

## Storm Data and Unusual Weather Phenomena - February 2024

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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### OKLAHOMA, Panhandle

**(OK-Z001) CIMARRON**

	02/10/24 07:00 CST	0	Winter Storm
	02/11/24 12:00 CST	0	

**(OK-Z002) TEXAS, (OK-Z003) BEAVER**

	02/10/24 07:00 CST	0	Winter Weather
	02/11/24 05:00 CST	0	

A strong upper level low pressure system moved across the western United States and eventually across southern New Mexico and west Texas during the weekend of February 10-11. Out ahead of this feature, moisture was able to move in across the region which allowed rain and snow showers to develop across the Panhandles by late morning on Saturday. Temperatures for most areas were above freezing, other than the northwest where temperatures were below freezing which allowed for snowfall to begin to accumulate across this area. On Saturday, between 1-3 inches of snow fell across the far northwest in areas like Texline, TX and Cimarron County in Oklahoma. A cold front pushed down late Saturday night into early Sunday morning and cooled temperatures down below freezing for the entire area. Early on Sunday, better lift provided by the low pressure system started to move across the Panhandles and allowed numerous bands of widespread snowfall to develop over the region. Snowfall rates up to a half inch to an inch per hour occurred in the heaviest snow bands. The system exited to the east during the evening on Sunday. Snowfall totals ranged anywhere from a Trace up to 7 inches across the Panhandles. The highest totals were located across the northwest, where 4-6 inches of snowfall was measured from Saturday into Sunday. The other area of higher totals was across the southern Texas Panhandle on Sunday, where snowfall accumulations ranged from 3.5 to 6.5 inches.

**(OK-Z001) CIMARRON, (OK-Z002) TEXAS, (OK-Z003) BEAVER**

	02/27/24 10:30 CST	0	High Wind (MAX 53 kt)
	02/27/24 14:30 CST	0	

**(OK-Z002) TEXAS, (OK-Z003) BEAVER**

	02/27/24 14:18 CST	0	Wildfire
	02/29/24 23:59 CST	0	

A good growing season through spring/summer 2023 led to decent fuel loading, compared to the previous couple of years, before vegetation went into winter dormancy. Dormant fuels and two weeks without precipitation leading into February 26th provided a very combustible environment when combined with abnormally warm temperatures (record breaking) and high winds on Monday, February 26th. An upper level system first brought strong winds on Monday with sustained winds peaking between 25 and 39 mph out of the west. Wind gusts peaked around 55 mph with some locations briefly gusting up to 58 to 62 mph. Not only were the winds strong but the RH values also dropped to 12 to 18 percent. These conditions with the dormant and dry state of vegetation contributed to some large wildfires on the 26th. Especially when these fires occurred in rough terrain leading to efforts to contain the fires being of little to no gain. These fires continued through the night with little recovery in relative humidity and short lived reduced winds.

Going into the morning of the 27th west to southwest winds quickly picked back up into the 25 to 35 mph range with gusts quickly exceeding 58 mph in the late morning hours before noon. Frequent gusts of 58 to 64 mph soon picked up into the 65 to 70 mph range during the afternoon of the 27th. Some areas saw sustained winds top out in the 40 to 45 mph range for a few hours as well. With temperatures starting out in the 50s on the morning of the 27th, afternoon temperatures were back in the 70s in no time. Despite afternoon temperatures a few degrees cooler than the day before on the 26th, relative humidity values fell into the 12 to 15 percent range. This did not help with ongoing fires and also contributed to a few new fires across the combined Panhandles, some of which merged with one another turning into megafires. The same system contributing to the high winds also pushed a cold front into the area from the north. Fires that once were moving from west to east soon started to move from north to south behind the front. Winds behind the front continued to blow in the 25 to 35 mph range and gusting 40 to 50 mph. Communities that were initially on the right flank of the fire, out of harm's way, soon found themselves on the forward flank.

There were roughly 9 named wildfires with some of these merging into one, such as the 687 Reamer Fire which started on the 27th, the day after the Smokehouse Creek Fire started but eventually burned into and merged with the Smokehouse Creek Fire. By mid March the Smokehouse Creek Fire and the Windy Deuce Fire were still not quite 100% contained yet. It is estimated that 2,075 homes were directly impacted by the fire and within the fire perimeter. How many of these housing units are a complete loss is unknown at this time. The fires also left residents without electricity or gas for several days after the 27th of February. Many cattle and livestock were also lost. It is estimated that just over 4,000 lives will forever be changed by these fires. Not to mention there were two souls lost in the fires on the 27th as well.

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### TEXAS, North Panhandle

**(TX-Z007) MOORE**

02/07/24 16:16 CST		0	High Wind (MAX 53 kt)
02/07/24 16:35 CST		0	

Breezy conditions were present across the Texas Panhandle on the afternoon of the 7th. Most wind gusts that day stopped short of 45 mph. However, a mesonet and AWOS station located near Dumas managed to gust up to 60 and 61 mph.

**(TX-Z001) DALLAM, (TX-Z011) OLDHAM, (TX-Z012) POTTER, (TX-Z013) CARSON, (TX-Z014) GRAY, (TX-Z016) DEAF SMITH, (TX-Z017) RANDALL COUNTY, (TX-Z018) ARMSTRONG, (TX-Z019) DONLEY**

02/10/24 07:00 CST		0	Winter Storm
02/11/24 20:30 CST		0	

**(TX-Z002) SHERMAN, (TX-Z003) HANSFORD, (TX-Z006) HARTLEY, (TX-Z007) MOORE, (TX-Z008) HUTCHINSON, (TX-Z009) ROBERTS, (TX-Z015) WHEELER, (TX-Z020) COLLINGSWORTH**

02/10/24 07:00 CST		0	Winter Weather
02/11/24 20:30 CST		0	

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**(TX-Z007) MOORE**

02/24/24 14:41 CST		0	Wildfire
02/25/24 02:41 CST		0	

A wildfire occurred in southeast Moore county on February 24th and burned about 854 acres.

**(TX-Z001) DALLAM, (TX-Z002) SHERMAN, (TX-Z003) HANSFORD, (TX-Z005) LIPSCOMB, (TX-Z006) HARTLEY, (TX-Z007) MOORE, (TX-Z008) HUTCHINSON, (TX-Z010) HEMPHILL, (TX-Z011) OLDHAM, (TX-Z012) POTTER, (TX-Z013) CARSON, (TX-Z014) GRAY, (TX-Z016) DEAF SMITH, (TX-Z017) RANDALL COUNTY, (TX-Z019) DONLEY, (TX-Z020) COLLINGSWORTH**

02/26/24 11:56 CST		0	High Wind (MAX 61 kt)
02/27/24 17:26 CST		0	

**(TX-Z018) ARMSTRONG**

02/26/24 13:21 CST		0	Wildfire
02/26/24 19:21 CST		0	

A good growing season through spring/summer 2023 led to decent fuel loading, compared to the previous couple of years, before vegetation went into winter dormancy. Dormant fuels and two weeks without precipitation leading into February 26th provided a very combustible environment when combined with abnormally warm temperatures (record breaking) and high winds on Monday, February 26th. An upper level system first brought strong winds on Monday with sustained winds peaking between 25 and 39 mph out of the west. Wind gusts peaked around 55 mph with some locations briefly gusting up to 58 to 62 mph. Not only were the winds strong but the RH values also dropped to 12 to 18 percent. These conditions with the dormant and dry state of vegetation contributed to some large wildfires on the 26th. Especially when these fires occurred in rough terrain leading to efforts to contain the fires being of little to no gain. These fires continued through the night with little recovery in relative humidity and short lived reduced winds.

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