

National Weather Service Storm Data and Unusual Weather Phenomena



September 2005 Time Local/ Path Length Path Number of Estimated Width Persons Damage **TEXAS, South Panhandle Briscoe County** 20 NE Silverton Thunderstorm Wind (EG50) 11 1815CST 0 0 Structural damage to a concrete and cinder block wall; the structure was blown down at the intersection of Highway 70 and 256. **Motley County** Thunderstorm Wind (EG50) **Roaring Spgs** 2110CST 11 0 Matador Fire Department reported wind damage in Roaring Springs, TX including destruction to many car ports and out-buildings. Numerous trees and powerlines downed by thunderstorm wind gusts. **Lamb County** 12 S Olton 12 1715CST Hail(1.00) **TXZ035** Lubbock 13 1410CST 0 0 10K Strong Wind (MG49) 1420CST The National Weather Service in Lubbock, TX conducted a damage survey on September 13, 2005 across portions of the City of Lubbock. A media storm chaser measured a thunderstorm wind gust of 56 mph near the Lubbock Christian University at 2:10 PM CST. In the vicinity, near the intersection of 29th Street and Bangor Street was a structure used as a roof covering to prevent water leaks into the residence. The covering was not secured well to the home and acted as a sail when the thunderstorm wind gust impacted the structure. The covering was blown off the roof and was damaged and also resulted in damage to a large tree adjacent to the residence. A few blocks to the east, near the intersection of 34th Street and Quaker Street, the SBC building sustained minor damage to an air conditioning unit. The covering to the unit was blown off the roof and into power lines where it was suspended. Small tree limbs were downed, however both areas had loose structures and/or items nearby that were not impacted **Dickens County** Dielzone 12 1722CCT Heil(0.75)

Dickens	13	1723CST	0	0	Hail(0.75)
Lynn County 5 SW Grassland	14 Citize	1525CST en located 5 miles north of Draw.	0	0	Hail(1.75)
Lynn County 5 E Tahoka	14	1528CST	0	0	Hail(1.75)
Dickens County Afton	14	1539CST	0	0	Hail(0.88)
Dickens County Afton	14	1545CST	0	0	Hail(1.75)
Garza County 7 NW Post	14	1545CST	0	0	Hail(1.75)
Garza County 2 NW Post	14	1610CST	0	0	Hail(1.75)
Cottle County 10 SW Paducah	14 Meas	1615CST ured by the Texas Tech/West Texas	0 mesonet station. Seve	0 eral large tree	Thunderstorm Wind (MG62) s downed by thunderstorm wind gusts as reported by

y an NWS Cooperative Observer near Paducah, TX.

King County

Thunderstorm Wind (EG57) Dumont

Several large trees downed by estimated 65 mph winds from an NWS Cooperative Observer.

King County Grow

Reported by an NWS Cooperative Observer located 15 miles south of Paducah or near the town of Grow, TX.



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		Time Local/	Path Length	Path Width		sons	Estimated Damage	September 2005
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property Crops	Character of Storm
TEXAS, South Panha	<u>ndle</u>							
Garza County								
15 E Post	14	1635CST			0	0		Hail(1.75)
Kent County 10 WSW Clairemont	14	1700CST			0	0		Hail(1.75)
Crosby County								
10 SE Crosbyton	14 Measi	1955CST ured by the Texas	Tech/West Te	exas mesonet	t station loca	0 ated 6 mile	es northwest of White	Thunderstorm Wind (MG54) River Lake.
Lamb County								
Littlefield	17	1505CST			0	0		Hail(0.75)
Lamb County 2 E Fieldton	17	1535CST			0	0		Hail(1.00)
Lamb County Olton	17	1545CST			0	0		Hail(0.88)
Lynn County 1 N New Home	17	1606CST			0	0		Hail(1.00)
Lubbock County 3 S Woodrow	17	1612CST			0	0		Hail(1.25)
Lubbock County								,
4 W Slaton	17 Golfb	1621CST all to Hen egg siz	ed hail coveri	ng the ground	0 d.	0		Hail(2.00)
Hale County								
Hale Center	17	1630CST			0	0		Hail(1.00)
Lubbock County 4 W Slaton	17	1636CST 1640CST			0	0	75K	Hail(2.75)
	Golfb		l baseball size	d hail coveri	ng the groun	nd. Hail la	asted for 4 minutes.	
Lubbock County Slaton	17	1640CST 1645CST			0	0		Hail(1.75)
Floyd County		1010001						
2 NE Floydada	17 Meast	1715CST ured by the Texas	Tech/West Te	exas mesonet	0 station.	0		Thunderstorm Wind (MG59)
Floyd County 2 N Floydada	17	1716CST			0	0		Hail(0.88)
Floyd County	-				-	-		
4 S Floydada	17	1716CST			0	0		Hail(0.88)
TXZ035	Lubbo				•	^	15077	W 1 W 1 46550
	17	2300CST 2315CST			0	0	150K	High Wind (MG58)
	High	winds associated i	with downbur	er and hast be	aret conditio	me raculta	a in avtanciva demage	across the City of Lubbook TV

High winds associated with downburst and heat burst conditions resulted in extensive damage across the City of Lubbock, TX

A series of thunderstorms developed across the NWS Lubbock area of responsibility during the mid and late afternoon hours on Saturday, September 17 2005. A large ridge of high pressure was situated across southeast Texas. The clockwise circulation around this broad ridge allowed a channel of Pacific moisture to stream over the area and interact with sultry temperatures well into the 90s. In fact, the high temperature on Saturday at the Lubbock International Airport reached 98 degrees which tied the previous record set in 1997.

Between 8:30 PM CST and 12:30 AM CST, an area of dissipating thunderstorms progressed across the area from southwest to northeast over Terry, Hockley, Lubbock, Lynn, Garza and Crosby counties. As this activity pushed through the region, strong winds and associated heat bursts occurred at several locations. A heat burst occurs when air rapidly descends from a dissipating thunderstorm, typically with very little if any rainfall. As the air sinks, compression will force heating, drying and a rapid rise in



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Time Path Path Number of Estimated September 2005
Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

TEXAS, South Panhandle

surface temperature. In addition to a rise in temperature, heat bursts can be accompanied by strong and gusty wind

The hail and strong winds Saturday night and early Sunday morning resulted in varied amounts of damage across the area. Large trees and/or tree branches were downed; structural damage occurred to car ports and overhang protection to resident porches; cotton plants were destroyed; automobiles, roofing and related structures were damaged. The damage to automobiles and other windows occurred as nearby gravel was lifted by the strong wind and penetrated windshields and side windows.

The National Weather Service in Lubbock, TX conducted a damage survey at the Memorial Baptist Church in Lubbock. The church had a large hail and rain roof in place above a permanent roof. This covering was

made of sheet metal and had an overlap of approximately six inches on the south facing wall. When the strong south wind ranging between 65 and 70 mph breached this roof, the metal was pealed off and became airborne and landed on trees on the north side of the church, as well as a residence across the street.

Several of the Texas Tech/West Texas mesonet stations measured the heat burst and high wind events. The National Weather Service Forecast Office in Lubbock, located in the Science Spectrum Building, measured a 15 degree rise in temperature with a 67 mph wind gust at 10:55 PM CST. The following are some of the more significant measurements:

Brownfield 2 south, 8 degree rise, 53 mph gust, 9:25 PM CST. Lubbock 3 west, 13 degree rise, 53 mph gust, 11:10 PM CST. Slaton 2 northeast, 15 degree rise, 56 mph gust, 11:30 PM CST. Ralls 1 southeast, 12 degree rise, 57 mph gust, 12:20 AM CST.

In comparison, stations measuring less rise in temperature measured lower wind speed gusts:

Lamesa 2 southeast, 5 degree rise, 27 mph gust, 10:35 PM CST. Graham 5 southwest, 4 degree rise, 35 mph gust, 11:10 PM CST.