

June managed to pack pieces of three seasons into a single month. The first 10 days were quite springlike, with abundant rainfall and high temperatures in the 70s and 80s. That there was very little in the way of severe weather was a bonus for this period, as was the drought reduction across much of the state. Drought coverage dropped from 43% of Oklahoma at the end of May to 31% at the end of June according to the U.S. Drought Monitor, and the worst two categories of drought—extreme and exceptional—fell from 17% to 5% over that same period. A strong burst of sweltering summer weather dominated for the next couple of weeks that saw relentless sunshine and high temperatures more befitting mid-July than mid-June. High temperatures reached as high as 110 degrees during the month’s middle stanza, and heat index values were as high as 120 degrees. While the month ended with more summer heat, a strong cold front during that last week dropped temperatures back down into the

average of 17.62 inches, 1.2 inches below normal and ranked as the 68th driest first 6 months of the year on record.

The statewide average temperature was 78.8 degrees, 1.5 degrees above normal and ranked as the 30th warmest June on record. Heat dominated the month for the most part, although significantly cool weather enveloped the state during June’s first 10 days and also part of its final week. High temperatures in the Panhandle failed to escape the 60s during the month’s first two days, but also on the 26th and 27th. Low temperatures dropped to a chilly 48 degrees at the Eva Mesonet site on June 28, the lowest reading of the month. The Mesonet recorded triple-digit temperatures on 15 days during June. Altus soared to 110 degrees on June 12 for the month’s highest reading. That was also the highest temperature recorded by the Mesonet in the state since Aug. 28, 2020, and the highest June reading since 2013 when

June 2022 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	110°F	Altus	12
Low Temperature	48°F	Eva	28
High Precipitation	9.36 in.	Weatherford	--
Low Precipitation	1.16 in.	Lahoma	--

70s and 80s for a few days—a nice sneak preview of the fall weather to come in a few months’ time.

The statewide average rainfall total finished at 3.76 inches according to data from the Oklahoma Mesonet, falling 0.5 inches below normal and ranking as the 63rd driest June since records began in 1895. Rainfall totals ranged from 9.36 inches at Weatherford—an unusual feat for a western Oklahoma site to have a month’s highest rainfall—to 1.16 inches at Lahoma. Twenty-two of the Mesonet’s 120 sites collected at least 5 inches of rainfall for the month, although another 14 recorded under 2 inches. The heaviest totals ran in two strips across the state from west to east: the first from west central through southeast Oklahoma, and the second from central through east central Oklahoma. Surpluses ranged from 1-5 inches in these areas. Deficits of 2-3 inches occurred in north central, northwestern, and south central Oklahoma. The January through June period had a statewide

June 2022 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2022)
Month (Jun)	78.8°F	1.5°F	30th Warmest
Year-to-Date (Jan-Jun)	56.2°F	-0.1°F	42nd Warmest

Precipitation

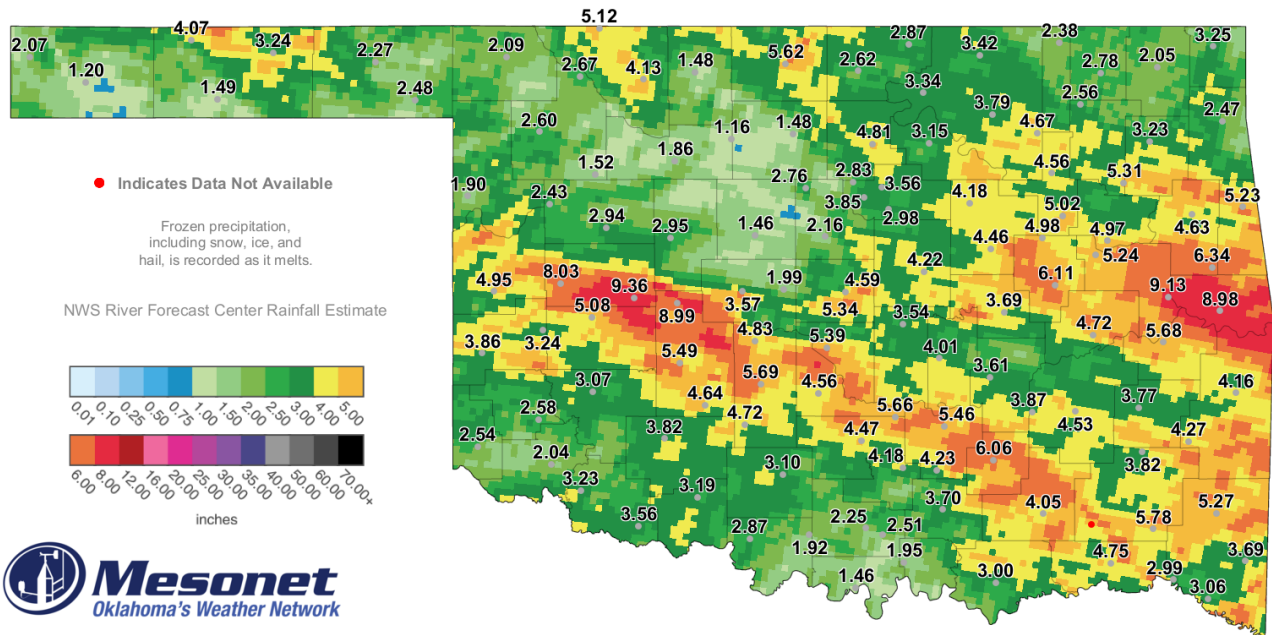
	Total	Depart.	Rank (1895-2022)
Month (Jun)	3.76 in.	-0.5 in.	63rd Driest
Year-to-Date (Jan-Jun)	17.62 in.	-1.2 in.	61st Wettest

Depart. = departure from 30-year normal

Freedom hit 111 degrees on the 27th of that month. Based on statewide averages, June 12 was the hottest day in the state since July 14, 2020, and the hottest June day since June 27, 2012. Heat index values soared during the hottest part of the month. The Mesonet site at Webbers Falls had the month’s highest heat index of 120 degrees on the 12th. The highest heat index ever recorded on the Mesonet—dating back to 1997—was 125 degrees from Calvin on Aug. 9, 1999. The Mesonet observed heat index values of at least 110 degrees 103 times during the month. The January-June statewide average temperature was 56.2 degrees, 0.1 degrees below normal and ranked as the 42nd warmest such period on record.

The hopes for a mild and wet July are a bit slim, at least according to the outlooks from the Climate Prediction center. They show increased odds of above normal temperatures and below normal precipitation. CPC's July drought outlook calls for drought to redevelop across western, southeastern, south central, and northeastern sections of the state by the end of July. Rapid drought development, or "flash drought," is of particular concern if prolonged and unusually hot and dry weather materializes.

JUNE 2022 OBSERVED PRECIPITATION

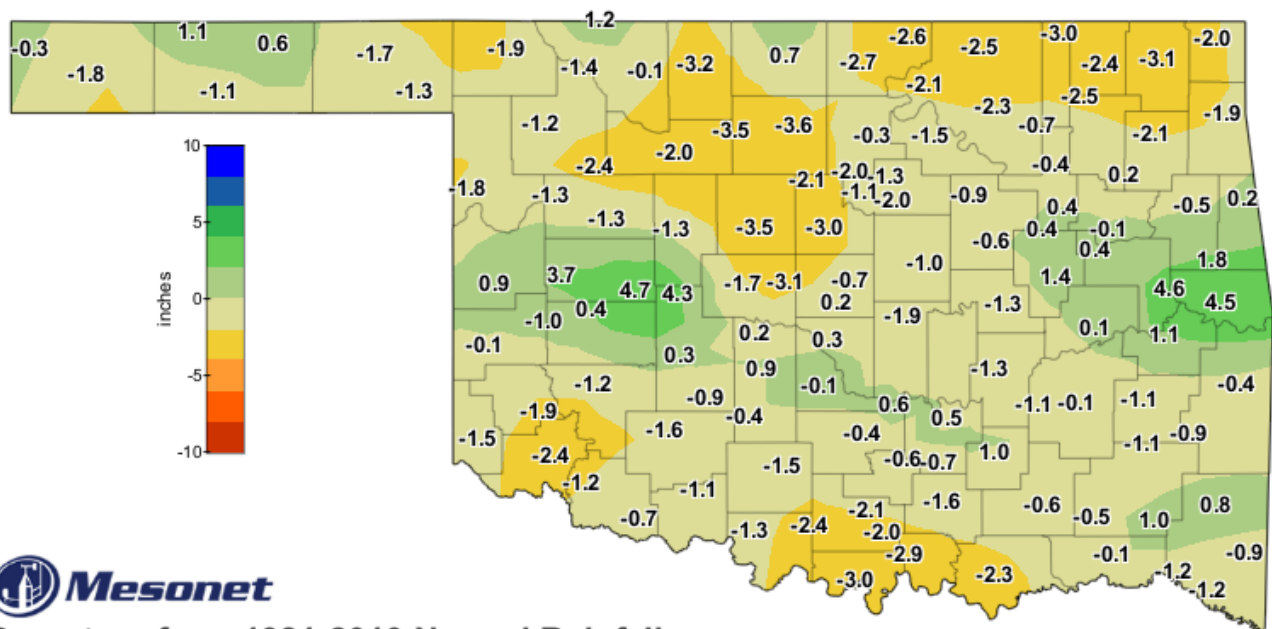


30-Day Rainfall Accumulation (inches)

Jun 1, 2022 12:00 AM CDT - Jul 1, 2022 12:00 AM CDT

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JUNE 2022 DEPARTURE FROM NORMAL PRECIPITATION

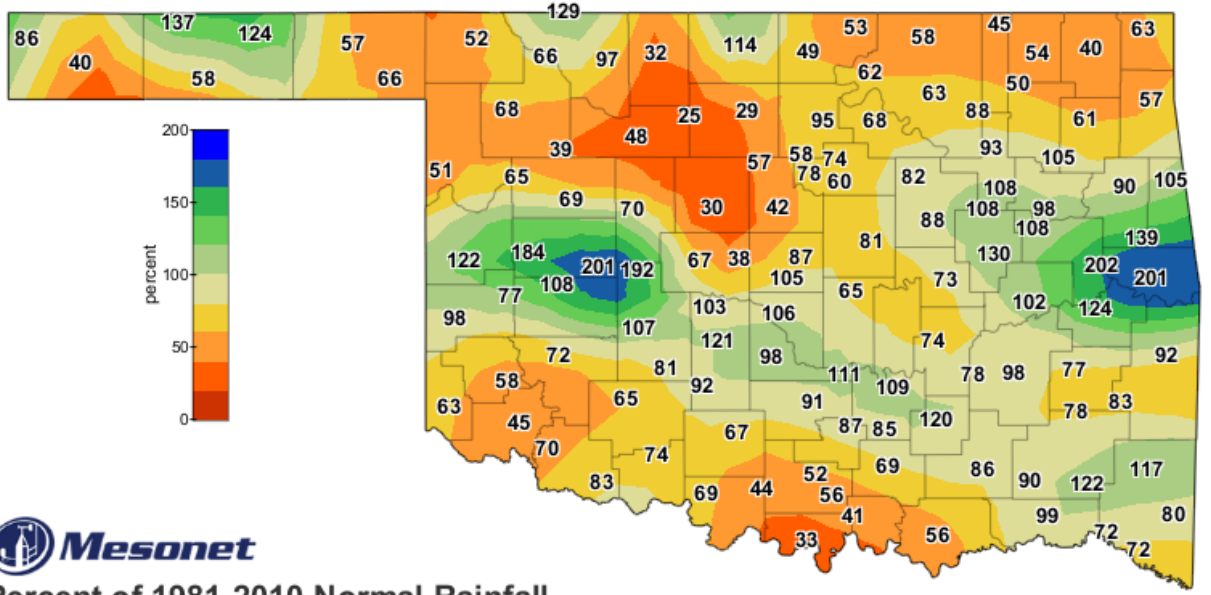


Departure from 1981-2010 Normal Rainfall
Calendar Month to Date

Jun 1, 2022 through Jun 30, 2022

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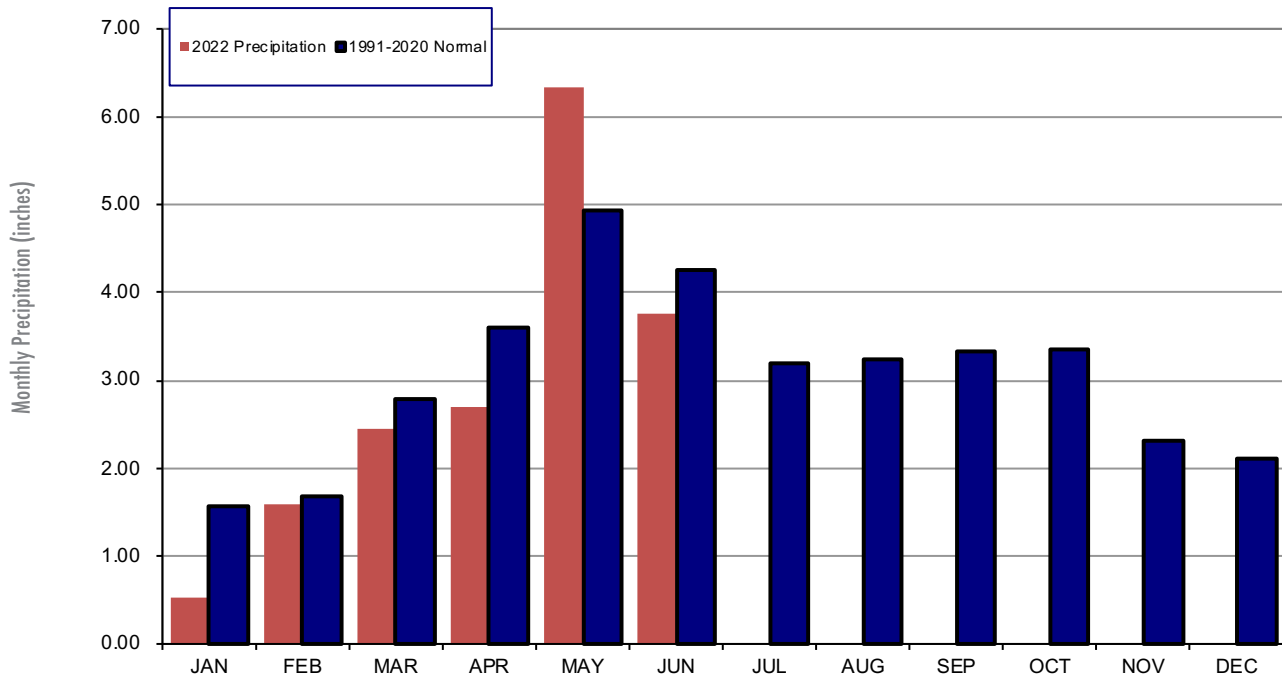
JUNE 2022 PERCENT OF NORMAL PRECIPITATION



Percent of 1981-2010 Normal Rainfall
Calendar Month to Date

Jun 1, 2022 through Jun 30, 2022
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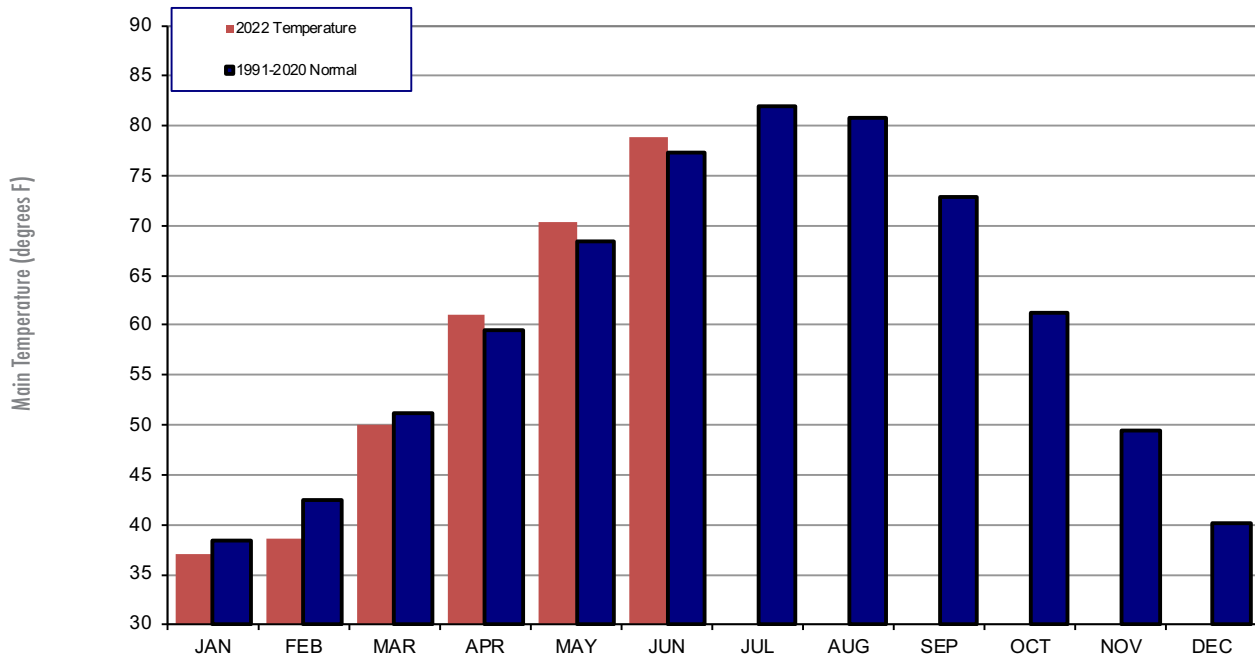
2022 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



June 2022 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Jun-21 (inches)
Panhandle	2.31	-0.65	49th Driest	7.09 (1962)	0.29 (1911)	2.02
North Central	2.92	-1.48	48th Driest	10.87 (2007)	0.40 (1933)	4.40
Northeast	3.56	-1.42	46th Driest	12.64 (2007)	0.28 (1933)	6.36
West Central	4.76	1.04	35th Wettest	8.90 (1962)	0.30 (1933)	5.17
Central	3.80	-0.88	64th Wettest	12.63 (2007)	0.41 (1933)	8.02
East Central	5.62	0.90	33rd Wettest	12.47 (1935)	0.69 (2011)	4.00
Southwest	3.68	-0.08	56th Wettest	9.96 (2007)	0.43 (1911)	6.35
South Central	3.55	-0.88	55th Driest	11.30 (1908)	0.25 (1933)	3.99
Southeast	4.17	-0.26	57th Wettest	11.51 (1935)	0.77 (1933)	4.33
Statewide	3.76	-0.50	63rd Driest	9.52 (2007)	0.44 (1933)	5.06

2022 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



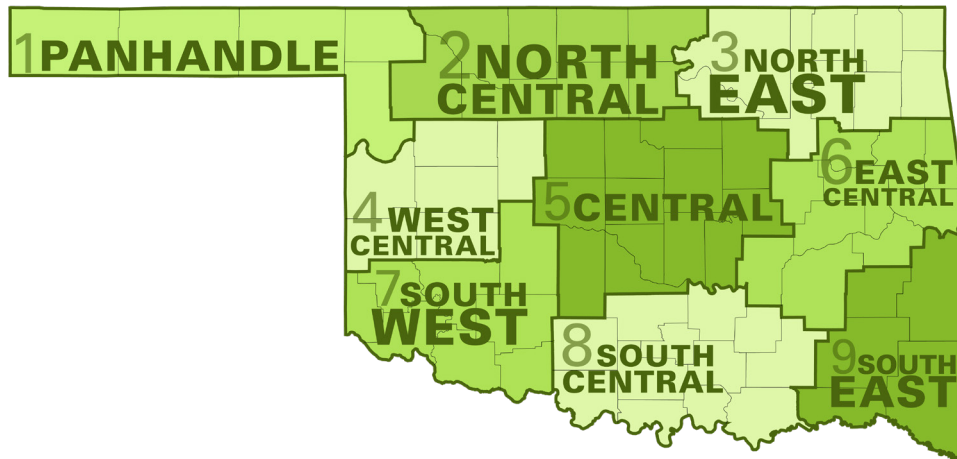
June 2022 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Jun-21 (F)
Panhandle	76.8	1.6	31st Warmest	82.9 (1953)	67.0 (1903)	76.1
North Central	79.3	1.9	25th Warmest	85.2 (1953)	69.1 (1903)	77.9
Northeast	77.6	1.1	40th Warmest	84.4 (1911)	70.3 (1903)	76.9
West Central	79.4	1.8	24th Warmest	85.7 (1953)	70.0 (1903)	77.8
Central	78.9	1.4	29th Warmest	85.2 (1911)	71.1 (1903)	77.3
East Central	77.9	0.8	42nd Warmest	84.5 (1953)	70.3 (1903)	77.2
Southwest	80.9	1.6	23rd Warmest	87.3 (2011)	72.4 (1903)	78.4
South Central	79.9	1.3	30th Warmest	85.7 (1911)	72.0 (1903)	77.8
Southeast	78.5	1.6	25th Warmest	83.5 (1953)	70.6 (1903)	77.5
Statewide	78.8	1.5	30th Warmest	84.8 (1953)	70.3 (1903)	77.4

MESONET EXTREMES FOR JUNE 2022

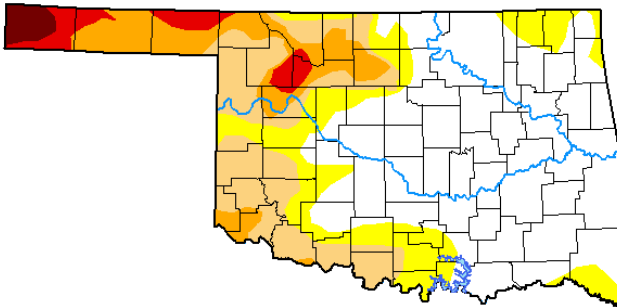
Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	108	12th	Beaver	48	28th	Eva	4.07	Eva	1.58	7th	Eva
North Central	107	24th	Cherokee	53	2nd	May Ranch	5.62	Medford	2.71	5th	May Ranch
Northeast	99	25th	Copan	53	3rd	Miami	5.31	Inola	2.84	10th	Inola
West Central	107	12th	Camargo	55	2nd	Cheyenne	9.36	Weatherford	4.34	1st	Weatherford
Central	105	25th	Kingfisher	56	4th	Oilton	5.39	Norman	1.93	10th	Bristow
East Central	102	25th	Webbers Falls	53	29th	Cookson	9.13	Webbers Falls	4.66	10th	Sallisaw
Southwest	110	12th	Altus	56	27th	Mangum	8.98	Hinton	4.27	7th	Hinton
South Central	104	25th	Ringling	56	29th	Burneyville	6.06	Centrahoma	2.64	7th	Centrahoma
Southeast	100	26th	Broken Bow	51	29th	Wister	5.78	Cloudy	1.74	2nd	Hugo
Statewide	110	12th	Altus	48	28th	Eva	9.36	Weatherford	4.66	10th	Sallisaw

Oklahoma Climate Divisions



U.S. Drought Monitor Oklahoma

June 28, 2022
(Released Thursday, Jun. 30, 2022)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	54.09	45.91	30.76	14.79	5.07	1.46
Last Week 06-21-2022	58.98	41.02	31.26	15.81	5.45	1.46
3 Months Ago 03-29-2022	13.76	86.24	76.49	63.34	33.90	8.32
Start of Calendar Year 01-04-2022	5.02	94.98	88.14	72.26	40.44	0.00
Start of Water Year 09-28-2021	6.45	93.55	73.23	23.72	2.65	0.00
One Year Ago 06-29-2021	84.11	15.89	1.77	0.24	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>

Author:

Curtis Riganti
National Drought Mitigation Center



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 differs 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

CLIMATE CALENDARS AND OTHER LOCAL WEATHER AND CLIMATE INFORMATION

Oklahoma Climatological Survey:

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



Oklahoma Climatological Survey is the State Climate Office for Oklahoma

Dr. Kevin Kloesel Director

Dr. Chris Fiebrich Associate Director

EDITOR

Gary D. McManus State Climatologist

CONTENT AND LAYOUT ASSISTANT

Andrea Dawn Melvin Outreach Program Manager, K20

For more information, contact:

Oklahoma Climatological Survey

The University of Oklahoma

120 David L. Boren Blvd., Suite 2900

Norman, OK 73072-7305

TEL: 405-325-2541

FAX: 405-325-7282

E-MAIL: ocs@ou.edu

WEBSITE: <http://climate.ok.gov>