

Storm Data and Unusual Weather Phenomena - May 2009

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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GULF OF MEXICO

LAGUNA MADRE FROM PORT OF BROWNSVILLE TO ARROYO COLORADO COUNTY --- 1.3 NE PORT ISABEL [26.08, -97.18]

05/24/09 04:45 CST	25K	Marine Thunderstorm Wind (MG 41 kt)
05/24/09 05:00 CST	0	Source: C-MAN Station

Outflow from a strong thunderstorm complex sweeping across the Lower Texas coast produced a wind gust of more than 34 knots at NOAA C-MAN site of Port Isabel. 47 mph wind gusts would soon sink five small boats moored in the Laguna Madre near the Town of South Padre Island.

During the early morning hours of May 24th, a small thunderstorm complex intensified over the western portion of the Lower RGV before accelerating through Weslaco, La Feria, Brownsville, and South Padre Island then raced into the Gulf. Wind gusts to 50 mph or higher along caused damage to boats in Laguna Madre and along the South Padre Island barrier around daybreak.

LAGUNA MADRE FROM ARROYO COLORADO TO 5NM N OF PT MANSFIELD TX COUNTY --- 0.6 NNE PORT MANSFIELD [26.56, -97.43]

05/27/09 14:12 CST	0	Marine Thunderstorm Wind (MG 44 kt)
05/27/09 14:22 CST	0	Source: COOP Observer

The Harbormaster at Port Mansfield reported a gust of 51 mph as outflow from strong thunderstorms moved south and west through the community. The location is within a mile of the bay; this value is assumed to extrapolate into the frictionless waters nearby.

Outflow from morning and early afternoon thunderstorms along the Texas Coastal Bend collided with the sea breeze along the Lower Texas coast, aided by unstable air and upper level energy, and produced strong thunderstorms over the nearshore waters which edged into the Laguna Madre in Willacy County, eventually feeding even stronger storms farther south. The initial storms produced their own outflows, which exceeded gale force well ahead of the precipitation.

TEXAS, South

(TX-Z248) ZAPATA, (TX-Z249) JIM HOGG, (TX-Z250) BROOKS, (TX-Z251) KENEDY, (TX-Z252) STARR, (TX-Z253) HIDALGO, (TX-Z254) WILLACY, (TX-Z255) CAMERON, (TX-Z256) COASTAL WILLACY, (TX-Z257) COASTAL CAMERON

05/01/09 00:00 CST	0	Drought
05/11/09 23:59 CST	0	

Precipitation remained below normal and temperatures continued above normal across Deep South Texas the first few weeks of May. Soil moisture continued abnormally to excessively dry. The United States Drought Monitor reported that exceptional (D4) drought conditions continued across portions of Kenedy, Brooks and Jim Hogg Counties. The drought conditions continue to mainly affect agricultural interests, including crops, pastures and grasslands. The drought would further intensify toward the middle of the month after a late April into early May heat wave and increasing sun angle whisked even more moisture from the ground.

(TX-Z257) COASTAL CAMERON

05/06/09 16:00 CST	1	0	Rip Current
05/06/09 18:00 CST		0	

Rip currents producing a strong undertow claimed the life of a swimmer at South Padre Island. The continuation of fair weather with light to moderate winds, comfortable Gulf of Mexico water temperatures, and plenty of sunshine lured larger numbers of local beach goers to Padre Island beaches. Unfortunately one person lost their life when he was caught in an undertow that pulled him out to sea.

User note: Strong longshore current at the north beach access points of South Padre Island has taken lives in the past. One reason given by a local expert is that the depth of the surf between sandbars is often near or above head height, and this current can pull unsuspecting persons into the surf. Inability to swim, combined with panic, can result in fatality or injury. While not meeting the true definition of rip current, the unique bathymetry of the surf zone along the Lower Texas Coast, combined with the persistent moderate to strong southerly flow and resulting longshore swell forced the local geography, are determining factors for including this case in Storm Data.

Direct Fatalities: M17IW

(TX-Z248) ZAPATA, (TX-Z249) JIM HOGG, (TX-Z250) BROOKS, (TX-Z251) KENEDY, (TX-Z252) STARR, (TX-Z253) HIDALGO, (TX-Z254) WILLACY, (TX-Z255) CAMERON, (TX-Z256) COASTAL WILLACY, (TX-Z257) COASTAL CAMERON

05/12/09 00:00 CST	0	Drought
05/31/09 23:59 CST	0	

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An early month heat wave, where temperatures were some 8 to 10 degrees higher than average, combined with low afternoon humidity, increasing sun angle, and strong winds wicking away any moisture allowed Drought to intensify across all of South Texas and the Rio Grande Valley. The eastern third of the region moved into Exceptional Drought, while the west and southwest corner moved to Extreme Drought. Stress was beginning to affect agriculture, including crops, pastures and grasslands - but enough irrigation from water stores was keeping commercial and larger farms in check.

STARR COUNTY --- 0.5 NW FALCON HGTS [26.55, -99.14]

05/16/09 15:30 CST	0	Heavy Rain
05/16/09 20:15 CST	0	Source: Other Federal Agency

The Remote Automated Weather System (RAWS) location at Falcon Lake reported 2.29 inches of rain from two separate thunderstorms, one during the mid afternoon and one during the evening of May 16th.

HIDALGO COUNTY --- 0.5 N SULLIVAN CITY [26.28, -98.55], 3.0 ESE LA JOYA [26.25, -98.53]

05/16/09 16:15 CST	0	Heavy Rain
05/16/09 16:45 CST	0	Source: COOP Observer

A cooperative observer reported 3.18 inches of rain in less than an hour near La Joya from a thunderstorm moving quickly through. The public reported localized minor flooding in this area.

HIDALGO COUNTY --- 1.2 E MC COOK [26.48, -98.38]

05/16/09 16:29 CST	0	Thunderstorm Wind (EG 50 kt)
05/16/09 16:34 CST	0	Source: COOP Observer

A CO-OP observer in McCook reported heavy rainfall from a severe thunderstorms which produced wind gusts a little above 50 mph. A few minutes later, the same observer reported winds estimated near 60 mph, along with very heavy rainfall and frequent lightning.

HIDALGO COUNTY --- 0.8 E EDINBURG [26.30, -98.16]

05/16/09 17:00 CST	0	Heavy Rain
05/16/09 17:30 CST	0	Source: COOP Observer

A cooperative observer in Edinburg reported 2.05 inches of rain in less than an hour with a fast moving strong thunderstorm. The rain caused brief, minor street flooding during the late afternoon but no observable damage.

The approach of a weak late season cold front, strong upper level westerly winds and increasing atmospheric moisture fueled strong to severe thunderstorms across portions of Deep South Texas Saturday May 16. Welcome rains eventually spread across much of Deep South Texas, particularly from western Hidalgo northeast into western Kenedy County, extending out toward the Rio Grande Plains of eastern Zapata County. Localized, nuisance flooding occurred in heavier rain and/or poor drainage locations of Hidalgo and Starr County.

The storms weakened as the moved east during the late afternoon and evening, still dropping relieving rainfall into eastern Hidalgo, Willacy, and western Cameron County. A spark of redevelopment early on May 17th near the Rio Grande dropped more heavy rains between the Brownsville Airport and the Town of South Padre Island.

(TX-Z249) JIM HOGG

05/19/09 00:00 CST	0	Drought
05/31/09 23:59 CST	0	

A weakening frontal system moving through Deep South Texas sparked locally heavy rains across the western Rio Grande Valley and Rio Grande Plains of Deep South Texas in mid May, and ultimately reduced drought by one category, from Exceptional to Extreme, for the assessment issued on May 18th. These conditions would continue through the end of the month, as another round of locally heavy rains early on May 28th would help keep drought from reintensifying further.

HIDALGO COUNTY --- 0.7 S WESLACO [26.16, -97.98]

05/24/09 03:45 CST	0.10M	Lightning
05/24/09 03:45 CST	0	Source: Emergency Manager

An emergency manager reported that lightning struck a home in Weslaco during an early morning thunderstorm. A fire engulfed the home which was completely destroyed. There were no injuries reported.

CAMERON COUNTY --- 1.5 NNW PALMETAL [26.20, -97.69]

05/24/09 04:10 CST	0	Thunderstorm Wind (EG 52 kt)
05/24/09 04:10 CST	0	Source: Trained Spotter

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A trained spotter reported they had estimated a wind gust up to approximately 60 miles per hour during a thunderstorm approximately 5 miles southwest of the Harlingen Airport.				
CAMERON COUNTY --- 2.6 ENE PORT ISABEL [26.09, -97.16]				
	05/24/09 05:00 CST	10K		Thunderstorm Wind (MG 46 kt)
	05/24/09 05:00 CST	0		Source: Mariner
Measured winds of 53 mph were recorded at the Isla Grande Resort on the south side of the Town of South Padre Island as a strong thunderstorm swept through. Awnings blew down nearby at Isla Blanca park, where winds may have been a bit higher in the exposed area.				
HIDALGO COUNTY --- DONNA [26.17, -98.05]				
	05/24/09 20:47 CST	0		Hail (0.88 in)
	05/24/09 20:47 CST	0		Source: Trained Spotter
A trained spotter reported nickel size hail fell in Donna during a thunderstorm that moved through Hidalgo County.				
HIDALGO COUNTY --- 2.2 WSW WESLACO [26.16, -98.01]				
	05/24/09 20:53 CST	0		Hail (1.00 in)
	05/24/09 20:53 CST	0		Source: Public
Quarter size hail fell along Milagros Road between Donna and Weslaco during a thunderstorm that moved through Hidalgo County. A news reporter from KRGV-TV-5 reported nickel size hail in the vicinity at around the same time.				
HIDALGO COUNTY --- 0.7 S WESLACO [26.16, -97.98]				
	05/24/09 20:55 CST	0		Hail (1.50 in)
	05/24/09 20:55 CST	0		Source: Trained Spotter
A trained spotter reported that half-dollar size hail fell in Weslaco during a thunderstorm that moved through Hidalgo County.				
WILLACY COUNTY --- 0.4 WNW RAYMONDVILLE [26.48, -97.79]				
	05/24/09 20:55 CST	0		Hail (0.75 in)
	05/24/09 21:15 CST	0		Source: Fire Department/Rescue
A Raymondville Volunteer Fire Department employee reported penny size hail fell in the city of Raymondville during a thunderstorm that moved through Willacy County. The Willacy County Emergency Manager also reported penny size hail had fallen in the city of Raymondville during this thunderstorm.				
WILLACY COUNTY --- 1.1 W RAYMONDVILLE [26.48, -97.80], 0.9 NW LYFORD [26.43, -97.79]				
	05/24/09 21:15 CST	50K		Thunderstorm Wind (EG 52 kt)
	05/24/09 21:15 CST	0		Source: Amateur Radio
A microburst from a cluster of thunderstorms moving through Raymondville toward Lyford rolled a new but unsecured mobile home just west of Raymondville. Nearby, several fences were blown down, and the door to an industrial building was blown in. Farther south, at about the same time, an amateur radio operator reported estimated wind gusts of 50 mph or higher occurred just north of Lyford.				
A series of upper level disturbances, an unstable atmosphere and an approaching cold front produced showers and thunderstorms across portions of Deep South Texas throughout the day May 24th. During the early morning hours, a small thunderstorm complex intensified over the western portion of the Lower RGV before accelerating through Weslaco, La Feria, Brownsville, and South Padre Island then raced into the Gulf. Wind gusts to 50 mph or higher along with brief but frequent cloud to ground lightning strikes caused damage around daybreak. After a hot and sunny day, another round of storms crossed the Lower Valley during the mid evening, producing more hail and severe wind gusts.				
(TX-Z248) ZAPATA, (TX-Z250) BROOKS, (TX-Z252) STARR, (TX-Z253) HIDALGO, (TX-Z254) WILLACY, (TX-Z255) CAMERON, (TX-Z256) COASTAL WILLACY, (TX-Z257) COASTAL CAMERON				
	05/26/09 00:00 CST	0		Drought
	05/31/09 23:59 CST	0		

Rainfall associated with a series of upper level disturbances moving across Deep South Texas during the last week of May helped slow the rate of drought intensity across the region to close out the month. Unfortunately, the rains were associated with strong to severe thunderstorms, which favored some areas while leaving others dry. Brooks and Kenedy County would miss most of the activity until early June; storms on May 24th in Willacy into Cameron County would not be accounted for in reducing drought intensity until after June 1st.

Areas helped by the May 24th through 28th rains, combined with other rainfall on the 16th and 17th, including the western portion of the

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Rio Grande Valley and Rio Grande Plains.

Locations toward the coast, including Brooks and Kenedy County, would remain largely in Exceptional Drought (D4) status, while all other areas would be reduced to strong to extreme (D2 and D3) status.

CAMERON COUNTY --- 1.7 WSW LAURELES [26.09, -97.52]

05/27/09 15:35 CST	0	Hail (1.75 in)
05/27/09 15:40 CST	0	Source: NWS Employee

Family of a National Weather Service Employee reported hail up to golf ball size during an intense thunderstorm just northwest of the center of Los Fresnos.

CAMERON COUNTY --- 0.6 E PORT BROWNSVILLE [25.95, -97.41]

05/27/09 16:22 CST	0	Hail (1.75 in)
05/27/09 16:30 CST	0	Source: Unknown

The manager of the Port of Brownsville reported golf ball size hail on the grounds as a severe thunderstorm moved slowly through.

CAMERON COUNTY --- 3.2 ENE PORT BROWNSVILLE [25.97, -97.37]

05/27/09 16:25 CST	2K	Thunderstorm Wind (EG 52 kt)
05/27/09 16:30 CST	0	Source: Public

The business manager of a ship breaking and metal processing firm at the Port of Brownsville reported a bolted down radio tower was blown down by microburst winds associated with a severe thunderstorm, which produced golf ball sized hail nearby.

JIM HOGG COUNTY --- 10.4 S HEBBRONVILLE [27.17, -98.69]

05/28/09 00:15 CST	0	Hail (1.75 in)
05/28/09 00:20 CST	0	Source: Law Enforcement

The Jim Hogg Sheriff's Department reported golf ball size hail fell on Highway 16 approximately 10 miles south of the city of Hebbronville as a severe thunderstorm moved through the area.

JIM HOGG COUNTY --- RANDADO [27.08, -98.88]

05/28/09 00:15 CST	0	Heavy Rain
05/28/09 01:15 CST	0	Source: Law Enforcement

The Jim Hogg Sheriff's Department reported water along and over State Highway 16 near the city of Randado during and a little after a thunderstorm moved through the area with locally heavy rainfall, estimated by radar to be more than 2 inches. The water depth on Highway 16 was estimated to be in inches, and the road was still passable.

HIDALGO COUNTY --- 1.4 SW EDINBURG MUNI ARPT [26.28, -98.21]

05/28/09 03:30 CST	1M	Lightning
05/28/09 03:30 CST	0	Source: Newspaper

Frequent cloud to ground lightning strikes, associated with continuing strong storms which had earlier produced locally heavy rains and large hail across portions of Jim Hogg, Starr, and Zapata County, moved across the McAllen/Edinburg area during the pre-dawn hours. One of these strikes started a roof fire by igniting shingles at an estate home. Within an hour, the blaze had engulfed the entire roof; residents were able to escape unharmed. Video showed the house, as well as a vehicle, to be a total loss, with replacement estimated to be near \$1 million.

Outflows from thunderstorms, an unstable air mass, and an upper level disturbance moving across Deep South Texas set the stage for more showers and strong to severe thunderstorms moving across portions of the CWA the afternoon of May 27th and into the early morning hours of May 28th. Frequent lightning was common with a large cell in southern Cameron County; the same cell produced large hail, heavy rains, and a prolonged downburst that produced one wind damage event.

Another round of storms developed around midnight east of the Sierra Madre and west of Laredo, forming a large complex of thunderstorms which progressed through Deep South Texas after midnight. One set of storms containing a continuous hail core and possible microbursts raced through Zapata, Jim Hogg, Brooks, and Kenedy, Counties while other thunderstorms moved through Starr County and eastward through the Lower Rio Grande Valley. All storms contained frequent cloud to ground lightning and locally torrential rains.