

October's weather was highly variable, and a bit too exciting at times as is usually the case during this transition period from summer to winter. Temperatures ranged from the teens to the 90s and rainfall totals fluctuated from double-digits to less than a quarter-inch. Flurries in the Panhandle as early as Oct. 11 brought the state its first snow of the season, although the sleds remained stored in the attic. The last of several cold fronts during the month provided trick-or-treaters with a chilly and sometimes damp search for candy. Severe weather seemed to get the most emphatic exclamation point of the month, however. Turbulent weather on the 21st brought severe winds, large hail and at least five tornadoes according to preliminary numbers from the National Weather Service. Twisters are not particularly uncommon during October. From 1950 through 2016, it had the fifth highest tornado count of any month with 130, and stands as the most active fall month. It is more uncommon

to see widespread totals of 6-9 inches. Kenton measured a measly 0.16 inches, more than an inch below normal for that portion of the state. Twenty-nine of the Mesonet's 120 stations recorded at least 5 inches of rain, and another 20 had at least 4 inches. Deficits of 1-3 inches were evident across northwestern and southern Oklahoma. The year was still on pace to finish significantly wet with a statewide average of 37.09 inches, 5.16 inches above normal to rank as the 12th wettest January-October since 1895.

Temperatures went on a roller coaster ride during October with wild swings between storm systems and fronts. Those extreme temperature variations were epitomized on Oct. 9 during the passage of a strong cold front. At one point that afternoon, the wind chill was 29 degrees in Boise City and the heat index was 97 degrees in Durant. The Mesonet's actual air temperatures during October ranged from 94

October 2017 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	94°F	Idabel, Valliant	9
Low Temperature	18°F	Buffalo	28
High Precipitation	10.95 in.	Pawnee	--
Low Precipitation	0.16 in.	Kenton	--

to have a tornado strike a venue where The Beach Boys are performing, however. An EF1 tornado touched down on the east side of Newcastle and moved along State Highway 9 into the Norman area, striking the site of the concert at the Riverwind Casino. Minor damage was reported at the facility, and no injuries were noted. Another EF1 tornado moved through the northwest outskirts of Seminole, damaging homes and businesses. An additional three tornadoes were being investigated in southwest Oklahoma. The preliminary count for the year rose to 81 tornadoes, well above the 1950-2016 annual average of 56.

According to preliminary data from the Oklahoma Mesonet, the statewide average precipitation total finished at 3.43 inches, 0.11 inches below normal to rank as the 42nd wettest October since records began in 1895. Pawnee led the Mesonet with 10.95 inches for the month, more than 7 inches above normal. That surrounding area in the northeast

October 2017 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2017)
Month (October)	61.6°F	0.7°F	58th Coolest
Season-to-Date (Sep-Oct)	67.3°F	0.8°F	59th Warmest
Year-to-Date (Jan-Oct)	64.7°F	1.6°F	18th Warmest

Precipitation

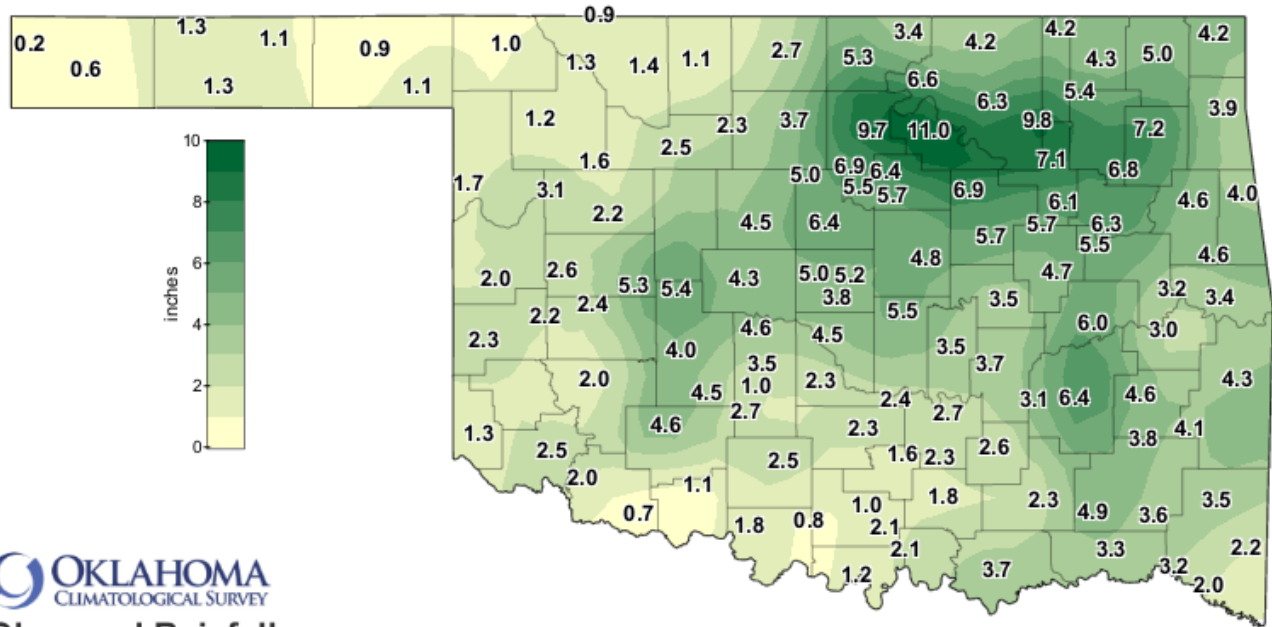
	Total	Depart.	Rank (1895-2017)
Month (October)	3.43 in.	-0.11 in.	42nd Wettest
Season-to-Date (Sep-Oct)	5.97 in.	-1.10 in.	61st Driest
Year-to-Date (Jan-Oct)	37.09 in.	-5.16 in.	12th Wettest

Depart. = departure from 30-year normal

degrees at Idabel and Valliant to 18 degrees at Buffalo on the 28th. The season's first freeze occurred on Oct. 10 in the far northwest. Most of the state had experienced a hard freeze (at or below 28 degrees) by the end of the month. The statewide average for October finished 0.7 degrees above normal at 61.6 degrees, although that ranked as the 57th coolest on record. The year remained on the warm side with

a January-October statewide average of 64.7 degrees, 1.6 degrees above normal and the 18th warmest such period on record.

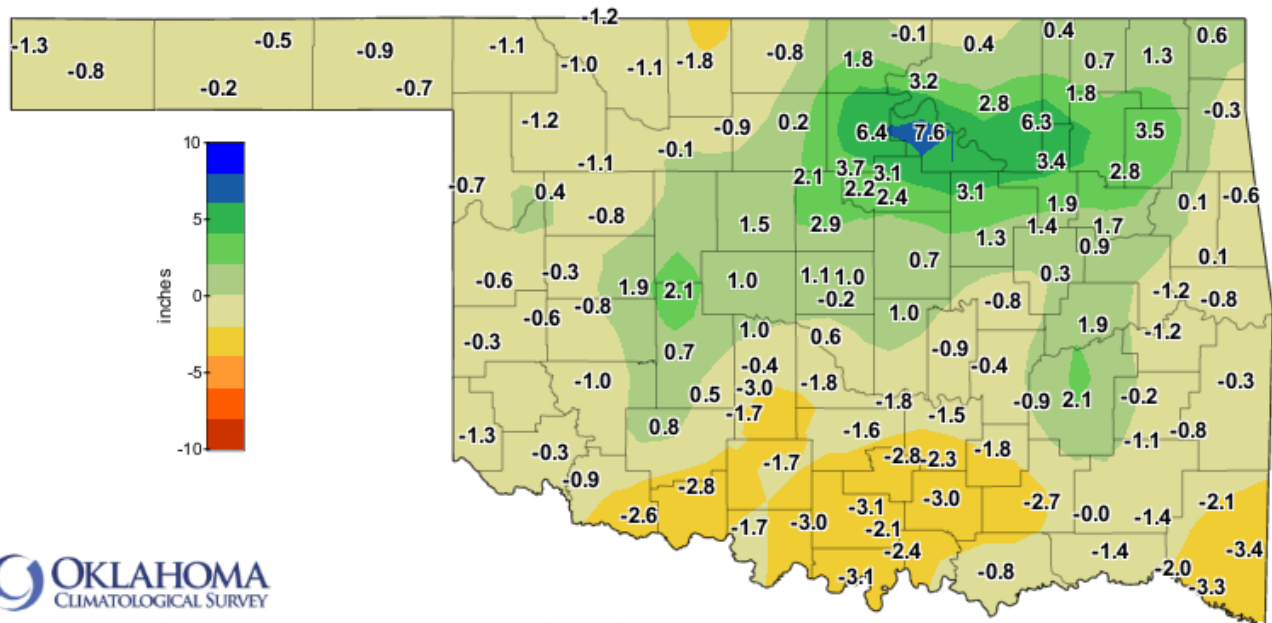
OCTOBER 2017 OBSERVED PRECIPITATION



OKLAHOMA
CLIMATOLOGICAL SURVEY
Observed Rainfall
Current Month

Oct 01, 2017 through Oct 31, 2017
Created 12:01:30 PM November 1, 2017 UTC. © Copyright 2017

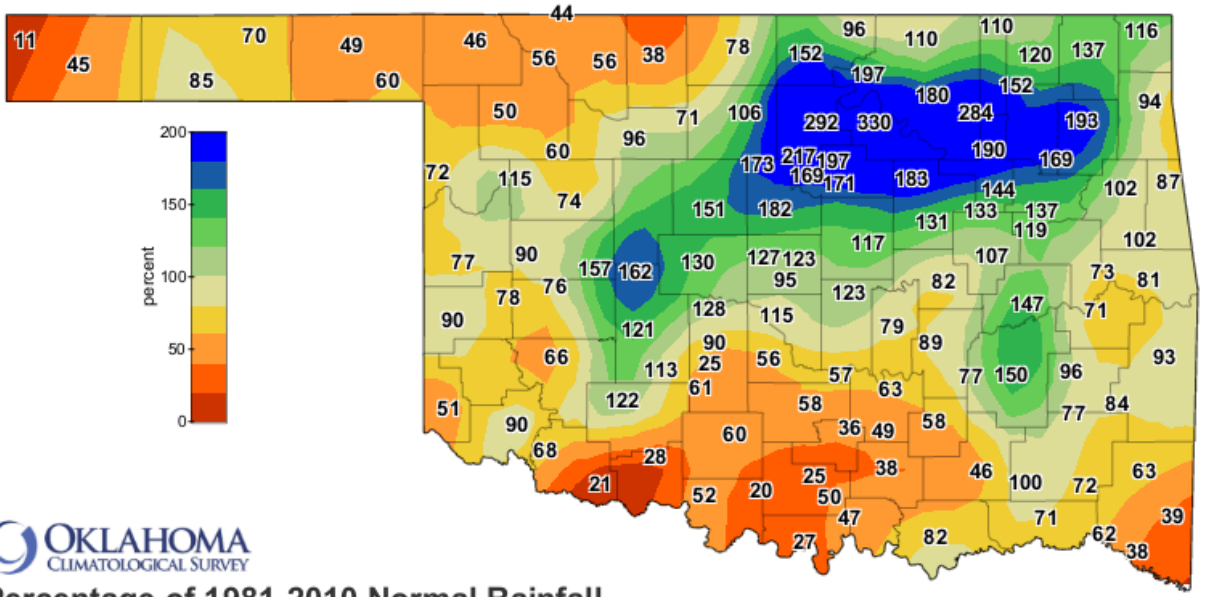
OCTOBER 2017 DEPARTURE FROM NORMAL PRECIPITATION



OKLAHOMA
CLIMATOLOGICAL SURVEY
Departure from 1981-2010 Normal Rainfall
Current Month

Oct 01, 2017 through Oct 31, 2017
Created 12:01:30 PM November 1, 2017 UTC. © Copyright 2017

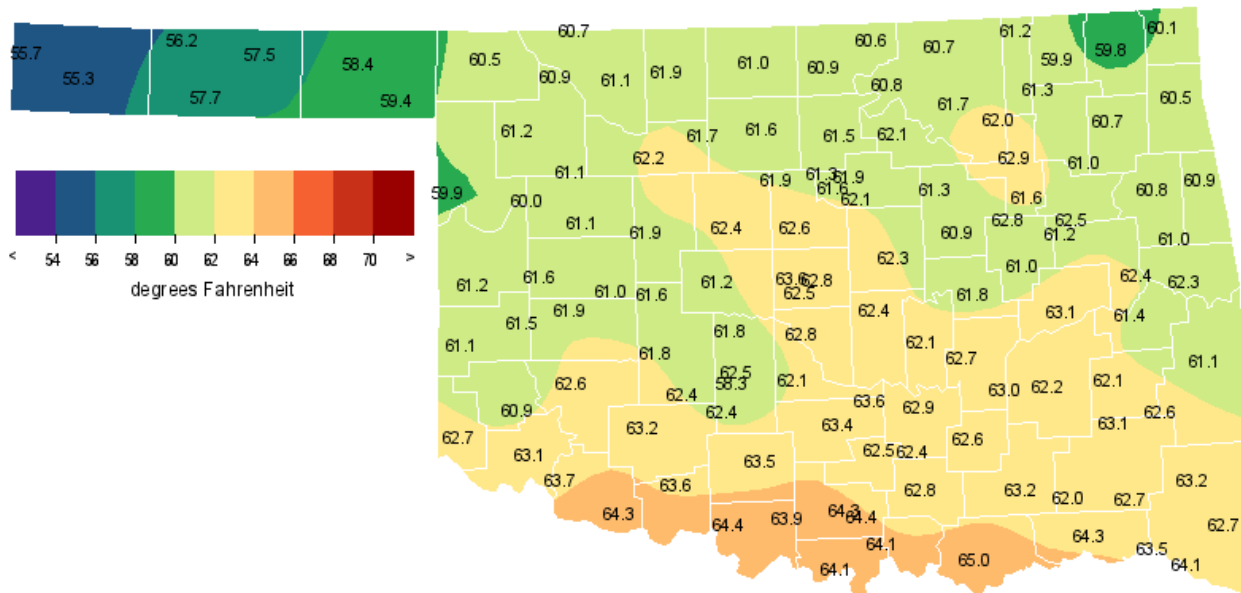
OCTOBER 2017 PERCENT OF NORMAL PRECIPITATION



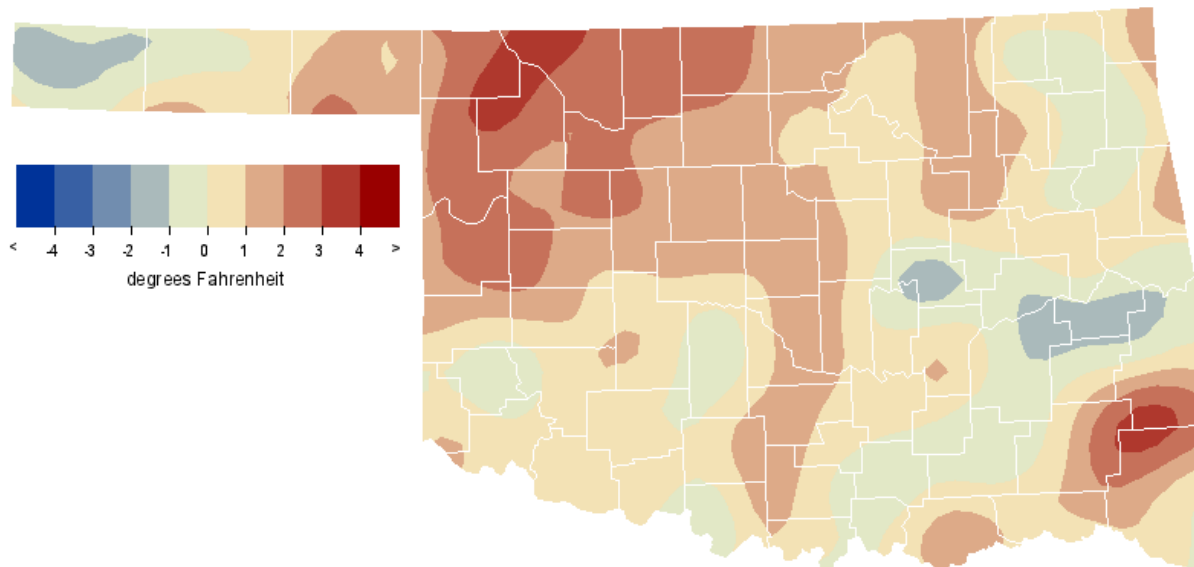
Percentage of 1981-2010 Normal Rainfall
Current Month

Oct 01, 2017 through Oct 31, 2017
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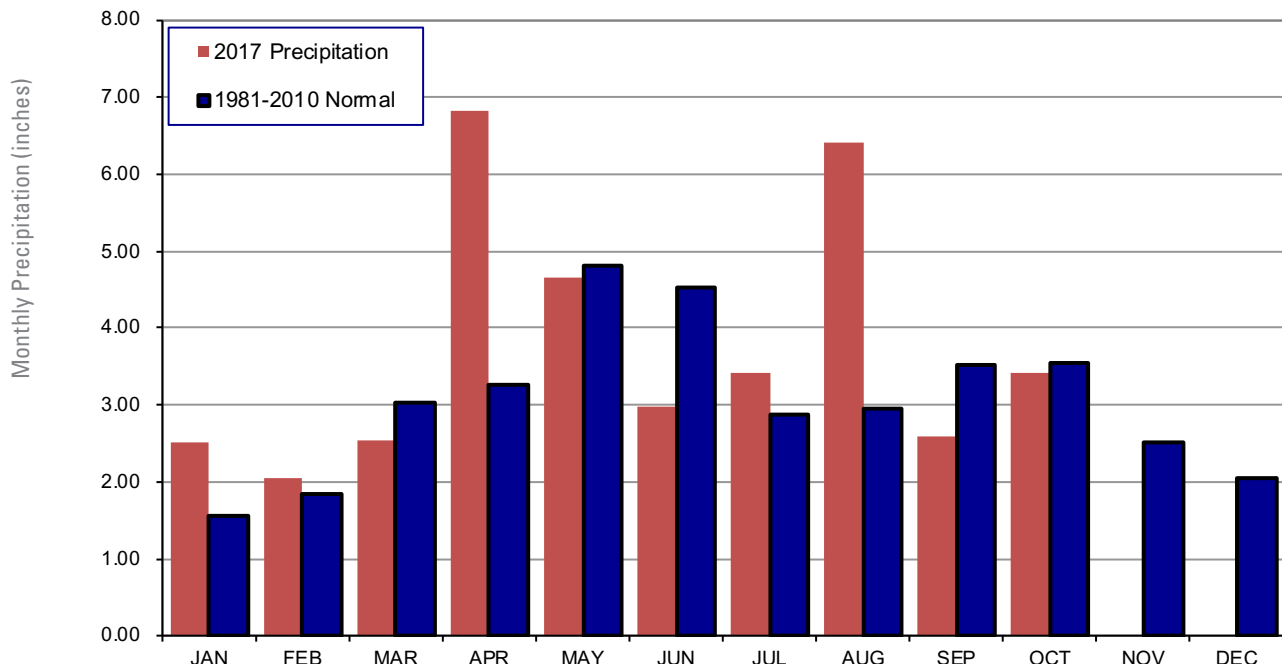
OCTOBER 2017 AVERAGE TEMPERATURE



OCTOBER 2017 DEPARTURE FROM NORMAL TEMPERATURE



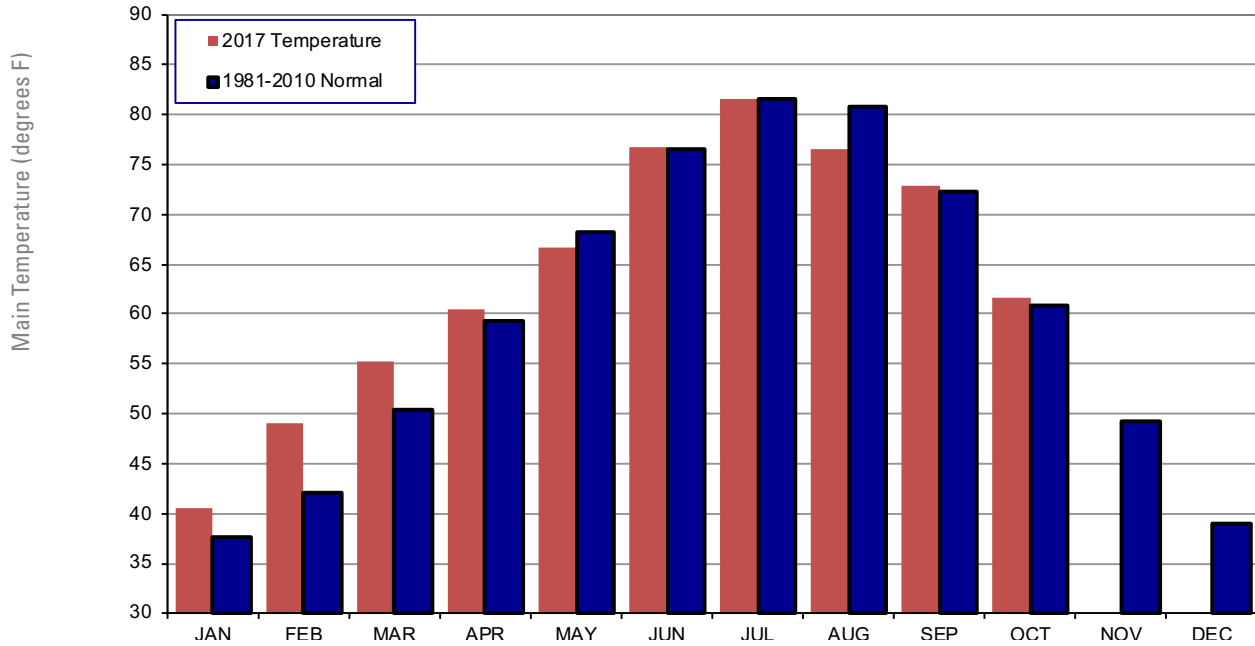
2017 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



October 2017 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Oct-16 (inches)
Panhandle	1.02	-0.68	57th Driest	6.84 (1923)	0.03 (2001)	0.26
North Central	2.85	-0.06	38th Wettest	8.97 (1998)	0.00 (1952)	2.27
Northeast	6.14	2.36	15th Wettest	14.98 (1941)	0.05 (1952)	4.86
West Central	2.76	0.00	36th Wettest	9.57 (1923)	0.00 (1952)	0.67
Central	4.66	0.91	25th Wettest	13.34 (1941)	0.03 (1952)	1.49
East Central	4.44	0.00	44th Wettest	14.00 (1941)	0.15 (1963)	2.81
Southwest	2.80	-0.35	44th Wettest	11.03 (1983)	0.00 (1952)	0.94
South Central	2.07	-2.30	42nd Driest	14.83 (1981)	0.09 (1921)	1.95
Southeast	3.58	-1.38	61st Wettest	12.89 (1984)	0.20 (1924)	1.04
Statewide	3.43	-0.11	42nd Wettest	10.75 (1941)	0.14 (1952)	1.87

2017 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



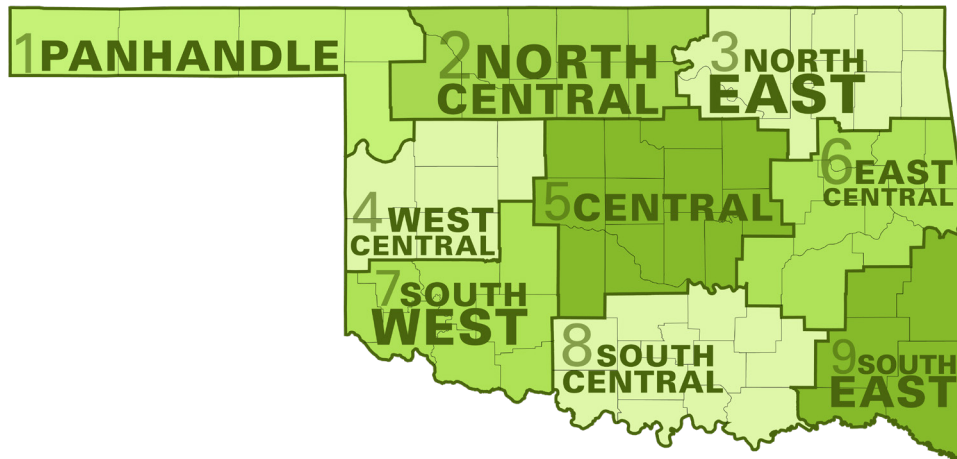
October 2017 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Oct-16 (F)
Panhandle	57.8	0.4	55th Coolest	65.9 (1963)	50.1 (1925)	63.8
North Central	61.3	1.6	44th Warmest	68.9 (1963)	51.6 (1925)	65.6
Northeast	61.2	1.0	60th Warmest	70.2 (1963)	53.9 (1925)	66.3
West Central	61.3	1.0	57th Warmest	68.5 (1963)	52.1 (1925)	65.9
Central	61.9	0.5	55th Coolest	70.2 (1963)	55.0 (2009)	67.7
East Central	61.9	0.2	51st Coolest	70.9 (1963)	55.5 (1976)	68.2
Southwest	62.7	0.2	54th Coolest	70.2 (1963)	55.4 (1925)	68.0
South Central	63.6	0.3	53rd Coolest	71.0 (1963)	56.8 (1976)	68.7
Southeast	62.9	0.9	58th Warmest	69.8 (1963)	55.3 (1976)	68.3
Statewide	61.6	0.7	58th Coolest	69.5 (1963)	54.6 (1925)	66.9

MESONET EXTREMES FOR OCTOBER 2017

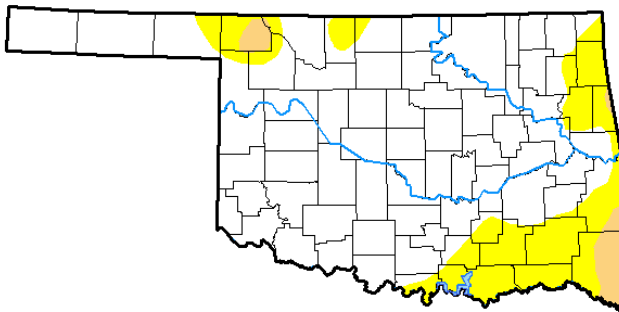
Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	91	14th	Beaver	18	28th	Buffalo	1.72	Arnett	1.07	5th	Arnett
North Central	92	14th	Fairview	19	28th	Alva	9.72	Red Rock	6.93	4th	Red Rock
Northeast	90	9th	Porter	23	28th	Vinita	10.95	Pawnee	7.72	4th	Pawnee
West Central	89	14th	Butler	20	28th	Camargo	5.33	Weatherford	2.52	4th	Weatherford
Central	91	14th	Perkins	22	28th	Acme	6.93	Lake Carl Blackwell	4.15	4th	Lake Carl Blackwell
East Central	92	9th	Webbers Falls	23	28th	Cookson	6.43	McAlester	2.81	4th	Hectorville
Southwest	92	14th	Mangum	24	28th	Mangum	5.39	Hinton	3.57	4th	Hinton
South Central	93	9th	Lane	22	28th	Burneyville	3.72	Durant	1.40	21st	Durant
Southeast	94	9th	Valliant	23	29th	Talihina	4.91	Antlers	2.08	22nd	Valliant
Statewide	94	9th	Valliant	18	28th	Buffalo	10.95	Pawnee	7.72	4th	Pawnee

Oklahoma Climate Divisions



U.S. Drought Monitor Oklahoma

October 24, 2017
(Released Thursday, Oct. 26, 2017)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	79.57	20.43	2.75	0.00	0.00	0.00
Last Week <small>10-17-2017</small>	70.28	29.72	11.57	0.00	0.00	0.00
3 Months Ago <small>07-25-2017</small>	47.74	52.26	16.15	3.99	0.00	0.00
Start of Calendar Year <small>01-03-2017</small>	5.61	94.39	83.21	55.75	5.55	0.00
Start of Water Year <small>09-26-2017</small>	64.46	35.54	0.77	0.00	0.00	0.00
One Year Ago <small>10-25-2016</small>	47.43	52.57	25.04	4.26	0.00	0.00

Intensity:

- 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. See accompanying text summary for forecast statements.

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U.S. Department of Agriculture



<http://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

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

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