

Storm Data and Unusual Weather Phenomena - October 2012

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
----------	-----------	-------------------	---------------------	------------------------

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

10/01/12 00:00 CST	0	Drought
10/31/12 23:59 CST	0	

October was a month dominated by hot and breezy weather, punctuated by teases of fronts, the first around Columbus Day. A persistent ridge of high pressure that typically settles across northern Mexico from mid to late summer held firm through October before being nudged into the Pacific near Baja California. This ridge kept significant fronts from moving very far south into Texas, while maintaining unseasonably warm temperatures and mainly dry conditions across Deep South Texas and the Rio Grande Valley the first two weeks of the month. The first teaser cold front moved across the region on Columbus Day and provided welcome rain across coastal sections of Willacy and Cameron counties, with nearly 2 inches (1.94 inches) falling at the Cameron County Airport, near Bayview. The area generally west of Highway 281 recorded little to no rainfall during those weeks and average temperatures continued above normal.

Improvements in Drought - by one category - appeared across the Rio Grande Plains/Ranchlands of Jim Hogg and Zapata County by the 2nd, courtesy of very heavy rains just before the end of September. These improvements would hold through October before worsening in November. Other slight improvements would appear near the Lower Valley Coast, courtesy of torrential rains on the 7th, 12th/13th, and 18th.

The areas generally west of Highway 281 recorded little or no rainfall. Most locations would finish among the top 10 driest. Unseasonably warm temperatures continued through the month of October across Deep South Texas. October 18th was the hottest October day all time across many locations across the Rio Grande Valley; high temperatures away from the coast soared above 100, including a blistering 108 at La Joya. Temperatures lowered into the upper 80s to lower 90s on the 19th, but quickly recovered back into the 90s in all areas until the 25th. Much cooler temperatures were felt on the 26th as the first significant cold front of the season made its way through Deep South Texas. The cold front allowed temperatures to drop to below to near normal, but did nothing to improve the drought on a large scale basis.

(TX-Z248) ZAPATA, (TX-Z249) JIM HOGG

10/01/12 00:00 CST	0	Drought
10/01/12 23:59 CST	0	

Torrential rainfall, estimated at 1 to 2.5 inches in northern Jim Hogg County and 3 to more than 5 inches across northern Zapata County on September 28th improved drought one category - D4 (Exceptional) to D3 (Extreme) or D3 to D2 (Severe) across portions of these counties to begin October. The levels would remain steady for the remainder of the month.

(TX-Z255) CAMERON, (TX-Z257) COASTAL CAMERON

10/09/12 00:00 CST	0	Drought
10/31/12 23:59 CST	0	

A small pocket of improvement of the 2011/2012 Drought in Cameron County, where local rainfall toward the coast on the 7th improved conditions from Extreme (D3) to Severe (D2). This was little consolation for those needing welcome rainfall in the more populous areas of the County (Brownsville, San Benito, Harlingen) which missed the bulk of the early month rains and tropical cyclones remained far away from the Valley. Monthly rainfall varied, favoring the Cameron County coast; many locations finished among the top 20 driest. A band of storms surged across the Lower and Mid Valley on October 18th, followed by locally heavy rains along the Rio Grande near Brownsville on the 19th. Rainfall totals averaged 1 to 2 inches with isolated heavier amounts on the 18th. Rainfall totals averaged one half to one inch across southern Cameron County on the 19th.

WILLACY COUNTY --- 0.2 ENE SAN PERLITA [26.50, -97.65], 0.7 ESE SAN PERLITA [26.50, -97.64]

10/18/12 16:28 CST	0	Thunderstorm Wind (EG 70 kt)
10/18/12 16:33 CST	0	Source: NWS Storm Survey

A meteorologist from the U.S. National Weather Service in Brownsville surveyed the damage, which occurred in and around the San Perlita area. The damage was found to be the result of damaging straight line winds, with wind speeds estimated between 70 and 80 mph.

Damage appeared to initially occur to the roof of a mobile home in the northwestern part of San Perlita. At this location, roofing material was removed and blown toward the southeast. As the severe thunderstorm moved southward, additional small tree limbs and branches were blown down across the city. An additional damage area was noted near the San Perlita ISD complex, where interviews with ISD officials indicated a poorly attached door was removed to the district's bus barn. High winds also uprooted an oak tree on school property, which resulted in damage to a chain link fence. No further wind damage was noted south of this location.

Storm Data and Unusual Weather Phenomena - October 2012

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
WILLACY COUNTY --- 2.4 NW WILLAMAR [26.45, -97.70]				
	10/18/12 16:50 CST	0		Hail (1.75 in)
	10/18/12 16:55 CST	0		Source: Law Enforcement
Willacy County Sheriff's Department reported golf ball size hail fell on FM 490, 6 miles west of Willamar at 6 pm.				

WILLACY COUNTY --- 0.2 ENE SAN PERLITA [26.50, -97.65]				
	10/18/12 17:34 CST	0		Hail (1.00 in)
	10/18/12 17:35 CST	0		Source: NWS Storm Survey
Nickel to quarter sized hail fell in San Perlita. Event time based on radar.				

A weak front, late afternoon sea breeze, and upper level jet stream energy combined with record, widespread heat across the Rio Grande Valley to fire numerous dangerous thunderstorms across the Lower Valley during the late afternoon and evening. The record heat allowed the atmosphere to realize full potential instability and was triggered by the front. Damaging straight line winds and large hail occurred. Some areas received a welcome downpour which dropped more than an inch in a few spots. A storm survey conducted on October 19th revealed significant roof damage to one mobile home in San Perlita, east of Raymondville, in Willacy County. Damage was found to be the result of damaging straight line winds, with wind speeds estimated between 70 and 80 mph, with additional damage from high winds noted near the San Perlita Independent School District complex.



Roof damage to mobile home in San Perlita.

HIDALGO COUNTY --- 0.3 NNW MONTE ALTO [26.37, -97.97], 2.5 SSE MONTE ALTO [26.34, -97.95]				
	10/18/12 17:10 CST	0		Hail (1.75 in)
	10/18/12 17:25 CST	0		Source: Public

A supercell thunderstorm dropped hail the size of golfballs across a several mile swath of rural eastern Hidalgo County. The initial reports from the public indicated golf ball sized hail fell in Monte Alto at 615 pm CDT; radar reconciliation suggested the hail core drifted southward from Monte Alto for about 2.5 miles (north of Edcouch/Elsa) between 610 PM and 625 PM.

HIDALGO COUNTY --- 2.0 N ELSA [26.33, -97.98]				
--	--	--	--	--

Storm Data and Unusual Weather Phenomena - October 2012

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	10/18/12 17:17 CST		7.50K	Thunderstorm Wind (EG 61 kt)
	10/18/12 17:17 CST		0	Source: Emergency Manager

Estimated thunderstorm wind gusts of 65 to 70 mph, lifted a metal roof from a cinderblock shed at the residence of the brother of the Hidalgo County Emergency Manager, 3 miles north of Elsa. Debris from roof and building also injured livestock.

HIDALGO COUNTY --- 2.3 WNW ELSA [26.32, -98.01], 1.2 SSE EDCOUCH [26.28, -97.96]

10/18/12 17:30 CST	0	Hail (1.75 in)
10/18/12 17:40 CST	0	Source: Public

Public reported quarter to golf ball size hail at Monte Cristo and Filegonia Road in Elsa. Hail fell at approximately 630 PM, according to the report and radar reconciliation, and appears to have continued at quarter to golf-ball sized as the updraft redeveloped over and just south of Edcouch between 630 and 640 PM CDT.

HIDALGO COUNTY --- 2.7 S EDINBURG [26.26, -98.16], 2.7 S EDINBURG [26.26, -98.16]

10/18/12 17:45 CST	0	Heavy Rain
10/18/12 18:25 CST	0	Source: Public

Public reported water over the curbs in Edinburg, near the intersection of Trenton and 281, on either side of 7 PM CDT. Estimated two inches of rain fell in a short period of time in the area.

HIDALGO COUNTY --- 4.8 NNW MERCEDES OLD REB ARP [26.23, -97.91]

10/18/12 17:45 CST	0	Hail (1.00 in)
10/18/12 17:50 CST	0	Source: Public

Public reported quarter size hail at the intersection of Mile 12 and FM 491.

HIDALGO COUNTY --- 2.6 NE DONNA [26.20, -98.02]

10/18/12 17:55 CST	1K	Thunderstorm Wind (EG 48 kt)
10/18/12 17:55 CST	0	Source: Public

Internet report of a large-diameter tree blown down by thunderstorm winds near the intersection of North Victoria and Mile 10 Road, just north of Donna. Radar reconciliation suggest the winds fell just below severe limits.

HIDALGO COUNTY --- 0.4 SE MC ALLEN [26.20, -98.23]

10/18/12 18:15 CST	5K	Thunderstorm Wind (EG 50 kt)
10/18/12 18:15 CST	0	Source: Amateur Radio

An amateur radio operator in McAllen reported a carport had blown into adjacent building by thunderstorm winds. A nearby carport also damaged, all around the intersection of at Houston Street and 6th Avenue.

Outflow boundaries from an earlier supercell on October 18th in Willacy and Kenedy Counties triggered another supercell storm which cycled through eastern Hidalgo County between 6 and 7 pm CDT. Unrelated cells produced additional damage and heavy rainfall farther west, including in Donna, Edinburg, and McAllen. The supercell storm dropped quarter to golfball size hail and lifted a metal roof from a cinderblock shed at one residence 3 miles north of Elsa. Preliminary wind speed estimate from this storm was 65 to 70 mph.



Storm Data and Unusual Weather Phenomena - October 2012

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
----------	-----------	-------------------	---------------------	------------------------

Damage to cinderblock storage building after metal roof was lifted by thunderstorm winds at approximately 617 PM on October 18th, 2012.

(TX-Z254) WILLACY, (TX-Z256) COASTAL WILLACY

10/23/12 00:00 CST	0	Drought
10/31/12 23:59 CST	0	

Rainfall on October 7th, 12th, and 18th, temporarily improving the long term drought from Extreme (D3) to Severe (D2) mainly east of Highway 77 in agriculturally-rich Willacy County. Unfortunately, lack of rainfall after the 18th along with continued hot, dry weather returned all but the southeast sliver of the county to Extreme conditions by month's end.

(TX-Z251) KENEDY

10/30/12 00:00 CST	0	Drought
10/31/12 23:59 CST	0	

One half inch or less of rain fell across all but the southeast third of the King Ranch in October, and drought deteriorated to Exceptional (D4) levels by the 30th. These levels would continue through the remainder of 2012.