National Weather Service
Storm Data and Unusual Weather Phenomena

March 2006

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									
Merced County									
Countywide	**02** **31**	**0900PST** **2359PST**			**0**	**0**			**Heavy Rain**
Madera County									
Countywide	**02** **31**	**0930PST** **2359PST**			**0**	**0**			**Heavy Rain**
Fresno County									
Countywide	**02** **31**	**1000PST** **2359PST**			**0**	**0**			**Heavy Rain**
Kings County									
Countywide	**02** **31**	**1100PST** **2359PST**			**0**	**0**			**Heavy Rain**
Tulare County									
Countywide	**02** **31**	**1100PST** **2359PST**			**0**	**0**			**Heavy Rain**

The month of March started wet and continued in Interior Central California. As example, Fresno had 4.73" of precipitation during the month which is 2.53" above normal and makes it the 6th wettest March on record [There was rain reported on 21 of 30 days of the month. For Fresno this was the wettest March since 1995 when 5.88" of rain fell]; Madera had 4.26" of rain or 1.97" above normal; Merced had 3.36" of rain or 1.13" above normal; and, Hanford had 2.60" of rain. Agricultural losses were caused by a delay in planting, out right damage due to the above normal rainfall, and/or much below normal temperatures (Fresno and Bakersfield had their 2nd and 3rd coldest March months, respectively). Monetary losses for the excessive rain and cool weather will be annotated in the April Report.

CAZ093>095	**S Sierra Foothills - Tulare Cty Foothills - Kern Cty Mtns**								
	02 **03**	**2100PST** **1600PST**			**0**	**0**			**Winter Weather**
CAZ096>097	**S Sierra Mtns - Tulare Cty Mtns**								
	02 **03**	**2100PST** **1600PST**			**0**	**0**			**Winter Storm**

Another major winter weather system struck Interior Central California the night of the 2nd and early on the 3rd. The S.Sierra Nevada received substantial new snow amounts: 45" at Paradise Meadow; 42" at Lower Kibbie Ridge; 38" at Tamarack Summit; 36" at Gin Flat; 35" at Chilkoot Meadow; and Kaiser Point had 30". The Tulare County Mountains received: 26" at big Meadows and Grant Grove; and 18" at Beach Meadows. Snow fell to relatively low levels during the event: 10" at Lush Meadows and 2" at Coarsegold in the S. Sierra Nevada Foothills; Springville had 2" in the Tulare County Foothills; and 4" fell at Bear Valley Springs in the Tehachapi Mountains. Low snow levels (down to 1500 feet M.S.L.) occurred with this system throughout Interior Central California. In the Mariposa area of the S.Sierra Nevada foothills at the 2,900 foot M.S.L. elevation had 28" of snowfall for the period of Feb 18th to March 12th. The snowfall on the 3rd led to downed tree limbs and 20 locations of power line damage throughout the Mariposa area.

CAZ090-092	**E Central Sj Valley - Se Sj Valley**								
	03	**0530PST** **0645PST**			**0**	**0**	**65K**		**Strong Wind (EG35)**
Madera County									
Madera Muni Arpt	**03**	**1345PST** **1500PST**			**0**	**0**			**Heavy Rain**

Strong northwest wind associated with a vigorous cold frontal passage led to damage on 15 units in a Selma mobile home park with trees and power poles downed around the Fresno County area in the early morning hours of the 3rd. In Visalia a large oak tree was felled in the north side of town by the strong wind. Rainfall that occurred with this cold front was intense. Madera reported street flooding in the downtown area with 1.56" received from the day's rain. On the west side of the San Joaquin Valley Coalinga in Fresno County reported 0.68" of rain with the system.

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CALIFORNIA, South Central									
Fresno County									
5 S San Joaquin	**03**	**1351PST** **1355PST**			**0**	**0**			**Funnel Cloud**
Tulare County									
4.5 E Tipton	**03**	**1527PST** **1541PST**			**0**	**0**			**Hail(0.75)**
Tulare County									
7.2 WNW Tipton	**03**	**1531PST** **1555PST**			**0**	**0**			**Funnel Cloud**

Thunderstorm activity with locally heavy rain occurred over the Central and northern portions of the Southern San Joaquin Valley during the afternoon of the 3rd.

CAZ089>092	**W Central Sj Valley - E Central Sj Valley - Sw Sj Valley - Se Sj Valley**								
	04	**0530PST** **0730PST**			**0**	**0**			**Frost/Freeze**

Following cold-frontal passage, skies cleared across the Central and Southern San Joaquin Valley late in the afternoon and strong radiational conditions occurred overnight of the 3rd and morning of the 4th even with the surface wet from the rain on the 3rd. Minimum temperatures ranged from 30 degrees at the coldest locations in the middle of the Valley but generally were in the 31 to 32 degree F. range for most locations.

CAZ089>092	**W Central Sj Valley - E Central Sj Valley - Sw Sj Valley - Se Sj Valley**								
	04	**0530PST** **0730PST**			**0**	**0**			**Frost/Freeze**

Minimum temperatures dropped to or slightly below 32F at several locations including 30F at Lemoore, 31F at Hanford, Lemon Cove, and Wasco, and 32F at Merced, Madera, and Los Banos on the morning of the 4th.

CAZ096>097	**S Sierra Mtns - Tulare Cty Mtns**								
	05 **07**	**1900PST** **0400PST**			**0**	**0**			**Winter Storm**
Tulare County									
Porterville	**07**	**1745PST** **1800PST**			**0**	**0**			**Heavy Rain**
Tulare County									
Porterville	**07**	**1750PST**			**0**	**0**		**5K**	**Hail(0.33)**

Continued inclement weather brought more snow to the higher elevations of Interior Central California and rain to the Central and South San Joaquin Valley. On the Valley floor Fresno received an additional 0.62" of rain, Porterville 0.50" on the 6th, and Bakersfield 0.48". New snow amounts included 24" at Mitchell Meadows, 23" at Paradise Meadows, 21" at Blackcap Basin; 28" at Farewell Gap; and, 27" at Big Meadows. Following the snowfall in the adjacent mountain areas, afternoon shower activity developed over the Southern San Joaquin Valley bringing locally heavy rain, local street flooding, and small hail in the Porterville area as the afternoon ended on the 7th.

CAZ098>099	**Indian Wells Vly - Se Kern Cty Desert**								
	07 **08**	**1055PST** **0215PST**			**0**	**0**	**2K**		**Strong Wind (MG56)**

Gusty west wind prevailed over the Kern Desert areas on the 7th and 8th.

CAZ095-098>099	**Kern Cty Mtns - Indian Wells Vly - Se Kern Cty Desert**								
	09 **10**	**1314PST** **0415PST**			**0**	**0**	**3K**		**Strong Wind (MG40)**

Gusty WNW wind associated with an active weather system swept the Kern County Mountains and Desert late on the 9th and early 10th.

CAZ089>091-093-095	**W Central Sj Valley - E Central Sj Valley - Sw Sj Valley - S Sierra Foothills - Kern Cty Mtns**								
	10 **11**	**0300PST** **2200PST**			**0**	**0**			**Winter Weather**

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

In the Tehachapi area 8 inches of new snow fell on the 10th with another 6 to 8 inches of new snow accumulating in the Kern County Mountains by late on the 11th. Lebec reported over an inch of snow late on the 11th which caused highway problems through the busy Gorman Pass area to Southern Calif. Snowfall of 6" to 8" fell on the 1400-foot M.S.L. Pacheco Pass on Highway 152 which crosses from Los Banos in the San Joaquin Valley to Gilroy along the Central Coast early Saturday morning. Highway 41 leading from the Southwest San Joaquin Valley to the Central Coast was closed from 0735 to 0845 PST due to snow below the 2,000 foot M.S.L. Cottonwood Pass. In the Southern Sierra Nevada Foothills Ponderosa Basin reported 14" of new snow, Lush Meadow near Mariposa had 8", and the Oakhurst Fire Station reported 10". Sleet, small hail, and ice pellets fell in the Kings and Fresno Counties area late in the morning of the 10th leading many to think snow had fallen on the Valley floor. The storm was also responsible for a high number of downed trees and broken power lines in Madera County foothill area around Oakhurst to Mariposa. With the very cold air aloft, snowfall was even mentioned as a possibility for the Central and South San Joaquin Valley for the forecasts early on the 11th.

CAZ096>097	**S Sierra Mtns - Tulare Cty Mtns**								
	10	**0800PST**			**0**	**0**			**Winter Storm**
	11	**2200PST**							

Snowfall occurred in the mountains from the 8th of March into the 12th. The greatest amounts of snow in the Southern Sierra Nevada and Tulare County Mountains fell during the 10th and 11th: Quaking Aspen 43" of new snow; Gin Flat 38"; Upper Tyndal Basin 30"; Lodgepole 28"; and Volcanic Knob 26".

Fresno County									
3 NE Westhaven	**10**	**1600PST**			**0**	**0**			**Hail(0.75)**
		1617PST							
Kings County									
(Nlc)Nas Lemoore	**10**	**1627PST**			**0**	**0**			**Hail(0.75)**
		1635PST							
Madera County									
15.6 ESE Madera to 12.3 E Madera	**10**	**1700PST**			**0**	**0**		**100K**	**Hail(0.40)**
		1710PST							
Tulare County									
3 NE Alpaugh	**10**	**1704PST**			**0**	**0**			**Hail(0.75)**
		1708PST							

Associated with the severe thunderstorms was locally heavy rain. Lemoore, in Kings County, received 0.48" of rain in about an hour that lead to extensive street flooding. A late afternoon thunderstorm along Highway 41 just north of the Fresno/Madera County Line brought small hail and icy rain onto the roadway as well as impacting crops in the vicinity.

Kern County									
(Bfl)Meadows Field Ap	**11**	**1414PST**			**0**	**0**			**Hail(0.75)**
		1429PST							

A thunderstorm moved from the Shafter area at 1340 PST and impacted the Meadows Field Airport by 1414 PST with large hail. Another thunderstorm indicated by radar developed in the vicinity of Lamont at 1653 PST and moved southeast to the Arvin area before dissipating on the 11th.

CAZ095-098>099	**Kern Cty Mtns - Indian Wells Vly - Se Kern Cty Desert**								
	12	**0010PST**			**0**	**0**	**3K**		**Strong Wind (MG51)**
		0900PST							

Gusty west wind occurred late in the evening of the 11th and the very early morning hours of the 12th in the Kern County Mountains and Deserts.

Fresno County									
3 S Mendota	**12**	**1506PST**			**0**	**0**			**Lightning**
Fresno County									
7.8 W Tranquility	**12**	**1535PST**			**0**	**0**			**Funnel Cloud**
		1540PST							
Fresno County									
14 WSW Tranquility	**12**	**1540PST**			**0**	**0**		**100K**	**Hail(0.50)**
		1550PST							

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

Fresno County

11 NW Cantua Creek | **12** | **1545PST** | | | **0** | **0** | | | **Funnel Cloud**
1550PST

Weak convection on the west side of the Central San Joaquin Valley resulted in reports of funnel clouds and small hail. However, the 1/2-inch hail resulted in a young deciduous crop loss (almonds).

CAZ096 — **S Sierra Mtns**

14 | **0700PST** | | | **0** | **0** | | | **Winter Weather**
16 | **1600PST**

Another in a line of weather systems provided up to 12" of new snow over a 24 hour period at the high elevations of the Southern Sierra Nevada.

Kern County

(Bfl)Meadows Field Ap | **14** | **1451PST** | | | **0** | **0** | | | **Lightning**

A thunderstorm was reported at Meadows Field during the middle of the afternoon on the 14th.

CAZ095>096 — **Kern Cty Mtns - S Sierra Mtns**

17 | **0400PST** | | | **0** | **0** | | | **Winter Weather**
18 | **0900PST**

Tulare County

Tulare | **17** | **1500PST** | | | **0** | **0** | | | **Heavy Rain**
1530PST

Tulare County

Tulare | **17** | **1500PST** | | | **0** | **0** | **5K** | | **Lightning**

Another cold frontal passage through Interior Central California brought more snow to the higher elevations. In the Southern Sierra Nevada Lower Kibbie Ridge accumulated 12" of new snow and West Woodchuck Meadow received 9". In the Tehachapi Mountains Bear Valley Springs picked up 6" of new snow. Thunderstorm activity late in the afternoon on the 17th led to lightning damaging power transmission to Tulare storm drainage pumps. Locally heavy rain occurred occurred a couple of times in the late afternoon hours in the city of Tulare area. Hail about 0.50" in diameter fell just before 1800 PST in the Tulare.

CAZ096 — **S Sierra Mtns**

20 | **1200PST** | | | **0** | **0** | | | **Winter Storm**
21 | **0700PST**

CAZ090 — **E Central Sj Valley**

20 | **1445PST** | | | **0** | **0** | **5K** | | **Strong Wind (EG40)**
1600PST

CAZ097 — **Tulare Cty Mtns**

20 | **1600PST** | | | **0** | **0** | | | **Winter Weather**
21 | **1600PST**

New snowfall in the Southern Sierra Nevada varied from 18" at Graveyard Meadow to 12" at Yosemite Valley and Huntington Lake. In the Tulare County Mountains, 8" fell at Lodgepole with 15" reported at Giant Forest, Quaking Aspen, and Big Meadows. On the East-Central San Joaquin Valley floor, rain and windy conditions contributed to at least separate vehicle accidents from just north of Madera to 10 miles southeast. The gusty wind downed trees, including a large tree in downtown Madera just before 3 PM PST on the 20th.

CAZ096 — **S Sierra Mtns**

25 | **0000PST** | | | **0** | **0** | | | **Winter Weather**
1600PST

Additional snow in the Southern Sierra Nevada ranged from 6" at Tamarack Summit to 8" at Chilcoot Meadow.

CAZ095-098>099 — **Kern Cty Mtns - Indian Wells Vly - Se Kern Cty Desert**

25 | **1010PST** | | | **0** | **0** | **3K** | | **Strong Wind (MG50)**
26 | **0400PST**

Gusty west wind swept over the Kern County Mountains and Desert areas the afternoon of the 25th associated with a cold frontal

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

passage.

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

	27 29	2200PST 0400PST			0	0			Winter Storm

In the Southern Sierra Nevada new snow amounts in a 24-hour period ranged from 18" at Tuolumne Meadows to 55" at Kaiser Point with several other reporting stations well over 40" of new snow. In the Tulare County Mountains Lodgepole received 34" of new snow while Big Meadows got 52". Even in the Kern County Mountains where the snow level was 6000 feet M.S.L., 15" of new snow occurred at Piute.

Merced County

5 SSE Merced to 1 SE Merced	28	1435PST 1450PST			0	0			Funnel Cloud

Merced County

2.1 NNW Merced Arpt	28	1517PST 1520PST	0.1	20	0	0	5K		Tornado (F0)

A late report indicated damage from this second small tornado in Merced at 1517 PST shortly after the 1448 PST tornado. There was minimal damage associated with the small track and path. There was an unconfirmed report of another touchdown in the city close to the time this confirmed 1517 PST tornado.

Merced County

1.6 WSW Atwater to 1.6 W Atwater	28	1442PST 1447PST	0.2	20	0	0	10K		Tornado (F0)

Kings County

Lemoore to Hanford	28 29	1500PST 0400PST			0	0			Heavy Rain

Merced County

2 NNE Livingston	28	1545PST 1615PST			0	0			Heavy Rain

Tulare County

Porterville	28 29	1800PST 0600PST			0	0			Heavy Rain

A small F0 Tornado occurred just west of Atwater, CA, that resulted in small structure roof damage and the tossing of equipment and trash cans at nearly the same time as another tornado 10 miles to the ESE in Merced County. Locally heavy rain from the thunderstorm activity in Merced County also resulted in reports of roadway flooding just northeast of Livingston by 1633 PST. Urban flooding was the result of locally heavy rain and thundershowers specifically in the Lemoore/Hanford area of Kings County as well as Porterville in Tulare County

Merced County

1 SE Merced to 1 ESE Merced	28	1448PST 1453PST	0.2	30	0	0	10K		Tornado (F0)

A trained spotter noted a funnel cloud approaching the city of Merced and tracked the northward movement of that funnel. At 1448 PST the funnel removed half of the corrugated roof of a farm maintenance shop and lifted it up and over adjacent power lines to the north. Eyewitness accounts indicated rotation and movement of the lowest level clouds toward the NE approximately 0.19 miles. Other than two ground contact points, beginning and end of the damage track, there was no evidence of any other ground contact from the funnel. Analysis by a local structural engineer aided in the assignment of the F0 rating

CAZ096 **S Sierra Mtns**

	31	1800PST 2359PST			0	0			Winter Weather

Inclement weather in Interior Central California for March continued to increase the snowpack. Additional snow ranged from 8" at Upper Burnt Corral to 14" at Paradise Meadow with other new snow amounts of 13" at Tenaya Lake, and 10" at both Sierra Summit Lower Kibbie.

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CALIFORNIA, South Central