## Storm Data and Unusual Weather Phenomena - March 2023

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

## **TEXAS, South Panhandle**

A strong upper level storm system moving across Arizona and New Mexico during the day of the second allowed for a pacific cold front to move through the area. Deep boundary layer mixing and a very dry low level atmosphere allowed for virga showers to develop. A severe wind gust at Lubbock International Airport (Lubbock County) occurred with a measured gust to 59 mph.

(TX-Z028) LAMB, (TX-Z033) COCHRAN, (TX-Z035) LUBBOCK

03/16/23 09:42 CST 0 High Wind (MAX 52 kt) 03/16/23 13:16 CST 0

A powerful late winter cold front plowed through the region from late in the morning on the 16th into the afternoon hours. Strong winds were observed both ahead of the front and in the post frontal airmass. Texas Tech University West Texas mesonet sites near Amherst (Lamb County) measured a wind gust to 58 mph while a site near Morton (Cochran County) measured a wind gust to 60 mph. The Automated Surface Observing System at Lubbock International Airport (Lubbock County) measured a wind gust of 60 mph.

(TX-Z023) SWISHER

A weak upper level short wave moving across northern Arizona and northern New Mexico on the evening of the 24th provided an area of large scale lift that moved overhead. At the same time, mid-level moisture advected into the region with very dry air at the surface. The lift and moisture combined to create high based virga showers. The very dry lower troposphere allowed these showers to evaporate before reaching the ground but strong winds worked down to the surface. A high wind gust of 69 mph was reported by the Texas Tech University West Texas mesonet site near Tulia (Swisher County).

(TX-Z021) PARMER, (TX-Z022) CASTRO, (TX-Z023) SWISHER, (TX-Z024) BRISCOE, (TX-Z025) HALL, (TX-Z026) CHILDRESS, (TX-Z027) BAILEY, (TX-Z029) HALE, (TX-Z030) FLOYD, (TX-Z031) MOTLEY, (TX-Z032) COTTLE, (TX-Z034) HOCKLEY, (TX-Z035) LUBBOCK, (TX-Z037) DICKENS, (TX-Z043) KENT

A potent upper level low pressure system tracked across the Intermountain West onto the Northern Plains during the day of the 31st. Very strong winds aloft accompanied this trough. Deep vertical atmospheric mixing was able to transport higher momentum air aloft to the surface leading to widespread high winds across the region. The hardest hit area was the extreme southern Texas Panhandle into the northern South Plains and northern Rolling Plains where wind gusts in excess of 58 mph were common. Several locations also saw several hours of sustained winds in excess of 40 mph. The strong winds did loft some blowing dust into the lower atmosphere but did not cause any significant problems.

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

63 mph at Silverton (Briscoe County),

63 mph at Friona (Parmer County),

63 mph at Dimmitt (Castro County),

61 mph at Caprock Canyons State Park (Briscoe County),

61 mph at Paducah (Cottle County),

60 mph at Turkey (Hall County),

60 mph at Childress (Childress County),

59 mph at Floydada (Floyd County),

58 mph at Hart (Castro County),

58 mph at Tulia (Swisher County), and

58 mph at Jayton (Kent County).

Maximum wind gusts from area ASOS stations are listed below:

59 mph at Lubbock International Airport (Lubbock County).

Maximum sustained wind speeds from the Texas Tech University West Texas mesonet sites are listed below:

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42 mph at Roaring Springs (Motley County).

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