Storm Data and Unusual Weather Phenomena - October 2013

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
GULF OF MEXICO				
OALVESTON DAY SOUNTY - EASI	F BOINT 100 50 . 04 001			
GALVESTON BAY COUNTY EAGLI	10/01/13 09:47 CST		0	Marine Thunderstorm Wind (MG 39 kt)
	10/01/13 09:47 CST		0	Source: Buoy
The wind gust was measured at the Ea	agle Point PORTS.			
Strong marine winds gusts were gen	erated by showers and thunderstorms	in and around the	e Galveston Bay a	rea.
GALVESTON BAY COUNTY NORT	H JETTY [29 37 .94 73]			
CALVESTON BAT GOOTH HORT	10/27/13 07:14 CST		0	Marine Thunderstorm Wind (MG 44 kt)
	10/27/13 07:14 CST		0	Source: Buoy
Wind gust was measured at North Jetty	y PORTS.			
GALVESTON BAY COUNTY NORT	H JETTY [29.37, -94.73]			
	10/27/13 07:22 CST		0	Marine Thunderstorm Wind (MG 46 kt)
	10/27/13 07:22 CST		0	Source: Buoy
Wind gust was measured at North Jetty	y PORTS.			
HIGH IS TO FREEPORT TX OUT 20NM	M COUNTY NORTH JETTY [29.37, -9	14.73]		
Wind gust was measured at North Jetty	10/27/13 07:29 CST 10/27/13 07:29 CST y PORTS.		0 0	Marine Thunderstorm Wind (MG 38 kt) Source: Buoy
Wind gust was measured at North Jetty	10/27/13 07:29 CST 10/27/13 07:29 CST		0	Source: Buoy
Wind gust was measured at North Jetty Overnight showers and thunderstorm	10/27/13 07:29 CST 10/27/13 07:29 CST y PORTS.		0	Source: Buoy
Wind gust was measured at North Jetty Overnight showers and thunderstorm TEXAS, Central Southeast	10/27/13 07:29 CST 10/27/13 07:29 CST y PORTS. ns moved to the southeast into the coa		0	Source: Buoy
Wind gust was measured at North Jetty Overnight showers and thunderstorm TEXAS, Central Southeast	10/27/13 07:29 CST 10/27/13 07:29 CST y PORTS. ns moved to the southeast into the coa		0	Source: Buoy
Wind gust was measured at North Jetty Overnight showers and thunderstorm TEXAS, Central Southeast	10/27/13 07:29 CST 10/27/13 07:29 CST y PORTS. ns moved to the southeast into the coa		0 produced strong m	Source: Buoy arine wind gusts.
Wind gust was measured at North Jetty Overnight showers and thunderstorm TEXAS, Central Southeast HARRIS COUNTY 1.3 SW JETERO	10/27/13 07:29 CST 10/27/13 07:29 CST y PORTS. Ins moved to the southeast into the coal [29.91, -95.41] 10/02/13 11:05 CST 10/02/13 11:06 CST		oroduced strong m	Source: Buoy arine wind gusts. Funnel Cloud
Wind gust was measured at North Jetty Overnight showers and thunderstorm TEXAS, Central Southeast HARRIS COUNTY 1.3 SW JETERO A funnel cloud was sighted just outside	10/27/13 07:29 CST 10/27/13 07:29 CST y PORTS. Ins moved to the southeast into the coal [29.91, -95.41] 10/02/13 11:05 CST 10/02/13 11:06 CST	astal waters and p	oroduced strong m	Source: Buoy arine wind gusts. Funnel Cloud
Wind gust was measured at North Jetty Overnight showers and thunderstorm TEXAS, Central Southeast HARRIS COUNTY 1.3 SW JETERO A funnel cloud was sighted just outside A tropical air mass was favorable for	10/27/13 07:29 CST 10/27/13 07:29 CST by PORTS. In smoved to the southeast into the coarse [29.91, -95.41] 10/02/13 11:05 CST 10/02/13 11:06 CST 2 of Aldine.	astal waters and p	oroduced strong m	Source: Buoy arine wind gusts. Funnel Cloud
Wind gust was measured at North Jetty Overnight showers and thunderstorm TEXAS, Central Southeast HARRIS COUNTY 1.3 SW JETERO A funnel cloud was sighted just outside A tropical air mass was favorable for	10/27/13 07:29 CST 10/27/13 07:29 CST by PORTS. In smoved to the southeast into the coarse [29.91, -95.41] 10/02/13 11:05 CST 10/02/13 11:06 CST 2 of Aldine.	astal waters and p	oroduced strong m	Source: Buoy arine wind gusts. Funnel Cloud
Wind gust was measured at North Jetty Overnight showers and thunderstorm TEXAS, Central Southeast HARRIS COUNTY 1.3 SW JETERO A funnel cloud was sighted just outside A tropical air mass was favorable for	10/27/13 07:29 CST 10/27/13 07:29 CST y PORTS. In s moved to the southeast into the coal [29.91, -95.41] 10/02/13 11:05 CST 10/02/13 11:06 CST e of Aldine. waterspout and funnel cloud developed.	astal waters and p	oroduced strong m	Source: Buoy arine wind gusts. Funnel Cloud Source: Trained Spotter
Wind gust was measured at North Jetty Overnight showers and thunderstorm TEXAS, Central Southeast HARRIS COUNTY 1.3 SW JETERO A funnel cloud was sighted just outside A tropical air mass was favorable for (TX-Z237) BRAZORIA	10/27/13 07:29 CST 10/27/13 07:29 CST by PORTS. In smoved to the southeast into the coarse of the southeast into the coarse of Aldine. It is of Aldine. Waterspout and funnel cloud developed to the southeast into the coarse of Aldine. 10/05/13 05:30 CST 10/05/13 18:00 CST	astal waters and p	oroduced strong m	Source: Buoy arine wind gusts. Funnel Cloud Source: Trained Spotter
Wind gust was measured at North Jetty Overnight showers and thunderstorm TEXAS, Central Southeast HARRIS COUNTY 1.3 SW JETERO A funnel cloud was sighted just outside A tropical air mass was favorable for (TX-Z237) BRAZORIA Tropical Storm Karen produced mino	10/27/13 07:29 CST 10/27/13 07:29 CST y PORTS. Ins moved to the southeast into the coa [29.91, -95.41] 10/02/13 11:05 CST 10/02/13 11:06 CST e of Aldine. waterspout and funnel cloud develope 10/05/13 05:30 CST 10/05/13 18:00 CST or coastal flooding.	astal waters and p	oroduced strong m	Source: Buoy arine wind gusts. Funnel Cloud Source: Trained Spotter
Wind gust was measured at North Jetty Overnight showers and thunderstorm TEXAS, Central Southeast HARRIS COUNTY 1.3 SW JETERO A funnel cloud was sighted just outside A tropical air mass was favorable for (TX-Z237) BRAZORIA Tropical Storm Karen produced mino	10/27/13 07:29 CST 10/27/13 07:29 CST by PORTS. In smoved to the southeast into the coarse of the southeast into the coarse of Aldine. It is of Aldine. Waterspout and funnel cloud developed to the southeast into the coarse of Aldine. 10/05/13 05:30 CST 10/05/13 18:00 CST	astal waters and p	oroduced strong m	Source: Buoy arine wind gusts. Funnel Cloud Source: Trained Spotter
Wind gust was measured at North Jetty Overnight showers and thunderstorm TEXAS, Central Southeast HARRIS COUNTY 1.3 SW JETERO A funnel cloud was sighted just outside A tropical air mass was favorable for (TX-Z237) BRAZORIA Tropical Storm Karen produced mino	10/27/13 07:29 CST 10/27/13 07:29 CST by PORTS. Ins moved to the southeast into the coal state of the southeast into	astal waters and p	oroduced strong m	Funnel Cloud Source: Trained Spotter Coastal Flood

Heavy rain caused some street flooding near the intersection of Beltway 8 and Interstate 45.

10/12/13 14:03 CST

10/12/13 14:03 CST

HARRIS COUNTY --- 1.0 SSW GENOA [29.61, -95.21]

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Heavy Rain

Source: Law Enforcement

0

Storm Data and Unusual Weather Phenomena - October 2013

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
MADISON COUNTY 4.2 S NORTH ZUL	• • •			Thursdood and Mind (FO FF H)
	10/12/13 15:55 CST		0	Thunderstorm Wind (EG 55 kt)
	10/12/13 16:05 CST		0	Source: Law Enforcement
Severe thunderstorm winds downed trees	in the southern portions of the county	y.		
Deep tropical moisture combined with u rainfall.	pper level disturbances produced s	ome severe thun	derstorms and son	ne localized heavy
BRAZOS COUNTY 0.4 SW COLLEGE	STATION [30.60, -96.33]			
	10/13/13 01:58 CST		15K	Thunderstorm Wind (EG 52 kt)
	10/13/13 02:04 CST		0	Source: Newspaper
A severe thunderstorm produced wind dar damaged a parked car.	mage in and around the Bryan-Colleg	e Station area. Tr	ees were uprooted	that knocked out power and also
AUSTIN COUNTY 1.4 NW SAN FELIPE	-	29.77, -96.04], 4.7	=	
	10/13/13 08:00 CST		20K	Flash Flood (due to Heavy Rain)
	10/13/13 13:00 CST		0	Source: Law Enforcement
Heavy rains caused flash flooding in and a 36 and Highway 90. There was some wat		=	· ·	le, including the intersection of Highway
Deep tropical moisture combined with u	pper level disturbances produced s	ome severe thun	derstorms and flas	sh flooding.
WASHINGTON COUNTY 3.5 NE ZIONS	SVILLE [30.23, -96.44]			
	10/27/13 03:43 CST		0	Hail (0.75 in)
	10/27/13 03:43 CST		0	Source: Law Enforcement
Penny size hail was reported on Highway	36.			
			2K	Thunderstorm Wind (EG 52 kt)
	HENANDOAH [30.18, -95.46]		2K 0	Thunderstorm Wind (EG 52 kt) Source: Law Enforcement
MONTGOMERY COUNTY 0.9 WNW SH	HENANDOAH [30.18, -95.46] 10/27/13 04:10 CST 10/27/13 04:10 CST	tree downed on a	0	Source: Law Enforcement
MONTGOMERY COUNTY 0.9 WNW SH Numerous trees were downed northwest of Drive and Grogans Mill Road.	HENANDOAH [30.18, -95.46] 10/27/13 04:10 CST 10/27/13 04:10 CST of The Woodlands Mall. There was a	tree downed on a	0 parked car near th	Source: Law Enforcement se intersection of Research Forest
MONTGOMERY COUNTY 0.9 WNW SH Numerous trees were downed northwest of Drive and Grogans Mill Road.	HENANDOAH [30.18, -95.46] 10/27/13 04:10 CST 10/27/13 04:10 CST of The Woodlands Mall. There was a	tree downed on a	0	Source: Law Enforcement
MONTGOMERY COUNTY 0.9 WNW SH Numerous trees were downed northwest of Drive and Grogans Mill Road.	HENANDOAH [30.18, -95.46] 10/27/13 04:10 CST 10/27/13 04:10 CST of The Woodlands Mall. There was a	tree downed on a	0 parked car near th	Source: Law Enforcement se intersection of Research Forest
Penny size hail was reported on Highway MONTGOMERY COUNTY 0.9 WNW SH Numerous trees were downed northwest of Drive and Grogans Mill Road. HARRIS COUNTY 0.2 SE SPRING [30.4] Severe thunderstorm winds downed a tree	HENANDOAH [30.18, -95.46] 10/27/13 04:10 CST 10/27/13 04:10 CST of The Woodlands Mall. There was a 10/27/13 04:15 CST 10/27/13 04:15 CST	tree downed on a	0 parked car near th 2K	Source: Law Enforcement ie intersection of Research Forest Thunderstorm Wind (EG 52 kt)
MONTGOMERY COUNTY 0.9 WNW SHOULD NUMBER OF THE WORLD NUMBER OF	HENANDOAH [30.18, -95.46] 10/27/13 04:10 CST 10/27/13 04:10 CST of The Woodlands Mall. There was a 10/8, -95.42] 10/27/13 04:15 CST 10/27/13 04:15 CST e that damaged a residential fence.		0 parked car near th 2K 0	Source: Law Enforcement ie intersection of Research Forest Thunderstorm Wind (EG 52 kt)
MONTGOMERY COUNTY 0.9 WNW SHOULD NUMBER OF THE STATE	HENANDOAH [30.18, -95.46] 10/27/13 04:10 CST 10/27/13 04:10 CST of The Woodlands Mall. There was a 10/27/13 04:15 CST 10/27/13 04:15 CST 10/27/13 04:15 CST e that damaged a residential fence.	usts that downed	0 parked car near th 2K 0 trees.	Source: Law Enforcement ie intersection of Research Forest Thunderstorm Wind (EG 52 kt) Source: Broadcast Media
Numerous trees were downed northwest of Drive and Grogans Mill Road. HARRIS COUNTY 0.2 SE SPRING [30.4] Severe thunderstorm winds downed a tree of Dvernight southeast moving activity pro	HENANDOAH [30.18, -95.46] 10/27/13 04:10 CST 10/27/13 04:10 CST of The Woodlands Mall. There was a 10/27/13 04:15 CST 10/27/13 04:15 CST 10/27/13 04:15 CST e that damaged a residential fence.	usts that downed	0 parked car near th 2K 0 trees.	Source: Law Enforcement ie intersection of Research Forest Thunderstorm Wind (EG 52 kt) Source: Broadcast Media
Numerous trees were downed northwest of Drive and Grogans Mill Road. HARRIS COUNTY 0.2 SE SPRING [30.4] Severe thunderstorm winds downed a tree of Dvernight southeast moving activity pro	HENANDOAH [30.18, -95.46] 10/27/13 04:10 CST 10/27/13 04:10 CST of The Woodlands Mall. There was a 108, -95.42] 10/27/13 04:15 CST 10/27/13 04:15 CST e that damaged a residential fence. 104 duced severe thunderstorm wind g 13, -94.78], 3.3 ENE LAKE LIVINGST	usts that downed	0 parked car near th 2K 0 trees.	Source: Law Enforcement ie intersection of Research Forest Thunderstorm Wind (EG 52 kt) Source: Broadcast Media
MONTGOMERY COUNTY 0.9 WNW SHOULD Numerous trees were downed northwest of Drive and Grogans Mill Road. HARRIS COUNTY 0.2 SE SPRING [30.4] Severe thunderstorm winds downed a tree Overnight southeast moving activity proportion of Policy County 4.4 SW BARNES [30.8] CARMONA [30.98, -94.94]	10/27/13 04:10 CST 10/27/13 04:10 CST 10/27/13 04:10 CST of The Woodlands Mall. There was a 10/8, -95.42] 10/27/13 04:15 CST 10/27/13 04:15 CST e that damaged a residential fence. 10/40 december 10/31/13 06:30 CST 10/31/13 09:00 CST	usts that downed ON DAM [30.65, -9	0 parked car near th 2K 0 trees.	Source: Law Enforcement the intersection of Research Forest Thunderstorm Wind (EG 52 kt) Source: Broadcast Media LASKA [30.89, -95.06], 1.6 SSW Flash Flood (due to Heavy Rain)
Numerous trees were downed northwest of Drive and Grogans Mill Road. HARRIS COUNTY 0.2 SE SPRING [30.4] Severe thunderstorm winds downed a tree Dvernight southeast moving activity pro POLK COUNTY 4.4 SW BARNES [30.8] CARMONA [30.98, -94.94]	10/27/13 04:10 CST 10/27/13 04:10 CST 10/27/13 04:10 CST of The Woodlands Mall. There was a 10/8, -95.42] 10/27/13 04:15 CST 10/27/13 04:15 CST e that damaged a residential fence. 10/40 duced severe thunderstorm wind g 13, -94.78], 3.3 ENE LAKE LIVINGST 10/31/13 06:30 CST 10/31/13 09:00 CST 10/31/13 one one can be described by the county in and around the Live	usts that downed ON DAM [30.65, -9	0 parked car near th 2K 0 trees.	Source: Law Enforcement the intersection of Research Forest Thunderstorm Wind (EG 52 kt) Source: Broadcast Media LASKA [30.89, -95.06], 1.6 SSW Flash Flood (due to Heavy Rain)
Numerous trees were downed northwest of Drive and Grogans Mill Road. HARRIS COUNTY 0.2 SE SPRING [30.4] Severe thunderstorm winds downed a tree Dvernight southeast moving activity pro POLK COUNTY 4.4 SW BARNES [30.8] CARMONA [30.98, -94.94]	10/27/13 04:10 CST 10/27/13 04:10 CST 10/27/13 04:10 CST of The Woodlands Mall. There was a 10/8, -95.42] 10/27/13 04:15 CST 10/27/13 04:15 CST e that damaged a residential fence. 10/40 duced severe thunderstorm wind g 13, -94.78], 3.3 ENE LAKE LIVINGST 10/31/13 06:30 CST 10/31/13 09:00 CST 10/31/13 one one can be described by the county in and around the Live	usts that downed ON DAM [30.65, -9	0 parked car near th 2K 0 trees.	Source: Law Enforcement the intersection of Research Forest Thunderstorm Wind (EG 52 kt) Source: Broadcast Media LASKA [30.89, -95.06], 1.6 SSW Flash Flood (due to Heavy Rain)
MONTGOMERY COUNTY 0.9 WNW SH Numerous trees were downed northwest of Drive and Grogans Mill Road.	HENANDOAH [30.18, -95.46] 10/27/13 04:10 CST 10/27/13 04:10 CST of The Woodlands Mall. There was a 10/8, -95.42] 10/27/13 04:15 CST 10/27/13 04:15 CST e that damaged a residential fence. 10/duced severe thunderstorm wind g 13, -94.78], 3.3 ENE LAKE LIVINGST 10/31/13 06:30 CST 10/31/13 09:00 CST 10/31/13 one conducted the Livingst of the conducted severe than derivative with the conducted severe that the c	usts that downed ON DAM [30.65, -9	parked car near th 2K 0 trees. 4.95], 6.4 NE ONA	Source: Law Enforcement the intersection of Research Forest Thunderstorm Wind (EG 52 kt) Source: Broadcast Media LASKA [30.89, -95.06], 1.6 SSW Flash Flood (due to Heavy Rain) Source: Law Enforcement
Numerous trees were downed northwest of Drive and Grogans Mill Road. HARRIS COUNTY 0.2 SE SPRING [30.4] Severe thunderstorm winds downed a tree Overnight southeast moving activity pro POLK COUNTY 4.4 SW BARNES [30.8] CARMONA [30.98, -94.94]	HENANDOAH [30.18, -95.46] 10/27/13 04:10 CST 10/27/13 04:10 CST of The Woodlands Mall. There was a 10/8, -95.42] 10/27/13 04:15 CST 10/27/13 04:15 CST e that damaged a residential fence. 10/duced severe thunderstorm wind g 13, -94.78], 3.3 ENE LAKE LIVINGST 10/31/13 06:30 CST 10/31/13 09:00 CST 10/31/13 09:00 CST 10/31/13 09:00 CST	usts that downed ON DAM [30.65, -9	0 parked car near th 2K 0 trees. 4.95], 6.4 NE ONA 10K 0	Source: Law Enforcement ie intersection of Research Forest Thunderstorm Wind (EG 52 kt) Source: Broadcast Media LASKA [30.89, -95.06], 1.6 SSW Flash Flood (due to Heavy Rain) Source: Law Enforcement Heavy Rain
Numerous trees were downed northwest of Drive and Grogans Mill Road. HARRIS COUNTY 0.2 SE SPRING [30.4] Severe thunderstorm winds downed a tree of Dvernight southeast moving activity processor of POLK COUNTY 4.4 SW BARNES [30.8] CARMONA [30.98, -94.94] Flooded roads were reported across wester walker County 5.5 SSW HUNTSVI	HENANDOAH [30.18, -95.46] 10/27/13 04:10 CST 10/27/13 04:10 CST of The Woodlands Mall. There was a 10/3, -95.42] 10/27/13 04:15 CST 10/27/13 04:15 CST e that damaged a residential fence. 10/41/13 06:30 CST 10/31/13 06:30 CST 10/31/13 09:00 CST 10/31/13 09:00 CST 10/31/13 06:54 CST 10/31/13 08:24 CST eek Rd and Bowden Rd.	usts that downed ON DAM [30.65, -9	0 parked car near th 2K 0 trees. 4.95], 6.4 NE ONA 10K 0	Source: Law Enforcement ie intersection of Research Forest Thunderstorm Wind (EG 52 kt) Source: Broadcast Media LASKA [30.89, -95.06], 1.6 SSW Flash Flood (due to Heavy Rain) Source: Law Enforcement Heavy Rain
MONTGOMERY COUNTY 0.9 WNW SHOULD NUMBER OF THE PROPERTY OF	HENANDOAH [30.18, -95.46] 10/27/13 04:10 CST 10/27/13 04:10 CST of The Woodlands Mall. There was a 10/3, -95.42] 10/27/13 04:15 CST 10/27/13 04:15 CST e that damaged a residential fence. 10/41/13 06:30 CST 10/31/13 06:30 CST 10/31/13 09:00 CST 10/31/13 09:00 CST 10/31/13 06:54 CST 10/31/13 08:24 CST eek Rd and Bowden Rd.	usts that downed ON DAM [30.65, -9	0 parked car near th 2K 0 trees. 4.95], 6.4 NE ONA 10K 0	Source: Law Enforcement ie intersection of Research Forest Thunderstorm Wind (EG 52 kt) Source: Broadcast Media LASKA [30.89, -95.06], 1.6 SSW Flash Flood (due to Heavy Rain) Source: Law Enforcement Heavy Rain

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Storm Data and Unusual Weather Phenomena - October 2013

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
Heavy rain caused street flooding in the t	town of Richmond.			
HARRIS COUNTY 0.8 E GOLDEN AC JEANNETTA [29.66, -95.53]	RES [29.67, -95.16], 2.3 E MOONSHII	NE HILL [29.98, -9	5.21], 0.7 SSE BUN	NKER HILL [29.72, -95.53], 1.7 S
• •	10/31/13 10:30 CST		0	Flash Flood (due to Heavy Rain)
	10/31/13 12:00 CST		0	Source: Emergency Manager
Heavy rain caused road flooding around	the city of Houston.			
GALVESTON COUNTY 9.6 E FRIEND	SWOOD [29.56, -95.26], 1.5 ENE ALC	GOA [29.41, -95.18], 0.2 ESE SAN LE	ON [29.48, -94.92], 5.6 NNW LEAGUE
CITY [29.57, -95.14]	10/31/13 10:50 CST		10K	Flash Flood (due to Heavy Rain)
	10/31/13 10:30 CST		0	Source: Emergency Manager
	10/31/13 13.30 CS1		U	Source. Emergency Manager
Heavy rain caused road closures due to water around Tiki Island, and the Bolivar	•	eague City, Hitchco	ck, Dickinson, La	Marque, and San Leon, as well as high
SAN JACINTO COUNTY 1.4 NW CAN CAMILLA [30.59, -95.08]	NILLA [30.61, -95.09], 3.4 SW EVERG	REEN [30.51, -95.2	8], 4.7 SW LIBER	TY HILL [30.47, -95.22], 1.2 SW
OAMILEA [30.33, -33.36]	10/31/13 11:05 CST		0	Flash Flood (due to Heavy Rain)
	10/31/13 12:35 CST		0	Source: Law Enforcement
There were road clousures due to floodir	ng in and around the Camilla area.			
BRAZORIA COUNTY BONNEY [29.32	2, -95.45]			
<u>-</u>	10/31/13 12:50 CST		0	Heavy Rain
	10/31/13 14:20 CST		0	Source: Emergency Manager
High water on roads in and around Bonn	ev.			

High water on roads in and around Bonney.

A slow moving storm system and associated frontal boundary generated heavy rainfall that led to flooding across portions of southeast Texas, especially in and around the Houston and Galveston areas.

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