Storm Data and Unusual Weather Phenomena - August 2009

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

TEXAS, South

(TX-Z248) ZAPATA, (TX-Z259) 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

08/01/09 00:00 CST 0 Drought

08/31/09 23:59 CST 0

Dry conditions and above normal temperatures at the end of July continued the first few days of August and maintained the end of July drought level intensities across Deep South Texas and the Rio Grande Valley. These values ranged from severe (D2) drought along the Rio Grande including most of Zapata County and a pocket in southeastern Hidalgo and Southwest Cameron County, to exceptional (D4) from the eastern half of Jim Hogg County through all of Brooks and Kenedy County, stretching south to Willacy County.

By the end of the month, the drought would result of tens of millions of dollars in dryland crop, pastureland, and livestock loss across all of Deep South Texas.

(TX-Z253) HIDALGO, (TX-Z255) CAMERON

08/04/09 00:00 CST 0 Drought

08/17/09 23:59 CST 0

Dry, record to near record heat, and frequently breezy to windy weather courtesy of persistent high pressure ridge above the surface extending from the southwest U.S. to the central Gulf of Mexico worsened the drought across Cameron and Hidalgo County through mid month. Drought conditions would reach their peak for the entire year for the final two weeks of August.

(TX-Z248) ZAPATA

08/04/09 00:00 CST 0 Drought

08/31/09 23:59 CST 0

Continued dry, very hot, and rain free weather across Zapata County intensified the drought from severe to extreme as the ridge of high pressure above the earth's surface persisted from the U.S. four corners southeast through the Rio Grande Valley and into the central Gulf of Mexico.

(TX-Z253) HIDALGO, (TX-Z254) WILLACY, (TX-Z255) CAMERON, (TX-Z257) COASTAL CAMERON

08/18/09 00:00 CST 0 Drought

08/31/09 23:59 CST 20.70M

Continued record to near record heat, frequently breezy to windy conditions, low humidity for the time of year, and lack of rainfall allowed the 2009 Drought to peak before the end of August, ensuring massive dryland crop, pastureland, and livestock loss. The agricultural loss in the heart of Deep South Texas dryland crop country will be one of the worst in recent times. The pattern, featuring a persistent high pressure ridge above the surface from the southwest U.S. through the central Gulf of Mexico, would begin to break at month's end, but the rains were far too little, far too late, to save much of the crop yield.

(TX-Z248) ZAPATA, (TX-Z252) STARR, (TX-Z253) HIDALGO, (TX-Z255) CAMERON

08/20/09 12:00 CST 0 Heat

08/21/09 15:00 CST 0

A developing upper level low pressure trough in the mid and upper Mississippi Valley helped push a weak cool front into north central Texas on August 20 and 21. This front helped to increase compression - and heating - of the surface air mass across South Texas and Deep South Texas, while drawing up additional tropical moisture from the southeast. The result was two consecutive nights of widespread 80 or higher degree ambient temperature, along with a single day of afternoon heat index values which reached or exceeded 111 for 2 to 4 hours across much of the Rio Grande Valley.

JIM HOGG COUNTY --- HEBBRONVILLE [27.32, -98.68]

08/28/09 21:00 CST 0 Heavy Rain

08/28/09 23:00 CST 0 Source: COOP Observer

More than 2.7 inches of rain fell during a two to three hour period at the cooperative observing site in Hebbronville during the late evening of August 28th.

JIM HOGG COUNTY --- 0.6 W HEBBRONVILLE [27.32, -98.69]

08/28/09 21:14 CST 2K Lightning

08/28/09 21:25 CST 0 Source: Law Enforcement

Two transformers were struck by lightning in the city of Hebbronville, reported by the Jim Hogg County Sheriff Department.

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A small complex of thunderstorms developed ahead of a weakening frontal boundary moving across South Texas, moving across Deep South Texas from west to east during the evening and overnight hours of the 28th into the 29th. Heavy rainfall and lightning were notable in Jim Hogg County.

CAMERON COUNTY --- 2.0 WSW HARLINGEN [26.17, -97.73], RANCHO VIEJO [26.03, -97.55]

08/30/09 12:00 CST 0 Heavy Rain

08/30/09 14:00 CST 0 Source: CoCoRaHS

CoCoRaHS observers reported between 2.5 and 3 inches of rain in both Palm Valley (about 2.2 miles west of Harlingen) and Rancho Viejo from a small thunderstorm complex which moved from Port Isabel west and developed stronger in west central Cameron County during the early afternoon of the 30th. Some poor draining streets had nuisance flooding, but most locations soaked up the rainfall, which was the first of significance during the entire month and going back to July 11th for most in the area.

An unstable atmosphere, very weak upper level disturbance, a dissipating front north of the area, and the afternoon sea breeze helped trigger the first widespread rains in the Lower Rio Grande Valley during the month of August, on the penultimate day of the month. While the torrential rains were sucked up by very thirsty ground, a few areas saw nuisance poor drainage flooding with well over 2 inches falling in a short period of time during the early and mid afternoon.

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