

Storm Data and Unusual Weather Phenomena - May 2016

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

HIDALGO COUNTY --- 2.7 WNW HARGILL [26.46, -98.06], 0.2 WNW LA BLANCA [26.30, -98.07]

05/14/16 16:35 CST		0.50M	Thunderstorm Wind (EG 56 kt)
05/14/16 16:55 CST		50K	Source: NWS Storm Survey

Damage began along Farm to Market Road 490 west of Hargill, where a string of three power poles were blown down, as well as several 1 to 3 inch diameter mesquite limbs. Crops in a nearby grain field were also blown at an angle from northwest to southeast. Damage was more notable in colonias in the San Carlos area east of Edinburg, where one poorly anchored roof and one carport were lifted along Farm to Market 2182, and partial roof damage was noted to a single family home and multiple mobile (trailer) homes lost parts of their tin roofs. In all, according to county officials and additional surveys, at least three dozen homes sustained structural damage in the area.

Atmospheric energy combined with differential heating boundaries to kick off thunderstorm clusters across the ranchlands during the afternoon. Boundaries from these cells would spark further development across the region. One cell in particular became bow-shaped as it progressed through northern and central Hidalgo County, eventually dropping a 10 mile long, 2 mile wide (varying) downburst of 60 to 65 mph winds from 4 miles west of Hargill to 5 miles east of Edinburg. This downburst caused damage to numerous power poles, crops, as well as to at least three dozen homes.

CAMERON COUNTY --- 0.4 ENE STUART PLACE [26.18, -97.76]

05/15/16 10:50 CST		0	Heavy Rain
05/15/16 12:30 CST		0	Source: CoCoRaHS

CoCoRaHS observer west of Harlingen reported 4.06 inches of rainfall in less than 2 hours.

CAMERON COUNTY --- 1.7 NNE STUART PLACE [26.20, -97.76]

05/15/16 10:50 CST		0	Heavy Rain
05/15/16 12:30 CST		0	Source: CoCoRaHS

CoCoRaHS observer west of Harlingen reported 3.55 inches of rainfall in less than 2 hours.

Convection initiated across the Rio Grande Valley as daytime heating combined with daytime heating of a moist atmosphere and a mid-level disturbance moving into the area. Slow moving thunderstorms dropped heavy rainfall across northwestern Cameron County resulting in urban nuisance flooding from heavy rainfall.

STARR COUNTY --- EL SAUZ [26.58, -98.87]

05/17/16 21:40 CST		0	Hail (1.75 in)
05/17/16 21:50 CST		0	Source: Social Media

Public reported via social media golf ball size hail in El Sauz.

STARR COUNTY --- 0.8 NNW FALCON HGTS [26.56, -99.14]

05/17/16 22:05 CST		2K	Hail (0.88 in)
05/17/16 22:10 CST		0	Source: COOP Observer

COOP observer at Falcon Dam reported the front and back windows of a front end loader shattered.

STARR COUNTY --- 4.9 NNE RIO GRANDE CITY ARPT [26.49, -98.82]

05/17/16 22:50 CST		0	Hail (2.00 in)
05/17/16 22:55 CST		0	Source: Social Media

Public posted video on social media showing hen egg size hail falling on a carport on La Sagunada Road north of Rio Grande City.

Discrete hail storms developed around and just after midnight in Starr County. Large hail, 1.75 to 2 inches in diameter, pelted El Sauz and other locations north of Rio Grande City.

HIDALGO COUNTY --- 2.3 ENE CHIHUAHUA [26.24, -98.39], 5.6 ESE HIDALGO [26.07, -98.19]

05/31/16 21:11 CST		10M	Thunderstorm Wind (EG 83 kt)
05/31/16 21:44 CST		0.50M	Source: NWS Storm Survey

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<p>Initial damage to tree limbs and some poorly built roofs in the Mission/Palmview area would intensify by the time the downburst reached the Madero and Granjeno communities, where more than 100 homes sustained varying levels of damage, dozens of power poles were felled, and hundreds of softwood trees were uprooted. Specific damage and associated impacts included the following: At least 150 homes and businesses sustained notable damage, and several dozen required significant repair. This included varied damage to nearly every building (RV, trailer, and fixed structure) in the Chimney Park RV and Mobile Home Park along the Rio Grande, as well as the adjacent neighborhood of Madero. The State Farm Arena lost a large part of its cladding (side wall) and up to 40% of its roof shingles and underneath decking allowing rainwater to leak into the facility. A several thousand foot community center in the town of Granejo was destroyed as free-standing reinforced cinderblock walls crumbled, and the wind destroyed ductwork/ HVAC and an entire side wall on its way out of the building. A tractor trailer weighing 79,000 pounds, including freight, was moved and then tipped on its side in the community of Madero. Hundreds of softwood trees were uprooted and thousands of tree limbs were snapped, these included ash, mesquite, ebony, and palm. Dozens of wooden power poles were snapped, with more than 20,000 customers without power.</p>				

HIDALGO COUNTY --- PHARR [26.20, -98.18]

05/31/16 22:40 CST	0	Hail (1.75 in)
05/31/16 22:45 CST	0	Source: Emergency Manager

City of Pharr Emergency Manager reported golf ball size hail south of Pharr.

HIDALGO COUNTY --- (MFE)MILLER INTL ARP [26.17, -98.23]

05/31/16 22:43 CST	0	Thunderstorm Wind (MG 50 kt)
05/31/16 22:43 CST	0	Source: ASOS

The ASOS at KMFE reported wind gust of 58 mph.

A mini-supercell and associated downburst core moved across south central Hidalgo County beginning in the Palmview/Mission area and generally tracked along and just north of the Rio Grande before crossing the river southeast of Pharr. A NWS survey, combined with radar assessment, determined a path length of 19.4 miles and a path width, which varied, of 1 to 3 miles. Peak winds were estimated to be 85 to 95 mph, though 100 mph or greater winds may have occurred on elevated surfaces, particularly at the State Farm Arena in the city of Hidalgo. Peak winds pulsed at two phases of the storm, and likely lasted 5 or more minutes. Initial damage to tree limbs and some poorly built roofs in the Mission/Palmview area would intensify by the time the downburst reached the Madero and Granjeno communities, where more than 100 homes sustained varying levels of damage, dozens of power poles were felled, and hundreds of softwood trees were uprooted. In addition to the wind, one to two inch diameter hail fell, some of it driven by the strong winds.