

## Storm Data and Unusual Weather Phenomena - June 2013

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

<b>LAGUNA MADRE FROM 5NM N OF PT MANSFIELD TO BAFFIN BAY TX COUNTY --- 2.1 WNW S BAFFIN BAY [27.21, -97.41]</b>				
	06/30/13 06:30 CST		0	Marine Thunderstorm Wind (MG 43 kt)
	06/30/13 06:45 CST		0	Source: Buoy

Strong thunderstorm wind gusts exceeding 40 knots affected the Laguna Madre Waters east of Kenedy County. Nearby TCOON buoy in Baffin Bay recorded gusts of 40.6 kts and 43 kts.

The first in a series of shortwave troughs in the northerly flow aloft moved across the region during the early morning hours of June 30th. Moisture pooled ahead of the trough due to a rapidly moistening atmosphere. A large complex of showers and thunderstorms developed over the middle Texas coast and rapidly moved south over the Lower Texas Coastal Waters. Strong and gusty winds accompanied the strongest of the thunderstorms.

### TEXAS, South

<b>(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</b>				
	06/01/13 00:00 CST		0	Drought
	06/30/13 23:59 CST		0	

The combination of abundant tropical moisture, a series of upper level disturbances and seabreeze boundary provided for scattered showers and thunderstorms over Deep South Texas and the Rio Grande Valley during the first two weeks of the month. Isolated strong thunderstorms rumbled through, producing periods of locally heavy rainfall. Heaviest rains occurred over the western counties, mainly over Zapata County. Rainfall amounts of 3.75 inches were reported at Falcon Dam from the 1st through the 14th. Rainfall estimates indicated rainfall amounts of 2 to 4 inches falling over Zapata, western Starr and extreme western Jim Hogg counties. A few areas of Hidalgo, Willacy and Cameron also received beneficial rains, however rainfall amounts were much less, averaging 1 inch or less.

The first half of the month rains stabilized drought conditions, and bought time for degradation which arrived to begin July. At the end of May, Drought conditions had lessened to Moderate D1 over nearly all of Zapata and western Jim Hogg counties. Severe drought extended across western Starr, eastern Jim Hogg and western Brooks counties. Extreme drought covered the rest of the area all the way to the coast, with pockets of exceptional drought indicated over western Hidalgo and coastal Kenedy counties.

Late month hot, rain-free, and dry (humidity) weather east of Zapata County - a result of the return of "La Canicula", or the atmospheric high pressure that provides hot and dry conditions typically from mid July to mid August - set the stage for slightly degraded conditions along the coast and in portions of the ranchlands of Jim Hogg and Brooks County by the start of July.

<b>HIDALGO COUNTY --- 0.6 N WESLACO MID VLY ARPT [26.18, -97.97], 2.4 S WESLACO [26.14, -97.98]</b>				
	06/02/13 13:35 CST		0.10M	Thunderstorm Wind (EG 56 kt)
	06/02/13 13:45 CST		0	Source: Law Enforcement

At the Weslaco/Mid Valley Airport AWOS, a gust of 53 mph was recorded at 135 PM CDT. Further south, winds were estimated to be 60 to 65 mph based on the photos, descriptions, and prior experience with similar past events in the Rio Grande Valley. On the tarmac, the first damage occurred when one small plane flipped into another, causing damage to each. An empty trailer was flipped on its side at a local dealership just south of the airport. The most notable damage occurred at a warehouse at the intersection of Business 83 and S. Utah Avenue at approximately 139 PM CST, where much of the tin roof was torn from the building. Diagonally across the street, part of the metal roof at the Economy Inn and Suites was torn off. About one and one half miles south, part of a tin carport was blown into nearby trees and a house in Rancho Village Mobile Home Park, most likely around 143-145 PM CST. A dilapidated house in Mercedes also lost part of its roof, though wind speed was likely somewhat lower than estimated and observed in Weslaco. Weslaco Police initially estimated at least \$100 thousand in property damage.

A weak upper level disturbance over the region and a dissipating surface front combined with the seabreeze to produce a small cluster of thunderstorms that developed along the sea breeze near Kenedy County and then raced from northeast to southwest across western Willacy, eastern Hidalgo, and western Cameron counties between 1230 and 2 pm CST before moving into Mexico. A microburst formed as the cluster of storms raced through Weslaco and Mercedes between 135 and 145 pm CST on June 2nd.

At the Weslaco/Mid Valley Airport AWOS, a gust of 53 mph was recorded at 135 PM CDT, as torrential rain was driven sideways and reduced visibility to one quarter mile for a few minutes. On the tarmac, the first damage occurred when one small plane flipped into another, causing damage to each. An empty trailer was flipped on its side at a local dealership just south of the airport. The most notable damage occurred at a warehouse at the intersection of Business 83 and S. Utah Avenue at approximately 139 PM CST, where much of the tin roof was torn from the building. Diagonally across the street, part of the metal roof at the Economy Inn and Suites was torn off. About one and one half miles south, part of a tin carport was blown into nearby trees and a house in Rancho Village Mobile

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Home Park, most likely around 143-145 PM CST. A dilapidated house in Mercedes also lost part of its roof, though wind speed was likely somewhat lower than estimated and observed in Weslaco. Weslaco Police initially estimated at least \$100 thousand in property damage; winds were estimated to be 60 to 65 mph based on the photos, descriptions, and prior experience with similar past events in the Rio Grande Valley. Blinding rains in the core of the storm dropped a quick 1.5 to 2.22 inches. Unfortunately, the blinding rains contributed to two vehicle accidents along Expressway 83 between Mercedes and Weslaco. Frequent cloud to ground lightning strikes caused some power outages and started one small fire in a building.

**HIDALGO COUNTY --- 0.5 NE MISSION [26.23, -98.31]**

06/07/13 17:19 CST	10K	Thunderstorm Wind (EG 45 kt)
06/07/13 17:20 CST	0	Source: Law Enforcement

Mission police department reported several car ports damaged or destroyed in the 800 block of East 21st Street in Mission. ASOS at KMFE, about 5 miles to the SE, reported peak wind gust of 39 knots during the thunderstorm.

An MCS associated with a weak surface boundary progressed south across Texas throughout the afternoon and evening hours and combined with convection that developed along the westward propagating seabreeze. Thunderstorm activity produced gusty winds estimated at 40 to 45 knots as the convection moved across Hidalgo County. The Mission Police Department reported several car ports damaged or destroyed in Mission.

**STARR COUNTY --- 1.1 NE SALINENO [26.53, -99.09], 0.9 NE SALINENO [26.53, -99.09], 0.8 E SALINENO [26.52, -99.09], 0.8 E SALINENO [26.52, -99.09], 0.9 NE SALINENO [26.53, -99.09], 1.1 NE SALINENO [26.53, -99.09]**

06/13/13 19:00 CST	0	Flash Flood (due to Heavy Rain)
06/13/13 21:15 CST	0	Source: Emergency Manager

Starr County Sheriff's Department reported floodwater covering the southbound lane of Highway 83 in the vicinity of Salineno.

**ZAPATA COUNTY --- 0.9 SW FALCON [26.62, -99.09], 1.8 NW FALCON [26.65, -99.10], 1.8 NW FALCON [26.65, -99.10], 0.9 SW FALCON [26.62, -99.09]**

06/13/13 19:00 CST	0	Flash Flood (due to Heavy Rain)
06/13/13 21:15 CST	0	Source: Emergency Manager

Zapata County emergency manager and fire department reported floodwaters of 1 to 2 feet deep on Highway 83 in the vicinity of Falcon in the far southern portion of Zapata County. The emergency manager also reported that the Texas Department of Transportation had placed warning signs along portions of Highway 83, but closed no roads.

An upper level disturbance over the area strengthened as it undercut the ridge and tapped into deep tropical moisture. Thunderstorms developed during the day of the 13th and by midevening had dumped torrential amounts of rain that resulted in flash flooding along Highway 83 in southwest Starr and southern Zapata counties. Between 3 and 4 inches in a small area between Falcon Heights in southwest Starr County and Lopeno in extreme south Zapata .