Storm Data and Unusual Weather Phenomena - January 2024

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details	
TEXAS, South Panhandle					
	HER, (TX-Z024) BRISCOE, (TX-Z025) HA Y, (TX-Z032) COTTLE, (TX-Z033) COCHI (TX-Z042) GARZA				
	01/08/24 12:24 CST		0	High Wind (MAX 59 kt)	
	01/09/24 03:19 CST		0		
(TX-Z021) PARMER, (TX-Z022) CAST	IRO				
	01/08/24 14:45 CST		0	Blizzard	
	01/08/24 18:30 CST		0		
(TX-Z023) SWISHER, (TX-Z027) BAIL	_EY, (TX-Z029) HALE				
	01/08/24 15:00 CST		0	Winter Weather	
	01/08/24 19:00 CST		0		

A powerful storm system emerging over the southern High Plains brought a variety of impacts to the region on the eighth. Scattered showers and thunderstorms formed over the central and eastern South Plains and swept eastward through the predawn hours although no severe weather occurred from this activity. A dry slot from this system then moved over the area around daybreak bringing increasing westerly winds following a Pacific cold front. The strong winds brought patchy blowing dust to the area through the afternoon hours. As the upper low lifted into the northeastern Texas Panhandle during the afternoon, stronger northwesterly winds aloft developed on the back side of the low. It was at this point when stronger winds aloft mixed down to the surface bringing widespread severe wind gusts to the extreme southern Texas Panhandle and portions of the South Plains and Rolling Plains. As this occurred, a narrow band of snow developed across the extreme southwestern Texas Panhandle within a TROWAL region detached from the main TROWAL in the northern Texas Panhandle. Severe wind gusts created blowing snow resulting in near zero visibility in white out conditions. Several roadways, including US Highway 385 north of Dimmitt, were closed during the height of the storm. The dangerous travel conditions resulted in numerous vehicles running off the road and becoming stranded in ditches. In total, two to four inches of snow was measured over much of Parmer and Castro Counties.

Snowfall totals from NWS cooperative weather observers and local law enforcement are listed below:

4.0 inches at Friona (Parmer County),

- 2.0 inches at Hart (Castro County),
- 1.5 inches at Dimmitt (Castro County),
- 1.3 inches at Plainview (Hale County),
- 1.0 inch at Tulia (Swisher County), and
- 1.0 inch at Muleshoe (Bailey County).

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

66 mph at Childress (Childress County), 65 mph at McAdoo (Dickens County), 65 mph at Caprock Canyons State Park (Briscoe County), 65 mph at White River Lake (Crosby County), 64 mph at Tulia (Swisher County), 64 mph at Memphis (Hall County), 63 mph at Happy (Swisher County), 63 mph at Paducah (Cottle County), 62 mph at Silverton (Briscoe County), 61 mph at Turkey (Hall County), 61 mph at Lesley (Hall County), 61 mph at Shallowater (Lubbock County), 61 mph at Slaton (Lubbock County), 60 mph at O'Donnell (Lynn County), 59 mph at Floydada (Floyd County), 59 mph at Olton (Lamb County), 59 mph at Graham (Garza County), 58 mph at Brownfield (Terry County), and 58 mph at Morton (Cochran County).

The following high wind reports are from Automated Surface Observing Stations (ASOS):

	Storm Data and Unusu	al Weather F	henomena	- January 2024
Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
68 mph at Childress Municipal A 67 mph at Lubbock International	• •			
Sustained high winds of 40 mph	or greater were observed by the Texas Te	ch University Wes	t Texas mesonet s	ites below:
Sustained high winds of 40 mph 45 mph at Hart (Castro County),	or greater were observed by the Texas Te	ch University Wes	t Texas mesonet s	ites below:
45 mph at Hart (Castro County), 45 mph at Aiken (Hale County),		ch University Wes	t Texas mesonet s	ites below:
45 mph at Hart (Castro County), 45 mph at Aiken (Hale County), 44 mph at Dimmitt (Castro Count	ty), and	ch University Wes	t Texas mesonet s	ites below:
45 mph at Hart (Castro County), 45 mph at Aiken (Hale County),	ty), and	ch University Wes	: Texas mesonet s	ites below:
45 mph at Hart (Castro County), 45 mph at Aiken (Hale County), 44 mph at Dimmitt (Castro Count	ty), and ty).	ch University Wes	t Texas mesonet s	ites below:
45 mph at Hart (Castro County), 45 mph at Aiken (Hale County), 44 mph at Dimmitt (Castro Count 44 mph at Abernathy (Hale Coun	ty), and ty).	ch University Wes	t Texas mesonet s	ites below: High Wind (MAX 53 kt)

A strengthening surface low pressure system on the afternoon of the 11th took place ahead of an approaching short wave trough. Strong winds at 700mb mixed down to the surface creating widespread strong winds. A few locations briefly reached severe wind gust speeds late in the afternoon prior to a strong cold frontal passage.

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

61 mph at McAdoo (Dickens County), 58 mph at Ralls (Crosby County), and 58 mph at Paducah (Cottle County).