National Weather Service
Storm Data and Unusual Weather Phenomena

December 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

CALIFORNIA, South Central

CAZ089>092 **W Central S.J. Valley - E Central S.J. Valley - Sw S.J. Valley - Se S.J. Valley**

01	**0000PST**			**1**	**0**	**100K**	**Fog**
09	**0900PST**						

Despite indications of much above normal rainfall for the month of November 2002, the rainfall only occurred in a single 3-day rain event from the 7th through the 9th of November. Strong, blocking high pressure then kept any further significant late Fall accumulation of rain/snow for Interior Central California into mid-December. With the large rainfall amounts on the San Joaquin Valley floor by November 9th, haze and fog prevailed subsequently for a 30+-day period while the adjacent foothills, mountains, and Kern Desert dried again in rainless conditions. Widespread dense fog from mid to late-November ceased by the morning of the 1st of December on the Valley floor. But patchy dense fog and haze prevailed from the 1st of the month through the 9th before the major precipitation in December began on the 13th. The morning of the 5th had some very dense, but again patchy fog. A 9-vehicle pile-up occurred near Los Banos in Merced County (CAZ89) on Highway 152 around 8:35 AM PST that killed one and injured 3 others. M40VE

CAZ089>092 **W Central S.J. Valley - E Central S.J. Valley - Sw S.J. Valley - Se S.J. Valley**

10	**0515PST**			**0**	**0**	**200K**	**Fog**
12	**2200PST**						

Dense fog, more widespread, again returned to the South San Joaquin Valley early on the morning of the 10th, extended to the Central Valley on the mornings of the 11th and 12th, and occurred briefly on the evening of the 12th. Driving visibilities on the 11th and 12th were particularly low with less than 100 feet reported by law enforcement in several locations. There were at least 7 vehicle collisions around the Visalia area of Tulare County on the morning of the 11th. The unusual disruption of the fog after its formation during the evening hours on the 12th was due to on oncoming frontal system. There were five accidents indirectly caused by the fog on the morning of the 10th in Tulare and Kings Counties leaving 8 injured.

Merced County									
Merced Arpt	**13**	**1800PST**			**0**	**0**			**Heavy Rain**
	17	**0400PST**							
Merced County									
4 N Merced Arpt to	**16**	**1240PST**	**1.3**	**45**	**0**	**0**	**400K**		**Tornado (F1)**
5.5 NNE Merced Arpt		**1245PST**							
Merced County									
6.4 NE Merced Arpt to	**16**	**1250PST**	**1**	**45**	**0**	**0**	**0**		**Tornado (F0)**
7.8 NE Merced Arpt		**1255PST**							

From low-topped convection, a short duration tornado touched down northwest of Merced California on the 16th and had a discernible damage track of 1.25 miles. The tornado dissipated but the parent cell...after a distance of about 3 miles...generated another weak tornado (with a noticable condensation funnel). This tornado was reported to have traveled about one mile over pasture land before dissipating. At its most intense, this cell spawned F1 Tornado damage for 3/8-mile when it lifted a roof from a house and carport and caused damage to various light structures along its path. There were no injuries or fatalities despite residents at home when the roof lifted from a house along Highway 59 near mid-day. Additionally, locally heavy rain occurred over a 3-day period accumulating a 1.87" precipitation total causing local urban flooding problems due to clogged storm drains in the city of Merced (16th Street west of 'V' and 18th and Canal Streets).

CAZ089>091 **W Central S.J. Valley - E Central S.J. Valley - Sw S.J. Valley**

14	**1404PST**			**0**	**0**	**15K**	**Strong Wind**
	2339PST						

Winds at the Los Banos RAWS Meso-net gusted to 57 MPH from the WSW at 1704 PST on the 14th with numerous locations around the Central and South San Joaquin Valley reporting downed trees and powerlines. Sustained winds were noted at Mendota in the 25-29 MPH range around the same time. And while the east side of the San Joaquin Valley was recording steady wind of 30 MPH with gusts to 36 MPH, the west side near Kettleman Hills reached gusts of 55 MPH. Wind gusts exceeded 40 MPH from the

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CALIFORNIA, South Central

middle of the afternoon of the 14th until just before midnight. Navy Lemoore had sustained winds of 33 MPH at 1958 PST.

CAZ096>097 **S Sierra Mtns - Tulare Cty Mtns**

14	**1730PST**	**0**	**0**			**Winter Storm**
15	**0335PST**					

The first significant storm to again hit the higher elevations of Interior Central California since November 9th spread relatively light snow amounts around 8 inches but were accompanied by high wind. Gusts to 64 MPH were observed at Bear Peak in the Tulare County Mountains late on the 14th. Snow initially began to fall on the afternoon of the 13th but strong wind did not occur until the 14th with the event.

CAZ089>090 **W Central S.J. Valley - E Central S.J. Valley**

16	**0150PST**	**0**	**0**	**10K**		**Strong Wind**
	1000PST					

CAZ091>092 **Sw S.J. Valley - Se S.J. Valley**

16	**1000PST**	**0**	**0**	**800K**		**High Wind (G91)**
	1200PST					

Strong southeast wind was observed in the San Joaquin Valley in the early morning hours of the 16th. Wind gusts to 41 MPH were observed around Los Banos around 0300 PST; 38 MPH at Merced at 0520 PST; and, 36 MPH at Kettleman Hills at 0509 PST. Some minor power line and fallen trees occurred on the Central Valley floor. In the South Valley in Kern County blowing dust was reported on Interstate-5 at the base of the Grapevine with 3 overturned trucks due to the strong wind at that location, and 2 others along Highway 166 just east of Taft to Mettler at I-5. The city of Taft reported snapped powerlines leaving 6,000 PG&E customers (almost all the town) without power. The strongest wind was short-lived at only about an hour according to law enforcement. A barn estimated at $500K was destroyed approximately 5 miles west of I-5 due to the strong wind

CAZ096>097 **S Sierra Mtns - Tulare Cty Mtns**

16	**0600PST**	**0**	**0**			**Winter Storm**
17	**0300PST**					

Significant snows occurred through the high elevations of the Southern Sierra Nevada from Yosemite south through the Tulare County Mountains: Chickroot Meadow 42 inches of snow, Huntington Lake 32", Volcanic Knob 39", Sierra Summit 18", Quaking Aspen 31", Chagoopa Plateau 26", and Casa Vieja Meadows 26". A water equivalent for precipitation at Mammoth Pass was 4.12" over the weekend prior to the 17th.

Tulare County

Ducor	**17**	**1345PST**	**0**	**0**		**Hail(0.75)**
		1346PST				

CAZ089-092-095 **W Central S.J. Valley - Se S.J. Valley - Kern Cty Mtns**

19	**1104PST**	**0**	**0**	**11K**		**Strong Wind**
20	**0000PST**					

Wind reports showed strong southeast wind ahead of frontal passage in Interior Central California during the afternoon and early evening of the 19th. Observed wind included: gusts to 37 MPH at Los Banos at 1104 PST, sustained 45 MPH with gusts to 53 at Hilmar in the Central San Joaquin Valley, 45 MPH near Lamont on the South Valley floor, and 50 MPH gust in Frazier Park and 50 MPH sustained wind in the Kern Mountains.

CAZ095>097 **Kern Cty Mtns - S Sierra Mtns - Tulare Cty Mtns**

19	**1500PST**	**0**	**0**			**Winter Storm**
21	**0400PST**					

While snow fell to an elevation of 2500 feet Mean Sea Level, larger amounts of snow fell at high elevations of the S.Sierra Nevada and Kern County Mountains. Observed snowfall included: 13 inches at Volcanic Knob and Charlotte Lake, 12" at Crane Flat and Hume Lake, 24" at Quaking Aspen, 20" at Lodgepole, 16" at Ponderosa Lodge, 13" at Chagoopa Plateau, and 7" at Mountain Valley Airport on the Tehachapi Valley floor

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CALIFORNIA, South Central

CAZ089>090 — **W Central S.J. Valley - E Central S.J. Valley**

	19	**2000PST**	**0**	**0**		**Flood**
	20	**0000PST**				
Tulare County						
Porterville	**19**	**2100PST**	**0**	**0**		**Heavy Rain**
	20	**0500PST**				

Heavy rainfall measured 1.73" in 2 hours at Chowchilla in the East-Central San Joaquin Valley and 1.57" in 2 hours at Mendota in the West-Central Valley. Intersections were reported flooded in the smaller, rural towns of these zones. On the San Joaquin Valley floor at Porterville, the city received 1.05" in 24-hours on the 19th which was common for Valley locations for this event

CAZ089>092 — **W Central S.J. Valley - E Central S.J. Valley - Sw S.J. Valley - Se S.J. Valley**

22	**2300PST**	**0**	**0**		**Frost/Freeze**
25	**1000PST**				

Temperatures dropped to 32 degrees F. or lower over a 3-morning period just before Christmas. While only the very coldest locations reached the critical 27F, the colder air was easily mitigated by citrus concerns. The colder readings in the South San Joaquin Valley occurred on the morning of the 24th when Delano dropped to 27F, Wasco to 30F, and Porterville to 32F. Generally minimum temperature readings were in the 29-34F range for the period.

CAZ089>092 — **W Central S.J. Valley - E Central S.J. Valley - Sw S.J. Valley - Se S.J. Valley**

25	**0300PST**	**0**	**0**		**Dense Fog**
	1200PST				

Visibilities around the Central and Southern San Joaquin Valley on the morning of the 25th dropped to less than 500 feet in widespread locations.

CAZ089>090 — **W Central S.J. Valley - E Central S.J. Valley**

28	**1352PST**	**0**	**0**	**4K**	**Strong Wind**
	1900PST				

Strong winds from the southeast in a pre-frontal environment caused minor damage from downed power lines and fallen trees in the Central San Joaquin Valley on the 28th. The wind subsided by 7:00 PM PST with frontal passage. Reported winds included: gusts to 35 MPH at San Luis RAWS, 34 knots at Coalinga and Merced, 29 knots at Fresno, and 28 knots at Madera.

CAZ096>097 — **S Sierra Mtns - Tulare Cty Mtns**

28	**1600PST**	**0**	**0**		**Winter Storm**
29	**1200PST**				

Observed snow totals with this storm included: 24 inches at Tuolumne Meadows, Horse Meadow 33", Yosemite Valley 9", Big Meadows 13", and Lodgepole 11".

CAZ096 — **S Sierra Mtns**

30	**1800PST**	**0**	**0**		**Winter Storm**
31	**0600PST**				

New Snow totals in the Southern Sierra Nevada from Yosemite south through Fresno County included: Bishop Pass and Paradise Meadows with 24", Agnew Pass 18", Gin Flat 15", Kaiser Point 13", Tenaya Lake 12", and Shaver Lake 9".

CAZ095-098 — **Kern Cty Mtns - Indian Wells Vly**

31	**1040PST**	**1**	**0**	**205K**	**High Wind (G73)**
	1800PST				
M76UT					

CAZ099 — **Se Kern Cty Desert**

31	**1040PST**	**0**	**0**	**1K**	**Strong Wind**
	1800PST				

Wind likely associated with a mountain wave reached high wind criteria in the Kern County Mountains and Deserts during the afternoon of the 31st. In the vicinity of Inyokern winds spiked at 73 knots at a nearby low-elevation mountain meso-net site and a falling tree resulted in a fatality from the wind in Inyokern.