

Storm Data and Unusual Weather Phenomena - September 2014

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 --- 2.0 E PORT ISABEL [26.07, -97.17]

09/03/14 01:06 CST	0	Marine Thunderstorm Wind (MG 41 kt)
09/03/14 01:18 CST	0	Source: Coast Guard

Several wind gusts in excess of 34 knots were measured at the South Padre Island Coast Guard Station.

LAGUNA MADRE FROM PORT OF BROWNSVILLE TO ARROYO COLORADO COUNTY --- 8.6 ENE ARROYO CITY [26.26, -97.29]

09/03/14 01:12 CST	0	Marine Thunderstorm Wind (MG 40 kt)
09/03/14 01:13 CST	0	Source: C-MAN Station

A 40 knot gust was measured at the Realitos Peninsula TCOON site.

As Tropical Storm Dolly moved toward the northeast Mexican coast, some rain bands associated with the storm pushed across the lower Texas coastal waters bringing some strong gusty showers and thunderstorms that produced gale force wind gusts.

LAGUNA MADRE FROM PORT OF BROWNSVILLE TO ARROYO COLORADO COUNTY --- 1.1 WSW PORT ISABEL [26.06, -97.22]

09/13/14 03:48 CST	0	Marine Thunderstorm Wind (MG 39 kt)
09/13/14 03:49 CST	0	Source: C-MAN Station

A wind gust of 39 knots was reported by the Port Isabel TCOON site.

LAGUNA MADRE FROM PORT OF BROWNSVILLE TO ARROYO COLORADO COUNTY --- 8.6 ENE ARROYO CITY [26.26, -97.29]

09/13/14 04:12 CST	0	Marine Thunderstorm Wind (MG 38 kt)
09/13/14 04:18 CST	0	Source: C-MAN Station

Several wind gusts in excess of 34 knots were measured at the Realitos Peninsula TCOON site.

LAGUNA MADRE FROM PORT OF BROWNSVILLE TO ARROYO COLORADO COUNTY --- 1.1 WSW PORT ISABEL [26.06, -97.22]

09/13/14 13:51 CST	0	Marine Thunderstorm Wind (MG 34 kt)
09/13/14 13:52 CST	0	Source: C-MAN Station

A 34 knot wind gust was measured at the Port Isabel TCOON site.

LAGUNA MADRE FROM PORT OF BROWNSVILLE TO ARROYO COLORADO COUNTY --- 2.0 E PORT ISABEL [26.07, -97.17]

09/13/14 13:54 CST	0	Marine Thunderstorm Wind (MG 39 kt)
09/13/14 14:06 CST	0	Source: Coast Guard

Several wind gusts in excess of 34 knots were measured at the South Padre Island Coast Guard Station.

LAGUNA MADRE FROM PORT OF BROWNSVILLE TO ARROYO COLORADO COUNTY --- 7.0 SE ARROYO CITY [26.16, -97.34]

09/13/14 13:54 CST	0	Marine Thunderstorm Wind (MG 34 kt)
09/13/14 13:55 CST	0	Source: ASOS

A 34 knot gust was measured by the KPIL ASOS.

A pair of weak tropical waves combined with a dissipating cold front across the Rio Grande Valley and the Gulf of Mexico to produce strong and gusty showers and thunderstorms across the lower Texas coastal waters. Several gusts of 34 knots or greater were reported throughout the day.

WATERS FROM BAFFIN BAY TO PT MANSFIELD TX EXT FROM 20 TO 60NM COUNTY --- 45.1 ESE S BAFFIN BAY [26.97, -96.69]

09/27/14 19:30 CST	0	Marine Thunderstorm Wind (MG 37 kt)
09/27/14 19:31 CST	0	Source: Buoy

NOAA Buoy 42020 reported a wind gust of 37 knots.

A slow moving upper level disturbance enhanced low pressure and moisture convergence in the western Gulf of Mexico. Scattered to numerous showers and thunderstorms developed over the lower Texas coastal waters. Some of this convective activity produced gale force winds.

WATERS FROM BAFFIN BAY TO PT MANSFIELD TX EXT FROM 20 TO 60NM COUNTY --- 45.1 ESE S BAFFIN BAY [26.97, -96.69]

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	09/28/14 19:30 CST		0	Marine Thunderstorm Wind (MG 47 kt)
	09/28/14 19:31 CST		0	Source: Buoy

NOAA Buoy 42020 reported a 47 knot wind gust.

Weak 500 mb troughiness remaining over the region combined with a slight bump in moisture to produce isolated showers and thunderstorms over the lower Texas coastal waters, where instability was the greatest. Some of the thunderstorms became strong with wind gusts over 34 knots.

TEXAS, South

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

09/01/14 00:00 CST	0	Drought
09/15/14 23:59 CST	0	

Drought conditions began to improve across the Rio Grande Valley and Deep South Texas during the first week of September as the benefits from rainfall during the end of August began to turn areas of brown to green across portions of the Lower to Mid Rio Grande Valley and especially the King Ranch. Extreme (D3) drought conditions were eliminated from the region and the areal coverage of severe (D2) drought conditions shrank.

(TX-Z249) JIM HOGG, (TX-Z252) STARR

09/09/14 00:00 CST	0	Drought
09/15/14 23:59 CST	0	

A combination of rainfall events (the remnants of Dolly and a pair of weak tropical waves combined with a dissipating cold front) during the first half of September brought abundant rainfall to the Rio Grande Valley and Deep South Texas, with virtually all of the region receiving rainfall. Rainfall totals ranged from 2 inches across Zapata County to widespread totals of more than 7 inches in Cameron and Hidalgo counties. This rainfall would improve drought conditions across the area, with all severe (D2) drought conditions eliminated.

CAMERON COUNTY --- 0.9 SSW PALMETAL [26.17, -97.68], 0.2 N BROWNSVILLE [25.92, -97.50]

09/13/14 12:30 CST	0	Heavy Rain
09/13/14 16:00 CST	0	Source: CoCoRaHS

A slow moving band of torrential rain/thunderstorms created areas of nuisance urban flooding from the west side of Brownsville through San Benito and parts of Harlingen during the mid afternoon of September 13th, 2014. Generally less than 2 feet of water flooded typically poor drainage roads in the area during and just after the peak of the heavy rains. In total, the band produced 2 to 3 inches of rain in a roughly 3 hour period.

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

09/13/14 13:00 CST	0	Heavy Rain
09/13/14 15:00 CST	0	Source: ASOS

The ASOS at KMFE reported 2.23 inches of rain fell in 2 hours, with 1.62 inches falling in 1 hour.

HIDALGO COUNTY --- WESLACO MID VLY ARPT [26.17, -97.97]

09/13/14 13:00 CST	0	Heavy Rain
09/13/14 15:00 CST	0	Source: AWOS

The AWOS at KT65 reported 1.74 inches of rain fell in 2 hours, with 0.97 inches falling in 1 hour.

HIDALGO COUNTY --- 1.4 NE (MFE)MILLER INTL ARP [26.18, -98.22], 1.6 ESE MC ALLEN [26.19, -98.21], 1.3 W PHARR [26.20, -98.20], 0.6 ENE ALAMO [26.18, -98.11], 1.7 NNE ALAMO [26.20, -98.11], 1.2 NW PHARR [26.21, -98.19], 1.1 E MC ALLEN [26.20, -98.21]

09/13/14 13:30 CST	0	Flash Flood (due to Heavy Rain)
09/13/14 16:00 CST	0	Source: Emergency Manager

Hidalgo County EM reported widespread flash flooding along the frontage roads of Highway 83/I-2 and closed roads across Mercedes, Alamo, Pharr, San Juan, and McAllen. There were several reports of stalled and half way submerged cars across the area.

HIDALGO COUNTY --- 2.2 W WESLACO [26.16, -98.01], 1.5 SE WESLACO MID VLY ARPT [26.15, -97.96], 0.8 ENE WESLACO MID VLY ARPT [26.17, -97.96], 2.2 E DONNA [26.17, -98.02]

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	09/13/14 13:30 CST		0	Flash Flood (due to Heavy Rain)
	09/13/14 16:00 CST		0	Source: Emergency Manager

Flash flooding was reported by various sources of flash flooding along the frontage roads in Weslaco along Highway 83/I-2 and road closures in Weslaco. Several feet of water was noted, as well as water to the top of tire wells.

HIDALGO COUNTY --- 0.8 SE MOORE AFB [26.44, -98.12]

09/13/14 14:00 CST	0	Heavy Rain
09/13/14 16:00 CST	0	Source: AWOS

The AWOS at KEBG reported 1.56 inches of rain fell in 2 hours, with 1.1 inches falling in 1 hour.

A pair of weak tropical waves combined with a dissipating cold front across the Rio Grande Valley and dumped widespread heavy rainfall, with rainfall totals of 3 to 5 inches region wide. Urban, nuisance flooding occurred in every city and town across the Valley with a single band of rain between 130 and 430 pm on the 13th. Locally heavy downpours produced life and property flash flooding in Mission, McAllen, San Juan, Pharr, and Alamo.

CAMERON COUNTY --- 0.2 ESE EVAN [25.98, -97.50], 0.9 SSE BROWNSVILLE [25.91, -97.50]

09/15/14 17:00 CST	0	Heavy Rain
09/15/14 21:00 CST	0	Source: Emergency Manager

The heavy rain led to widespread urban flooding. The flooding included several roads with at least two feet of water across in poor drainage locations and where drainage ditches and canals were filled above capacity. Some resacas filled to bank full; running trails and playgrounds located some of them were covered in water during the peak of the flooding. The high waters forced road closures into the night, and several vehicles became stranded.

A weak easterly wave approached the Lower Texas coast bringing bands of torrential rainfall during the early morning commute. Additional bands with heavier rainfall would drop an estimated 2 to 3 inches from late afternoon until sunset, on top of the ½ to ¾ inch that fell in the morning. The torrents immediately ran off and would produce widespread urban flooding from North Brownsville through downtown by sunset.

STARR COUNTY --- 0.7 N LOS SAENZ [26.41, -99.00]

09/16/14 11:45 CST	0	Heavy Rain
09/16/14 13:00 CST	0	Source: Trained Spotter

The Arroyo Roma was reportedly in minor flood (bank full) after slow moving thunderstorms likely produced sufficient runoff into the waterway near Roma during the late morning and early afternoon of September 16th. Rainfall amounts in the area were unknown.

The remains of a weak upper level disturbance and surface trough triggered more slow moving thunderstorms on September 16, 2014, that exacerbated runoff across arroyos of the Upper Rio Grande Valley early that afternoon - runoff that likely began after locally heavy rainfall on the 13th.

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

09/19/14 17:53 CST	0	Heavy Rain
09/19/14 18:13 CST	0	Source: ASOS

In 20 minutes, 1.24 inches of rain fell at the KMFE ASOS. The rainfall resulted in minor street flooding at the nearby La Plaza Mall.

A weak boundary over the northern Gulf of Mexico combined with the remnants of Odile over NW Texas. Daytime heating during the afternoon and the deep moisture (indicated by precipitable waters of 2 inches) allowed for scattered showers to develop over the lower and middle Valley. Periods of heavy rain fell across the region, with over an inch of rain falling in less than 30 minutes in McAllen.

STARR COUNTY --- 0.6 ESE RIO GRANDE CITY [26.38, -98.81]

09/26/14 00:00 CST	0	Heavy Rain
09/26/14 23:59 CST	0	Source: COOP Observer

A COOP observer in Rio Grande City reported 6.30 inches of rain.

STARR COUNTY --- 0.7 SE VILLAREALES [26.37, -98.87]

09/26/14 00:00 CST	0	Heavy Rain
09/26/14 23:59 CST	0	Source: CoCoRaHS

A CoCoRaHS observer west of Rio Grande City reported 4.15 inches of rain.

STARR COUNTY --- 0.8 WSW OLNOS [26.37, -98.79], 0.9 S OLNOS [26.36, -98.78], 1.3 WNW KETSAY [26.35, -98.77], 0.9 ENE OLNOS [26.37, -98.77], 0.9 NW OLNOS [26.38, -98.79]

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	09/26/14 17:30 CST		0	Flash Flood (due to Heavy Rain)
	09/26/14 23:59 CST		0	Source: Law Enforcement

Rio Grande City Police Department reported major street flooding across the city. Starr County Sheriff's Office reported that the normally dry Arroyo Los Olmos exceeded bank full by 2 to 3 feet and that several feet of flowing water had flooded the Las Lomas neighborhood. Several cars were partially submerged and at least one house had extensive inundation.

Early afternoon heating, boundaries and storms moving ward the west and southwest from the South Texas Brush Country, and a wave of upper level energy rotating from southwest to northeast each combined to create a nearly stationary band of torrential rain producing thunderstorms over Rio Grande City and nearby locations. Nuisance flooding began during the late afternoon, and significant, life and property, flooding began in Rio Grande City before sunset. Flooding peaked after sunset and continued through at least 11 pm. Observations and radar estimated 6 to 8+ inches of rain fell during the long duration event.

HIDALGO COUNTY --- 0.3 SE SAN MANUEL [26.57, -98.12]

09/27/14 00:00 CST	0	Heavy Rain
09/27/14 23:59 CST	0	Source: COOP Observer

COOP observer in Linn-San Manuel reported 4.45 inches of rainfall.

HIDALGO COUNTY --- 0.8 NE EDINBURG [26.31, -98.16], 1.2 SSE EDINBURG [26.28, -98.17]

09/27/14 13:30 CST	0	Heavy Rain
09/27/14 15:00 CST	0	Source: Social Media

Numerous social media posts reported street flooding in Edinburg.

HIDALGO COUNTY --- 1.0 ENE PHARR [26.21, -98.17], 0.2 NNW (MFE)MILLER INTL ARP [26.17, -98.23]

09/27/14 13:30 CST	0	Heavy Rain
09/27/14 15:00 CST	0	Source: Social Media

Numerous social media posts reported street flooding in McAllen, with water near the top of tire wells in some locations.

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

09/27/14 13:36 CST	0	Heavy Rain
09/27/14 15:26 CST	0	Source: ASOS

ASOS at KMFE reported 2.36 inches of rainfall in just under 2 hours.

HIDALGO COUNTY --- 1.3 WNW EDINBURG YARD [26.34, -98.19], 2.8 WNW EDINBURG YARD [26.34, -98.21], 2.8 WNW EDINBURG YARD [26.35, -98.21], 1.4 NW EDINBURG YARD [26.34, -98.19]

09/27/14 14:00 CST	0	Flash Flood (due to Heavy Rain)
09/27/14 15:00 CST	0	Source: Broadcast Media

Broadcast media reported flash flooding in rural Hidalgo County. Flood waters damaged property and several feet of standing water remained.

CAMERON COUNTY --- 5.1 SE MONTE GRANDE [26.22, -97.46], 5.4 ENE LOZANO [26.20, -97.47], 2.2 NE LAURELES [26.12, -97.47], 2.3 SW BAYVIEW [26.11, -97.43], 5.2 NW PORT ISABEL ARPT [26.21, -97.42]

09/27/14 20:00 CST	0	Flash Flood (due to Heavy Rain)
09/28/14 03:00 CST	0	Source: NWS Employee

An off duty NWS employee reported as much as 6 inches of flowing water remaining on the road in the immediate vicinity of La Tina , as well as several stalled cars. There was also evidence of flash flooding on FM 1847 and FM 106 near La Tina and the Laguna Atascosa National Wildlife Refuge . The road bed had been partially washed away on FM 106. Water remained in or up to the edge of some homes .

Showers and thunderstorms would continue to plague the region on the 27th. By noon, a slow moving band of blinding rains developed in rural northeast Starr and northwest Hidalgo counties, and would soon link up with other cells forming from Reynosa/Tamaulipas into the Mcallen, Edinburg, San Juan, and Pharr area early in the afternoon. Poor drainage areas were unable to keep up with the rainfall rates, and water up to 3 feet deep piled up in a few areas until a little while after the rain moved east. Farther north, in rural central and northern Hidalgo County, rains continued well after they had cleared out from the larger population centers. Nearly 4 and a half inches fell in San Manuel during the afternoon. Further east in Cameron County an evening round of rain dropped 4 to 6 additional inches and flooded areas from the La Tina Ranch to Holly Beach and the Laguna Atascosa National Wildlife Refuge.