

## Storm Data and Unusual Weather Phenomena - April 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	04/01/22 00:00 CST		0	Drought
	04/30/22 22:59 CST		0	

The month of April continued to see very little rainfall throughout the South Plains, Rolling Plains, and extreme southern Texas Panhandle region. This resulted in every county within the Lubbock County Warning Area (CWA) was either at extreme (D3) drought or exceptional (D4) drought conditions.

Ongoing La Niña over the tropical eastern Pacific Ocean has kept conditions very dry locally. During the month of April, seasonal moisture usually begins to improve with occasional rain and thunderstorm events. However, in April of 2022, very few of these events occurred. A few light rainfall events occurred in the Rolling Plains which brought spotty amounts between one half inch and one inch of rainfall. However, these rainfall amounts still only amounted to as much as 50 percent of normal. Only one severe convective day occurred which brought isolated heavy rainfall in Castro County but also very large hail. Numerous strong to high wind events continued to occur through the month which created widespread blowing dust throughout the South Plains. Additionally, there were numerous small wildfire starts throughout the entire region. However, a strong initial attack from the Texas Forest Service were able to suppress many of these wildfires. Observed fuels continued to be extremely to critically dry with ERC values consistently near record values. One significant wildfire occurred on the 13th near Tahoka in Lynn County which burned approximately 1477 acres.

(TX-Z022) CASTRO, (TX-Z023) SWISHER, (TX-Z029) HALE	04/01/22 15:22 CST		0	High Wind (MAX 56 kt)
	04/01/22 17:10 CST		0	

KING COUNTY --- 10.0 WSW GUTHRIE [33.56, -100.49]	04/01/22 17:07 CST		0	Thunderstorm Wind (MG 52 kt)
	04/01/22 17:08 CST		0	Source: Mesonet

A Texas Tech University West Texas mesonet site near Guthrie measured severe wind gusts at 1707 and 1708 CST. A peak wind gust of 60 mph was measured at 1708 CST.

On the first, a relatively compact short wave rotated over the South Plains of West Texas within a larger upper level trough located over the Intermountain West. A small amount of low level moisture returned to the region ahead of this short wave but was generally not enough to see significant measurable rainfall on the afternoon and evening. A diffuse dryline developed during the afternoon and moved east into the Rolling Plains. By late afternoon, a cold front was moving into the area from the northwest. Lift from the short wave along with sufficient mid level moisture was enough to produce virga showers on the caprock. Strong winds behind the cold front combined with the virga showers to produce isolated wind gusts in the extreme southern Texas Panhandle and central South Plains. Additionally, lift from this short wave was able to act on elevated instability over the Rolling Plains creating isolated thunderstorm activity. One of these thunderstorms produced severe wind gusts near Guthrie (King County).

High wind reports below are from the Texas Tech University West Texas mesonet:

- 64 mph at Tulia (Swisher County),
- 62 mph at Vigo Park (Swisher County),
- 60 mph at Hart (Castro County), and
- 58 mph at Abernathy (Hale County).

(TX-Z025) HALL, (TX-Z026) CHILDRESS, (TX-Z038) KING	04/05/22 20:46 CST		0	High Wind (MAX 54 kt)
	04/05/22 23:19 CST		0	

A strong upper level cyclone over the Northern and Central Plains sent a cold front through the area on the evening of the fifth. The combination of the strong cold front and deepening upper level cyclone contributed to isolated high winds across the southeastern Texas Panhandle and Rolling Plains.

Maximum wind gusts from the Texas Tech University West Texas mesonet are listed below:

- 62 mph at Memphis (Hall County),
- 61 mph at Lesley (Hall County),

## Storm Data and Unusual Weather Phenomena - April 2022

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

61 mph at Childress Municipal Airport ASOS (Childress County),  
 59 mph at Childress (Childress County), and  
 58 mph at Guthrie (King County).

(TX-Z033) COCHRAN, (TX-Z034) HOCKLEY, (TX-Z035) LUBBOCK

04/12/22 11:23 CST			0	High Wind (MAX 53 kt)
04/12/22 16:30 CST			0	

A powerful storm system ejecting from northern Rockies into the northern High Plains brought impactful weather to the area on the 12th. The northern track and strong westerly flow on the south side of the system meant that West Texas received another healthy dose of wind. Wind gusts from 50 to 60 mph were common across much of the South Plains into the Texas Panhandle. Copious amounts of dust were lifted and carried across the region during the afternoon and evening hours, as it evident in the above satellite imagery. Lubbock, Childress and Plainview airports reported visibilities of three miles or less for an extended period of time as the large dust plume engulfed the region. Warm and dry winds also supported several small wildfires locally.

High wind reports from Texas Tech University West Texas mesonets are listed below along with the Automated Surface Observation System (ASOS) at Lubbock Preston Smith International Airport:

61 mph at Anton (Hockley County),  
 60 mph at Lubbock ASOS (Lubbock County), and  
 58 mph at Morton (Cochran County).

(TX-Z041) LYNN

04/13/22 14:00 CST			0	Wildfire
04/13/22 20:30 CST			0	

A powerful upper level storm system which brought isolated high wind gusts to the area on the 12th departed the area on the 13th but still was able to bring strong but non-severe winds on the 13th. These winds came in the wake of a cold front which moved through early in the morning of the 13th. Although temperatures were close to seasonal averages on the 13th behind this cold front, extremely dry air advected into the region with widespread dew points below 0 degrees Fahrenheit. This led to relative humidity values at or below three percent along with gusty northwesterly winds. A wildfire in Lynn County, named the Side Oats Fire, started several miles to the southwest of Tahoka (Lynn County). The wildfire burned a total estimated 1477 acres before being fully contained by the Texas Forest Service on the evening of the 13th.

(TX-Z021) PARMER, (TX-Z022) CASTRO, (TX-Z023) SWISHER, (TX-Z024) BRISCOE, (TX-Z028) LAMB, (TX-Z031) MOTLEY, (TX-Z035) LUBBOCK, (TX-Z041) LYNN, (TX-Z042) GARZA

04/22/22 15:22 CST			0	High Wind (MAX 63 kt)
04/22/22 23:22 CST			0	

CASTRO COUNTY --- HART [34.38, -102.12], 3.0 S NAZARETH [34.51, -102.10]

04/22/22 18:01 CST			0	Hail (2.50 in)
04/22/22 18:05 CST			0	Source: Storm Chaser

Numerous reports were received of quarter to golf ball size hail in Hart (Castro County) as a supercell thunderstorm quickly tracked to the north-northeast across Castro County. The supercell thunderstorm continued to intensify as it moved across the County producing hail as large as tennis ball size south of Nazareth (Castro County) along Farm to Market Road 168. No reports of damage were received.

SWISHER COUNTY --- 5.4 ENE HAPPY [34.75, -101.76]

04/22/22 18:56 CST			0	Hail (2.00 in)
04/22/22 18:56 CST			0	Source: Storm Chaser

A storm chaser reported hail up to two inch diameter size along the Swisher/Armstrong County line along Farm to Market Road 1075 approximately five miles east of Happy (Swisher County). No reports of damage were received.

A strong upper level short wave trough and polar jet stream over the southwestern United States moved across the Rockies on the afternoon of the 22nd which brought widespread severe weather to the Central High Plains down into the Southern High Plains. As a result, strong surface cyclogenesis occurred in lee of the Rockies which brought robust moist southerly winds into the South Plains of West Texas. These southerly winds produced severe wind gusts at times also lofting dust across a widespread area. The increase in low level atmospheric moisture and steep mid level lapse rates allowed instability values to rise to around 3000 J/kg by late afternoon. However, a stout elevated mixed layer existed over the area from persistent southwesterly winds overhead. This cap was able to suppress most convection across the region however, one supercell thunderstorm was able to develop. This storm tracked northeastward across Castro County dropping hail up to tennis ball size.

Highest wind gusts below are from the Texas Tech University West Texas mesonet:

## Storm Data and Unusual Weather Phenomena - April 2022

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
73 mph at Lubbock Preston Smith International Airport (ASOS, Lubbock County), 71 mph at Graham (Garza County), 62 mph at Olton (Lamb County), 61 mph at Tulia (Swisher County), 60 mph at Friona (Parmer County), 59 mph at Dimmitt (Castro County), 59 mph at O'Donnell (Lynn County), 58 mph at Silverton (Briscoe County), and 58 mph at Northfield (Motley County).				

---

**CROSBY COUNTY --- 1.0 SE RALLS [33.67, -101.37]**

04/29/22 14:29 CST	0	Dust Devil
04/29/22 14:29 CST	0	Source: Mesonet

On the afternoon of the 29th, a dust devil directly impacted the Texas Tech University West Texas mesonet near Ralls (Crosby County). A wind gust to 61 mph was reported by the mesonet at the time of occurrence.