



National Weather Service

Storm Data and Unusual Weather Phenomena



May 1998

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

CALIFORNIA, South Central

Fresno County

Fresno	01 15	0001PST 1200PST			0	0	7.2M		Heavy Rain
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Kern County

Bakersfield	01 15	0001PST 1200PST			0	0	5.9M		Heavy Rain
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Kings County

Hanford	01 15	0001PST 1200PST			0	0	73.6M		Heavy Rain
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Madera County

Madera	01 15	0001PST 1200PST			0	0	7.1M		Heavy Rain
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Merced County

Merced	01 15	0001PST 1200PST			0	0	10.2M		Heavy Rain
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Tulare County

Visalia	01 15	0001PST 1200PST			0	0	5.3M		Heavy Rain
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The final estimated total damage figures for agriculture by county for the late winter/spring rain and below normal temperatures (February through May) in Central California: Madera \$7.1M ... Merced \$10.2M ... Fresno \$7.2M ... Kern \$5.9M ... Kings \$73.6M ... Tulare \$5.3M. Fresno County had specifically \$464K damage in May from inclement weather.

For the rain season through May 31, Fresno had 71 days of measurable rain with Bakersfield having 68. Total rainfall for Bakersfield in May was 1.33" which was the 5th wettest on record ... Fresno had 1.37" which was the 8th wettest. Bakersfield's year-to-date total as of 5/31/98 was 14.36" eclipsing the old record set in 1977-78 of 11.78" and compared to a normal of only 5.72". Fresno's total rain was at 18.43" which is the 5th wettest on record and compares to a normal of 10.60"/year.

There were no 90 degree days in Fresno or Bakersfield in May 1998. This is only the third time on record for either city that the warmest day did not reach 90 degrees during the month. The average monthly temperature for Bakersfield was only 61.0 degs F with the old record of 61.7 degs F in 1911. Fresno's average monthly temperature was 62.0 degs F with the coolest of 61.7 degs F in 1953. However, Fresno did have a record monthly low maximum temperature of 72.5 degs compared to the old record of 74.8 degs in 1953.

Fresno County

Firebaugh	02 05	1200PST 2000PST			0	0	200K		Heavy Rain
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Above normal rain at start of the May continued to plague the Central California multi-billion dollar ag industry. Rainfall as measured at Fresno and Bakersfield totalled close to an inch from 5/2 through 5/5. In the vicinity of the west valley town of Firebaugh, unofficial reports put 3" of rainfall on still near-saturated soils thereby continue to hamper agricultural field operations for not only Fresno County...but all of the Central Valley ag areas in Merced, Madera, Kings, Tulare, and Kern Counties

Kern County

Lamont	02	1615PST 1730PST			0	0			Urban/Sml Stream Fld
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With nearby thunderstorms and locally heavy rain...saturated soils continued to bring runoff into the town of Lamont where ponding basins are silted and water can only run down streets.

Kern County

Arvin to 3 ENE Bakersfield	02	1622PST			0	0			Funnel Cloud
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Numerous sightings of funnel cloud from Arvin to East Bakersfield.



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CALIFORNIA, South Central

Kern County

3 ENE Bakersfield	02	1700PST 1942PST			0	0	250K		Flash Flood
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A convergence line over the southeast corner of the Southern San Joaquin Valley led to low-topped convection in a line from East Bakersfield southward toward Lamont. The resulting heavy rain from the narrow thunderstorm band over the sloped terrain of Northeast Bakersfield led to rapid rises in storm runoff with substantial water depths at several locations in a 12 square mile area bounded by the Panorama Bluffs to the north...River Blvd to the west...Fairfax Ave to the east...and State Highway 58 to the south. State Highways 178 and 58 were closed due to standing water in underpasses with numerous stalled vehicles throughout the area. Several residences and apartments were flooded due to the high runoff levels up to 3 feet in depth. A reliable spotter report indicated that 1.50" of rain fell between 1615-1715 PST (1.80" for the day) and was very similar in behavior to an event in June of 1972. Meadows Field only 3 miles to the west received only 0.17" of rain for the event.

Kings County

21 WSW Hanford Muni	04	1825PST 1833PST			0	0			Funnel Cloud
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This convective day saw a very unstable airmass support thunderstorms along the west side of the Central and Southern San Joaquin Valley. While most of the cells were not considered overly threatening...one cell formed in the northwest corner of Kern County with tops in excess of 25K feet and radar reflectivity reaching 66 dBz. This storm...in a very rural area of Kern County...prompted a severe thunderstorm warning (SVR) at 1603 PDT on its slow track northward toward Kings County. A subsequent SVR was issued at 1754 PDT and threatening Corcoran in Kings County. The storm subsequently split in with the right side continuing to move toward Corcoran but diminishing in intensity while the left side continued toward Hanford. A 3rd SVR was issued at 1838 PDT as the thunderstorm threatened the Hanford-Lemoore area. Again the storm split as it approached Hanford with the right half diminishing in intensity but the left side swinging northward into Lemoore. The thunderstorm over Lemoore was noted at 1835 PDT and supported numerous cloud-to-cloud lightning discharges. Pea-size hail with gusty wind no more than 30 MPH occurred at 1902 PDT. The rain was heavy but lasting only 30 minutes with amounts close to 1/2-inch in that time period. The thunderstorm cell outflow boundary then interacted with another from the north and developed a southwest-northeast line of thunderstorms along the Kings-Fresno County Line. In all cases SVRs for the day were issued on the basis of strong reflectivity values and storm structure...including a classic weak echo region...but the storm's track was over very remote areas of the counties except at its last stages so no verification of SVR criteria was observed.

Fresno County

1 W Huron	05	0015PST 1600PST			0	0			Urban/Sml Stream Fld
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Thunderstorm activity during the 4th and early on the 5th again provided saturated soils in West Fresno County. With locally heavy rain from thunderstorm activity late on the 4th, water from Arroyo Pasajero threatened Huron's west side. Low dikes were built which prevented water from entering the town to any great depth. Rainfall reports over the calendar day of 1.92 inches were reported by a Coalinga spotter (15 miles WSW).

Kern County

Old River	05	0020PST			0	0			Lightning
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Lightning strike from the continued thunderstorm activity resulting from a closed low just off the Central California Coast. Thunderstorms occurred on the 4th and 5th in the Kern County area.

Kings County

Lemoore	05	1030PST 1100PST			0	0			Urban/Sml Stream Fld
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Early convective activity on this day led to heavy rain...enough to cause street flooding in East Kings County. No damage reported.



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CALIFORNIA, South Central

Kern County

**15 SW Bakersfield to
3 NE Bakersfield** **05** **1303PST
1511PST** **0** **0** **100K** **Urban/Sml Stream Fld**

Kern County

Bakersfield **05** **1430PST** **0** **1** **Lightning**

While on the phone an office manager was mildly electrocuted due to a nearby lightning strike and the resulting electrical surge through the phone line.

Kern County

Taft **05** **1700PST
1815PST** **0** **0** **20K** **Urban/Sml Stream Fld**

An evening deluge brought substantial sheet flow through the City of Taft resulting in basement flooding of one home and other minor flooding problems.

An active thunderstorm band moved from southwest to northeast through west Kern County with 1/2-inch hail reported at Buena Vista Lake at 1403 PDT...torrential rain in southwest Bakersfield by 1515 PDT leading to widespread urban flooding...and flooding again in northeast Bakersfield by 1525 PDT. Pea-size hail piled 2-3 inches deep in SW Bakersfield by 1515PDT. Radar estimates placed numerous rainfall rate areas of 1.25-1.75" per hour southwest and west of Bakersfield. Downtown Bakersfield had several streets flooded including Chester Avenue just south of Highway 178...and the rail undercrossing on 'H' Street where one car was trapped. Two severe thunderstorm warnings (SVR) and one flash flood warning (FFW) were issued by NWSO HNX in response to this convective activity. While no severe threshold criteria were evidently met...torrential rain for the area was experienced and quotes such as "never seen it rain this hard" were common. The flooding was not classified as "flash flood" due to lack of movement in the deeply ponded water in the urban areas of Bakersfield. Radar estimates of precipitation for the period of 5/2/98 through 5/5/98 showed that primarily the west and south side of the HNX CWFA were affected by the convective activity...many areas had in excess of 1.5-2.5" of accumulated rainfall. The west edge of the Kings-Fresno County Line had radar estimates of 4-5" over the period. By the morning of the 5th...Porterville in Tulare County received another 0.22" of rain bringing the season total to 20.51"...second only to the 1968-69 record of 21.22".

Fresno County

5 SW Cantua Creek **05** **1520PST
1900PST** **0** **0** **Urban/Sml Stream Fld**

Runoff from the western hills of Fresno County continued to plague area agriculture and cause local road hazards. Water from Arroyo Hondo flowed over Highway 33 south of Mendota and north of Interstate-5 but not to any great depth.

Merced County

Los Banos **05** **1538PST
1700PST** **0** **0** **Urban/Sml Stream Fld**

Very heavy rain from a thunderstorm ponded water on State Highway 152 on both the west and east ends of Los Banos in West Merced County.

As measured from an automated gauge...2.33 inches of rain fell in a 3-hour period between 1400-1700 PDT just west of Los Banos...rates of 1"/hour were seen for the two hours between 1500-1700. Heavy rain threatened to shut down Interstate-5 at 1608 PDT west of Los Banos due to water on the roadway. Again severe thunderstorm or flash flood criteria were not quite met from this thunderstorm although warnings were issued due to high VIL and storm structure. Pea-size hail was noted by a mobile weather spotter north of Los Banos from 1710-1720 PDT as the thunderstorm moved toward Gustine.

CAZ020>021

07 **0600PST
0700PST** **0** **0** **Fog**

The moist conditions caused by late and near record rains this spring gave way to infrequent dense fog formation in the month of May in the Central and north portions of the Southern San Joaquin Valley. Visibilities dropped to less than 300 feet in west Merced



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CALIFORNIA, South Central

County (near State Highway 152 and Interstate Highway-5) by 0600 PST with other reports of dense fog in Fresno and Kings Counties.

Madera County
3 SE Chowchilla

12	1245PST 1248PST				0	0			Funnel Cloud
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Kings County
Corcoran

13	0910PST 0915PST				0	0			Funnel Cloud
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Unsettled weather in this longer-than-normal rainy season provided convection and several sightings of funnel clouds on May 12 and 13.

Fresno County
Oro Loma

12	2000PST 2200PST				0	0			Urban/Sml Stream Fld
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Merced County
Dos Palos

12	2000PST 2200PST				0	0			Urban/Sml Stream Fld
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Locally heavy rain...up to 2.6 inches...fell in western Merced County in a 6-hour period. Local street flooding in and around Dos Palos and South Dos Palos led to sandbagging of local businesses and negatively impacted travel on Highway 33 south of State Highway 152. Similar rainfall amounts were estimated in the Northwest Fresno County area just south of the Merced County Line.