

Storm Data and Unusual Weather Phenomena - October 2009

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

FRESNO COUNTY --- SHAVER LAKE HGTS [37.10, -119.32]

	10/12/09 21:36 PST	0	0	Heavy Rain
	10/13/09 21:36 PST	0	0	Source: Mesonet

The RAWS weather station at Shaver Lake measured 6.18 inches 24 hour rainfall.

FRESNO COUNTY --- TRANQUILITY [36.65, -120.25]

	10/12/09 21:36 PST	0	0	Heavy Rain
	10/13/09 21:36 PST	0	0	Source: Mesonet

The 24 hour rainfall measured at Trimmer Springs RAWS station was 4.5 inches.

MADERA COUNTY --- 0.6 E NORTH FORK [37.23, -119.51]

	10/12/09 21:36 PST	0	0	Heavy Rain
	10/13/09 21:36 PST	0	0	Source: Mesonet

North Fork RAWS station measured 5.32 inches 24 hour rainfall.

MADERA COUNTY --- 0.6 E THE PINES [37.32, -119.56]

	10/12/09 21:36 PST	0	0	Heavy Rain
	10/13/09 21:36 PST	0	0	Source: Mesonet

The RAWS weather station at Bass Lake measured 6.16 inches 24 hour rainfall.

MARIPOSA COUNTY --- 0.6 E NORTH WAWONA [37.55, -119.64]

	10/12/09 21:36 PST	0	0	Heavy Rain
	10/13/09 21:36 PST	0	0	Source: Mesonet

The RAWS weather station at Wawona measured 7.84 inches 24 hour rainfall.

MARIPOSA COUNTY --- 2.3 NNE FISH CAMP [37.51, -119.61]

	10/12/09 21:36 PST	0	0	Heavy Rain
	10/13/09 21:36 PST	0	0	Source: Mesonet

The RAWS weather station at Mariposa Grove measured 7.54 inches 24 hour rainfall.

FRESNO COUNTY --- 2.1 S TOLLHOUSE [36.99, -119.40]

	10/13/09 07:00 PST	0	0	Heavy Rain
	10/14/09 07:00 PST	0	0	Source: Public

An observer with the volunteer program called COCORAHS reported minor flooding caused by heavy rains. The 24 hour rainfall total measured by the volunteer was 4.85 inches, 2 miles south of Tollhouse.

(CA-Z090) E CENTRAL S.J. VALLEY, (CA-Z091) SW S.J. VALLEY, (CA-Z095) KERN CTY MTNS

	10/13/09 09:29 PST	0	0.33M	High Wind (MAX 67 kt)
	10/13/09 23:00 PST	0	0	

KINGS COUNTY --- HANFORD [36.33, -119.65], 1.1 WNW HANFORD [36.34, -119.67], 1.7 ESE ARMONA [36.31, -119.67], 1.0 SW HANFORD MUNI ARPT [36.31, -119.64]

	10/13/09 16:00 PST	2K	0	Flood (due to Heavy Rain)
	10/13/09 18:00 PST	0	0	Source: NWS Employee

Several streets were flooded throughout the city of Hanford. No significant injuries or damages were reported.

(CA-Z091) SW S.J. VALLEY

	10/13/09 16:00 PST	3	0.10M	Dust Storm
	10/13/09 18:00 PST	0	0	

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Direct Fatalities: VE				
FRESNO COUNTY --- 7.2 E PINE LOGGING CAMP [37.07, -119.04], 6.7 E DINKEY CREEK [37.08, -119.05], 6.1 E PINE LOGGING CAMP [37.07, -119.06], 6.7 E PINE LOGGING CAMP [37.06, -119.05]				
	10/14/09 01:30 PST		0	Flash Flood (due to Heavy Rain)
	10/14/09 03:00 PST		0	Source: Other Federal Agency

Flash flooding was reported on Dinkey Creek where 13 inches of rain fell in less than 24 hours. No damage or injuries were reported.

TULARE COUNTY --- LODGEPOLE [36.60, -118.73], 4.2 NW LODGEPOLE [36.65, -118.78], 7.4 E BADGER [36.63, -118.89], 0.3 NNE GIANT FOREST [36.53, -118.75]				
	10/14/09 04:00 PST		5K	Flash Flood (due to Heavy Rain)
	10/14/09 05:00 PST		0	Source: Park/Forest Service

The National Park Service reported rock and mud slides on State Highway 198 in Sequoia National Park. No damage or injuries were reported.

TULARE COUNTY --- 0.9 SW THREE RIVERS [36.42, -118.91]				
	10/14/09 06:12 PST		5K	Heavy Rain
	10/14/09 06:12 PST		0	Source: Law Enforcement

The California Highway Patrol reported power lines and poles downed due to heavy rain near the intersection of South Fork Dr and Blossom Dr near Three Rivers.

MADERA COUNTY --- 1.5 SSW AHWAHNEE [37.35, -119.74]				
	10/14/09 06:27 PST		1K	Heavy Rain
	10/14/09 06:27 PST		0	Source: Law Enforcement

The California Highway Patrol reported rocks in the road at Blind Curve on Road 600 near Apache, just north of the town of Three Rivers. This was caused by heavy rain estimated at 5-7 inches in the area.

FRESNO COUNTY --- 0.9 NW LACJAC [36.63, -119.48]				
	10/14/09 06:29 PST		8K	Heavy Rain
	10/14/09 06:29 PST		0	Source: Law Enforcement

Law enforcement reported power lines downed due to heavy rain at the intersection of Lac Jac Ave and Adams Ave near Reedley.

(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				
	10/17/09 01:00 PST		0	Dense Fog
	10/17/09 11:00 PST		0	

A deep low pressure trough tapped into quite a bit of moisture from the remnants of Super-Typhoon Melor, bringing as much as around 2 inches of rain to the central and southern San Joaquin Valley on the 13th-14th. Much higher amounts fell in the Southern Sierra Nevada. Dinkey Creek received the most precipitation from this storm, with a storm total was just over 13 inches (about 9 inches of this fell in 12 hours on the 13th). Wishon Dam recorded a storm total of around 10 inches by the 14th. At the onset of this storm during the morning of Oct 13th, quite a bit of snow fell over the crest of the Sierra Nevada. Once the precipitation began in earnest by the afternoon of the 13th, snow levels actually rose to over 10,000 feet, so most precipitation was falling as rain by the end of the event on the 14th. Rock and mud slides were reported on Highway 198 in Sequoia National Park. A Flash Flood Warning was issued for the Dinkey Creek area due to the very heavy rain. A hydrograph showed a sharp rise in the stream flow due to rainwater runoff, indicative of a flash flood event in the creek which normally does not reach such high levels.

In addition to the near-record (and in a few locations, record) rainfall, the storm brought high wind gusts that toppled trees, downed utility lines, and created areas of blowing dust with near-zero visibility. Wind gusts to 58 mph were recorded at both Castle Airport near Atwater (in Merced County) and Crane Flat in Yosemite National Park. Gusts to 60 mph developed at the south end of the San Joaquin Valley near the base of the Grapevine, and 77-mph gusts occurred over the Temblors in western Kern County. High winds in the Buttonwillow area caused a chain-reaction vehicle pileup on Interstate 5 around 515 pm on October 13th, where 3 people were killed in traffic collisions. The California Highway Patrol reported several areas of wind damage to trees and powerlines in the Merced area on the 13th.

On the 15th another high pressure ridge began to build over the area with light surface winds. The lower levels of the atmosphere had abundant moisture as a result of the recent rain, with high dewpoints for at least the next three mornings. Patchy dense fog developed over the southwestern portions of the San Joaquin Valley on the morning of the 15th, with more widespread dense fog, with visibilities

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below a quarter of a mile, throughout much of the valley on the mornings of the 16th and 17th.

(CA-Z099) SE KERN CTY DESERT

	10/27/09 06:05 PST		0	High Wind (MAX 61 kt)
	10/27/09 22:00 PST		0	

(CA-Z091) SW S.J. VALLEY

	10/27/09 10:00 PST		0	Dust Storm
	10/27/09 18:00 PST		0	

(CA-Z089) W CENTRAL S.J. VALLEY, (CA-Z090) E CENTRAL S.J. VALLEY

	10/27/09 11:00 PST		40K	Strong Wind (MAX 45 kt)
	10/27/09 22:00 PST		0	

(CA-Z090) E CENTRAL S.J. VALLEY, (CA-Z091) SW S.J. VALLEY, (CA-Z092) SE S.J. VALLEY, (CA-Z099) SE KERN CTY DESERT

	10/29/09 02:00 PST		0	Frost/Freeze
	10/29/09 08:00 PST		0	

Temperatures warmed to near normal by October 22nd as another upper-level ridge built into California. By the 26th, high temperatures in the central and southern San Joaquin Valley warmed into the lower to mid 80s in the warm sector ahead of a dry cold front. This front brought a combination of unseasonable cold air and gusty winds to the region. Bakersfield had a high temperature of 83 degrees on the 26th; the next day, the high only reached 63 degrees after a morning low of 55. High temperature falls of 14-21 degrees were common throughout the central and southern San Joaquin Valley. In the Kern County deserts, wind gusts reached 75 mph in the Indian Wells Canyon, 72 mph at Rosamond, and 70 mph at Edwards AFB. In the central and southern San Joaquin Valley, gusts to 50 mph were reported in several locations. As with the previous high wind event, trees and utility lines were downed, and areas of blowing dust formed, some with near-zero visibility. Interstate 5 and highways 119 and 43 were both closed on the 27th due to dust storms and near zero visibility.

As the cold airmass settled over the San Joaquin Valley, low temperatures in the coldest Valley locations fell to around 30-32 degrees during the morning of October 29th. Weak high pressure returned to California on the 30th, with temperatures warming to slightly below normal on the 30th, and to near to slightly above normal on the last day of the month.

The impact of the remnants of Super-Typhoon Melor, and the effects of rain shadowing on the south end of the San Joaquin Valley were well noted during the month of October.