

Storm Data and Unusual Weather Phenomena - August 2022

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

TEXAS, South Panhandle

(TX-Z021) PARMER, (TX-Z022) CASTRO, (TX-Z023) SWISHER, (TX-Z024) BRISCOE, (TX-Z025) HALL, (TX-Z026) CHILDRESS, (TX-Z027) BAILEY, (TX-Z028) LAMB, (TX-Z029) HALE, (TX-Z030) FLOYD, (TX-Z031) MOTLEY, (TX-Z032) COTTLE, (TX-Z033) COCHRAN, (TX-Z034) HOCKLEY, (TX-Z035) LUBBOCK, (TX-Z036) CROSBY, (TX-Z037) DICKENS, (TX-Z038) KING, (TX-Z039) YOAKUM, (TX-Z040) TERRY, (TX-Z041) LYNN, (TX-Z042) GARZA, (TX-Z043) KENT, (TX-Z044) STONEWALL

| | | |
|--------------------|---|---------|
| 08/01/22 00:00 CST | 0 | Drought |
| 08/31/22 22:59 CST | 0 | |

The most significant improvement to long term drought conditions for the duration of this drought occurred during the month of August. The greatest improvements were seen over the Rolling Plains and extreme southwestern Texas Panhandle where exceptional drought (D4) was lowered two categories to severe drought (D2). Improvements elsewhere included a reduction to extreme drought (D3) over the southern South Plains and moderate drought (D1) across the northwest South Plains.

This improvement was fueled by widespread rain showers and thunderstorms during the second half of the month. August began hot and dry similar to conditions earlier in the summer, but August trended cooler and more unsettled with periodic bouts of precipitation with flooding at times. This pattern shift occurred following an early departure of a subtropical ridge that typically resides near West Texas in August. As a result, monsoonal moisture was able to expand east from the desert southwest and combine with occasional weak fronts and disturbances for widespread beneficial rainfall. Rainfall was mostly between 150 and 200 percent of normal with several swaths of 300 percent or more. The improved soil moisture along with increased cloud cover served to keep temperatures near normal for the month following the record breaking heat earlier this summer. Despite the widespread rainfall, negative agricultural impacts continued across the region as a result of long term drought conditions. Fire weather conditions have generally remained low due to relatively light winds and improved moisture. Fuel states significantly improved due to the widespread rainfall during the second half of August.

BRISCOE COUNTY --- 6.5 ESE SILVERTON [34.45, -101.19]

| | | |
|--------------------|---|------------------------------|
| 08/04/22 15:23 CST | 0 | Thunderstorm Wind (MG 51 kt) |
| 08/04/22 15:23 CST | 0 | Source: Mesonet |

A Texas Tech University West Texas mesonet site near Silverton measured a severe wind gust of 59 mph.

SWISHER COUNTY --- 1.1 W VIGO PARK [34.65, -101.50]

| | | |
|--------------------|---|------------------------------|
| 08/04/22 15:43 CST | 0 | Thunderstorm Wind (MG 52 kt) |
| 08/04/22 15:43 CST | 0 | Source: Mesonet |

A Texas Tech University West Texas mesonet site near Vigo Park measured a severe wind gust of 60 mph.

SWISHER COUNTY --- 1.0 NNE HAPPY [34.74, -101.84]

| | | |
|--------------------|---|------------------------------|
| 08/04/22 15:53 CST | 0 | Thunderstorm Wind (MG 60 kt) |
| 08/04/22 16:19 CST | 0 | Source: Mesonet |

A Texas Tech University West Texas mesonet site near Happy measured several severe wind gusts between 1553 CST and 1619 CST. The peak gust measured during this time was 69 mph at 1618 CST.

DICKENS COUNTY --- 1.5 W SPUR [33.48, -100.88]

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|--------------------|---|------------------------------|
| 08/04/22 18:05 CST | 0 | Thunderstorm Wind (MG 50 kt) |
| 08/04/22 18:05 CST | 0 | Source: Mesonet |

A Texas Tech University West Texas mesonet site near Spur measured a severe wind gust of 58 mph.

DICKENS COUNTY --- 4.6 NW MC ADOO [33.77, -101.04]

| | | |
|--------------------|---|------------------------------|
| 08/04/22 18:09 CST | 0 | Thunderstorm Wind (MG 57 kt) |
| 08/04/22 18:09 CST | 0 | Source: Mesonet |

A Texas Tech University West Texas mesonet site near McAdoo measured a severe wind gust of 66 mph.

CHILDRESS COUNTY --- 2.5 N CHILDRESS [34.46, -100.20]

| | | |
|--------------------|---|------------------------------|
| 08/04/22 18:14 CST | 0 | Thunderstorm Wind (MG 65 kt) |
| 08/04/22 18:16 CST | 0 | Source: Mesonet |

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A Texas Tech University West Texas mesonet site near Childress measured continuous severe wind gusts between 1814 CST and 1816 CST. The peak gust measured during this time was 75 mph at 1814 CST.

GARZA COUNTY --- 5.4 SSW GRAHAM CHAPEL [33.08, -101.52]

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|--|--------------------|--|---|------------------------------|
| | 08/04/22 20:13 CST | | 0 | Thunderstorm Wind (MG 62 kt) |
| | 08/04/22 20:17 CST | | 0 | Source: Mesonet |

A Texas Tech University West Texas mesonet site near Graham measured several severe wind gusts between 2013 CST and 2017 CST. The peak gust measured during this time was 71 mph at 2014 CST.

A return of monsoonal moisture lead to numerous thunderstorm development during the afternoon and evening of the 4th. These thunderstorms were high-based and produced isolated severe downburst winds primarily east of the Caprock escarpment.

CASTRO COUNTY --- 3.1 NNE HART [34.42, -102.11]

| | | | | |
|--|--------------------|--|---|------------------------------|
| | 08/05/22 04:40 CST | | 0 | Thunderstorm Wind (MG 54 kt) |
| | 08/05/22 04:40 CST | | 0 | Source: Mesonet |

A Texas Tech University West Texas mesonet site near Hart measured a severe wind gust of 62 mph.

An isolated thunderstorm developed directly over the Hart (Castro County) mesonet during the early morning hours of the 5th. It began to collapse over the mesonet leading to a severe wind gust.

COTTLE COUNTY --- 8.6 SSE NARCISSO [33.89, -100.40]

| | | | | |
|--|--------------------|--|---|------------------------------|
| | 08/07/22 17:18 CST | | 0 | Thunderstorm Wind (MG 52 kt) |
| | 08/07/22 17:18 CST | | 0 | Source: Mesonet |

A Texas Tech University West Texas mesonet site near Paducah measured a severe wind gust of 60 mph.

Increasing monsoonal moisture over the forecast area combined with afternoon temperatures breaching convective temperature levels led to the development of isolated thunderstorms primarily east of the Caprock Escarpment. A thunderstorm strengthened directly over the Paducah (Cottle County) mesonet site which resulted in a downburst leading to severe wind gusts.

LAMB COUNTY --- 0.9 E AMHERST [34.02, -102.40]

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|--|--------------------|--|---|------------------------------|
| | 08/09/22 14:45 CST | | 0 | Thunderstorm Wind (MG 53 kt) |
| | 08/09/22 14:45 CST | | 0 | Source: Mesonet |

A Texas Tech University West Texas mesonet site near Amherst measured a severe wind gust of 61 mph.

Isolated thunderstorms developed over much of the area on the afternoon and evening of the 9th. Dry air beneath the cloud bases led to an evaporatively enhanced downburst directly over the Amherst (Lamb County) mesonet.

COTTLE COUNTY --- 8.6 SSE NARCISSO [33.89, -100.40]

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|--|--------------------|--|---|------------------------------|
| | 08/10/22 17:58 CST | | 0 | Thunderstorm Wind (MG 56 kt) |
| | 08/10/22 17:59 CST | | 0 | Source: Mesonet |

A Texas Tech University West Texas mesonet site near Paducah measured severe wind gusts between 1758 CST and 1759 CST. The peak gust measured during this time was 65 mph at 1758 CST.

A monsoonal fetch of mid-level moisture remained over the forecast area on the afternoon and evening of the 10th which allowed for isolated to scattered thunderstorms to develop. A relatively dry sub-cloud layer allowed one of these storms to produce severe downburst winds near Paducah (Cottle County).

HOCKLEY COUNTY --- 3.6 S PEP [33.77, -102.58], 3.0 S PEP [33.78, -102.58], 3.1 SSE PEP [33.78, -102.56], 3.6 SSE PEP [33.77, -102.56]

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|--|--------------------|--|---|---------------------------------|
| | 08/21/22 00:30 CST | | 0 | Flash Flood (due to Heavy Rain) |
| | 08/21/22 03:30 CST | | 0 | Source: Department of Highways |

The Texas Department of Transportation reported that a portion of Farm to Market Road 597 was closed due to water over the roadway approximately three miles south of Pep. Radar imagery revealed that storms repeatedly trained over northeastern Hockley County for several hours. Although radar reflectivities were not incredibly high during this time, the repeated storms and very efficient rainfall production led to localized flooding .

A moisture-rich monsoon fetch, infused by tropical moisture from a wave that moved off the Gulf of Mexico and through South Texas, brought significant amounts of moisture into West Texas. The approach of an upper level storm system well to our north and northwest caused the fetch of monsoon moisture to bend squarely over West Texas. In addition to embedded disturbances within the monsoon, a couple of weak frontal boundaries moved southward into the region. Working together, the moisture, mid-level disturbances, and low-level boundaries generated widespread showers and thunderstorms. The increasingly tropical airmass led to very efficient rain rates and locally heavy rainfall through the evening and overnight hours from the 20th into the 21st.

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| LUBBOCK COUNTY --- 2.4 SW LUBBOCK [33.55, -101.88], 6.0 E NEW DEAL [33.73, -101.73] | | | | |
| | 08/28/22 16:35 CST | | 0 | Thunderstorm Wind (MG 50 kt) |
| | 08/28/22 16:35 CST | | 0 | Source: Mesonet |
| A thunderstorm that moved over central Lubbock County produced widespread damage across the central portion of the city of Lubbock . Multiple power poles were snapped along with downed trees and fences. At the same time, a wind gust to 58 mph was reported by a Texas Tech University West Texas mesonet site near New Deal at 1635 CST. | | | | |
| LYNN COUNTY --- 6.0 NE NEW HOME [33.39, -101.86], 6.5 SW TAHOKA T BAR ARPT [33.11, -101.89], 4.5 W GRASSLAND [33.12, -101.68], 4.5 N WILSON [33.38, -101.73] | | | | |
| | 08/28/22 17:30 CST | | 0 | Flash Flood (due to Heavy Rain) |
| | 08/28/22 20:30 CST | | 0 | Source: Law Enforcement |
| Numerous reports were received of widespread flooding along US Highway 87 from the Lubbock/ Lynn County Line into Tahoka . An estimated two to four inches of rain fell within an hour causing flooding. A rain gage in Tahoka reported a rainfall total of 3.50 inches. | | | | |
| LYNN COUNTY --- TAHOKA [33.18, -101.78] | | | | |
| | 08/28/22 18:29 CST | | 0 | Thunderstorm Wind (EG 50 kt) |
| | 08/28/22 18:29 CST | | 0 | Source: COOP Observer |
| An NWS cooperative weather observer in Tahoka relayed photographs of wind damage to trees, fences, and power poles. | | | | |
| On the afternoon of the 28th, scattered thunderstorms developed over the central and southwestern South Plains within a low level convergence zone from a surface pressure trough. Hot temperatures and well above average moisture levels fueled the development of convection as it slowly moved to the east. These slow moving storms brought severe wind gusts and widespread flooding to parts of Lubbock and Lynn Counties. These severe winds caused damage within the cities of Lubbock (Lubbock County) and Tahoka (Lynn County), primarily snapping power poles and downing trees and fences. The slow moving nature of the storms combined with the abundant moisture in the atmosphere allowed for extremely heavy rainfall over Lynn County. Several underpasses were flooded along US Highway 87 along with reports of water over the roadway between Tahoka and the Lubbock/Lynn County line. | | | | |
| SWISHER COUNTY --- VIGO PARK [34.65, -101.48] | | | | |
| | 08/29/22 15:44 CST | | 0 | Thunderstorm Wind (MG 50 kt) |
| | 08/29/22 16:00 CST | | 0 | Source: Mesonet |
| A Texas Tech University West Texas mesonet site at Vigo Park measured multiple wind gusts of 58 mph. | | | | |
| LAMB COUNTY --- 1.0 NE AMHERST [34.03, -102.41] | | | | |
| | 08/29/22 16:04 CST | | 0 | Thunderstorm Wind (MG 56 kt) |
| | 08/29/22 16:04 CST | | 0 | Source: Mesonet |
| A Texas Tech University West Texas mesonet site near Amherst measured a wind gust of 64 mph. | | | | |
| BRISCOE COUNTY --- CAPROCK CANYONS STATE PARK [34.41, -101.07] | | | | |
| | 08/29/22 16:45 CST | | 0 | Thunderstorm Wind (MG 53 kt) |
| | 08/29/22 16:46 CST | | 0 | Source: Mesonet |
| A Texas Tech University West Texas mesonet site at Caprock Canyons State Park measured wind gusts from 1645 CST through 1646 CST. A peak wind gust of 61 mph was measured at 1646 CST. | | | | |
| FLOYD COUNTY --- 2.0 NNE FLOYDADA [34.01, -101.32] | | | | |
| | 08/29/22 16:46 CST | | 0 | Thunderstorm Wind (MG 50 kt) |
| | 08/29/22 16:46 CST | | 0 | Source: Mesonet |
| A Texas Tech University West Texas mesonet site near Floydada measured a wind gust of 58 mph. | | | | |
| HOCKLEY COUNTY --- 6.0 SSW ANTON [33.74, -102.21] | | | | |
| | 08/29/22 16:46 CST | | 0 | Thunderstorm Wind (MG 63 kt) |
| | 08/29/22 16:59 CST | | 0 | Source: Mesonet |
| A Texas Tech University West Texas mesonet site near Anton measured severe wind gusts from 1646 CST through 1659 CST. A peak wind gust of 73 mph was measured at 1652 CST. | | | | |

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| HALL COUNTY --- 2.0 WSW TURKEY [34.39, -100.91] | | | | |
| | 08/29/22 16:50 CST | | 0 | Thunderstorm Wind (MG 52 kt) |
| | 08/29/22 16:50 CST | | 0 | Source: Mesonet |
| A Texas Tech University West Texas mesonet site near Turkey measured a wind gust of 60 mph. | | | | |
| HOCKLEY COUNTY --- SMYER [33.58, -102.17] | | | | |
| | 08/29/22 17:03 CST | | 0 | Thunderstorm Wind (MG 56 kt) |
| | 08/29/22 17:13 CST | | 0 | Source: Mesonet |
| A Texas Tech University West Texas mesonet site in Smyer measured severe wind gusts from 1703 CST through 1713 CST. A peak wind gust of 65 mph was measured at 1704 CST. | | | | |
| LUBBOCK COUNTY --- REESE AFB [33.60, -102.05] | | | | |
| | 08/29/22 17:10 CST | | 0 | Thunderstorm Wind (MG 59 kt) |
| | 08/29/22 17:17 CST | | 0 | Source: Mesonet |
| A Texas Tech University West Texas mesonet site at Reese measured severe wind gusts from 1710 CST through 1717 CST. A peak wind gust of 68 mph was measured at 1710 CST and 1715 CST. | | | | |
| LUBBOCK COUNTY --- 6.0 E NEW DEAL [33.73, -101.73] | | | | |
| | 08/29/22 17:18 CST | | 0 | Thunderstorm Wind (MG 59 kt) |
| | 08/29/22 17:28 CST | | 0 | Source: Mesonet |
| A Texas Tech University West Texas mesonet site near New Deal measured severe wind gusts at 1718 CST and 1728 CST. A peak wind gust of 68 mph was measured at 1718 CST. | | | | |
| HALE COUNTY --- 5.0 ENE ABERNATHY [33.86, -101.77] | | | | |
| | 08/29/22 17:19 CST | | 0 | Thunderstorm Wind (MG 52 kt) |
| | 08/29/22 17:21 CST | | 0 | Source: Mesonet |
| A Texas Tech University West Texas mesonet site near Abernathy measured severe wind gusts from 1719 CST through 1721 CST. A peak wind gust of 60 mph was measured at 1721 CST. | | | | |
| HOCKLEY COUNTY --- 6.0 NW ROPESVILLE [33.48, -102.22] | | | | |
| | 08/29/22 17:33 CST | | 0 | Thunderstorm Wind (EG 52 kt) |
| | 08/29/22 17:33 CST | | 0 | Source: Trained Spotter |
| A trained spotter located approximately six miles northwest of Ropesville estimated wind gusts of 60 mph. | | | | |
| LUBBOCK COUNTY --- 2.0 NE SLATON [33.45, -101.63] | | | | |
| | 08/29/22 17:48 CST | | 0 | Thunderstorm Wind (MG 56 kt) |
| | 08/29/22 17:51 CST | | 0 | Source: Mesonet |
| A Texas Tech University West Texas mesonet site near Slaton measured severe wind gusts from 1748 CST through 1751 CST. A peak wind gust of 65 mph was measured at 1748 CST. | | | | |
| COCHRAN COUNTY --- 12.5 S WHITEFACE [33.42, -102.62] | | | | |
| | 08/29/22 17:49 CST | | 0 | Thunderstorm Wind (MG 54 kt) |
| | 08/29/22 17:49 CST | | 0 | Source: Mesonet |
| A Texas Tech University West Texas mesonet site near Sundown measured a wind gust of 62 mph at 1749 CST. | | | | |
| CROSBY COUNTY --- 6.0 NW WHITE RIVER LAKE [33.52, -101.16] | | | | |
| | 08/29/22 18:27 CST | | 0 | Thunderstorm Wind (MG 56 kt) |
| | 08/29/22 18:35 CST | | 0 | Source: Mesonet |
| A Texas Tech University West Texas mesonet site near White River Lake measured severe wind gusts from 1827 CST through 1835 CST. A peak wind gust of 64 mph was measured at 1833 CST. | | | | |
| GARZA COUNTY --- 5.5 SSW GRAHAM CHAPEL [33.08, -101.52] | | | | |

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| | 08/29/22 18:33 CST | | 0 | Thunderstorm Wind (MG 56 kt) |
| | 08/29/22 18:36 CST | | 0 | Source: Mesonet |

A Texas Tech University West Texas mesonet site near Graham measured severe wind gusts from 1833 CST through 1836 CST. A peak wind gust of 65 mph was measured at 1835 CST.

LYNN COUNTY --- 1.0 W O'DONNELL [32.97, -101.85]

| | | | | |
|--|--------------------|--|---|------------------------------|
| | 08/29/22 18:46 CST | | 0 | Thunderstorm Wind (MG 50 kt) |
| | 08/29/22 18:46 CST | | 0 | Source: Mesonet |

A Texas Tech University West Texas mesonet site near O'Donnell measured a wind gust of 58 mph.

Widespread severe thunderstorms developed on the afternoon of the 29th triggered in part by an upper level disturbance approaching via the southern Rockies. A high amount of instability led to rapid thunderstorm development across the southwest Texas Panhandle and northwestern South Plains bringing sweeping severe wind gusts. This activity quickly grew into a line as it accelerated south and southeastward through the evening hours. Along the leading edge of the line, intense winds created a haboob severely limiting visibility in spots.

LUBBOCK COUNTY --- 2.3 SW WOODROW [33.42, -101.84], 2.0 SSE WOODROW [33.42, -101.80], 1.9 WSW UNION [33.41, -101.80], 3.0 SSW WOODROW [33.41, -101.84]

| | | | | |
|--|--------------------|--|---|---------------------------------|
| | 08/31/22 12:30 CST | | 0 | Flash Flood (due to Heavy Rain) |
| | 08/31/22 14:30 CST | | 0 | Source: Social Media |

Photographs on social media showed that a portion of US Highway 87 near Farm to Market Road 41 was flooded.

TERRY COUNTY --- 3.6 S GOMEZ [33.13, -102.39], 2.4 SE BROWNFIELD ARPT [33.14, -102.15], 3.2 NNE BROWNFIELD ARPT [33.21, -102.16], 2.3 N GOMEZ [33.21, -102.38]

| | | | | |
|--|--------------------|--|---|---------------------------------|
| | 08/31/22 13:30 CST | | 0 | Flash Flood (due to Heavy Rain) |
| | 08/31/22 15:30 CST | | 0 | Source: Law Enforcement |

A photograph on social media showed a vehicle that had drifted off the road at a low water crossing in Brownfield. The Brownfield police department confirmed that there were several flooded out vehicles throughout town. Additionally, heavy rainfall led to several flooded out buildings in town.

GARZA COUNTY --- 0.5 WSW POST [33.18, -101.39], 1.6 E POST [33.18, -101.35], 4.8 N JUSTICEBURG [33.10, -101.21], 2.0 SSW AUGUSTUS [33.10, -101.32]

| | | | | |
|--|--------------------|--|---|---------------------------------|
| | 08/31/22 14:30 CST | | 0 | Flash Flood (due to Heavy Rain) |
| | 08/31/22 16:30 CST | | 0 | Source: Department of Highways |

The Texas Department of Transportation reported that a portion of US Highway 84 was underwater due to heavy rainfall and a large backup in traffic occurred due to the flooded roadway.

An upper level storm system became nearly stationary, centered close to El Paso, which allowed extremely moist air to continue to be pumped up into West Texas on the 31st. The near record moisture levels, along with the nearby upper level low, and weak daytime heating, initiated a round of westward-moving showers and thunderstorms that dumped torrential rain in spots adding to the already saturated soils. A number of area roadways become inundated with water stopping traffic and causing some vehicles to be washed off the road. In addition to causing flooding in and around Lubbock (Lubbock County), Brownfield (Terry County), and Post (Garza County), a couple of the tropical showers generated brief funnel clouds. These tropical-type funnels did no known damage.