



National Weather Service

Storm Data and Unusual Weather Phenomena



June 2005

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<u>TEXAS, South Panhandle</u>									
Yoakum County									
7 W Denver City	02	2330CST			0	0			Thunderstorm Wind (MG52)
		Measured by the Texas Tech/West Texas Mesonet.							
Yoakum County									
3 N Plains	03	0030CST			0	0			Thunderstorm Wind (MG51)
		Measured by the Texas Tech/West Texas Mesonet.							
Terry County									
2 S Brownfield	03	0040CST			0	0			Thunderstorm Wind (MG60)
		Measured by the Texas Tech/West Texas Mesonet.							
Hockley County									
8 SW Sundown	03	0055CST			0	0			Thunderstorm Wind (MG50)
		Measured by the Texas Tech/West Texas Mesonet.							
Yoakum County									
7 W Denver City	03	0100CST			0	0			Thunderstorm Wind (MG54)
		Measured by the Texas Tech/West Texas Mesonet.							
Bailey County									
2 S Muleshoe	03	0120CST			0	0			Thunderstorm Wind (MG53)
		Measured by the Texas Tech/West Texas Mesonet.							
Cochran County									
1 NE Morton	03	0130CST			0	0			Thunderstorm Wind (MG51)
		Measured by the Texas Tech/West Texas Mesonet.							
Hockley County									
4 S Levelland	03	0550CST			0	0			Thunderstorm Wind (MG56)
		Measured by the Texas Tech/West Texas Mesonet. A wake low developed behind dissipating convection across the area and generated severe winds.							
Garza County									
5 SW Graham Chapel	03	0625CST			0	0			Thunderstorm Wind (MG51)
		Measured by the Texas Tech/West Texas Mesonet. A wake low developed behind dissipating convection across the area and generated severe winds.							
Lubbock County									
11 SW Lubbock	05	1523CST			0	0			Hail(0.88)
Lubbock County									
12 SW Lubbock	05	1540CST			0	0			Hail(1.00)
Lubbock County									
12 S Lubbock	05	1542CST			0	0			Hail(0.75)
Lubbock County									
12 S Lubbock	05	1545CST			0	0			Hail(1.00)
Lubbock County									
11 SW Lubbock	05	1548CST			0	0			Hail(1.75)
Lubbock County									
Lubbock	05	1609CST			0	0			Hail(1.75)
Lubbock County									
9 S Lubbock	05	1615CST			0	0			Hail(2.00)
Lynn County									
2 N Wilson	05	1625CST			0	0			Hail(4.25)
Lubbock County									
9 N Slaton	05	1636CST			0	0			Hail(1.75)
		Ransom Canyon.							



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<u>TEXAS, South Panhandle</u>									
Lubbock County Slaton	05	1636CST			0	0			Hail(1.75)
Lubbock County Slaton	05	1640CST			0	0			Hail(0.75)
Lubbock County 7 S Lubbock	05	1650CST			0	0			Hail(1.00)
Lynn County 5 N Grassland	05	1705CST			0	0			Hail(1.75)
Kent County Girard	05	1715CST			0	0			Hail(1.00)
Floyd County 2 E Lockney	05	1733CST			0	0			Hail(1.00)
Garza County 1 S Post	05	1744CST			0	0			Hail(1.75)
Garza County 1 E Post	05	1747CST			0	0			Hail(1.75)
Garza County 5 SE Post	05	1751CST			0	0			Hail(1.75)
Kent County 6 N Jayton	05	1751CST			0	0			Hail(0.88)
King County Dumont	05	1753CST			0	0			Hail(1.75)
Garza County 5 SE Post	05	1755CST			0	0			Hail(1.75)
Kent County 5 N Jayton	05	1759CST			0	0			Hail(1.75)
Floyd County 4 N Floydada	05	1802CST			0	0			Hail(1.75)
King County Dumont	05	1812CST			0	0			Hail(2.75)
Cottle County Delwin	05	1830CST			0	0			Hail(0.88)
Garza County Justiceburg	05	1900CST			0	0			Hail(1.00)
Swisher County Tulia	05	1915CST			0	0			Hail(1.00)
Swisher County Tulia	05	1923CST			0	0			Hail(0.88)
King County Guthrie	05	1940CST			0	0			Thunderstorm Wind (EG52)
									Several trees and power lines downed by strong thunderstorm winds.
Kent County 10 WNW Jayton	05	2015CST			0	0			Thunderstorm Wind (EG52)
									Several trees and power poles downed by strong thunderstorm winds
Lynn County 1 N Odonnell	05	2300CST			0	0			Thunderstorm Wind (MG53)
									Measured by the Texas Tech/West Texas Mesonet.



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June 2005

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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TEXAS, South Panhandle

Lynn County

1 N Odonnell	05	2305CST			0	0			Thunderstorm Wind (MG55)
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Measured by the Texas Tech/West Texas Mesonet.

Kent County

1 S Jayton	05	2340CST			0	0			Thunderstorm Wind (MG54)
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Measured by the Texas Tech/West Texas Mesonet.

Kent County

1 S Jayton	05	2355CST			0	0			Thunderstorm Wind (MG68)
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Measured by the Texas Tech/West Texas Mesonet.

Kent County

1 S Jayton	06	0000CST			0	0			Thunderstorm Wind (MG52)
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Measured by the Texas Tech/West Texas Mesonet.

Summary of the Wind Event impacting Kent and Lynn counties on June 5th and 6th, 2005:
 During the early morning hours Monday, June 6, 2005, a weakening area of showers and thunderstorms moved across Kent county. Through accurate reports from citizens and a National Weather Service (NWS) official Co-Operative Observer, the greatest impact from strong and damaging wind occurred in the Jayton, TX area between the hours of 11:40 PM and 12:00 AM CST. In reviewing NWS doppler radar data and observational wind, temperature and dew point information from the Texas Tech University West Texas Mesonet stations in O'Donnell and Jayton between 11:00 PM and 12:00 AM CST, two areas of impact were evident. At O'Donnell, TX, located in extreme southern Lynn county, a dissipating area of showers and weak thunderstorms forced what is known as a heat burst. At times, a heat burst will occur in a dissipating thunderstorm with little rainfall. The temperature will increase and the dew point (measure of moisture) will decrease. A sharp increase in temperature and a related sharp decrease in dew point was noted in the mesonet data from O'Donnell around the time of their 61 mph and 63 mph wind gust at 11:00 PM and 11:05 PM CST, respectively. As air rushes down to the ground from a thunderstorm (with little rainfall) it has a tendency to warm through compression. Heat bursts are not uncommon to this area and often result in damage. Showers and thunderstorms became slightly better organized as the activity moved to the east over Kent county. Strong inflow developed behind the activity and a rear inflow jet signature was evident in radar data following a post-storm analysis. Similarly, as this activity began to weaken, the strong winds were transferred to the ground within the down-rush of air (downdraft) from the dissipating area of showers and thunderstorms. These strong winds higher above the surface were able to reach the ground and deliver damaging wind gusts ranging from 62 mph at 11:40 PM at the Jayton (1 mile south) mesonet station to a peak of 78 mph at 11:55 PM CST to 60 mph at 12:00 AM CST as the activity dissipated. These types of downburst and/or straight-line wind events can damage several structures in the path of the wind flow. At times, as the wind flow is prevented from passing through (damaging) a structure, the wind flow will be diverted around or over more dominant structures and can produce varied damage patterns.

Parmer County

15 W Friona	06	1810CST			0	0			Hail(1.00)
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Hail reported in Rhea from 6:10 PM to 6:15PM CST.

Yoakum County

Bronco	06	1910CST			0	0			Hail(1.00)
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Bailey County

6 W Muleshoe	06	1951CST			0	0			Hail(1.00)
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Cochran County

1 NE Morton	06	2000CST			0	0			Thunderstorm Wind (MG51)
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Measured by the Texas Tech/West Texas Mesonet station.



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TEXAS, South Panhandle

Bailey County 7 N Maple	06	2005CST			0	0			Thunderstorm Wind (EG57)
Lamb County 8 N Littlefield	06	2055CST			0	0			Thunderstorm Wind (MG65)
Measured by KLBK-TV media storm chaser hand-held anemometer.									
Lamb County Olton	06	2100CST			0	0			Hail(0.88)
Reported from 9:00 PM to 9:10 PM CST.									
Lamb County 9 NNE Spade	09	1600CST			0	0			Hail(0.75)
Hockley County 5 SE Anton	09	1620CST			0	0			Hail(1.00)
Lubbock County 6 NW Shallowater	09	1625CST			0	0			Hail(1.00)
Hale County 1 E Countyline	09	1635CST			0	0			Hail(1.75)
Hail reported on FM 179.									
Hale County Edmonson	09	1635CST			0	0			Hail(1.00)
Hale County 15 W Plainview	09	1638CST			0	0			Hail(1.00)
Town of Halfway.									
Hale County Edmonson	09	1650CST			0	0			Hail(1.75)
Lubbock County 1 W New Deal	09	1650CST			0	0			Hail(1.00)
Swisher County 5 S Tulia	09	1653CST			0	0			Hail(1.75)
Swisher County Tulia	09	1700CST			0	0			Hail(0.88)
Lubbock County 2 S Abernathy	09	1708CST			0	0			Hail(1.75)
Hale County Abernathy	09	1710CST			0	0			Hail(1.75)
Swisher County Kress	09	1720CST			0	0			Hail(1.00)
Hale County 4 N Hale Center	09	1722CST			0	0			Hail(1.75)
Reported by NBC/KCBD11 Storm Chaser.									
Hale County 6 E Hale Center	09	1724CST			0	0			Hail(0.75)
Swisher County Kress	09	1727CST			0	0			Hail(2.00)
Hale County 4 NE Abernathy	09	1729CST			0	0			Hail(4.00)
Hale County 5 NE Abernathy	09	1730CST			0	0			Hail(3.25)
Reported at the Texas Tech/West Texas mesonet station by Texas Tech mesonet meteorologist.									



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<u>TEXAS, South Panhandle</u>									
Hale County									
3 NE Abernathy	09	1730CST			0	0			Hail(2.50)
Hale County									
Plainview	09	1732CST			0	0			Hail(1.00)
Hale County									
9 E Abernathy	09	1738CST			0	0			Hail(1.75)
Hale County									
3 E Plainview	09	1745CST			0	0			Hail(2.75)
Hale County									
2 NE Plainview	09	1752CST			0	0			Hail(2.75)
Swisher County									
Tulia	09	1804CST			0	0			Hail(1.00)
Briscoe County									
8 NW Silverton	09	1844CST			0	0			Hail(1.75)
Hale County									
6 N Petersburg	09	1845CST 1900CST			0	0			Flash Flood
			Roadways flooded between 4 and 8 miles north of Petersburg on FM 789.						
Floyd County									
11 SSW Floydada	09	1919CST			0	0			Hail(1.75)
			Hail reported near the Floyd/Crosby county line just south of McCoy.						
Floyd County									
11 SSW Floydada	09	1950CST 2000CST			0	0			Flash Flood
			Flooded roadway on FM 37.						
Hale County									
5 N Petersburg	09	1950CST			0	0			Hail(2.75)
Briscoe County									
16 NE Silverton	09	2020CST			0	0			Hail(0.88)
			12 miles north of Caprock Canyon State Park.						
Floyd County									
10 SW Floydada	09	2035CST 2047CST			0	0			Flash Flood
			Numerous roads flooded across the county. Flooded roadway on FM54 between FM387 and U.S. Highway 62						
Dickens County									
10 N Dickens	09	2040CST			0	0			Hail(1.75)
Floyd County									
9 SE Floydada	09	2040CST			0	0			Hail(1.00)
Motley County									
1 W Roaring Spgs	09	2100CST			0	0			Hail(0.88)
Dickens County									
5 N Mc Adoo	09	2111CST			0	0			Hail(1.75)
Dickens County									
6 W Dickens	09	2130CST			0	0			Hail(1.75)
Dickens County									
Dickens	09	2154CST			0	0			Hail(1.00)
Cottle County									
10 SW Paducah	09	2220CST			0	0			Thunderstorm Wind (MG52)
			Measured by the Texas Tech/West Texas mesonet station.						



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TEXAS, South Panhandle

Cottle County

3 WSW Paducah	09	2227CST			0	0			Thunderstorm Wind (EG52)
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Several trees, power lines and a transformer downed by thunderstorm wind gust.

King County

Grow	09	2230CST			0	0			Hail(0.88)
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Reported 15 miles south of Paducah or near the town of Grow.

Hale County

Petersburg to 5 E Petersburg	09	1725CST 1750CST	5	200	0	0	100K	500K	Tornado (F1)
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The National Weather Service in Lubbock, TX conducted a damage survey in Petersburg, TX in Hale county. The tornado was a long-lived occurrence across southeast Hale county and traveled into southwestern Floyd county. Significant damage resulted from a tornado at a local tractor business in Petersburg. The roof was blown off the structure causing internal damage to equipment and furniture. Debris was blown across the street and damaged a residence. The tornado cut a path through the business and scattered debris for up to a mile. Several power poles were snapped as the tornado propagated to the east. The debris field surveyed indicated the tornado went through a cycle of frequently lifting and then regaining contact with the ground

Floyd County

5 W Mc Coy to 10 E Mc Coy	09	1750CST 2010CST	10	900	0	0	200K	70M	Tornado (F3)
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The National Weather Service in Lubbock, TX conducted a damage survey in the vicinity of McCoy, TX in Floyd county. The tornado was a long-lived occurrence stretching from the Petersburg area in southeast Hale county across portions of southwest and south-central Floyd county. Significant damage resulted from a tornado impacting a grain elevator about 5 miles east of Petersburg/ miles west of McCoy.

The tornado destroyed the grain elevator, numerous power poles and center pivot irrigation systems across the area along and either side of FM 54. Numerous homes sustained roof and structural damage. One home sustained extensive roof damage as tornadic winds breached the garage and moved a pickup truck about ten inches in the driveway. The damage surveyed indicated the tornadic circulation was multi-vortex in nature. Extensive video of the tornado was captured by media and storm chasers depicting a very large, wedge tornado appearance. Another residence sustained extensive damage with a pickup truck thrown over 1/2 mile from the driveway into a field behind the home. The truck was lifted and carried through the air to the field and sustained only glass damage. The Fujita-rating for this long-lived tornado was rated F-3 based on the movement and condition of the vehicle, however the majority of the damage was rated in the F-1 and F-2 categories

Crosby County

6 NE Crosbyton	09	2040CST 2042CST	1	50	0	0			Tornado (F0)
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Public report of a tornado.

Dickens County

10 N Dickens	09	2100CST 2102CST	1	50	0	0			Tornado (F0)
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Public report of a tornado.

Swisher County

Kress	10	1035CST			0	0			Hail(1.00)
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Castro County

Dimmitt	11	1610CST			0	0			Hail(0.88)
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TEXAS, South Panhandle

of Clairemont. In collaboration with the Center for Severe Weather Research in Boulder, CO and Texas Tech University meteorologists assessing the tornadoes across the county with Doppler-On-Wheels (DOW) data, a better understanding of the wind fields and tornado timing was achieved.

The area of assessed damage was bounded by a triangle comprised of FM2320 to the south, FM1228 to the east, and CR112 to the west. There was a damage path characterized by tree damage across the zone. The path of the damage was oriented from a northeast-east to southwest-west direction. DOW data confirmed the large, wedge tornado initially propagated to the east and northeast, became nearly stationary, then rotate southward around the west side of the parent mesocyclone. The tornado moved to the southwest, then south and crossed FM1228 from the north/northeast to the south/southwest.

The path of the tornado was between 0.6 to 0.7 miles wide. In assessing the damage, a circulatory patten was evident in a wheat field owned by a private farmer, with all of the wheat laying down to the south. Along this quadrant of the circulation, large farm equipment (tractors and cotton trailers) were tossed and mangled. An 80,000 lb box car was shaken by the tornado and the associated strong wind but was not moved from its location, however the contents inside were disturbed. The farm vehicles were tossed briefly a few times as there were scar marks and impact marks in the field as the equipment was blown to the south. The front-end of one tractor was snapped off after the second impact with the ground, as the vehicle was likely too heavy to remain airborne and was dragged and rolled by the tornadic wind and circulation. On the east side of the circulation, there were tree branches not grown in that immediate area that were stripped clean of bark. A cotton trailer (lighter than the other equipment) was lifted from its original location and was tossed to the north and mangled upon impact. The equipment was tossed approximately 3/10 of a mile within the circulation. It was evident from the damage pattern and debris, the circulation was multi-vortex in nature.

The DOW measured wind speeds ranging from 45, 65 and 90 meters per second at various stages of the tornado life cycle at heights between 3 and 50 meters above ground level.

Kent County

17 NW Clairemont	12	1733CST 1735CST	0.5	50	0	0		Tornado (F0)
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University of Oklahoma Graduate Student and Storm Chasers report of a tornado.

Kent County

13 NW Clairemont	12	1739CST 1744CST	0.5	50	0	0		Tornado (F0)
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University of Oklahoma Graduate Student and Storm Chasers report of a tornado.

Kent County

8 SE Clairemont	12	1755CST 1758CST	1.5	100	0	0		Tornado (F0)
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NWS meteorologist report of a tornado on the ground for around three minutes.

Kent County

8 NW Clairemont	12	1805CST 1808CST	0.5	50	0	0		Tornado (F0)
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University of Oklahoma Graduate Student and Storm Chasers report of a tornado.

Kent County

12 SE Clairemont	12	1807CST 1814CST	2	100	0	0		Tornado (F0)
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NWS meteorologist and University of Oklahoma Graduate Student and Storm Chasers report of a tornado

Kent County

15 SE Clairemont	12	1816CST 1821CST	0.4	40	0	0		Tornado (F0)
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NWS meteorologist and University of Oklahoma Graduate Student and Storm Chasers report of a tornado

Dickens County

4 E Dickens	12	1726CST 1727CST	0.1	30	0	0		Tornado (F0)
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NWS meteorologist report of a brief tornado 4 miles east of Dickens along Highway 82. The surface dust whirl was visible as the condensation funnel lowered toward the ground.



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					Killed	Injured	Property	Crops	

TEXAS, South Panhandle

Parmer County									
6 W Lazbuddie	16	1615CST			0	0			Hail(1.75)
Bailey County									
Muleshoe	16	1619CST			0	0			Hail(1.00)
Castro County									
7 W Dimmitt	16	1632CST			0	0			Hail(1.00)
Lamb County									
Earth	16	1722CST			0	0			Hail(0.75)
Crosby County									
1 N Lorenzo	16	1851CST			0	0	50K		Hail(1.00)
			Cotton crop damage.						
Motley County									
1 NW Roaring Spgs	16	1909CST			0	0			Thunderstorm Wind (EG52)
Crosby County									
1 N Lorenzo	16	1913CST			0	0			Hail(0.75)
Dickens County									
Dickens	16	1925CST			0	0			Thunderstorm Wind (EG50)
			Large tree limbs blown down by thunderstorm wind.						
Dickens County									
Dickens	16	1925CST			0	0			Thunderstorm Wind (EG57)
			KLBK-TV Storm Chaser.						
Cottle County									
10 SW Paducah	16	2005CST			0	0			Thunderstorm Wind (MG50)
			Measured by the Texas Tech/West Texas Mesonet.						
Cochran County									
1 NE Morton	30	1955CST			0	0			Thunderstorm Wind (MG50)
			Measured by the Texas Tech/West Texas Mesonet.						
Cochran County									
1 NE Morton	30	2000CST			0	0			Thunderstorm Wind (MG57)
			Measured by the Texas Tech/West Texas Mesonet.						
Crosby County									
1 SE Ralls	30	2230CST			0	0			Thunderstorm Wind (MG57)
			Measured by the Texas Tech/West Texas Mesonet.						