

Storm Data and Unusual Weather Phenomena - February 2021

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

(OK-Z001) CIMARRON

02/01/21 00:00 CST	0	Drought
02/28/21 23:59 CST	0	

For much of the combined Oklahoma and Texas Panhandle soil moisture remained very short going into and coming out of the month of February. Winter wheat conditions were fair to poor, with oat conditions fair. Supplemental feeding continued for cattle with hay being shipped in from places further away as grasslands and range fields continue to be impacted by the drought. A strong arctic air mass brought historical cold weather during mid-February. Though this system brought with it some snow it was too cold for the snow to hold any significant liquid and brought only limited relief to drought ridden areas. The snow to liquid ratio was around 25:1 to 35:1. Therefore, several inches of snow only brought a few tenths of an inch of liquid for the month. Though snowfall was above normal the area still finished the month below normal in terms of liquid precipitation. The snow was only beneficial in insulating crops from the extreme cold. However, the extreme cold caused other problems to the livestock aspect of agriculture.

(OK-Z003) BEAVER

02/09/21 12:00 CST	0	Freezing Fog
02/11/21 13:00 CST	0	

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

02/14/21 03:00 CST	0	Extreme Cold/Wind Chill
02/15/21 12:00 CST	0	

A historic outbreak of arctic air resulted in record breaking cold temperatures during an extreme cold spell that lasted almost two weeks for some locations across the combined Texas and Oklahoma Panhandles. The cold air moved over the northeastern combined Panhandles as early as Feb 8th, and spread southwest through Feb 12th, engulfing most of the southern plains by Feb 13th. The northeast Panhandles remained below freezing for 12 days straight while the southwest Panhandles were below freezing for a full week or more. Periods of flurries and freezing fog also occurred mainly in the overnight and morning periods almost each day Feb 8th through Feb 18th. In addition, two storm systems interacted with the arctic air to produce several inches of snow, not only across the Panhandles but across most of the Great Plains, including almost the entire state of Texas and surrounding states.

The frigid arctic air would put a strain on area power grids, resulting in rotating blackouts for some locations (this was much worse for other portions of Texas due to a state wide power crises felt most on the ERCOT power grid). The extreme cold also caused multiple indirect fatalities in the Texas Panhandle and led to school closings due to winter weather and/or the Texas energy crises that required measures to strongly limit energy consumption. The cold also halted plant operations due to issues with natural gas fuel, killed some livestock and also caused localized damage to residences and schools due to freezing water pipes. There were isolated reports of private water wells freezing up across the area. In addition, several municipal water wells in the southeast Texas Panhandle froze up and sustained damage (Donley County) during this time. There was also reported damage to water treatment facilities in Oldham County.

While local impacts in the Panhandle were less than the rest of Texas because the region's infrastructure is more built to handle major cold outbreaks, losses in the state of Texas were estimated to be well into the billions. Impacts from the power disruptions and natural gas fuel issues caused by the cold were certainly felt well outside of the worst hit areas and this included the Texas and Oklahoma Panhandles. For example, local dairy production was halted for a period of time because the processing plants located outside the Panhandles were without power and unable to operate. Farmers were forced to dispose of milk produced during this timeframe. Damage outside the Panhandles to the southeast was extensive due to power interruptions within the ERCOT power grid which led to numerous broken pipes and damages down state in Texas. These greater disruptions impacted the far southeast Texas Panhandle, which was the only area that was included on the ERCOT power grid at the time.

TEXAS, North Panhandle

(TX-Z015) WHEELER, (TX-Z016) DEAF SMITH, (TX-Z017) RANDALL COUNTY, (TX-Z018) ARMSTRONG

02/01/21 00:00 CST	0	Drought
02/28/21 23:59 CST	0	

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(TX-Z006) HARTLEY, (TX-Z011) OLDHAM

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	02/28/21 23:59 CST	0	

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(TX-Z001) DALLAM, (TX-Z002) SHERMAN, (TX-Z003) HANSFORD, (TX-Z004) OCHILTREE, (TX-Z005) LIPSCOMB, (TX-Z006) HARTLEY, (TX-Z007) MOORE, (TX-Z008) HUTCHINSON, (TX-Z009) ROBERTS, (TX-Z010) HEMPHILL, (TX-Z011) OLDHAM, (TX-Z012) POTTER, (TX-Z013) CARSON, (TX-Z015) WHEELER, (TX-Z016) DEAF SMITH, (TX-Z017) RANDALL COUNTY, (TX-Z018) ARMSTRONG, (TX-Z019) DONLEY, (TX-Z020) COLLINGSWORTH

	02/14/21 03:00 CST	59.50K	Extreme Cold/Wind Chill
	02/15/21 13:00 CST	0	

(TX-Z011) OLDHAM, (TX-Z012) POTTER, (TX-Z013) CARSON, (TX-Z014) GRAY, (TX-Z015) WHEELER, (TX-Z016) DEAF SMITH, (TX-Z017) RANDALL COUNTY, (TX-Z018) ARMSTRONG, (TX-Z019) DONLEY, (TX-Z020) COLLINGSWORTH, (TX-Z317) PALO DORO CANYON

	02/16/21 13:20 CST	0	Heavy Snow
	02/17/21 00:00 CST	0	

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