

May's weather was rather tame by Oklahoma standards, with severe weather greatly diminished by an abundance of cool, cloudy weather. Plenty of moisture was to be had, with heavy rains falling right through May's final day. That is not to say severe weather was completely absent, but at times flood warnings were seemingly more prevalent than severe thunderstorm warnings. Only a handful of tornadoes were reported in the state during May. While the official number is still under investigation by the National Weather Service, the total will come in well below the month's 1950-2020 average of 24.3 twisters. Those that did touch down were damaging, nonetheless. An EF-1 tornado struck near Roland on May 3, destroying several outbuildings and damaging homes in the area. Another EF-1 twister damaged structures near Hanna on the 27th before dissipating. The month ended on a more violent note as at least two large tornadoes were reported in Cimarron County on the 29th.

the month. May brought the climatological spring (March-May) to a close as the 30th wettest on record statewide with an average of 12.44 inches, 1.32 inches above normal. The first 5 months of the year continued on the wet side at 15.48 inches, the 37th wettest January-May on record and 0.97 inches above normal.

The statewide average temperature was 65.6 degrees according to preliminary data from the Oklahoma Mesonet, 2.7 degrees below normal and ranked as the 15th coolest May since 1895. The cooler weather was mainly a result of diminished high temperatures throughout the month, as opposed to lower minimum temperatures. Statewide average high temperatures were below their long-term averages as many as 24 days in May. Only 58 readings of at least 90 degrees were observed by the 120 Mesonet sites during the month, on just five separate days. Hollis recorded

### May 2021 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	97°F	Hollis	8
Low Temperature	35°F	Nowata	5
High Precipitation	12.62 in.	Broken Bow	--
Low Precipitation	2.02 in.	Newkirk	--

The twisters traveled over open ground mostly, threatening Boise City before dissipating. More tornadoes were reported in Cimarron County the following night as well.

Most of the state saw a surplus of moisture during the month, although a few areas did suffer from continued dry weather. The statewide average precipitation total of 5.82 inches was 0.91 inches above normal and ranked as the 37th wettest May in Oklahoma since records began in 1895. Totals of 5-10 inches were common across much of central through eastern Oklahoma, and again through the Panhandle. Some areas of north central and southwestern Oklahoma saw only 2-4 inches for the month, however, to fall on the deficit side of the ledger. The Mesonet site at Broken Bow led the state with 12.62 inches. Seventy-seven of the Mesonet's 120 sites saw at least 5 inches of rain, with 51 of those locations receiving at least 6 inches. Newkirk brought up the rear with 2.02 inches, one of only four sites with less than 3 inches for

### May 2021 Statewide Statistics

#### Temperature

	Average	Depart.	Rank (1895-2021)
Month (May)	65.5°F	-2.7°F	15th Coolest
Season-to-Date (Mar-May)	59.0°F	-0.3°F	63rd Coolest
Year-to-Date (Jan-May)	49.9°F	-1.8°F	32nd Coolest

#### Precipitation

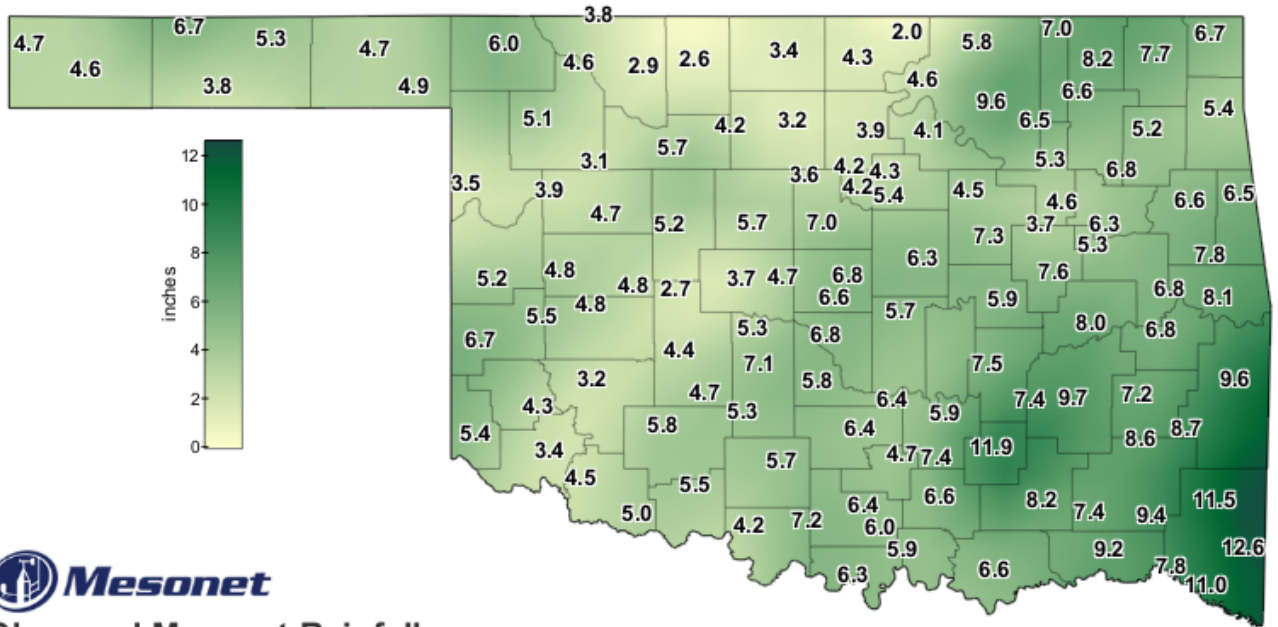
	Total	Depart.	Rank (1895-2021)
Month (May)	5.82 in.	1.00 in.	34th Wettest
Season-to-Date (Mar-May)	12.44 in.	1.32 in.	30th Wettest
Year-to-Date (Jan-May)	15.48 in.	0.97 in.	37th Wettest

Depart. = departure from 30-year normal

the month's highest temperature with 97 degrees on May 8. Nowata reported the lowest temperature of 35 degrees on May 5, marking April 24 in the Panhandle as Oklahoma's final spring freeze. Spring finished at 59 degrees, 0.3 degrees below normal to rank as the 63rd coolest March-May on record. The year remained on the cold side at 49.9 degrees, 1.8 degrees below normal and the 32nd coolest January-May on record.

Drought coverage in Oklahoma was reduced by over half during May, from 20 percent of the state at the end of April to less than 8 percent to end May. Only two small pockets of moderate-to-severe drought were left in southwestern and south central Oklahoma. The Climate Prediction Center's (CPC) June outlooks gave promise to a possible drought free Oklahoma by the end of June. The outlooks show increased odds for above normal rainfall and below normal temperatures across virtually the entire state. Given those expectations, CPC's June drought outlook calls for improvement or removal of the remaining areas of drought in Oklahoma.

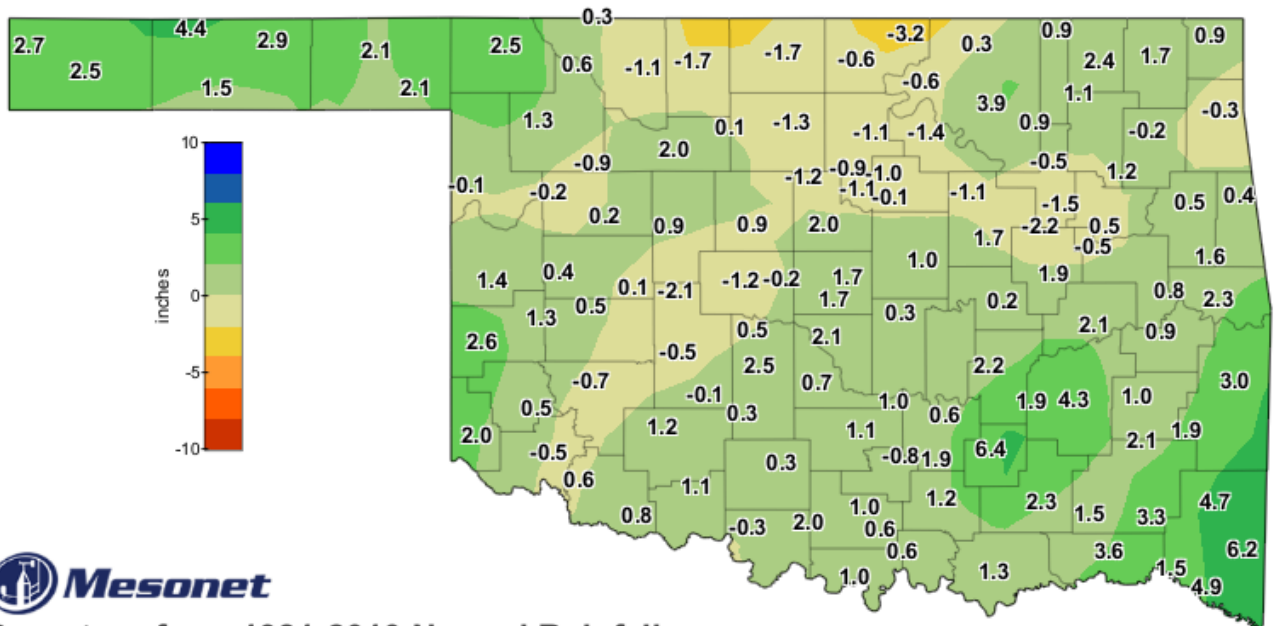
## MAY 2021 OBSERVED PRECIPITATION



Observed Mesonet Rainfall  
Calendar Month to Date

May 1, 2021 through May 31, 2021  
Created 3:41:49 AM June 1, 2021 CDT. Copyright 2021

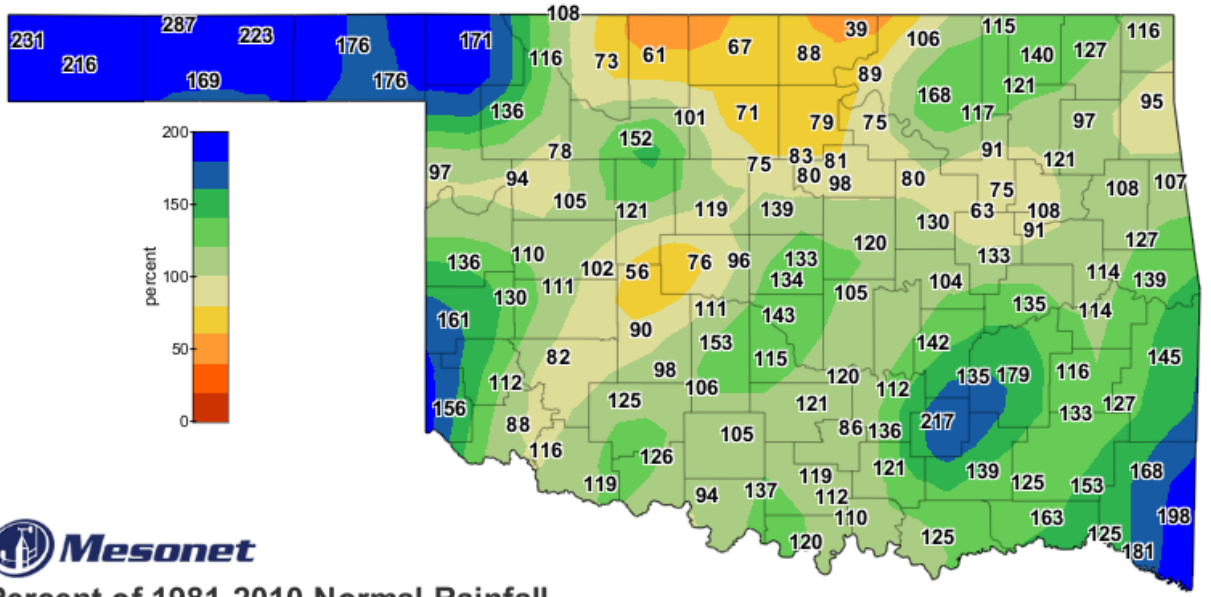
## MAY 2021 DEPARTURE FROM NORMAL PRECIPITATION



Departure from 1981-2010 Normal Rainfall  
Calendar Month to Date

May 1, 2021 through May 31, 2021  
Created 3:41:50 AM June 1, 2021 CDT. Copyright 2021

# MAY 2021 PERCENT OF NORMAL PRECIPITATION



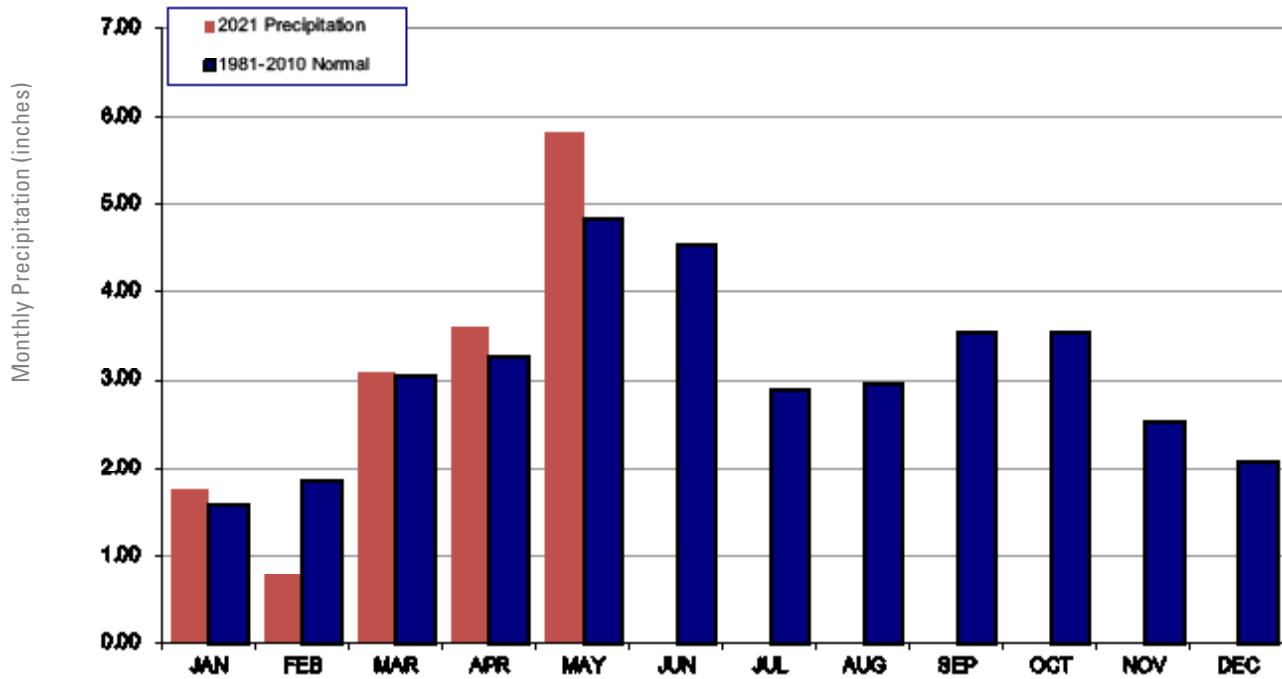
Percent of 1981-2010 Normal Rainfall  
Calendar Month to Date

May 1, 2021 through May 31, 2021  
Created 3:41:50 AM June 1, 2021 CDT. Copyright 2021





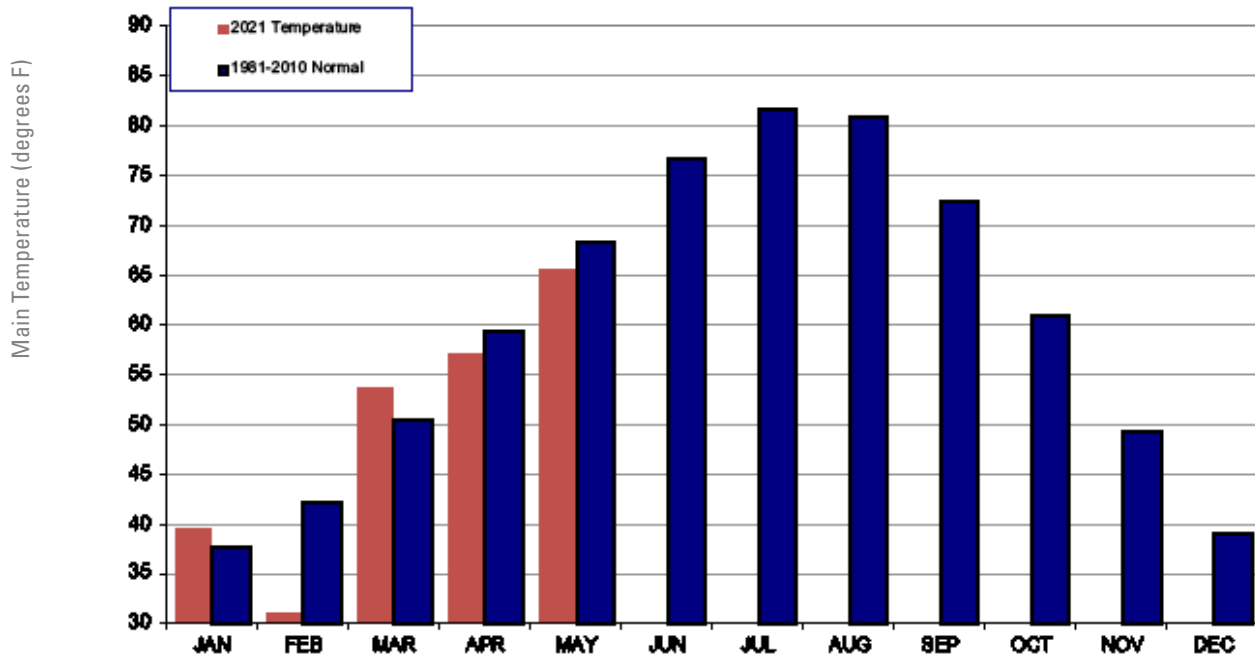
## 2021 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



### May 2021 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	May-20 (inches)
Panhandle	4.91	2.21	18th Wettest	7.12 (2015)	0.19 (2004)	1.19
North Central	3.75	-0.61	62nd Driest	14.72 (2019)	0.63 (1970)	2.66
Northeast	6.26	0.57	44th Wettest	17.98 (1943)	1.45 (1911)	6.82
West Central	5.05	0.98	39th Wettest	12.10 (1982)	0.42 (1966)	2.57
Central	5.48	0.46	46th Wettest	15.50 (2015)	0.92 (1988)	4.28
East Central	7.06	1.23	38th Wettest	17.48 (2015)	1.56 (1921)	8.36
Southwest	4.46	0.25	55th Wettest	16.40 (2015)	0.44 (1966)	4.14
South Central	6.61	1.29	40th Wettest	20.69 (2015)	0.58 (1988)	6.38
Southeast	9.34	3.19	19th Wettest	20.03 (2015)	1.21 (1988)	9.53
Statewide	5.82	1.00	34th Wettest	14.42 (2015)	1.23 (1988)	5.04

## 2021 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



### May 2021 Mesonet Temperature Comparison

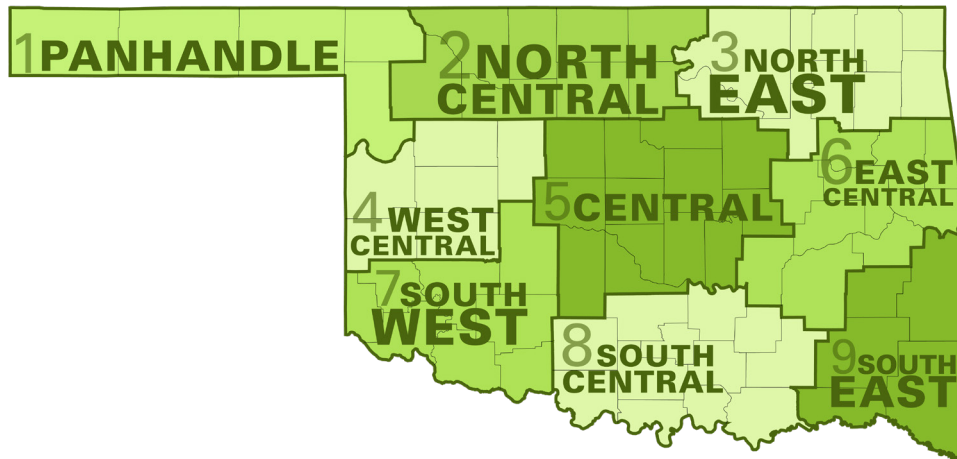
Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	May-20 (F)
Panhandle	63.7	-1.4	40th Coolest	72.6 (2018)	58.0 (1907)	65.9
North Central	64.4	-3.0	20th Coolest	75.5 (2018)	60.6 (1907)	65.9
Northeast	64.5	-3.0	10th Coolest	74.4 (1962)	61.7 (1917)	64.6
West Central	65.7	-2.2	29th Coolest	76.2 (2018)	60.9 (1907)	68.1
Central	65.5	-3.1	10th Coolest	75.4 (2018)	62.0 (1907)	67.3
East Central	65.4	-3.1	8th Coolest	75.1 (2018)	63.2 (1917)	66.8
Southwest	67.5	-2.5	24th Coolest	76.9 (2018)	63.5 (1907)	70.3
South Central	67.0	-3.1	7th Coolest	75.5 (2018)	63.5 (1907)	69.0
Southeast	66.7	-1.9	19th Coolest	74.4 (2018)	62.8 (1917)	67.7
Statewide	65.5	-2.7	15th Coolest	75.1 (2018)	61.9 (1907)	67.2



## MESONET EXTREMES FOR MAY 2021

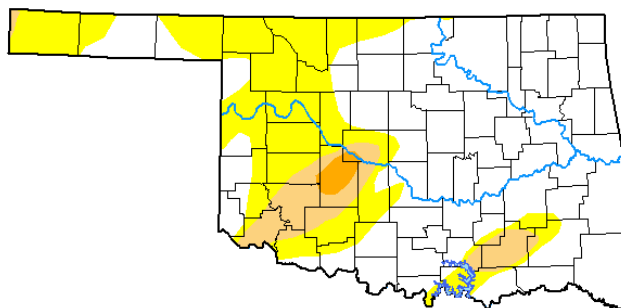
Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	106	21st	Buffalo	50	1st	Eva	3.63	Eva	2.11	3rd	Slapout
North Central	107	22nd	Red Rock	57	1st	Freedom	3.75	Lahoma	2.91	3rd	Lahoma
Northeast	104	22nd	Burbank	59	30th	Jay	5.54	Wynona	2.38	2nd	Inola
West Central	106	22nd	Bessie	60	4th	Putnam	2.36	Cheyenne	1.08	3rd	Cheyenne
Central	108	22nd	Kingfisher	61	30th	El Reno	5.91	Bowlegs	4.08	3rd	Marena
East Central	102	22nd	Hectorville	60	31st	Westville	5.85	McAlester	2.68	2nd	Haskell
Southwest	106	22nd	Grandfield	62	4th	Mangum	5.19	Walters	1.73	3rd	Fort Cobb
South Central	102	28th	Burneyville	63	31st	Lane	11.80	Fittstown	6.98	2nd	Fittstown
Southeast	99	23rd	Wister	58	31st	Wister	10.69	Antlers	5.94	5th	Valliant
Statewide	108	22nd	Kingfisher	50	1st	Eva	11.80	Fittstown	6.98	2nd	Fittstown

Oklahoma Climate Divisions



# U.S. Drought Monitor Oklahoma

**May 25, 2021**  
(Released Thursday, May. 27, 2021)  
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	64.15	35.85	7.84	1.04	0.00	0.00
<b>Last Week</b> 05-18-2021	59.61	40.39	10.09	1.12	0.00	0.00
<b>3 Months Ago</b> 02-23-2021	69.33	30.67	14.83	4.17	0.23	0.00
<b>Start of Calendar Year</b> 12-29-2020	56.83	43.17	25.21	7.75	1.45	0.00
<b>Start of Water Year</b> 09-29-2020	66.79	33.21	17.71	11.97	1.55	0.00
<b>One Year Ago</b> 05-26-2020	73.67	26.33	14.44	3.46	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>*

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NOAA/NWS/NCEP/CPC



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

## INTERPRETATION INFORMATION

**MEAN DAILY TEMPERATURE:** Calculated from an average of the daily maximum and minimum temperatures. Daily averages are summed for each day, and then divided by the number of valid data points – typically the number of days in the month. Although this November differ from the “true” daily average, it is consistent with historical methods of observation and comparable to the normals and extremes for stations and regions of the state.

**DEGREE DAYS:** Degree Days are calculated each day of the month for which there is a temperature report and the mean temperature for the day is less than (Heating Degree Days) or greater than (Cooling Degree Days) 65 degrees. Daily values are summed to arrive at a monthly total. HDD/CDD are qualitative measures of how much heating/cooling was required to maintain a comfortable indoor temperature. Missing observations November result in an artificially high or low value.

## ADDITIONAL RESOURCES

### SUNRISE / SUNSET TABLES

U.S. Naval Observatory: <http://aa.usno.navy.mil/data>

### SEVERE STORM REPORTS

Storm Prediction Center: <http://spc.noaa.gov/climo/>

National Centers for Environmental Information:

<https://www.ncdc.noaa.gov/stormevents/>

### SEASONAL OUTLOOKS

Climate Prediction Center:

[http://www.cpc.ncep.noaa.gov/products/OUTLOOKS\\_index.shtml](http://www.cpc.ncep.noaa.gov/products/OUTLOOKS_index.shtml)

### CLIMATE CALENDARS AND OTHER LOCAL WEATHER AND CLIMATE INFORMATION

Oklahoma Climatological Survey:

<http://climate.mesonet.org> or <http://climate.ok.gov/>



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