

Storm Data and Unusual Weather Phenomena - July 2022

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

07/01/22 00:00 CST	0	Drought
07/31/22 22:59 CST	0	

Rainfall deficits continued to deepen throughout July as heat ramped up due to the lack of moisture. Extreme drought (D3) conditions grew to include all but portions of the western South Plains where earlier spring rains were limiting drought conditions to severe (D2) levels. Exceptional drought (D4) expanded slightly to encompass portions of the northern and southern South Plains, Rolling Plains, and extreme southwestern Texas Panhandle.

Rainfall through the month was between zero and 50 percent of normal. Additionally, this July was the warmest on record for several locations including Lubbock (Lubbock County) where 18 days of 100 degrees or higher temperatures were recorded which is a new record. The North American monsoon remained mostly to the west of the region which is typical for July. This monsoon moisture expanded into West Texas for a few days during the month which brought beneficial but spotty rainfall. Wide ranging agricultural impacts continued with overall dry conditions resulting in a difficult year for cotton growth. Despite the dryness, relatively light winds mitigated wildfire danger.

COTTLE COUNTY --- 2.0 SSE HACKBERRY [33.90, -100.14]

07/03/22 15:03 CST	0	Thunderstorm Wind (MG 52 kt)
07/03/22 15:04 CST	0	Source: Mesonet

A Texas Tech University West Texas mesonet site near Hackberry measured severe wind gusts from 1503 CST through 1504 CST. A peak wind gust of 60 mph was measured at 1504 CST.

BRISCOE COUNTY --- 7.0 ESE SILVERTON [34.43, -101.19]

07/03/22 17:22 CST	0	Thunderstorm Wind (MG 50 kt)
07/03/22 17:22 CST	0	Source: Mesonet

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

Very hot temperatures on the afternoon of the third and an approaching weak mid-level circulation allowed for isolated to scattered thunderstorms to develop off the caprock. Relatively dry sub-cloud layers allowed for strong downburst winds to develop which produced a couple of severe wind gusts near Hackberry (Cottle County) and near Silverton (Briscoe County).

COCHRAN COUNTY --- 1.0 ENE MORTON [33.73, -102.75]

07/04/22 18:34 CST	0	Thunderstorm Wind (MG 53 kt)
07/04/22 18:34 CST	0	Source: Mesonet

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

Very hot temperatures on the afternoon of the fourth allowed for isolated thunderstorms to develop on the South Plains. A relatively dry sub-cloud layer enhanced the downburst potential of these storms. One of these storms became severe producing a severe wind gust near Morton (Cochran County).

LUBBOCK COUNTY --- 3.9 SSW LUBBOCK [33.53, -101.88]

07/05/22 15:05 CST	0	Thunderstorm Wind (MG 55 kt)
07/05/22 15:05 CST	0	Source: Official NWS Observations

A wind gust of 63 mph was measured at the National Weather Service Weather Forecast Office in Lubbock.

HALL COUNTY --- 2.0 WSW TURKEY [34.39, -100.91]

07/05/22 18:44 CST	0	Thunderstorm Wind (MG 51 kt)
07/05/22 18:44 CST	0	Source: Mesonet

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

A third consecutive afternoon of very hot temperatures allowed isolated thunderstorms to develop across the region under a monsoonal fetch of mid-level moisture. A relatively dry sub-cloud layer allowed a couple of these storms to produce severe downburst winds in Lubbock (Lubbock County) and near Turkey (Hall County).

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LAMB COUNTY --- 1.0 NE AMHERST [34.03, -102.41]				
	07/08/22 16:44 CST		0	Thunderstorm Wind (MG 52 kt)
	07/08/22 16:44 CST		0	Source: Mesonet
A Texas Tech University West Texas mesonet site near Amherst measured a wind gust of 60 mph.				

HOCKLEY COUNTY --- 6.0 NNW ROPESVILLE [33.50, -102.19]				
	07/08/22 18:50 CST		0	Thunderstorm Wind (EG 61 kt)
	07/08/22 18:50 CST		0	Source: Trained Spotter
A meteorologist with the Texas Tech University West Texas mesonet estimated wind gusts of 70 mph along with minor tree damage with a wet microburst.				

Very hot temperatures on the afternoon of the eighth allowed for isolated thunderstorms to develop on the South Plains. Thunderstorms initially developed on an outflow boundary draped across the extreme southern Texas Panhandle that developed from early morning thunderstorms in the Texas Panhandle. A relatively dry sub-cloud layer enhanced the downburst potential of these storms. A few of these storms were able to produce severe wind gusts.

CASTRO COUNTY --- 2.0 NE DIMMITT [34.57, -102.30], 1.0 ESE DIMMITT [34.54, -102.30]				
	07/12/22 20:05 CST		0	Thunderstorm Wind (MG 56 kt)
	07/12/22 20:05 CST		0	Source: Mesonet
A Texas Tech University West Texas mesonet site near Dimmitt measured a wind gust of 64 mph. Additionally, an NWS cooperative weather observer reported that a portable toilet was blown over.				

Thunderstorms formed on the higher terrain of eastern New Mexico on the afternoon of the 12th. A few of these storms moved into the extreme southwestern Texas Panhandle during the evening hours where instability was sufficient to sustain convective development. These storms were able to produce a severe wind gust near Dimmitt (Castro County).

HALE COUNTY --- 5.0 ENE ABERNATHY [33.86, -101.77]				
	07/21/22 14:36 CST		0	Thunderstorm Wind (MG 52 kt)
	07/21/22 14:37 CST		0	Source: Mesonet
A Texas Tech University West Texas mesonet site near Abernathy measured severe wind gusts of 60 mph from 1436 CST through 1437 CST.				

(TX-Z035) LUBBOCK				
	07/21/22 15:09 CST		0	Strong Wind (MAX 49 kt)
	07/21/22 15:09 CST		0	

Several outflow boundary existed across the region on the afternoon of the 21st which initiated isolated thunderstorm development. Strong instability and DCAPE allowed one storm to produce a severe wind gust near Abernathy (Hale County). This storm went on to produce a 57 mph wind gust at Lubbock Preston Smith International Airport (Lubbock County).

BRISCOE COUNTY --- 6.4 ESE SILVERTON [34.45, -101.19]				
	07/29/22 16:42 CST		0	Thunderstorm Wind (MG 57 kt)
	07/29/22 16:42 CST		0	Source: Mesonet
A Texas Tech University West Texas mesonet site near Silverton measured a severe wind gust of 66 mph.				

A weak cold front settled into the southern Texas Panhandle during the afternoon of the 29th which initiated isolated thunderstorm development. Sufficient instability combined with a dry and well mixed boundary layer lead to an evaporatively enhanced downdraft near Silverton (Briscoe County) generating a severe wind gust.