



# National Weather Service

## Storm Data and Unusual Weather Phenomena



May 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
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### CALIFORNIA, South Central

<b>CAZ095-098&gt;099</b>	<b>Kern Cty Mtns - Indian Wells Vly - Se Kern Cty Desert</b>								
	<b>07</b>	<b>1100PST</b>			<b>0</b>	<b>0</b>			<b>Wind</b>
	<b>08</b>	<b>0300PST</b>							
	In a strong northwest flow sustained wind of 45 MPH was reported in the Tehachapi Pass area of the Kern Mountains with gusts to 45 MPH in the Indian Wells Valley. At the Mojave Airport wind speeds gusted briefly to 75 knots with some blowing sand in the area.								
<b>CAZ095-098&gt;099</b>	<b>Kern Cty Mtns - Indian Wells Vly - Se Kern Cty Desert</b>								
	<b>09</b>	<b>1146PST</b>			<b>0</b>	<b>0</b>			<b>Wind</b>
	<b>10</b>	<b>2000PST</b>							
	Another spring event brought northwest wind speeds reaching close to warning criteria for the latter part of the 9th and much of the 10th. A peak gust of 63 MPH occurred at Jawbone RAWS early in the afternoon of the 10th in the Kern Mountains with speeds generally running from 33 gusting to 46 MPH. In the Indian Wells Valley winds ran from 30 gusting to 45 MPH. Government Peak in the Mojave Desert had a peak gust of 52 MPH.								
<b>CAZ095-098&gt;099</b>	<b>Kern Cty Mtns - Indian Wells Vly - Se Kern Cty Desert</b>								
	<b>10</b>	<b>0853PST</b>			<b>0</b>	<b>0</b>			<b>Wind</b>
	<b>11</b>	<b>1824PST</b>							
	Jawbone RAWS reported 35 gust to 58 MPH on the morning of the 10th in the Kern Mountains with Indian Wells Canyon having gusts to 57 MPH. In the Kern Desert Government Peak had a gust to 49 MPH with Mojave Airport sustaining wind of 34 MPH.								
<b>CAZ099</b>	<b>Se Kern Cty Desert</b>								
	<b>15</b>	<b>1546PST</b>			<b>0</b>	<b>0</b>			<b>Wind</b>
		<b>1900PST</b>							
	Locally wind around Mojave Airport gusted to 50 knots late in the afternoon of the 15th								
<b>CAZ095-098&gt;099</b>	<b>Kern Cty Mtns - Indian Wells Vly - Se Kern Cty Desert</b>								
	<b>19</b>	<b>0924PST</b>			<b>0</b>	<b>0</b>			<b>Wind</b>
		<b>1920PST</b>							
	Ahead of an approaching winter storm, winds in the Kern County Mountains and Deserts became gusty. Indian Wells Canyon reported gusts to 51 MPH in the evening of the 19th; Laural Mountain had a peak gust of 43 MPH; and, Government Peak reaching 61 MPH midday on the 10th.								
<b>CAZ091&gt;092</b>	<b>Sw Sj Valley - Se Sj Valley</b>								
	<b>19</b>	<b>1800PST</b>			<b>0</b>	<b>0</b>			<b>Dust Storm</b>
		<b>2200PST</b>							
	In the late afternoon and early evening hours of the 19th, gusty wind raised dust on the Southern San Joaquin Valley floor to the extent that visibilities were reduced to 200 feet on South Valley roads with many area visibilities at or below 1/2 mile. Meadows Field at Bakersfield reported wind to 31 MPH with vertical visibility limited to just 900 feet due to the blowing dust. While the wind was from the northwest in the vicinity of Bakersfield, other locations in the Central Valley reported wind from the southeast. The blowing dust was limited primarily to the Kern County portion of the San Joaquin Valley floor.								
<b>CAZ097</b>	<b>Tulare Cty Mtns</b>								
	<b>20</b>	<b>0300PST</b>			<b>0</b>	<b>0</b>			<b>Winter Weather</b>
	<b>21</b>	<b>0300PST</b>							
<b>CAZ095-098&gt;099</b>	<b>Kern Cty Mtns - Indian Wells Vly - Se Kern Cty Desert</b>								
	<b>20</b>	<b>1308PST</b>			<b>0</b>	<b>0</b>			<b>Wind</b>
		<b>2000PST</b>							
	A late Spring frontal passage brought 14" of new snow to Giant Forest in the Tulare County Mountains on the 20th and windy conditions to the Kern County Mountains and Desert areas. In the Kern Mountains Indian Wells Canyon reported wind gusts to 46 MPH in the early evening of the 20th; and winds of 45 MPH at Inyokern Airport and 50 MPH at Government Peak in the Kern Desert.								



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### CALIFORNIA, South Central

<b>CAZ096&gt;097</b>			<b>S Sierra Mtns - Tulare Cty Mtns</b>						
	20	0600PST			0	0			<b>Winter Storm</b>
	21	0300PST							
	In a little less than 24 hours, significant snow fell in the Southern Sierra Nevada Mountains of Central California. Larger snow amounts included Volcanic Knob receiving 24" of new snow, Quaking Aspen and Pascoes 21", and Huntington Lake and Chilkoat Meadows 20".								
<b>Fresno County</b>									
<b>10 N Fresno</b>	20	1230PST			0	0			<b>Lightning</b>
	Lightning strikes (2) in close proximity to overhead aircraft approaching Fresno Air Terminal								
<b>Fresno County</b>									
<b>2 ESE Fig Garden</b>	20	1250PST 1255PST			0	0			<b>Lightning</b>
	Three lightning strikes were reported in and around the Bullard High School campus.								
<b>Fresno County</b>									
<b>8 E (Fat) Air Terminal</b>	20	1445PST			0	0	5K		<b>Lightning</b>
	Structure fire due to lightning hit.								
<b>Fresno County</b>									
<b>5 NE Kerman</b>	20	1511PST			0	0			<b>Lightning</b>
<b>Kern County</b>									
<b>Ridgecrest</b>	20	1230PST			0	0	25K		<b>Wind</b>
	Very localized wind, likely a gustnado along an outflow boundary, caused minor damage within the city of Ridgecrest on the 20th. Some power lines were downed along with flying debris breaking a police car window. About 1,200 customers went without power in the area at the same time due to the downed lines. The highest wind reported by the China Lake Naval Weapons Test Center about 3 miles away was only 31 knots.								
<b>Fresno County</b>									
<b>Clovis</b>	20	1305PST 1310PST			0	0			<b>Funnel Cloud</b>
<b>Fresno County</b>									
<b>3 E Clovis to 4 E Clovis</b>	20	1355PST 1400PST			0	0			<b>Funnel Cloud</b>
<b>Madera County</b>									
<b>5 WSW Chowchilla to 4 WSW Chowchilla</b>	20	1313PST 1318PST			0	0			<b>Funnel Cloud</b>
<b>Madera County</b>									
<b>7 ESE Chowchilla to 7.5 ESE Chowchilla</b>	20	1325PST 1330PST			0	0			<b>Thunderstorm Wind (G50)</b>
	Several hundred trees were downed in an orchard east of Chowchilla due to strong wind accompanying approximately 1" of rain with the event.								
<b>Madera County</b>									
<b>4 S Madera Muni Arpt to 5.5 SE Madera Muni Arp</b>	20	1459PST 1520PST	2.7	40	0	0	130K		<b>Tornado (F1)</b>



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### CALIFORNIA, South Central



*Madera County F1 Tornado as seen from the Madera County foothills 27 miles to the northeast looking looking back to the southwest toward the city of Madera at approximately 4 PM PDT on May 20th. Photo by Carolyn Mather.*

This tornado occurred from the explosive development of a cell along neighboring cells' outflow boundary convergence. The tornado track on the ground was 2.675 miles and mostly F0 in intensity and as wide as 100 yards. It began relatively weak, peeling roofs off from farm structures, downing trees and fencing, but engulfing a well-built structure with minimal damage. However, a 1/4-mile stretch reached F1 intensity as it totally demolished a small farm structure toward the end of its run and was narrowed to a 40-yard path width at that point. The tornado occurred essentially in a rural area of south Madera, tracked west-to-east, but finished with a sweep toward the southeast.

#### **Madera County**

3 NE Madera Muni Arpt	20	1515PST			0	0	256K	Hail(1.75)
3.5 NE Madera Muni Arpt		1518PST						

Much like Fresno and Tulare Counties to the south, various sizes of hail scarred vegetables and fruit within localized rural areas of Madera County. Nonetheless, the largest hail fell generally within a semi-rural area north of the city of Madera

#### **Madera County**

6 NE Madera Muni Arpt	20	1520PST			0	0		Hail(1.50)
6.5 NE Madera Muni Arpt		1524PST						

Total rainfall from this event was 2.35" in the area around Madera Golf and Country Club.

The thunderstorm that supported a tornado at approximately 1500 PST also brought very large hail and locally heavy rain to areas to the north and north-northeast of Madera and the tornado track area.

#### **Fresno County**

8 NNE (Fat) Air Termini	20	1340PST			0	0	24.3M	Hail(1.00)
8.5 NNE (Fat) Air Termini		1345PST						

#### **Fresno County**

1 NW Clovis	20	1400PST			0	0		Hail(1.00)
		1405PST						

#### **Fresno County**

2 ESE Fig Garden to	20	1427PST			0	0		Hail(0.75)
2.2 ESE Fig Garden		1430PST						



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### CALIFORNIA, South Central

#### Fresno County

1 NW Clovis to 5 NE Clovis	20	1500PST 1515PST			0	0			Hail(1.00)
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Hail damage to area agriculture was substantial during the course of this inclement weather day in the Central and Southern San Joaquin Valley. In Fresno County alone \$24.3M of damage occurred due to not only severe threshold level hail...but copious amounts of smaller hail that caused vegetable and citrus and other fruit scarring, and stripped deciduous trees of smaller fruit

#### Fresno County

.5 W Centerville to Centerville	20	1540PST 1555PST			0	0			Hail(1.00)
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Swatch of hail 3-4 miles wide in the area.

#### Fresno County

Sanger	20	1602PST 1607PST			0	0			Hail(0.75)
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#### Fresno County

4 NE Sanger to 5 NE Sanger	20	1616PST 1621PST			0	0			Hail(1.00)
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1/2" Hail with some stones 3/4".

#### Fresno County

Clovis	20	1626PST 1629PST			0	0			Hail(0.88)
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#### Fresno County

1 NW Orange Cove to 1 N Orange Cove	20	1638PST 1645PST			0	0			Hail(0.75)
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While the largest hail fell in the vicinity of Orange Cove...frequent lightning with this event continued at least until 1801 PDT based on spotter reports.

#### Tulare County

Visalia to Woodlake	20	1600PST 1645PST			0	0	1.2M		Small Hail
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While no verifiable severe storm events occurred in Tulare County, significant damage was caused by large amounts of small hail and locally heavy thundershowers at a time of year when many stone and citrus fruits are vulnerable.

#### Fresno County

Navelencia	20	1625PST 1630PST			0	0			Hail(0.75)
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Hail size as reported by a storm spotter ranged from 1/2" to 3/4".

#### Merced County

Planada	20	1640PST 1650PST			0	0	200K		Small Hail
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Locally heavy rain and small hail led to spotty damage within Merced County. More substantial agricultural damage occurred in neighboring Central Valley counties to the south (see other reports)

#### CAZ099

Se Kern Cty Desert	21	0647PST 1900PST			0	0			Wind
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Following severe weather on the 20th through Interior Central California, gusty wind in the Kern Deserts caused some local wind problems in the form of blowing sand and dust late on the 21st. Highly localized northwest wind gusted to 60 knots mid-day around the Mojave Airport.

#### Fresno County

Piedra	31	2120PST 2259PST			0	0	50K		Thunderstorm Wind
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### CALIFORNIA, South Central

#### Kings County

3 E (Nlc)Nas Lemoore	31	2200PST 2203PST			0	0			Hail(0.88)
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#### Kings County

6.5 N Hanford	31	2217PST			0	0			Lightning
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#### Kings County

6.5 N Hanford to 7 N Hanford	31	2217PST 2220PST			0	0	200K		Thunderstorm Wind (G50)
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#### Fresno County

3 W (Fch) Chandler Af	31	2305PST 2315PST			0	0	50K		Thunderstorm Wind
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Remnants of Hurricane Alma interacted with a closed mid-latitude low providing moisture for a de-stabilizing air mass over Interior Central California in the late evening hours of Friday, May 31st. The resulting widespread, late evening convection lead to strong, gusty wind in wet microbursts and street flooding from localized, torrential rains. The most visual damage occurred with a series of very small microbursts evidenced by crop damage in North Kings County. Also a late report of 3/4+" hail was received from North Kings County.

#### Kings County

Avenal	31	2125PST			0	0	5K		Lightning
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#### Kings County

Hanford Muni Arpt	31	2149PST 2210PST			0	0			Heavy Rain
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#### Kings County

1 SSW Hanford Muni A	31	2215PST			0	0	5K		Lightning
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#### Kings County

6.5 N Hanford	31	2217PST			0	0	5K		Lightning
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#### Fresno County

Fresno	31	2230PST 2330PST			0	0			Heavy Rain
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Localized heavy rain at the Hanford Airport of 1.01" within a 21-minute time period totally flooded local streets and intersections. Despite heavy rain being highly localized (known locations at Hanford, Armona, Avenal, downtown Fresno, and Piedra area of Fresno County), lightning activity with this event was widespread, long-lasting, and very visual...an infrequent occurrence for the Central and Southern San Joaquin Valley. There were 260 lightning strikes between just 1900 and 2000 PST through the Central and South San Joaquin Valley...and that activity continued to just after midnight PST as a band of convection moved north through Kings County and into Fresno County. A trained spotter reported lightning at the rate of 5-6 flashes/second around 2100 PST in the Pine Flat Reservoir location near Piedra.