

## Storm Data and Unusual Weather Phenomena - April 2008

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

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**WATERS FROM BAFFIN BAY TO PT MANSFIELD TX EXT FROM 20 TO 60NM COUNTY --- 46.7 ESE S BAFFIN BAY [26.90, -96.70]**

04/26/08 06:40 CST		0		Marine Thunderstorm Wind (MG 45 kt)
04/26/08 07:00 CST		0		Source: Buoy

NOAA Buoy 42020 located east of Port Mansfield in the Gulf of Mexico coastal waters reported winds at 43 knots as a thunderstorm passed through the area during the early morning hours.

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**LAGUNA MADRE FROM ARROYO COLORADO TO 5NM N OF PT MANSFIELD TX COUNTY --- 3.0 ESE PORT MANSFIELD [26.53, -97.39]**

04/26/08 07:01 CST		0		Marine Thunderstorm Wind (EG 49 kt)
04/26/08 07:15 CST		0		Source: COOP Observer

A thunderstorm moved across the Laguna Madre and Gulf of Mexico coastal waters producing strong and gusty winds. The Harbor Master reported winds gusts to 49 knots as the thunderstorm moved through Port Mansfield and the Laguna Madre.

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**COASTAL WATERS FROM PT MANSFIELD TO RIO GRANDE RIVER TX OUT 20NM COUNTY --- 2.0 E SOUTH PADRE ISLAND [26.08, -97.10]**

04/26/08 07:45 CST		0		Marine Thunderstorm Wind (MG 35 kt)
04/26/08 08:15 CST		0		Source: ASOS

An outflow from strong thunderstorms over the coastal waters south and east of Baffin Bay moved across Port Isabel, the Laguna Madre and the Gulf of Mexico coastal waters producing strong winds over these areas. The Automated Surface Observing System at Port Isabel, just 4 miles from Laguna Madre and less than 10 miles from the nearshore Gulf waters, reported winds of 35 knots as the thunderstorm moved through the area, and similar winds likely crossed into the Laguna Madre and the adjacent Gulf waters near South Padre Island.

**A mesoscale convective vortex (MCV), developing in a favorable atmosphere across South Texas west of Corpus Christi and Kingsville, maintained its strength as it trekked into the western Gulf between Kingsville and Baffin Bay during the pre dawn hours of April 26th. The edge of the complex affected the coastal waters north of Port Mansfield, and the outflow from the initial storms surged south, reaching the waters along and east of the mouth of the Rio Grande before 8 AM. Wind gusts of Gale to near Storm force were recorded in some locations.**

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**LAGUNA MADRE FROM 5NM N OF PT MANSFIELD TO BAFFIN BAY TX COUNTY --- 27.2 SSW S BAFFIN BAY [26.82, -97.47]**

04/27/08 14:15 CST		0		Marine Thunderstorm Wind (MG 34 kt)
04/27/08 15:00 CST		0		Source: C-MAN Station

A cold front moved through Deep South Texas and the adjacent coastal waters producing isolated thunderstorms. One thunderstorm moved through Port Mansfield and the Laguna Madre producing strong and gusty winds. Wind speeds of 34 knots were recorded at the Rincon Del San Jose Texas Coastal Ocean Observing Network C-MAN station.

**An approaching cold front moving across Deep South Texas and the adjacent Gulf waters triggered a small line of strong thunderstorms which moved from Kingsville to Baffin Bay southward into the coastal waters east of Kenedy, Willacy, and Cameron County by late afternoon. A few gale force gusts occurred as the line moved through.**

### TEXAS, South

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**(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**

04/08/08 00:00 CST		0		Drought
04/30/08 23:59 CST		0		

The United States Drought Monitor noted that extreme drought conditions arrived in Zapata, Jim Hogg, and Starr Counties around the second week of April. Severe drought conditions developed farther east to the Deep South Texas coast. Virtually no rainfall, increasing sun angle, and gusty winds allowed conditions to worsen. Agricultural interests were doing their best to stay ahead of the dry, but warming conditions; additional feed was brought in for the large cattle population, while sorghum production was halted. Heavy irrigation allowed other crops to maintain spring growth rates.

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**(TX-Z248) ZAPATA, (TX-Z249) JIM HOGG, (TX-Z250) BROOKS, (TX-Z252) STARR, (TX-Z253) HIDALGO**

04/01/08 00:00 CST		0		Drought
04/07/08 23:59 CST		0		

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Severe drought conditions persisted across the western counties of Deep South Texas and the Lower and Middle Rio Grande Valley. The drought would further intensify through the remainder of the month.

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**(TX-Z248) ZAPATA, (TX-Z249) JIM HOGG, (TX-Z250) BROOKS, (TX-Z252) STARR, (TX-Z254) WILLACY, (TX-Z255) CAMERON**

04/15/08 00:00 CST	0	Drought
04/30/08 23:59 CST	0	

Drought conditions intensified over the western portions of Deep South Texas by April 15 and continued through the end of April. Drought conditions over Zapata, Jim Hogg, northern Starr and western Brooks counties intensified to exceptional (D4) exceptional by the middle of April. Extreme D3 drought conditions developed or continued for most other areas except close to the coast. Evaporation rates increased to one half an inch per day. Agricultural interests continued to heavily irrigate citrus, corn, onion, and other crops; sorghum production remained halted. Additional feed was brought in for area cattle.

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**(TX-Z249) JIM HOGG, (TX-Z253) HIDALGO**

04/15/08 13:00 CST	0	Wildfire
04/16/08 23:00 CST	1	0

The difference between a trough of low pressure across West Texas and High pressure across the Southeastern U.S. allowed southeast winds to increase to 25 to 30 mph, with gusts nearing 40 mph, across portions of Deep South Texas and the Lower Rio Grande Valley between April 15th and 17th. At least two notable wild fires developed across Deep South Texas on the 15th (Hidalgo County) and 16th (Jim Hogg County).

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**(TX-Z250) BROOKS**

04/30/08 15:00 CST	0	Wildfire
04/30/08 23:59 CST	0	

Continuing extreme to exceptional drought across Deep South Texas and the Lower Rio Grande Valley, as well as two dry days on April 28th and 29th (following a late season cold front), and low rainfall from an event on April 27th and 28th, resulted in very low one-hour fuel moisture, which then combined with gusty southeasterly flow and rapid dispersion potential through a dry and elevated mixing layer off the surface to help two wildfires to explosively develop during the afternoon of April 30th. In total, these new fires quickly burned more than 2500 acres, mostly in Brooks County.

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**CAMERON COUNTY --- RANCHO VIEJO [26.03, -97.55], 6.4 SE BROWNSVILLE [25.85, -97.43]**

04/27/08 15:30 CST	0	Heavy Rain
04/27/08 20:00 CST	0	Source: CoCoRaHS

Torrential thunderstorm rains fell generally between 430 and 7 PM across much of the Brownsville area, then were followed by steadier, locally heavy rains during the mid evening. Another round of lighter rains developed overnight. Storm totals ranged from 3 to 5 inches across the area, with the highest totals along a line from Rancho Viejo through Brownsville Airport, extending southeast to the Sabal Palm Audubon Center near the Rio Grande. Minor nuisance flooding was reported in poor drainage areas during the initial torrential rains, but, overall, the rain was welcome relief from drought conditions which had been dominant through most of the spring.

A late season cold front, combined with excellent upper level dynamics, collided with increasing deep layer moisture to produce a prolonged period of locally heavy rains, concentrated across populated areas of Cameron County, during the late afternoon and into the overnight of April 27th.