

## Storm Data and Unusual Weather Phenomena - March 2012

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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### TEXAS, South Panhandle

(TX-Z021) PARMER, (TX-Z022) CASTRO, (TX-Z023) SWISHER, (TX-Z024) BRISCOE, (TX-Z026) CHILDRESS, (TX-Z027) BAILEY, (TX-Z028) LAMB, (TX-Z029) HALE, (TX-Z030) FLOYD, (TX-Z031) MOTLEY, (TX-Z032) COTTLE, (TX-Z033) COCHRAN, (TX-Z034) HOCKLEY, (TX-Z035) LUBBOCK, (TX-Z036) CROSBY, (TX-Z037) DICKENS, (TX-Z038) KING, (TX-Z039) YOAKUM, (TX-Z040) TERRY, (TX-Z041) LYNN, (TX-Z042) GARZA, (TX-Z043) KENT, (TX-Z044) STONEWALL

03/01/12 00:00 CST	2.50M	Drought
03/31/12 23:59 CST	2.50M	

Lingering exceptional drought (D4) persisted over the central and western South Plains with severe (D2) to extreme (D3) elsewhere. Hall county was the only county in moderate (D1) drought conditions. In March, several precipitation events pushed rainfall totals to or above normal for the month. Drought impacts are typically low in late winter and early spring, which are among the driest times of the year on the Texas South Plains, and this period coincides with fairly low water demand.

Dry conditions through the month of February persisted through the early part of March. A strong low pressure system pushed into West Texas from the 18th to the 22nd and brought widespread thunderstorms to the region. Several areas over the southeastern Texas panhandle and the northern Rolling Plains received between two and three inches of rainfall for the month. Elsewhere, less precipitation was observed although amounts were still near normal for March. Some selected totals include 2.28" at Childress, 2.27" at White River Lake and 2.23" at Roaring Springs. Like much of the country east of the Rocky Mountains, March saw temperatures above climatological normals. The average temperature at both Lubbock and Childress were 6.4 and 7.7 degrees above normal respectively. These values placed the month at the second warmest March on record at both Lubbock and Childress. Keetch-Byram Drought Index values remained unchanged from February values. They ranged from 500-600 across the South Plains and northern Rolling Plains with 300-400 across the southern Rolling Plains.

Meteorologically, it appears as though the drought is easing but hydrologic data indicates potential for significant impacts to water supply and agriculture. Soil profiles in the top eight inches have continued to show gradual improvement with deeper soils below eight inch depth remaining largely deprived of significant moisture. Winter wheat producers were nearing harvesting their crop and cotton farmers were prepping for planting. Significant green up occurred over the Rolling Plains through March. Fuels this season have been significantly reduced from last year and only a few large fires have resulted despite several strong wind events.

Economic losses due to drought through March since the drought began were estimated near \$2.4 billion.

#### (TX-Z033) COCHRAN, (TX-Z036) CROSBY

03/08/12 08:45 CST	0	High Wind (MAX 52 kt)
03/08/12 09:15 CST	0	

#### (TX-Z034) HOCKLEY, (TX-Z035) LUBBOCK

03/08/12 09:30 CST	12K	Strong Wind (MAX 47 kt)
03/08/12 09:35 CST	0	

#### (TX-Z035) LUBBOCK, (TX-Z036) CROSBY, (TX-Z041) LYNN

03/08/12 13:00 CST	40K	Winter Weather
03/08/12 20:30 CST	0	

#### (TX-Z042) GARZA

03/08/12 13:30 CST	30K	Sleet
03/08/12 16:30 CST	0	

During the morning hours of the 8th, a strong cold front moved through the South Plains and Rolling Plains of West Texas. This front initially brought severe wind gusts along with minor wind damage. Behind the front, much colder air filtered into the region through the afternoon. During the afternoon, heavy sleet developed over the central and eastern South Plains causing numerous traffic accidents. Up to two inches of sleet was reported in Garza county on U.S. Highway 84.

A list of severe wind gusts measured by the Texas Tech University West Texas Mesonet follows:

60 mph at White River Lake (Crosby County) and 59 mph west southwest of Sundown (Cochran County).

#### LUBBOCK COUNTY --- 2.1 NNW NEW DEAL [33.76, -101.84]

03/16/12 15:47 CST	0	Hail (1.25 in)
03/16/12 15:47 CST	0	Source: Trained Spotter

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A trained storm spotter measured 1.25 inch diameter hail two miles north of New Deal. No damage was reported.

**HALE COUNTY --- 3.4 E ALLEY [33.90, -101.77]**

	03/16/12 16:15 CST	0	Hail (1.00 in)
	03/16/12 16:15 CST	0	Source: Storm Chaser

A storm chaser reported quarter size hail covering the ground six miles northeast of Abernathy.

**LUBBOCK COUNTY --- 3.3 E WOLFFORTH [33.51, -101.96]**

	03/16/12 16:35 CST	0	Hail (0.88 in)
	03/16/12 16:35 CST	0	Source: Public

The public reported nickel size hail in southwest Lubbock.

**CROSBY COUNTY --- 3.0 NNW ESTACADO [33.82, -101.54]**

	03/16/12 16:46 CST	0	Hail (1.00 in)
	03/16/12 16:46 CST	0	Source: Storm Chaser

A storm chaser reported quarter size hail covering the ground five miles southeast of Petersburg.

**FLOYD COUNTY --- 4.6 W MC COY [33.87, -101.51]**

	03/16/12 16:58 CST	0	Hail (2.00 in)
	03/16/12 16:58 CST	0	Source: Storm Chaser

A storm chaser reported hen egg size hail covering the ground five miles east of Petersburg.

**Isolated strong and severe thunderstorms developed late in the afternoon of the 16th as a weak upper level disturbance interacted with a dryline. Ample instability and high thunderstorm cloud bases resulted in mostly marginal severe hail occurrences; although one instance of very large hail up to two inches in diameter was observed.**

**CHILDRESS COUNTY --- 0.9 NW TELL [34.38, -100.39]**

	03/18/12 15:05 CST	0	Hail (1.00 in)
	03/18/12 15:05 CST	0	Source: Law Enforcement

Law enforcement estimated quarter size hail in Tell. No damage was reported.

**CHILDRESS COUNTY --- 5.7 SW LONNIE [34.53, -100.25]**

	03/18/12 15:37 CST	0	Hail (1.00 in)
	03/18/12 15:37 CST	0	Source: Storm Chaser

A storm chaser estimated one inch diameter hail seven miles north of Childress. No damage was reported.

**CHILDRESS COUNTY --- 4.6 W LONNIE [34.57, -100.25]**

	03/18/12 16:09 CST	0	Hail (1.75 in)
	03/18/12 16:09 CST	0	Source: Law Enforcement

Law enforcement estimated golfball size hail ten miles north of Childress along Highway 83. No damage was reported.

**KING COUNTY --- 16.0 S GUTHRIE [33.39, -100.33]**

	03/18/12 16:17 CST	0	Funnel Cloud
	03/18/12 16:17 CST	0	Source: Storm Chaser

A storm chaser broadcasted live video of a funnel cloud and rapidly rotating wall cloud about 16 miles south of Guthrie.

**KING COUNTY --- 12.2 ESE GUTHRIE [33.56, -100.13]**

	03/18/12 16:48 CST	0	Hail (1.00 in)
	03/18/12 16:48 CST	0	Source: Storm Chaser

A storm chaser measured quarter size hail 12 miles east-southeast of Guthrie. No damage was reported.

**GARZA COUNTY --- GRAHAM CHAPEL [33.15, -101.47]**

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	03/18/12 17:45 CST		0	Thunderstorm Wind (MG 63 kt)
	03/18/12 17:55 CST		0	Source: Mesonet

From 1745 CST to 1755 CST, a Texas Tech University West Texas Mesonet site near Graham measured severe wind gusts ranging from 65 to 73 mph.

**GARZA COUNTY --- 0.7 N SOUTHLAND [33.36, -101.55]**

03/18/12 18:11 CST	0	Thunderstorm Wind (EG 52 kt)
03/18/12 18:11 CST	0	Source: COOP Observer

A NWS co-op observer in Southland estimated straight line winds of 60 mph. No damage was reported.

**LUBBOCK COUNTY --- 0.9 NE SLATON [33.44, -101.64]**

03/18/12 18:20 CST	0	Hail (1.00 in)
03/18/12 18:20 CST	0	Source: Broadcast Media

Broadcast media relayed a report of quarter size hail in Slaton.

**LUBBOCK COUNTY --- 2.9 W MIDWAY [33.53, -101.63]**

03/18/12 18:32 CST	0	Thunderstorm Wind (EG 65 kt)
03/18/12 18:32 CST	0	Source: Fire Department/Rescue

Fire department personnel estimated straight line winds of 65-75 mph three miles east of Ranson Canyon. No damage was reported.

**FLOYD COUNTY --- 0.6 W FLOYDADA [33.98, -101.34]**

03/18/12 19:03 CST	0	Hail (1.75 in)
03/18/12 19:05 CST	0	Source: Fire Department/Rescue

Fire department personnel estimated quarter size hail at 1903 CST and golfball size hail at 1905 CST in Floydada. No damage was reported.

**BRISCOE COUNTY --- 6.8 ESE SILVERTON [34.43, -101.19]**

03/18/12 19:35 CST	0	Thunderstorm Wind (MG 57 kt)
03/18/12 19:35 CST	0	Source: Mesonet

Measured by the Texas Tech University West Texas Mesonet near Silverton.

**LAMB COUNTY --- 0.6 W LITTLEFIELD [33.92, -102.33]**

03/18/12 21:42 CST	0	Hail (0.88 in)
03/18/12 21:42 CST	0	Source: Post Office

A postal employee estimated nickel size hail near Littlefield.

**LUBBOCK COUNTY --- REESE AFB [33.60, -102.05]**

03/18/12 22:39 CST	0	Thunderstorm Wind (MG 68 kt)
03/18/12 22:39 CST	0	Source: Mesonet

Texas Tech University researchers measured a wind gust to 78 mph associated with a gustnado along a leading edge of a squall line near Reese Center.

**BRISCOE COUNTY --- 10.2 WNW SILVERTON [34.55, -101.45]**

03/18/12 23:49 CST	0	Thunderstorm Wind (MG 57 kt)
03/18/12 23:49 CST	0	Source: Broadcast Media

Reported by broadcast media. No damage was reported.

**HALL COUNTY --- 3.2 WSW TURKEY [34.38, -100.93]**

03/19/12 00:25 CST	0	Thunderstorm Wind (MG 52 kt)
03/19/12 00:25 CST	0	Source: Mesonet

Measured by the Texas Tech University West Texas Mesonet site near Turkey.

**HALL COUNTY --- 0.6 NW MEMPHIS [34.72, -100.54]**

03/19/12 00:57 CST	5K	Thunderstorm Wind (MG 64 kt)
03/19/12 01:00 CST	0	Source: Broadcast Media

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Destructive straight line winds measured up to 74 mph by a KVII-TV mesonet in Memphis resulted in numerous instances of mostly minor damage throughout the town. The most visible damage was caused after a tin roof was lifted and thrown into a nearby health clinic collapsing a small exterior wall. Also, portions of the high school football stadium press box were removed. The majority of the damage reports involved downed tree limbs, power lines and road signs. Some fences were also blown over and roofs were reported to have sustained generally minor damage. No injuries were reported.

**CHILDRESS COUNTY --- 2.9 W CHILDRESS [34.42, -100.25]**

03/19/12 01:37 CST	0	Hail (1.00 in)
03/19/12 01:37 CST	0	Source: Law Enforcement

Law enforcement estimated dime to quarter size hail in Childress. No damage was reported.

Two separate rounds of severe thunderstorms developed the afternoon and evening of the 18th ahead of a vigorous upper level trough. By mid-afternoon, a dryline ignited widely scattered supercell thunderstorms from near Childress south to near Aspermont. Marginally severe hail was common with these supercells. One storm south of Guthrie produced a funnel cloud observed by storm chasers. As the dryline retreated early in the evening, a left-moving supercell organized in northwest Garza County and raced north-northeast at highway speeds for the next 2.5 hours accompanied by large hail up to golfball size and severe winds.

A second and more extensive round of thunderstorms emerged late on the 18th across the southwest South Plains as a Pacific cold front collided with the retreating dryline. The result was an extensive squall line that at one point extended from the Oklahoma Panhandle south to the western Permian Basin. Strong low-level shear in the vicinity of this squall line resulted in the formation of at least three persistent, non-tornadic circulations as observed by the NWS-LBB WSR-88D. One of these circulations was sampled in high detail by research meteorologists from Texas Tech University near Reese Center using mobile Doppler radars and high resolution surface stations (sticknets). The mobile data collected suggests these vorticies were likely gustnadoes producing very localized winds up to 78 mph. Shortly after midnight CST, the squall line intensified in the southeast Texas Panhandle where downburst winds of at least 74 mph caused numerous instances of mostly minor structural damage in Memphis.



*Downburst winds knocked over this small wall, part of the health clinic building in Memphis. Photo credit KCBD news.*