



# National Weather Service

## Storm Data and Unusual Weather Phenomena



December 2004

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
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### CALIFORNIA, South Central

**CAZ089>092**      **W Central Sj Valley - E Central Sj Valley - Sw Sj Valley - Se Sj Valley**

	<b>01</b>	0100PST			<b>0</b>	<b>0</b>			<b>Frost/Freeze</b>
	<b>04</b>	0800PST							

As November had ended with cold mornings for the Central and South San Joaquin Valley, the event continued through the first four mornings of December. Overnight minimum temperatures were low enough to force citrus growers to employ frost protection measures. Low temperatures during this period were quite consistently in the mid 20s or ranging generally from 24F to 28F in the unprotected citrus ag belt. The coldest morning of the period was on the 4th when Hanford recorded 21F as its low temperature

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

	<b>07</b>	0100PST			<b>0</b>	<b>0</b>			<b>Winter Storm</b>
		1500PST							

In only about 12 hours over a foot of snow fell at several locations within the Southern Sierra Nevada stretching from Yosemite Park southward into the Tulare County Mountains: Bishop Pass, Lodgepole, Pascoes and Hume Lake had 13" of new snow, Shaver Lake and Kaiser Point had 15", and Big Meadows had 16".

**Mariposa County**  
**Countywide**

	<b>07</b>	0250PST			<b>0</b>	<b>0</b>			<b>Heavy Rain</b>
	<b>08</b>	0852PST							

**Merced County**  
**Countywide**

	<b>07</b>	0250PST			<b>0</b>	<b>0</b>			<b>Heavy Rain</b>
	<b>08</b>	0852PST							

**Madera County**  
**Countywide**

	<b>07</b>	0253PST			<b>0</b>	<b>0</b>			<b>Heavy Rain</b>
	<b>08</b>	0830PST							

**Fresno County**  
**Countywide**

	<b>07</b>	0257PST			<b>0</b>	<b>0</b>			<b>Heavy Rain</b>
	<b>08</b>	0808PST							

**CAZ090**      **E Central Sj Valley**

	<b>07</b>	0700PST			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Strong Wind (EG45)</b>
		1100PST							

Following a light precipitation month in November, the northern portions of Interior Central California had significant rainfall sweep across the San Joaquin Valley and adjacent foothill portions of the area's northern counties: In just a little over 24 hours over the 7th and 8th of the month Merced received 1.14 inches of rain, and Fresno 0.88." In the South San Joaquin Valley, it rained 0.41" at Hanford and just 0.10" at Bakersfield. Prefrontal strong wind early on the 7th caused damage to Christmas decorations in the city of Chowchilla in Madera County.

**CAZ089>092**      **W Central Sj Valley - E Central Sj Valley - Sw Sj Valley - Se Sj Valley**

	<b>10</b>	0500PST			<b>0</b>	<b>0</b>			<b>Dense Fog</b>
	<b>11</b>	1755PST							

For two consecutive late evenings and early mornings visibilities lowered, widespread, to less than 1/4 mile in the Central and South San Joaquin Valley. On the 11th visibilities remained less than 1/4 mile well past noon in southern Fresno, and northern Kings and Tulare Counties.

**CAZ089>092**      **W Central Sj Valley - E Central Sj Valley - Sw Sj Valley - Se Sj Valley**

	<b>16</b>	2300PST			<b>0</b>	<b>0</b>			<b>Dense Fog</b>
	<b>26</b>	0252PST							

The time from the 9th through the 26th of December (between the two major precipitation periods in the month) in Interior Central California's San Joaquin Valley was marked by late night and early morning fog and haze. Due to above normal rain in October and significant rain on the 7th and 8th, sufficient moisture had been deposited to provide for overnight fog formation in stable conditions. After a brief respite on the mornings of the 14th through the 16th, dense fog again became prevalent for the period from the mornings of the 17th through the 25th...and affected the Central San Joaquin Valley even early morning on the 26th. Visibilities were lowered to zero conditions at their worst on several mornings during the period between the 17th and 26th leading to many traffic accidents and several indirect deaths from the periods of dense fog



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### CALIFORNIA, South Central

#### Mariposa County

Countywide	27 31	0504PST 1005PST			0	0			Heavy Rain
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#### Merced County

Countywide	27 31	0504PST 1005PST			0	0			Heavy Rain
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#### Madera County

Countywide	27 31	1000PST 1030PST			0	0			Heavy Rain
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#### Fresno County

Countywide	27 31	2350PST 1048PST			0	0			Heavy Rain
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While much of December was relatively dry in Interior Central California with a brief 2-day period of rain on the 7th and 8th, the last 5 days of the month became exceptionally wet and extended well into January. Daily record rainfalls were recorded at Bakersfield on the 30th and 31st in the South San Joaquin Valley with amounts of 0.40" and 0.38", respectively, and in Fresno in the Central San Joaquin Valley on the 28th when 0.72" of rain fell. Continued unsettled weather over the last of the month led to large amounts of urban and rural ponding on the Central and South San Joaquin Valley floor and Kern County Desert areas, and full small streams in the adjacent foothill areas. Fresno ended the month with 3.16" of rain which is more than double its normal rainfall. In the South Valley Bakersfield received 1.09" of rain compared to its normal of 0.76". By the morning of the 31st ponding caused problems near Winton in Merced County with loosed boulders onto roadways in the foothills of Madera County near Bass Lake. In Fresno County by the morning of the 31st numerous reports of urban ponding in the city of Fresno and small stream flooding were reported from Coalinga on the west side of the San Joaquin Valley to loosed boulders in the foothills and mountains of the county due to the continued precipitation.

#### CAZ089-091>093

		<b>W Central Sj Valley - Sw Sj Valley - Se Sj Valley - S Sierra Foothills</b>					177K		Strong Wind (MG36)
	27 29	0504PST 0900PST			0	0			

#### CAZ095

		<b>Kern Cty Mtns</b>					40K		High Wind (MG77)
	27 28	0730PST 1500PST			0	0			

The period of time from the 27th in the Central San Joaquin Valley and extending to the South Valley through the 29th was marked by strong southeast (pre-frontal) wind conditions. Trees were downed with the damage extending to power lines and resultant power loss to customers in localized areas in the Central and South San Joaquin Valley. High wind occurred at the base of the grapevine on the 27th with a measured gust to 77 KTS but also wind at Rancho Ridge in the Kern County Mountains peaked at 72 KTS at 0450 PST on the 27th. Specific damage was reported in Porterville, Visalia, and Poso in the Tulare County area from downed trees and power lines late on the 27th through midday on the 28th. Over 2500 customers in the Kingsburg area of South Fresno County were without power due to the strong wind. Some minor damage caused by the wind was also reported in the foothills of Fresno County near Auberry on the 28th.

#### CAZ096>097

		<b>S Sierra Mtns - Tulare Cty Mtns</b>							Heavy Snow
	27 29	0800PST 1600PST			0	0			

#### CAZ095

		<b>Kern Cty Mtns</b>							Winter Storm
	28 29	0900PST 1600PST			0	0			

The first in a series of strong Pacific Ocean storms began bringing significant precipitation to the higher terrain of Interior Central California early on the 27th. By the morning of the 28th, a foot of new snow was reported in the Kern County Mountains at Frazier Park with drifts of 3 feet reported at nearby Mt. Pinos. The combination of snow water content and rain accumulation at Frazier Park had reached 4.25" by the afternoon of the 28th. Other snow amounts in the Southern Sierra Nevada from Yosemite through the



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### CALIFORNIA, South Central

Tulare County Mountains were as high as a foot overnight of the 27th to the morning of the 28th. By the afternoon of the 29th snow amounts were totalling around 18" at Casa Vieja Meadows and 20" at Wet Meadows in the Tulare County Mountains

#### **Kings County**

##### **Countywide**

	<b>28</b>	<b>0022PST</b>			<b>0</b>	<b>0</b>			<b>Heavy Rain</b>
	<b>31</b>	<b>0746PST</b>							

#### **Tulare County**

##### **Countywide**

	<b>28</b>	<b>0022PST</b>			<b>0</b>	<b>0</b>			<b>Heavy Rain</b>
	<b>31</b>	<b>0746PST</b>							

#### **Kern County**

##### **Countywide**

	<b>28</b>	<b>1128PST</b>			<b>0</b>	<b>0</b>			<b>Heavy Rain</b>
	<b>31</b>	<b>0926PST</b>							

With significant rainfall urban ponding of water caused difficulties for many locations by midday on the 28th in Kings (city of Hanford), Tulare (city of Visalia), and Kern Counties. In Kern County reports of significant ponding was reported in and near the cities of Buttonwillow, Maricopa, and Bakersfield in the Southern San Joaquin Valley but also at California City, Mojave, and Edwards AFB in the Kern County Desert. By the 31st, urban ponding was more prevalent on the Southern San Joaquin Valley floor in and around the city of Bakersfield in Kern County, the city of Hanford in Kings County, and the cities of Visalia and Ivanhoe in Tulare County. In the foothills of Tulare County some minor rock slides were reported near Pine Flat Dam

#### **CAZ096>097**

##### **S Sierra Mtns - Tulare Cty Mtns**

	<b>29</b>	<b>2330PST</b>			<b>0</b>	<b>0</b>			<b>Winter Storm</b>
	<b>31</b>	<b>1600PST</b>							

Another in a series of East Pacific storms continued to bring heavy snowfall with gusty wind to the Southern Sierra Nevada and Tulare County Mountains. New snow amounts included 37" at Giant Forest in the Tulare County Mountains; and 25" at Tuolumne Meadows by the morning of the 31st in the Southern Sierra Nevada. The accumulation of snow during the last 5 days of the month pushed the snowpack in the Southern Sierra Nevada and Tulare County Mountains to 166% of its normal for December 31st.