

Storm Data and Unusual Weather Phenomena - November 2023

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

(OK-Z008) KAY, (OK-Z033) HARMON, (OK-Z034) GREER, (OK-Z035) KIOWA, (OK-Z036) JACKSON, (OK-Z037) TILLMAN, (OK-Z043) COAL, (OK-Z048) ATOKA

	11/01/23 00:00 CST	0	Drought
	11/30/23 23:59 CST	0	

Near to below average monthly precipitation occurred in areas generally along and south of Interstate 40 across Oklahoma. This allowed areas of severe to extreme drought to persist, mainly across southwestern Oklahoma. Across far northern Oklahoma, isolated heavier monthly amounts/anomalies helped ease prolonged drought conditions across Kay County.

JOHNSTON COUNTY --- 2.1 SW MILBURN [34.22, -96.57]

	11/20/23 03:10 CST	0	Hail (0.75 in)
	11/20/23 03:10 CST	0	Source: Public

MPing report. Based on radar evidence, hailfall likely occurred prior (0302-0307 LST) to report time.

A secondary shortwave trough, embedded within a slowly advancing longwave system, moved out across the Southern Plains during the late evening of the 19th. Despite remaining stability within the boundary layer, mid-level warm advection (and continued cold/cooling temperatures aloft) aided in sufficient elevated instability for a few hail producing thunderstorms across Oklahoma. Once such storm impacted portions of Johnston County during the early morning of the 20th.

(OK-Z004) HARPER, (OK-Z005) WOODS, (OK-Z006) ALFALFA, (OK-Z007) GRANT, (OK-Z010) WOODWARD, (OK-Z011) MAJOR

	11/25/23 04:30 CST	0	Heavy Snow
	11/25/23 23:30 CST	0	

A positively tilted upper system advanced across the Great Divide on the 25th. Increasing synoptic (isentropic processes) and mesoscale (frontogenetical) ascent occurred throughout the day across the region, with widespread precipitation areas ongoing by the morning hours across northwestern Oklahoma. Initial precipitation types were mixed, with a combination of sleet/snow/rain, though eventual transition to all snow occurred in tandem with cooling mid/upper-level temperatures sliding overhead. A swath of heavy snowfall occurred from the afternoon into evening across northwestern Oklahoma.

(OK-Z025) OKLAHOMA

	11/26/23 00:00 CST	1.50M	Winter Weather
	11/26/23 10:00 CST	0	

Light precipitation, including a period of a wintry mix/rain-snow, impacted portions of central Oklahoma during the early morning hours of the 26th. With temperatures falling below freezing during the period, isolated slick spots developed on roadways across the area. A fatal vehicle incident, involving 22 vehicles, occurred along Interstate 40 near Oklahoma City as a result.

TEXAS, Western North

(TX-Z083) HARDEMAN, (TX-Z085) WILBARGER, (TX-Z086) WICHITA

	11/01/23 00:00 CST	0	Drought
	11/30/23 23:59 CST	0	

Near to slightly below normal precipitation (for November) allowed areas of severe drought to persist across the Red River Valley of western-north Texas.

WICHITA COUNTY --- ELECTRA [34.03, -98.92]

	11/19/23 09:40 CST	0	Hail (1.00 in)
	11/19/23 09:40 CST	0	Source: Public

Social media image showing nickel to quarter size hail. Time is radar estimated.

Increasing isentropic ascent, in advance of an approaching (low amplitude) shortwave trough, elicited widespread (mainly shallow) convection from the morning into early afternoon of the 19th. Cold temperatures aloft (<-20C) promoted steep lapse rates and weak elevated instability. Combined with sufficient deep-layer wind shear, brief storm organization occurred with a few thunderstorms across western-north Texas, with one leading to a report of severe-criteria hail.