# Storm Data and Unusual Weather Phenomena - April 2009

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

### 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

> 04/01/09 00:00 CST 0 Drought

04/30/09 23:59 CST 0

Below average precipitation, above average temperatures, persistent southerly winds, and increasing sun angle contributed to intensifying drought conditions in Deep South Texas and the Rio Grande Valley through the middle of April. The accelerated pace of drying decreased soil moisture levels to the abnormally or excessively dry category through this period.

The United States Drought Monitor, Texas sector, noted drought conditions deteriorating to extreme (D3) over portions of Jim Hogg, Brooks, and Kenedy Counties with the remainder of Deep South Texas experiencing severe drought (D2) conditions. The drought conditions continue to mainly affect agricultural interests, including crops, pastures and grasslands.

Any drought related crop damage likely held off until May.

(TX-Z249) JIM HOGG, (TX-Z250) BROOKS, (TX-Z253) HIDALGO, (TX-Z254) WILLACY, (TX-Z255) CAMERON, (TX-Z256) COASTAL WILLACY, (TX-Z257) COASTAL CAMERON

04/14/09 00:00 CST 0 Drought 0

04/30/09 23:59 CST

Below average precipitation and above average temperatures, combined with persistent winds and the seasonal increase of solar radiation, resulted in an intensification of the drought conditions across many portions of Deep South Texas. Very dry to Excessively Dry soil moisture resulted from the warm, dry, and breezy weather.

By the end of April, The United States Drought Monitor, Texas sector, showed drought conditions ranging from severe along the Rio Grande in Zapata and Starr Counties, to extreme and exceptional toward the coast, including most of the Lower Rio Grande Valley. The drought conditions began to stress agricultural interests, including crops, pastures and grasslands.

#### ZAPATA COUNTY --- 4.5 NW ZAPATA [26.95, -99.27], 4.9 NNW ZAPATA [26.97, -99.25]

04/17/09 20:25 CST 2K Hail (1.00 in)

04/17/09 20:44 CST 0 Source: Emergency Manager

Hail fell for more than 15 minutes near Zapata County during the mid evening. The Zapata County Emergency Management Coordinator received a report of quarter size hail in the Las Palmas subdivision, about 4 miles northeast of the City of Zapata. The Manager of the Zapata County Airport noted quarter size hail as well, which cause indentations in some vehicles' hoods. Some larger stones of unknown size were embedded with the quarter sized hail field.

### ZAPATA COUNTY --- 4.5 NNE SAN YGNACIO [27.11, -99.42], 9.3 N SAN YGNACIO [27.18, -99.42], 4.0 NE ZAPATA [26.94, -99.18], ZAPATA ARPT [26.88, -99.28]

04/17/09 20:30 CST 1K Flash Flood (due to Heavy Rain) 04/17/09 21:15 CST 0 Source: Law Enforcement

Torrential rains fed by continuing outflows from storms along the Sierra Madre Oriental blitzed the west half of Zapata County during hte mid evening. The Zapata County Sheriff's Office reported minor flooding along Federal Highway 83 in the San Ygnacio area north of the City of Zapata toward the Webb County line. The flooding was reported between Corralitos and the La Perla Ranch, Lake #4, area.

The Manager of the Zapata County Airport recorded 3.75 inches of rain, in addition to the fairly long duration of guarter size hail. Radar rainfall estimates were over 7 inches, but likely contaminated by the prodigious hail. Still, it is conceivable that more than 4 inches fell in a few spots, leading to enough water flowing across roads to consider the event a Flash Flood.

The first significant thunderstorms of 2009 developed on Friday night, April 17th, across the upper Rio Grande Valley in Zapata County. Setting the stage for the activity were a series of weak upper level disturbances moving in a southwesterly flow well above the surface, combined with the slow approach of a frontal boundary from the Texas Panhandle.

The severe storm in Zapata County was likely aided by outflow from early evening activity across northern Jim Hogg County, which collided with outflows from activity across the Sierra Madre Oriental. The storm was notable for its long duration, fed by a continuing tongue of humid air from the southeast.

STARR COUNTY --- 1.8 N EL SAUZ [26.61, -98.87], 2.8 NNE EL SAUZ [26.61, -98.85]

04/18/09 11:56 CST 0 Hail (1.00 in)

04/18/09 12:02 CST n Source: Trained Spotter

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Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details				
Quarter size hail was reported near El Sauz.							
[26.57, -98.69]							
04/18/09 12:30 CST		0	Hail (0.75 in)				
04/18/09 12:30 CST	04/18/09 12:30 CST 0		Source: Trained Spotter				
[26.48, -98.36], 5.8 ESE MC COOK [26 04/18/09 13:42 CST	5.46, -98.31]	0	Hail (0.88 in)				
04/18/09 13:48 CST		0	Source: Fire Department/Rescue				
	[26.57, -98.69] 04/18/09 12:30 CST 04/18/09 12:30 CST intersection of Farm to Market Roads 7  [26.48, -98.36], 5.8 ESE MC COOK [26] 04/18/09 13:42 CST	Injuries Sauz.  [26.57, -98.69]  04/18/09 12:30 CST  04/18/09 12:30 CST  intersection of Farm to Market Roads 755 and 490.  [26.48, -98.36], 5.8 ESE MC COOK [26.46, -98.31]  04/18/09 13:42 CST	Injuries Crop Dmg  Sauz.  [26.57, -98.69]  04/18/09 12:30 CST  04/18/09 12:30 CST  0 other to Market Roads 755 and 490.  [26.48, -98.36], 5.8 ESE MC COOK [26.46, -98.31]  04/18/09 13:42 CST  0				

The April 18th activity likely began along and near old boundaries which had spread east from the Zapata cells into Starr County; further development in warm, humid, unstable air propagated east into Hidalgo County, before shifting south into northern portion of the State of Tamaulipas, Mexico by early evening.

weak upper level disturbances moving in southwesterly flow well above the surface, combined with the slow approach of a cold front

from the Texas Panhandle.

(TX-Z249) JIM HOGG				
	04/30/09 11:00 CST	0	Wildfire	
	04/30/09 18:00 CST	0		

Persistent high pressure over the central Gulf of Mexico, combined with the semi-permanent trough of low pressure across west Texas into northern Mexico, continued to result in breezy to windy conditions, along with hot temperatures, in Deep South Texas. The combination of these weather conditions with critically dry fuels, and afternoon humidity falling below 40 percent likely aided the rapid spread of a wild fire in north central Jim Hogg County during the late morning and early afternoon of April 30th. Southeast winds gusted over 30 mph at times during the morning, and may have contributed to the spread rate.

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