

## Storm Data and Unusual Weather Phenomena - April 2010

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|----------|-----------|-------------------|---------------------|------------------------|
|----------|-----------|-------------------|---------------------|------------------------|

### TEXAS, South Panhandle

#### (TX-Z021) PARMER

|  |                    |   |                       |
|--|--------------------|---|-----------------------|
|  | 04/01/10 14:05 CST | 0 | High Wind (MAX 52 kt) |
|  | 04/01/10 14:05 CST | 0 |                       |

Strong southwest to westerly winds were common across the west Texas South Plains on the 1st. Although these winds were largely sustained in the 25 to 35 mph range, an isolated severe gust of 60 mph was recorded by the Texas Tech University West Texas Mesonet near Friona (Parmer County) shortly after 14:00 CST. No damage was reported.

#### (TX-Z034) HOCKLEY

|  |                    |   |          |
|--|--------------------|---|----------|
|  | 04/07/10 15:45 CST | 0 | Wildfire |
|  | 04/07/10 19:00 CST | 0 |          |

Critical fire weather conditions developed in the wake of a cold frontal passage during the afternoon of the 7th, characterized by dry relative humidities in the 20 percent range and sustained winds speeds between 20 and 30 mph. These conditions promoted rapid and uncontrollable fire spread when a prescribed burn was ignited in managed grassland west of Levelland around 15:45 CST. The resultant wildfire eventually consumed 8,400 acres before it was contained. No damage or injuries were reported.

#### BRISCOE COUNTY --- 2.4 NNE SILVERTON [34.50, -101.28], 9.7 N QUITAQUE [34.51, -101.03]

|  |                    |   |                 |
|--|--------------------|---|-----------------|
|  | 04/15/10 04:30 CST | 0 | Heavy Rain      |
|  | 04/17/10 02:00 CST | 0 | Source: Mesonet |

Heavy rainfall began over much of west Texas during the early morning hours of the 15th. By the time rainfall subsided early on the 17th, 48-hour rainfall record totals between 6 and 8 inches were measured in the vicinity of Caprock Canyons State Park. Local law enforcement officials reported a number of rock slides along Texas Highway 256, where the scenic route winds through steep canyon slopes. No serious damage or injuries were reported.

#### CHILDRESS COUNTY --- 1.6 W CHILDRESS [34.42, -100.23]

|  |                    |   |                 |
|--|--------------------|---|-----------------|
|  | 04/15/10 04:30 CST | 0 | Heavy Rain      |
|  | 04/17/10 02:00 CST | 0 | Source: Mesonet |

Heavy rainfall began over much of west Texas during the early morning hours of the 15th. By the time rainfall subsided early on the 17th, 48-hour rainfall totals of 5 to 6 inches were measured over portions of western Childress County.

#### FLOYD COUNTY --- 0.5 W FLOYDADA [33.98, -101.34]

|  |                    |   |                 |
|--|--------------------|---|-----------------|
|  | 04/15/10 04:30 CST | 0 | Heavy Rain      |
|  | 04/17/10 02:00 CST | 0 | Source: Mesonet |

Heavy rainfall began over much of west Texas during the early morning hours of the 15th. By the time rainfall subsided early on the 17th, rainfall totals ranged from 4.78 inches at Floydada to an unofficial measurement of 10.00 inches at Cedar Hill. Many unofficial reports of 6-8 inches of rain were received from residents in northern Floyd County.

#### HALE COUNTY --- 2.7 SW HALFWAY [34.15, -101.98], 10.1 E SETH WARD [34.22, -101.50]

|  |                    |   |                 |
|--|--------------------|---|-----------------|
|  | 04/15/10 04:30 CST | 0 | Heavy Rain      |
|  | 04/17/10 02:00 CST | 0 | Source: Mesonet |

Heavy rainfall began over much of west Texas during the early morning hours of the 15th. By the time rainfall had subsided early on the 17th, 3.71 inches of rainfall was officially measured at Plainview.

#### HALL COUNTY --- 4.8 NNE TAMPICO [34.55, -100.70]

|  |                    |   |                 |
|--|--------------------|---|-----------------|
|  | 04/15/10 04:30 CST | 0 | Heavy Rain      |
|  | 04/17/10 02:00 CST | 0 | Source: Mesonet |

Heavy rainfall began over much of west Texas during the early morning hours of the 15th. By the time rainfall subsided early on the 17th, 48-hour record rainfall totals between 6 and 8 inches were measured by an automated fire weather observing system in western Hall County.

#### LUBBOCK COUNTY --- 2.1 N WEST CARLISLE [33.61, -101.95], 3.2 SW ACUFF [33.57, -101.66]

|  |                    |       |              |
|--|--------------------|-------|--------------|
|  | 04/15/10 04:30 CST | 0.15M | Heavy Rain   |
|  | 04/17/10 02:00 CST | 0     | Source: ASOS |

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Heavy rainfall began over much of west Texas during the early morning hours of the 15th. By the time rainfall subsided early on the 17th, a 48-hour record total of 4.02 inches of rain had officially fallen at Lubbock's Preston Smith International Airport, with 5.32 inches at Slaton. The record rainfall contributed to the collapse of a business near the intersection of 13th Street and University Avenue around 12:30 CST on the 16th, when rain water accumulated on the structure's flat-roof. No injuries were reported.

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**MOTLEY COUNTY --- 3.0 SW MATADOR [33.99, -100.86], 2.1 W FLOMOT [34.23, -101.02]**

|  |                    |   |                 |
|--|--------------------|---|-----------------|
|  | 04/15/10 04:30 CST | 0 | Heavy Rain      |
|  | 04/17/10 02:00 CST | 0 | Source: Mesonet |

Heavy rainfall began over much of west Texas during the early morning hours of the 15th. By the time rainfall subsided early on the 17th, up to 7 inch unofficial totals were measured over portions of northwestern Motley County.

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**CHILDRESS COUNTY --- 6.3 N CAREY [34.56, -100.31], 4.0 SW CHILDRESS [34.38, -100.25], 1.7 WNW KIRKLAND [34.39, -100.10], 3.6 NW GARDEN VLY [34.56, -100.08]**

|  |                    |     |                           |
|--|--------------------|-----|---------------------------|
|  | 04/16/10 12:00 CST | 25K | Flood (due to Heavy Rain) |
|  | 04/18/10 05:00 CST | 0   | Source: Newspaper         |

Heavy rainfall centered over western Hall County resulted in significant flooding downstream along the Prairie Dog Town Fork of the Red River. The high water flooded low lying farmland, ranch land, and several roadways. No significant damage was reported.

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**FLOYD COUNTY --- 4.7 N MC COY [33.94, -101.42], 3.3 S SOUTH PLAINS [34.17, -101.31], 8.9 E SOUTH PLAINS [34.21, -101.16], 4.2 SE FLOYDADA MUNI ARPT [33.94, -101.27]**

|  |                    |     |                           |
|--|--------------------|-----|---------------------------|
|  | 04/16/10 12:00 CST | 25K | Flood (due to Heavy Rain) |
|  | 04/18/10 05:00 CST | 0   | Source: Newspaper         |

Flooding from heavy rainfall rendered a number of roadways impassable in portions of central and northern Floyd County. Texas Highway 207 and Farm to Market Road 97 north of Floydada were closed. A motorist was stranded by high water near Cedar Hill, and was rescued by law enforcement and fire fighting officials. Low lying areas in Floydada also flooded, and several structures were threatened.

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**HALE COUNTY --- 2.9 N HALE CENTER [34.11, -101.84], 4.8 WNW FINNEY [34.30, -101.80], 10.6 E SETH WARD [34.22, -101.49], 9.2 SE SETH WARD [34.13, -101.56]**

|  |                    |     |                           |
|--|--------------------|-----|---------------------------|
|  | 04/16/10 12:00 CST | 75K | Flood (due to Heavy Rain) |
|  | 04/18/10 05:00 CST | 0   | Source: Newspaper         |

Low lying areas in and around Plainview were flooded by heavy rains. Flood waters threatened the Ace Hardware store and several other structures, however, only minor damages were reported.

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**HALL COUNTY --- 3.4 SSE LESLEY [34.62, -100.79], 4.7 WNW TAMPICO [34.52, -100.80], 3.2 NNW HULVER [34.56, -100.56], 4.7 E PLASKA [34.61, -100.55]**

|  |                    |     |                           |
|--|--------------------|-----|---------------------------|
|  | 04/16/10 12:00 CST | 25K | Flood (due to Heavy Rain) |
|  | 04/18/10 05:00 CST | 0   | Source: Newspaper         |

Heavy rainfall centered over western Hall County resulted in significant flooding along the Prairie Dog Town Fork of the Red River. The high water flooded low lying farmland, ranch land, and several roadways. No significant damage was reported.

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**LUBBOCK COUNTY --- 2.8 NW LUBBOCK [33.60, -101.89], 1.8 SE DOUD [33.56, -101.90], 1.3 NW POSEY [33.50, -101.71], 2.8 SSW ACUFF [33.57, -101.64]**

|  |                    |       |                           |
|--|--------------------|-------|---------------------------|
|  | 04/16/10 12:00 CST | 0.15M | Flood (due to Heavy Rain) |
|  | 04/18/10 05:00 CST | 0     | Source: NWS Storm Survey  |

Flooding from heavy rainfall resulted in the closure of numerous roadways in the Lubbock area. Portions of south Indiana Avenue were washed away by the flood waters. A number of roadways were flooded in the Ransom Canyon and Buffalo Springs Lake areas of eastern Lubbock County, where some residences were also isolated by rising flood waters. No injuries were reported.

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**MOTLEY COUNTY --- WHITEFLAT [34.10, -100.88], 2.0 WNW WHITEFLAT [34.11, -100.91], 2.0 SSW WHITEFLAT [34.08, -100.90], 1.3 S WHITEFLAT [34.08, -100.88]**

|  |                    |     |                           |
|--|--------------------|-----|---------------------------|
|  | 04/16/10 12:00 CST | 25K | Flood (due to Heavy Rain) |
|  | 04/18/10 05:00 CST | 0   | Source: Newspaper         |

Flooding from heavy rainfall resulted in high water over a number of roadways near Whiteflat, including Texas Highway 70.

**A slow moving storm system translated eastward from the desert southwest across the southern Rockies and plains on the 15th and 16th. Lift and moisture associated with this system resulted in widespread showers and thunderstorms that overspread portions of the west Texas Permian Basin, South Plains, and the Panhandle early on the 15th. Rainfall was continuous at many locations through the**

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morning hours of the 17th. Small scale circulations embedded within the ambient flow aloft, however, enhanced the rainfall at times and resulted in periods of heavy rain.

Daily record rainfall totals were measured at Lubbock's Preston Smith International Airport on the 15th and 16th. The tally also set a single-rain event record for the area and jump started Lubbock toward its wettest year-to-date rainfall total in the city's history.

Doppler radar estimates indicated that the heaviest rainfall totals occurred along a swath northeast of Lubbock, over portions of Briscoe, Floyd, and Hall Counties, where upwards of eight to ten inches were estimated over rural areas. A maximum radar estimate of nearly one foot of rain was indicated near Caprock Canyons State Park in eastern Briscoe County and western Hall County. Ground truth measurements unofficially reached ten inches in adjacent areas of northern Floyd County, with five to seven inch totals more common.

The heavy and persistent rainfall resulted in flooding, mostly in the form of swollen playa lakes, creeks, and streams. Some of the most significant flooding occurred along the Prairie Dog Town Fork of the Red River, where runoff from the Briscoe and Hall County rains flowed downstream over portions of Childress County. Notable flooding also occurred along the North Double Mountain Fork of the Brazos where runoff from urban areas around Lubbock caused overflow of Buffalo Springs Lake in eastern Lubbock County. The flow downstream cut off a number of roads and isolated several homesteads. Structural damage was largely limited to the collapse of a flat roof on a Lubbock business that resulted in the partial collapse of the building.

At least one motorist was rescued from a stranded vehicle in Floyd County, but no injuries were reported. Total damages that resulted from the excessive rainfall and flooding across the South Plains were estimated at \$475,000.



*Flooding inundated roadways along the North Double Mountain Fork of the Brazos River near Buffalo Springs Lake. Photo courtesy: John Lipe - National Weather Service - Lubbock, Texas.*

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|          | 04/21/10 17:10 CST |                   | 0                   | Hail (1.75 in)         |
|          | 04/21/10 17:20 CST |                   | 0                   | Source: Public         |

Multiple public reports of golfball size hail were received along a swath northwest of Petersburg. This hail accompanied an isolated supercell storm that developed along a pre-existing outflow boundary. No damages were reported.

**FLOYD COUNTY --- 5.0 S FLOYDADA [33.91, -101.33], 14.0 ENE SOUTH PLAINS [34.30, -101.09]**

|                    |   |                                |
|--------------------|---|--------------------------------|
| 04/21/10 17:12 CST | 0 | Hail (1.75 in)                 |
| 04/21/10 18:21 CST | 0 | Source: Fire Department/Rescue |

A swath of large hail that ranged in size from quarters to baseballs accompanied a left moving (anticyclonic) supercell as it tracked north-northeastward over Floyd County during the 17:00 CST and 18:00 CST hours of the 21st. Storm chasers initially reported quarter size hail five miles south of Floydada along Texas Highway 207 at 17:12 CST. Hailfall increased to the size of golfballs as reported by the public just east of Cedar Hill at 17:52 CST. Golfball size hail along Farm to Market Road 1065 east of South Plains briefly increased to the size of baseballs before ending at 18:27 CST. No damages were reported.

**FLOYD COUNTY --- 14.8 E SOUTH PLAINS [34.24, -101.06]**

|                    |    |                                |
|--------------------|----|--------------------------------|
| 04/21/10 18:27 CST | 1K | Hail (2.75 in)                 |
| 04/21/10 18:27 CST | 0  | Source: Fire Department/Rescue |

Multiple reports of very large hail up to the size of baseballs were received along Farm to Market Road 1065 east of South Plains at 18:21 CST. Several car windsheilds were reportedly broken by the hail.

**DICKENS COUNTY --- 11.0 E AFTON [33.75, -100.61]**

|                    |   |                      |
|--------------------|---|----------------------|
| 04/21/10 19:30 CST | 0 | Hail (2.50 in)       |
| 04/21/10 19:30 CST | 0 | Source: Storm Chaser |

Storm chasers reported very large tennis ball size hail along Farm to Market Road 193 in northeastern Dickens County. The hail was associated with a persistent supercell thunderstorm that developed near Dickens and moved northeastward over rural portions of Dickens County for nearly two hours. No damages were reported.

**CHILDRESS COUNTY --- 1.0 NW CAREY [34.48, -100.33]**

|                    |   |                         |
|--------------------|---|-------------------------|
| 04/21/10 20:21 CST | 0 | Hail (1.50 in)          |
| 04/21/10 20:21 CST | 0 | Source: Trained Spotter |

Skywarn storm spotters reported ping pong ball size hail along U.S. Highway 287 near Carey.

**Isolated to scattered severe thunderstorms impacted portions of the eastern South Plains, Rolling Plains, and the extreme southeastern Texas Panhandle during the late afternoon and evening of the 21st. Thunderstorms developed along a stalled frontal boundary and a dryline. Several of the thunderstorms evolved into supercells and produced very large hail up to the size of baseballs. The most prolific hail producing storm of the day impacted portions of Floyd County. No significant damages were reported from the storms.**

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*Baseball size hail fell over portions of northern Floyd County shortly before 18:30 CST. Photo courtesy: Kiel Ortega - National Severe Storms Laboratory.*

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**HALE COUNTY --- 5.0 ESE PLAINVIEW [34.17, -101.62]**

|                    |   |                         |
|--------------------|---|-------------------------|
| 04/22/10 17:45 CST | 0 | Hail (1.25 in)          |
| 04/22/10 17:45 CST | 0 | Source: Trained Spotter |

Skywarn storm spotters reported half dollar size hail along U.S. Highway 70 southeast of Plainview.

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**GARZA COUNTY --- 1.0 N POST [33.19, -101.38]**

|                    |   |                         |
|--------------------|---|-------------------------|
| 04/22/10 17:48 CST | 0 | Hail (0.88 in)          |
| 04/22/10 17:48 CST | 0 | Source: Trained Spotter |

Skywarn storm spotters reported nickel size hail just north of Post.

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**CROSBY COUNTY --- 4.0 E CROSBYTON [33.67, -101.18]**

|                    |     |                              |
|--------------------|-----|------------------------------|
| 04/22/10 18:01 CST | 50K | Thunderstorm Wind (EG 52 kt) |
| 04/22/10 18:01 CST | 0   | Source: Trained Spotter      |

Trained storm spotters reported that damaging thunderstorm winds flipped a cotton trailer and destroyed a barn near the Silver Falls Roadside Park on U.S. Highway 82 east of Crosbyton.

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**FLOYD COUNTY --- 2.0 S SOUTH PLAINS [34.19, -101.32]**

|                    |     |                |
|--------------------|-----|----------------|
| 04/22/10 18:10 CST | 10K | Hail (1.00 in) |
| 04/22/10 18:15 CST | 0   | Source: Public |

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A motorist reported that penny to quarter size hail damaged her vehicle along Texas Highway 207 just south of South Plains.

**MOTLEY COUNTY --- 9.5 SSW NORTHFIELD [34.15, -100.66], 8.3 SSE NORTHFIELD [34.18, -100.52]**

|                    |   |       |  |
|--------------------|---|-------|--|
| 04/22/10 18:20 CST | 0 | 0.10M | Tornado (EF2, L: 7.50 mi , W: 1300 yd) |
| 04/22/10 18:42 CST | 0 | 0     | Source: Storm Chaser                   |

Multiple storm chasers observed a large and rain-wrapped tornado that moved east-northeastward across the Motley and Cottle County line south-southeast of Northfield and southwest of Cee Vee during the 18:00 CST hour on the 22nd.

Doppler radar, along with post-storm ground and aerial surveys, suggest that the tornado developed at approximately 18:20 CST 9 miles south-southwest of Northfield, just east of Farm to Market Road 94. Storm chasers first obtained a visual confirmation of the tornado at 18:37 CST as it partially emerged from obscuring rain curtains. Photographs show a very large wedge-shaped tornado, with only the southern portion of the vortex visible through the wrapping precipitation.

The tornado's track across northeastern Motley County remained over uninhabited ranch land. A National Weather Service cooperative observer, however, reported a loud roar as the tornado passed south of her home south of Northfield. Surveys of adjacent ranch land, conducted by private land owners as well as National Weather Service and Texas Tech University West Texas Mesonet meteorologists, revealed that the tornado destroyed four windmills, severely damaged mesquite trees, and snapped at least a half dozen wooden utility poles. The damage path was measured to be three-quarters of a mile wide.

The tornado again became totally obscured by rain and hail within the parent high precipitation supercell storm before it crossed the Motley and Cottle County line approximately 8.25 miles south-southeast of Northfield at 18:42 CST. It likely dissipated just a few minutes later at approximately 18:45 CST southwest of Cee Vee in northwestern Motley County.

The total path length of the tornado across portions of Motley and Cottle Counties was approximately 9 miles, with a 25-minute duration. Enhanced-Fujita Scale damage indicators for both free-standing metal towers and metal electrical transmission line poles were considered to gauge expected wind speeds for the destroyed windmills. The lower bounds for degrees of damage 2 and 5 respectively were accepted, yielding estimated wind speeds between 110 and 115 mph. Winds of at least this magnitude are additionally supported by the expected value for snapped wooden utility poles, which were additionally observed along the damage path. Therefore an EF-2 rating was assigned for this tornado.

**MOTLEY COUNTY --- NORTHFIELD [34.28, -100.60]**

|                    |   |   |                       |
|--------------------|---|---|-----------------------|
| 04/22/10 18:22 CST | 0 | 0 | Hail (1.75 in)        |
| 04/22/10 18:25 CST | 0 | 0 | Source: COOP Observer |

A National Weather Service cooperative observer reported golfball size hail that intermittently mixed with larger two inch-diameter hailstones at Northfield. No damages were reported.

**MOTLEY COUNTY --- NORTHFIELD [34.28, -100.60]**

|                    |   |   |                       |
|--------------------|---|---|-----------------------|
| 04/22/10 18:24 CST | 0 | 0 | Hail (2.00 in)        |
| 04/22/10 18:24 CST | 0 | 0 | Source: COOP Observer |

A National Weather Service cooperative observer reported that very large tennis ball hailstones intermittently mixed with more numerous golfball size hail at Northfield. No damages were reported.

**GARZA COUNTY --- 12.0 NE POST [33.30, -101.23]**

|                    |   |   |                           |
|--------------------|---|---|---------------------------|
| 04/22/10 18:37 CST | 0 | 0 | Hail (1.75 in)            |
| 04/22/10 18:41 CST | 0 | 0 | Source: Emergency Manager |

Local emergency management officials reported golfball to baseball size hail northeast of Post.

**GARZA COUNTY --- 12.0 NE POST [33.30, -101.23]**

|                    |   |   |                           |
|--------------------|---|---|---------------------------|
| 04/22/10 18:40 CST | 0 | 0 | Hail (2.75 in)            |
| 04/22/10 18:40 CST | 0 | 0 | Source: Emergency Manager |

Local emergency management officials reported that very large baseball size hailstones intermittently mixed with more numerous golfball sized stones northeast of Post.

**COTTLE COUNTY --- 4.8 WSW CEE VEE [34.18, -100.52], 3.5 SW CEE VEE [34.19, -100.50]**

|                    |   |   |  |
|--------------------|---|---|--|
| 04/22/10 18:42 CST | 0 | 0 | Tornado (EF2, L: 1.50 mi , W: 1300 yd) |
| 04/22/10 18:45 CST | 0 | 0 | Source: Storm Chaser                   |

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Multiple storm chasers observed a large and rain-wrapped tornado that moved east-northeastward across the Motley and Cottle County line south-southeast of Northfield and southwest of Cee Vee during the 18:00 CST hour on the 22nd.

Doppler radar, along with post-storm ground and aerial surveys, suggest that the tornado developed at approximately 18:20 CST south-southwest of Northfield in Motley County. Storm chasers first obtained a visual confirmation of the tornado at 18:37 CST as it partially emerged from obscuring rain curtains, while still in rural areas of northeastern Motley County. Photographs from that time show a very large wedge-shaped tornado.

The tornado's maximum intensity, per post storm surveys by private land owners and meteorologists from the National Weather Service and Texas Tech University West Texas Mesonet, occurred in northeastern Motley County where four windmills were destroyed, mesquite trees were severely damaged, and where a number of wooden utility poles were snapped. The damage path was measured to be three-quarters of a mile wide near the Motley and Cottle County line.

The tornado again became totally obscured by rain and hail within the parent high precipitation supercell storm before it crossed the Motley and Cottle County line approximately 4.8 miles west-southwest of Cee Vee at 18:42 CST. Doppler radar velocity data shows subtle evidence that a mesocyclone occlusion may have occurred, and that the tornado likely dissipated just a few minutes later at approximately 18:45 CST 3.5 miles southwest of Cee Vee. A second tornado, however, quickly developed in a cyclic fashion just southeast of the initial tornado as a new mesocyclone became dominant.

The total path length of the tornado across portions of Motley and Cottle Counties was approximately 9 miles, with a 25-minute duration. Enhanced-Fujita Scale damage indicators for both free-standing metal towers and metal electrical transmission line poles were considered to gauge expected wind speeds for the destroyed windmills observed in northeastern Motley County. The lower bounds for degrees of damage 2 and 5 respectively were accepted, yielding estimated wind speeds between 110 and 115 mph. Winds of at least this magnitude are additionally supported by the expected value for snapped wooden utility poles, which were additionally observed along the damage path. Therefore an EF-2 rating was assigned for this tornado.

**COTTLE COUNTY --- 5.0 SW CEE VEE [34.17, -100.51], 7.5 ENE CEE VEE [34.26, -100.33]**

|                    |       |  |
|--------------------|-------|--|
| 04/22/10 18:46 CST | 0.30M | Tornado (EF3, L: 12.25 mi , W: 975 yd) |
| 04/22/10 19:20 CST | 0     | Source: NWS Storm Survey               |

A large and rain wrapped tornado tracked from southwest of Cee Vee to just west of U.S. Highway 62/83 east-northeast of Cee Vee between 18:46 and 19:20 CST. A storm spotter observed the tornado as it passed southeast of Cee Vee at approximately 19:05 CST, and described it visually as a large wedge-shaped vortex. A post-storm ground and aerial survey conducted by local emergency management officials and National Weather Service meteorologists concluded that the tornado resulted in significant EF-3 damage.

A number light weight objects and structures, including well-houses, horse stables, utility poles, empty semi-truck trailers, and a partially filled petroleum tank were heavily damaged or destroyed along the initial portions of the tornado's track through ranchland southwest and south of Cee Vee. This includes minor roof damage to a permanent farm home near County Road 172.

Significant damage first occurred at a farmstead 3 miles east-southeast of Cee Vee, south of Farm to Market Road 1440. At this site, upwards of twenty-percent of the roof was removed from a well-built permanent home. A large metal building was partially collapsed and a well-house was completely destroyed. A horse trailer was blown over and rolled. In addition, several large trees were uprooted.

The tornado continued to move northeastward and impacted a second farmstead four miles east of Cee Vee, just south of Farm to Market Road 1440. The tornado's maximum damage intensity was observed at this site, where a well-built stucco constructed permanent home, a cinderblock two-car garage, and several outbuildings were destroyed. The home's roof was totally removed, and three exterior walls collapsed. A portion of the home's roof and exterior walls were blown downwind and struck the two-car cinderblock garage broadside. This contributed to the complete destruction of that structure with only the frames of two exterior walls remaining. Two outbuildings and a horse stable were completely destroyed, with another unroofed. In addition, an entire stand of more than a dozen large trees were uprooted. A detailed survey by local officials of the site, revealed that the home was well-built, and that the exterior walls were secured to the slab foundation with bolts.

In collaboration with experts at Texas Tech University's Wind Engineering Department, the developers of the Enhanced-Fujita Scale, it was determined that estimated wind speeds at the site of the destroyed residence ranged between 130 and 150 mph. With an average expected wind speed of 140 mph, the tornado was assigned an EF-3 rating based on this damage.

The tornado continued northeastward across Farm to Market Road 1440. It caused light roof damage to a couple of light weight structures before dissipating just west of U.S. Highway 62/83 east-northeast of Cee Vee at approximately 19:20 CST.

Despite damaging three residences, no injuries were reported.

**LYNN COUNTY --- TAHOKA [33.18, -101.78], 3.8 SSW WILSON [33.27, -101.76]**

|                    |   |                         |
|--------------------|---|-------------------------|
| 04/22/10 19:29 CST | 0 | Hail (1.00 in)          |
| 04/22/10 19:35 CST | 0 | Source: Law Enforcement |

Law enforcement officials and National Weather Service cooperative observers reported quarter size hail along a swath from Tahoka northeastward along Farm to Market Road 400 to southwest of Wilson.

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| <b>CHILDRESS COUNTY --- 7.0 SSW CHILDRESS [34.33, -100.25]</b>   |                    |                      |                        |                                       |
|  | 04/22/10 19:45 CST |                      | 0                      | Hail (1.75 in)                        |
|  | 04/22/10 19:45 CST |                      | 0                      | Source: Fire Department/Rescue        |
| Local fire department officials reported golfball size hail along U.S. Highway 62/83 on the Childress and Cottle County line south of Childress.   |                    |                      |                        |                                       |
| <b>COTTLE COUNTY --- 6.0 NE COLEYVILLE [34.28, -100.29]</b>  |                    |                      |                        |                                       |
|  | 04/22/10 19:45 CST |                      | 0                      | Hail (1.75 in)                        |
|  | 04/22/10 19:45 CST |                      | 0                      | Source: Fire Department/Rescue        |
| Local fire department officials reported golfball size hail along U.S. Highway 62/83 on the Childress and Cottle County line south of Childress.   |                    |                      |                        |                                       |
| <b>COTTLE COUNTY --- 4.0 W SWEARINGEN [34.15, -100.22], 3.0 N SWEARINGEN [34.19, -100.15]</b>  |                    |                      |                        |                                       |
|  | 04/22/10 20:05 CST |                      | 0                      | Tornado (EF0, L: 5.00 mi , W: 150 yd) |
|  | 04/22/10 20:12 CST |                      | 0                      | Source: Storm Chaser                  |
| Numerous storm chasers and Skywarn spotters reported witnessing an intermittent tornado near Swearingen shortly after 20:00 CST on the 22nd. Post-storm surveys by National Weather Service meteorologists did not reveal significant damage in the area, however, the number of eyewitness reports coupled with Doppler radar presentations of the parent supercell lend credibility to the presence of a tornado.  |                    |                      |                        |                                       |
| <b>LYNN COUNTY --- 8.0 W TAHOKA [33.18, -101.92], 7.0 W TAHOKA [33.18, -101.90]</b>  |                    |                      |                        |                                       |
|  | 04/22/10 20:20 CST |                      | 0                      | Hail (1.00 in)                        |
|  | 04/22/10 20:20 CST |                      | 0                      | Source: Trained Spotter               |
| Skywarn storm spotters reported nickel to quarter size hail along U.S. Highway 380 west of Tahoka.   |                    |                      |                        |                                       |
| <b>LYNN COUNTY --- 2.9 ESE NEW HOME ARPT [33.28, -101.88], 3.3 SW TAHOKA T BAR ARPT [33.15, -101.86], 2.9 SSE NEW LYNN [33.16, -101.66], 2.1 S WILSON [33.29, -101.73]</b>   |                    |                      |                        |                                       |
|  | 04/22/10 20:56 CST |                      | 0                      | Flood (due to Heavy Rain)             |
|  | 04/23/10 00:00 CST |                      | 0                      | Source: Emergency Manager             |
| Heavy rainfall from training thunderstorms resulted in flooding that persisted for several hours in portions of central and northeastern Lynn County. Local emergency management officials initially reported that ponding of high water rendered a U.S. Highway 87 underpass impassable just before 21:00 CST. A small section of the highway had to be closed until approximately 23:00 CST. A post-storm survey by a National Weather Service hydrologist revealed that swollen playa lakes inundated parts of U.S. Highway 87 north of Tahoka and U.S. Highway 380 east of Tahoka. No damage was reported. |                    |                      |                        |                                       |
| <b>GARZA COUNTY --- SOUTHLAND [33.35, -101.55]</b>   |                    |                      |                        |                                       |
|  | 04/22/10 21:07 CST |                      | 0                      | Hail (1.00 in)                        |
|  | 04/22/10 21:07 CST |                      | 0                      | Source: COOP Observer                 |
| Hail that ranged in size from peas to quarters was reported in Southland just after 21:00 CST.   |                    |                      |                        |                                       |
| <b>DICKENS COUNTY --- DICKENS [33.62, -100.83]</b>   |                    |                      |                        |                                       |
|  | 04/22/10 21:17 CST |                      | 0                      | Hail (1.25 in)                        |
|  | 04/22/10 21:17 CST |                      | 0                      | Source: Storm Chaser                  |
| The South Plains Storm Spotting Team reported half dollar size hail in Dickens.  |                    |                      |                        |                                       |
| <b>CROSBY COUNTY --- CROSBYTON [33.67, -101.25]</b>  |                    |                      |                        |                                       |
|  | 04/22/10 21:31 CST |                      | 0                      | Hail (0.88 in)                        |
|  | 04/22/10 21:31 CST |                      | 0                      | Source: Public                        |
| Nickel size hail was reported in Crosbyton shortly after 21:30 CST.  |                    |                      |                        |                                       |
| <b>COTTLE COUNTY --- 2.0 N PADUCAH [34.05, -100.30]</b>  |                    |                      |                        |                                       |
|  | 04/22/10 22:55 CST |                      | 50K                    | Thunderstorm Wind (EG 65 kt)          |
|  | 04/22/10 22:55 CST |                      | 0                      | Source: Emergency Manager             |
| A linear complex of severe thunderstorms resulted in significant wind damage at a homestead north of Paducah along U.S. Highway 62/83 shortly before 23:00 CST. Local emergency management officials reported that thunderstorm winds caused heavy roof and window damage to a permanent home. A number of large trees were blown down and five utility poles were snapped by the winds. No injuries were reported.  |                    |                      |                        |                                       |



## Storm Data and Unusual Weather Phenomena - April 2010

| Location | Date/Time | Deaths & Injuries | Property & Crop Dmg | Event Type and Details |
|----------|-----------|-------------------|---------------------|------------------------|
|----------|-----------|-------------------|---------------------|------------------------|

Scattered thunderstorms developed over the central and eastern South Plains region of west Texas during the late afternoon and evening hours of the 22nd. These storms resulted in significant severe weather, including strong tornadoes, as they impacted portions of the extreme southeastern Panhandle and the Rolling Plains.

The severe weather over the South Plains of west Texas on the 22nd was part of a larger tornado outbreak that impacted areas from west Texas northward through western Kansas and eastern Colorado.

Thunderstorms initiated over the central South Plains along and east of a dryline late in the day. These storms, some exhibiting supercell characteristics, initially became severe and produced large hail and damaging winds before 18:00 CST. By 18:20 CST, the first of three tornadoes, two of which were long-lived and significant, developed over northeastern Motley County. The parent supercell thunderstorm produced two damaging and rain-wrapped tornadoes over portions of Motley and Cottle Counties. The initial tornado south of Northfield crossed the Motley and Cottle County line southwest of Cee Vee. This three-quarter mile wide EF-2 tornado destroyed windmills and utility poles as it tracked through rural ranchlands. The second tornado heavily damaged or destroyed three farmsteads south and southeast of Cee Vee (Cottle County). Winds were estimated at approximately 140 mph where one home was destroyed east of that community. No injuries were reported.

A second supercell thunderstorm developed south of the initial tornadic storm, and became tornadic near Swearingen (Cottle County) shortly after 21:00 CST.

In addition to tornadoes, numerous reports of large hail up to the size of baseballs were received. Another Cottle County home was heavily damaged by thunderstorm winds just north of Paducah as convection organized into a linear complex late in the evening. Also, training thunderstorms repeatedly moved over the Tahoka area in Lynn County. This resulted in areas of flooding and portions of two U.S. Highways were rendered impassable.

In all, property damages were estimated at \$530,000. No injuries were reported.



*Storm chasers photographed a large tornado over northeastern Motley County at 18:27 CST before it evolved into a rain-wrapped wedge-shaped tornado. Photo courtesy: Catherin Temple - University of Oklahoma.*

## Storm Data and Unusual Weather Phenomena - April 2010

| Location         | Date/Time          | Deaths & Injuries | Property & Crop Dmg | Event Type and Details  |
|------------------|--------------------|-------------------|---------------------|-------------------------|
|                  | 04/23/10 11:20 CST |                   | 20K                 | High Wind (MAX 52 kt)   |
|                  | 04/23/10 15:00 CST |                   | 0                   |                         |
| <hr/>            |                    |                   |                     |                         |
| (TX-Z031) MOTLEY | 04/23/10 14:00 CST |                   | 10K                 | Strong Wind (MAX 48 kt) |
|                  | 04/23/10 15:00 CST |                   | 0                   |                         |

In the wake of a passing storm system that contributed to the severe weather and tornado outbreak on the 22nd, a tight pressure gradient over the South Plains of west Texas resulted in widespread sustained westerly winds between 25 mph and 35 mph during the afternoon hours of the 23rd. By midday, isolated virga showers developed and locally enhanced wind gusts. A few severe wind gusts were observed by the Texas Tech University West Texas Mesonet and the KVII-TV Schoolnet near the virga showers throughout the afternoon. A 55-year old cottonwood tree was blown down onto a house in Matador. The roof of the house sustained minimal damage and the occupant of the home was uninjured. A nearby Texas Tech University West Texas Mesonet site recorded a peak gust of 55 mph. Winds additionally blew tree limbs down into power lines in Plainview (Hale County), and resulted in a power outage that affected 650 households for nearly two hours.

A list of measured severe wind gusts follows: 60 mph at Plains (Yoakum County), 60 mph at Silverton (Briscoe County), 59 mph at Childress (Childress County), 58 mph at Abernathy (Hale County), 58 mph at Slaton (Lubbock County), and 58 mph at Turkey (Hall County).