Wind (MAX 49 kt)
12/26/07 22:00 PST	0	

(CA-Z099) SE KERN CTY DESERT

12/26/07 12:00 PST	0	Dust Storm
12/26/07 16:30 PST	0	

A weak area of low pressure moved through central California during the evening of December 25th. The main impacts were to bring a few showers to the Southern Sierra Nevada and Tehachapi Mountains (including the foothills). Behind the weak low pressure, gusty winds developed over the mountains and deserts, with numerous gusts to 50 mph, and a peak wind gust of 75 mph measured at the Mojave Air/Spaceport.

The strong winds around 75 mph in the desert caused a dust storm to occur in the Lancaster and Mojave areas on the 26th. Law enforcement shut down portions of the Antelope Valley Freeway north of Lancaster, as well as Highway 58 through much of eastern Kern County in the desert. Strong winds also caused a tractor-trailer to overturn along California Highway 14 at California City Blvd.

(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

12/27/07 00:00 PST	0	Frost/Freeze
12/27/07 09:00 PST	20K	

Cold temperatures brought frost to the San Joaquin valley on the morning of the 27th. Cold temperatures in the mid 20s occurred at several valley locations such as Allensworth, Lemoore, Hanford, Porterville, and Visalia.