

One weekend of heavy rain brightened the fortunes of some Oklahomans during October while others continued on in the embrace of significant drought. Eastern Oklahoma, especially the far northeast corner, came out the big winner in the moisture sweepstakes. Those across the western half of the state, particularly southwest Oklahoma, were not so lucky. According to preliminary data from the Oklahoma Mesonet, the statewide average rainfall total for the month was 3.42 inches, just a tad above normal and the 41st wettest October since records began in 1895. Punctuating the stark difference in fortunes along the southwest-to-northeast diagonal of the state, northeastern Oklahoma saw widespread totals of 5-9 inches, but much of southwestern Oklahoma received less than an inch. Northeast Oklahoma recorded an average of 5.99 inches, nearly 2.5 inches above normal and the 16th wettest October on record for that area. Meanwhile, southwest Oklahoma garnered a measly 1.34 inches, more than 1.5 inches below normal and the 39th driest on record. The Mesonet site at Oilton led the state with 9.04 inches while Mangum recorded a paltry 0.57 inches. The near normal totals of October kept the year-to-date statewide average in firm deficit mode at 25.07 inches, 6.78 inches below normal to rank as the 26th driest January-October on record. Southwest Oklahoma stands out in that time frame with an average of 18.32 inches, 9.37 inches below normal to rank as the 17th driest.

October 2014 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	99°F	Multiple	7
Low Temperature	23°F	Oilton	31
High Precipitation	9.04 in.	Vinita	
Low Precipitation	0.57 in.	Mangum	

Unlike precipitation, temperature had no intention of finishing near normal during October. The statewide average temperature, as determined by the Mesonet, was 64.1 degrees, 2.8 degrees above normal to rank as the 20th warmest on record. The month's highest reading from the Mesonet was 99 degrees from several sites on October 7, although 90s were recorded as late as the 27th. The lowest

reading of 23 degrees was reported at Oilton on the month's final day. Combined with a somewhat warm September, the average for the first two months of climatological fall was 68.6 degrees, good for the 27th warmest such period on record. The year-to-date average of 62.1 degrees remained 0.7 degrees below normal and ranked as the 28th coolest January-October since 1895.

October 2014 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2014)
Month (October)	64.1°F	3.2°F	20th Warmest
Season-to-Date (Sept-Oct)	68.6°F	2.1°F	27th Warmest
Year-to-Date (Jan-Oct)	62.1°F	-1.0°F	28th Coolest

Precipitation

	Total	Depart.	Rank (1895-2014)
Month (October)	3.40 in.	-0.14 in.	41st Wettest
Season-to-Date (Sept-Oct)	5.90 in.	-1.17 in.	59th Driest
Year-to-Date (Jan-Oct)	25.10 in.	-6.83 in.	26th Driest

Depart. = departure from 30-year normal

The warm weather was a disappointment to those hoping drought would begin to taper during what is considered the beginning of Oklahoma's cool season and secondary rainy season. Daytime highs in the 80s and even 90s at times kept pressure on the soils and reservoirs in the areas impacted by significant drought. Owing to the uneven precipitation pattern of October, the U.S. Drought Monitor showed an overall decrease in drought from 73 percent to 64 percent, but an increase in extreme-exceptional drought – the two worst categories – from 21 percent to 23 percent. Nearly the entire eastern half of the state was drought free, although some moderate drought was noted to the east of I-35 in northern and southern Oklahoma. The majority of southwestern Oklahoma remained in extreme or exceptional drought. One year ago, only 27 percent of the state was considered to be in drought according to the Drought Monitor.

OCTOBER 2014 DAILY SUMMARIES

OCTOBER 1-3: Maximum temperatures were warm around the state until an upper-level low and cold front moved into the region. Temperatures fell as showers and thunderstorms developed over northern Oklahoma. The storms moved south over central and southern OK as the front pushed its way through the state. The hottest temperatures in the state dropped from 97 degrees in Mangum, Grady, and Hobart on the 1st to 78 degrees in Idabel on the 3rd. The coolest highs dropped nearly 20 degrees from 78 degrees in Kenton to 59 degrees in Miami. Minimum temperatures were between 45-73 degrees on the 1st, 42-64 degrees on the 2nd, and 36-51 degrees on the 3rd. The highest rainfall amounts were between half an inch and .81 inches (Copan) on the 1st. By the 2nd, storms became severe with wind gusts measuring 83mph in Webbers Falls, 70mph in Poteau, and a hail report of 3 inches in Tahlequah. The highest rainfall amounts were around two inches with a maximum of 2.46 inches in Eufaula. Maximum daily average wind speeds were roughly 15mph during this period.

OCTOBER 4-7: Temperatures rebounded following the cold front with highs climbing from a range of 65-83 degrees to a range of 84-99 degrees. The highest minimums were in the 50s and 60s and the lowest minimums were primarily in the 30s. The coolest Mesonet reading during this four-day stretch was 32 degrees in Blackwell on the 4th. Precipitation fell on the 6th and 7th as a line of storms moved southeast through eastern Oklahoma. Some storms became severe with Mesonet gusts in the 40s and an EF-1 tornado in Le Flore County on the 6th. Central OK generally received a quarter of an inch to .71 inches (Chandler) of rain on Sunday and one-third to 1.93 inches (Newport) in south-central and southeast OK on Monday. Daily average wind speeds were mild, measuring less than 10mph.

OCTOBER 8-11: Following a brief warm-up, another cold front moved into the region and stalled over the northern third of OK. As the days passed, additional cold fronts as well as a stationary front visited the state. The highest temperatures recorded decreased from 95 degrees in Putnam on the 8th to 93 degrees, 92 degrees, and 67 degrees each consecutive day. In a similar manner, the lowest maximum temperatures decreased from 78 degrees to 67 degrees, 55 degrees, and 53 degrees each day. The highest minimums dropped from the low 70s to the mid-50s and the lowest minimums were generally in the 40s. Although rainfall amounts measured less than one-tenth of an inch on the 8th, heavy rain fell from the 9th-10th. Daily maximum precipitation amounts were 2.35 inches on the 9th, 4.49 inches on the 10th, and 1.53 inches on the 11th. McAlester broke a daily rainfall record of 2.54 inches and flooding was reported in Langley, Pryor, Vinita, and Miami on the 10th. Average wind speeds were less than 15mph each day except on Friday when the highest average wind speed was measured at 18.4mph.

Daily wind gusts hit as high as 56mph in Cheyenne on the 9th and 65mph in Idabel on the 10th.

OCTOBER 12-13: Throughout the day on the 12th, cloudiness gradually increased and seasonable temperatures returned to the area. Later in the day, isolated showers, storms, and a cold front moved in from the west. The heaviest precipitation was in western and south-central Oklahoma on the 12th and southeast Oklahoma on the 13th. By the afternoon of the 13th, the rain in north-central and central OK turned into drizzle. Rainfall amounts were as high as 2.69 inches in Burneyville (Oct. 12) and 3.12 inches in Wilburton (Oct. 13). Highs were between 59-87 degrees and lows were between 38-56 degrees on the 12th. On the 13th, highs were between 58-74 degrees and lows were between 40-58 degrees. Storms became severe on Sunday with wind gusts over 70mph in Altus, Tipton, Hydro, and Temple. Otherwise, average wind speeds were less than 19mph on the 12th and less than a breezy 26mph on the 13th.

OCTOBER 14-16: Thanks to upper level ridging, Oklahoma finally got a break from rain and thunderstorms. Maximum temperatures were on the upswing with the maximum temperature range increasing from 67-80 degrees on the 14th to 78-95 degrees on the 16th. Lows were generally between the 30s and 50s. Average wind speeds were 5-16mph on the 14th, less than 14mph on the 15th, and less than 12mph on the 16th.

OCTOBER 17-18: As a cold front moved in through southern Oklahoma, the highest maximum temperature recorded dropped from 84 degrees in Waurika on the 17th to 77 degrees in Burneyville, Waurika, and Grandfield the following day. The lowest maximum fell from 65 degrees in Kenton to 58 degrees in Boise City. Lows ranged from 39 degrees in Kenton to 62 degrees in Medicine Park. Since the cold front was a dry front, there was no measurable rainfall in the state except for a trace of .07 inches in Boise City on the 18th. Daily average wind speeds were less than 16mph on the 17th and less than 12mph on the 18th.

OCTOBER 19: The 19th was another rain-free day with highs between 68 degrees in Westville, Jay, and Cookson, and 80 degrees in Beaver and Hollis. Lows varied between 39 degrees in Nowata and 56 degrees in Grandfield. Average wind speeds were less than 14mph.

OCTOBER 20-22: A weak frontal boundary moved in from the west on the 20th. Dense fog formed over south-central OK on the morning of the 21st and the central one-third of the state on the morning of the 22nd. Scattered showers and thunderstorms developed over northeast OK on the 20th and then over southwest and central OK on the 22nd. Rainfall amounts were generally between a quarter to 1.02 inches in Inola on Monday and a quarter and .59 inches in Hollis on Wednesday. The highest temperatures dropped

from 86 degrees in Mangum to 81 degrees in Waurika and Burneyville throughout this period. The coolest highs were 71 degrees (Westville) on the 20th, 75 degrees (Boise City and Kenton) on the 21st, and 66 degrees (Cheyenne) on the 22nd. Lows were primarily in the 40s and 50s. The highest average wind speeds increased slightly each day with the highest speeds measuring 10mph on Monday, 12mph on Tuesday, and 15mph on Wednesday.

OCTOBER 23-26: Despite lingering showers in the east on the 23rd, this four-day period was fairly dry. The most precipitation measured was .49 inches in Okemah on Thursday. Then, as skies cleared, temperatures warmed. The highest maximum temperature increased from 83 degrees in Grandfield on the 23rd to 93 degrees in Mangum on the 26th. The lowest maximums showed more substantial heating with an increase from 61 degrees at Tahlequah to 82 degrees at Mt. Herman. Lows ranged from the 40s to the 60s. Oklahoma City and McAlester broke their daily high temperature records on the 25th at 92 and 88 degrees, respectively. Fog was an issue in southwest OK on the morning of the 23rd, in western OK on the morning of the 24th, and in north-central OK on the morning of 25th. Average wind speeds were less than 10mph from the 23rd to the 25th and less than 20mph on the 26th. A 46mph wind gust from Red Rock accompanied the breezy average winds on Sunday.

OCTOBER 27-29: A strong southward moving cold front entered northwest Oklahoma on the 27th, causing showers and thunderstorms in eastern OK as well as light snow over central OK. The highest recorded precipitation amounts were .48 inches in Chandler on Monday and .38 inches in Broken Bow on Tuesday. By the 29th, precipitation had cleared out. The warmest maximum temperatures plummeted from 91 degrees in Mangum on the 27th to 77 degrees in Waurika on the 29th. The coolest maximum temperatures fluctuated between 62 and 68 degrees. The highest minimums in the state dropped from 67 degrees in Wister, Bixby, and Hectorville, to 51 degrees in Medicine Park within this three-day period. The lowest minimums each day were 38 degrees in Boise City on the 27th, 34 degrees in Boise City and Kenton on the 28th, and 31 degrees in Beaver on the 29th. Average wind speeds died down as the days passed, measuring less than 17mph on the 27th, less than 14mph on the 28th, and less than 11mph on the 29th.

OCTOBER 30-31: Although temperatures were slightly warmer on the 30th, another cold front made for a chilly Halloween. Highs ranged from 67 (Boise City and Kenton) to 81 degrees (Grandfield) on the 30th and from 51 degrees (Vinita) to 63 degrees (south and southeast OK) on the 31st. Lows were between 34 and 54 degrees on the 30th and 23 and 43 degrees on Halloween. Rainfall was negligible and the highest daily average wind speeds were 13mph and 15mph on Thursday and Friday, respectively.

OCTOBER 2014 SEVERE WEATHER

Hail (2 inches in diameter or greater)

Size (in.)	Location	County	Day
3	Tahlequah	Cherokee	2

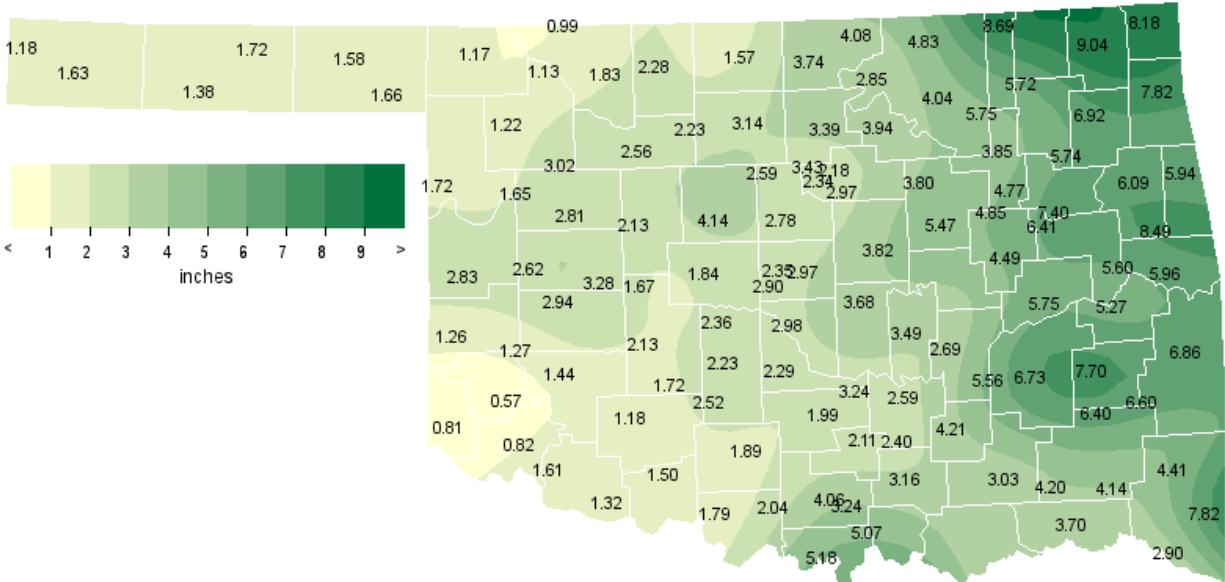
Wind Gusts (70 mph or greater)

Speed (m.p.h)	Location	County	Day
83	Webbers Falls	Muskogee	2
70	Poteau	Le Flore	2
76	Altus	Jackson	12
75	Altus Air Force Base	Jackson	12
76	Tipton	Tillman	12
80	Hydro	Caddo	12
70	Temple	Cotton	12

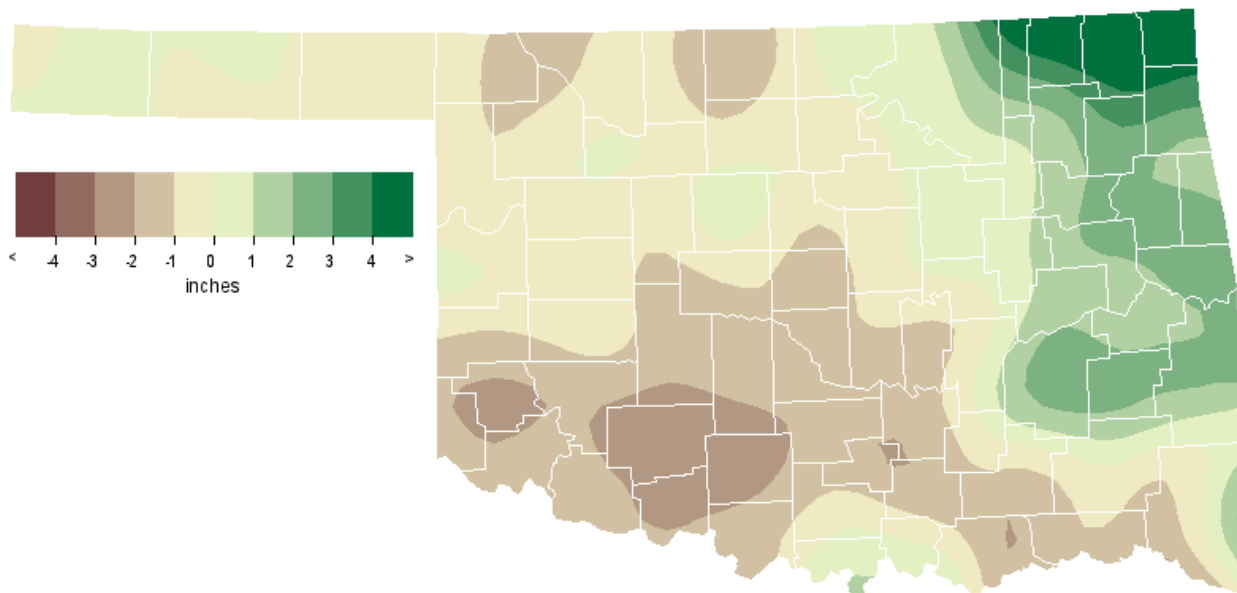
Flooding

Location	County	Day
Langley	Mayes	10
Pryor	Mayes	10
Vinita	Craig	10
Miami	Ottawa	10

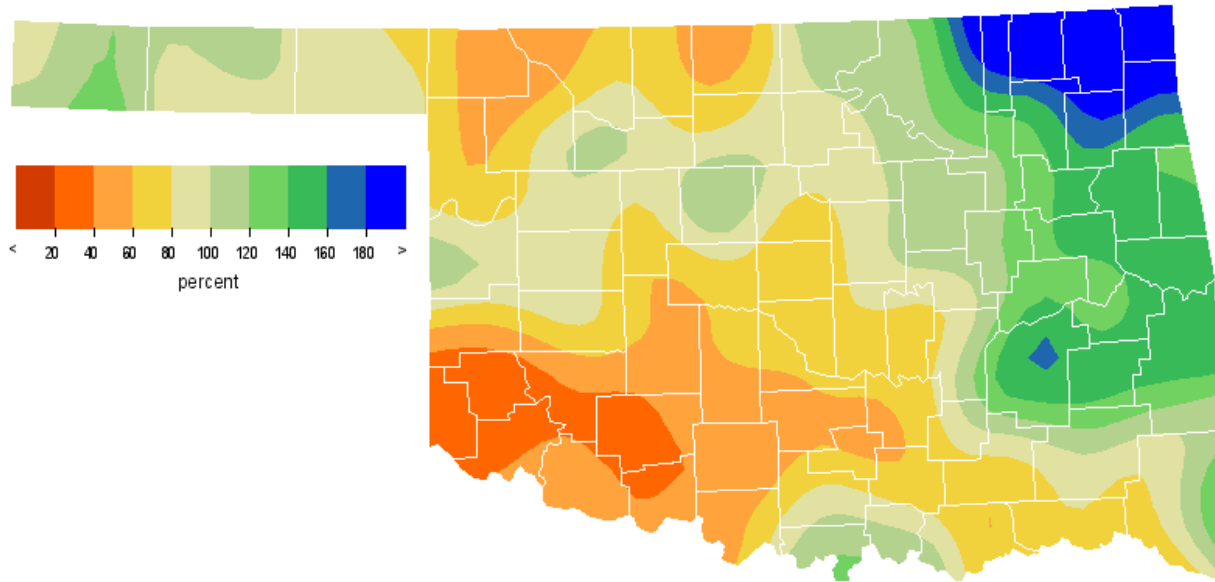
OCTOBER 2014 OBSERVED PRECIPITATION



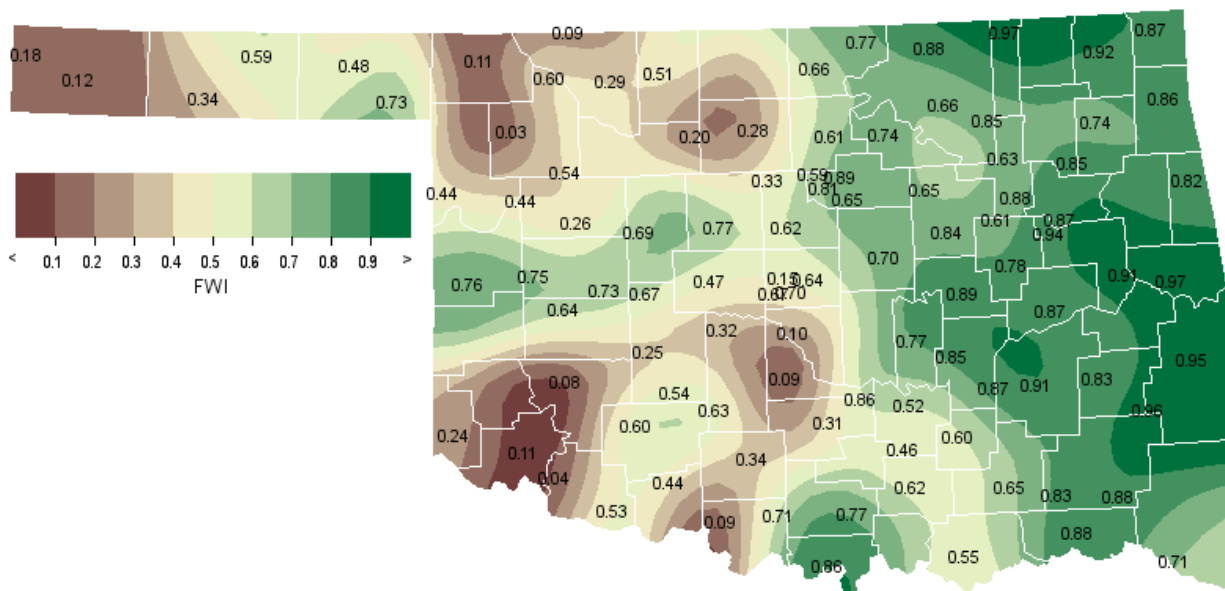
OCTOBER 2014 DEPARTURE FROM NORMAL PRECIPITATION



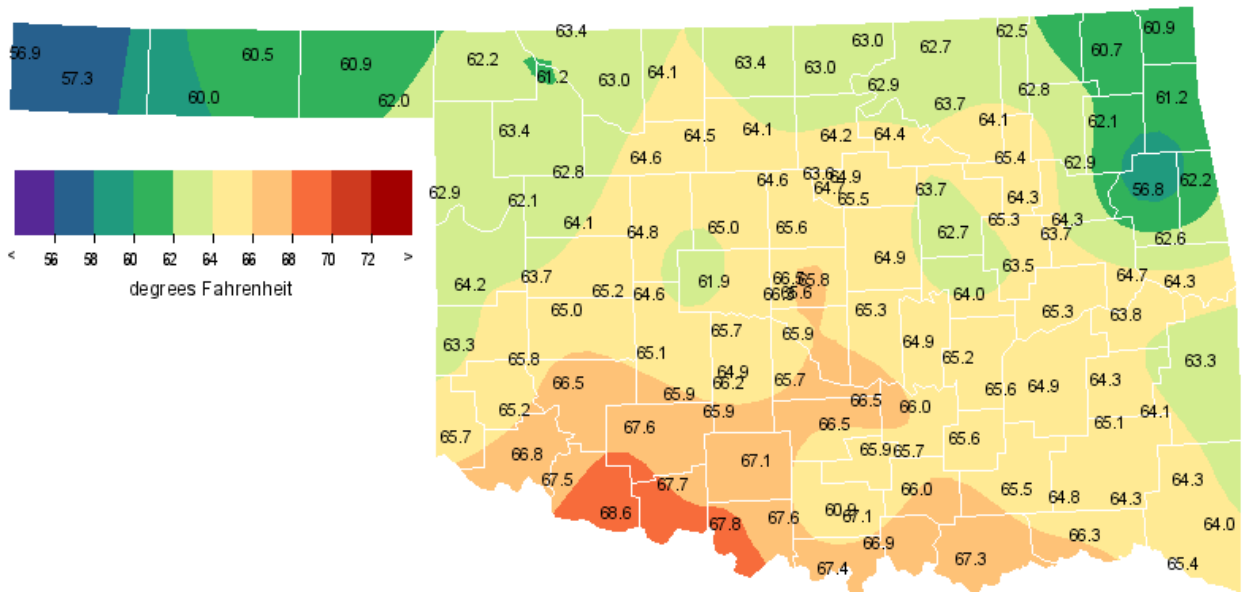
OCTOBER 2014 PERCENT OF NORMAL PRECIPITATION



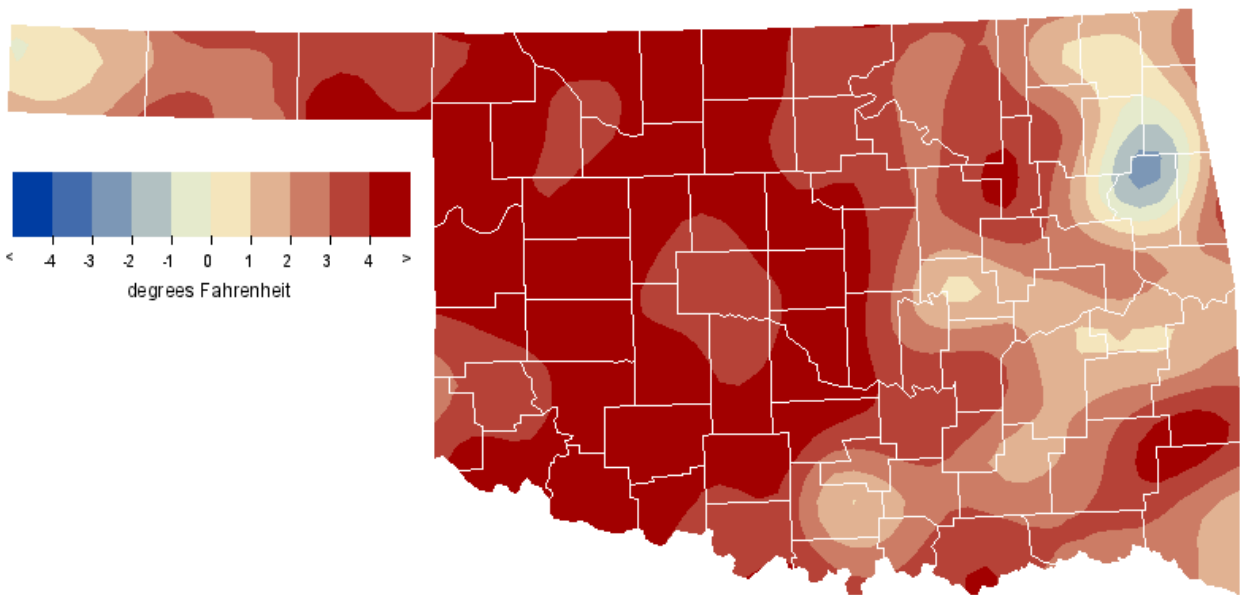
OCTOBER 2014 AVERAGE SOIL MOISTURE AT 25CM



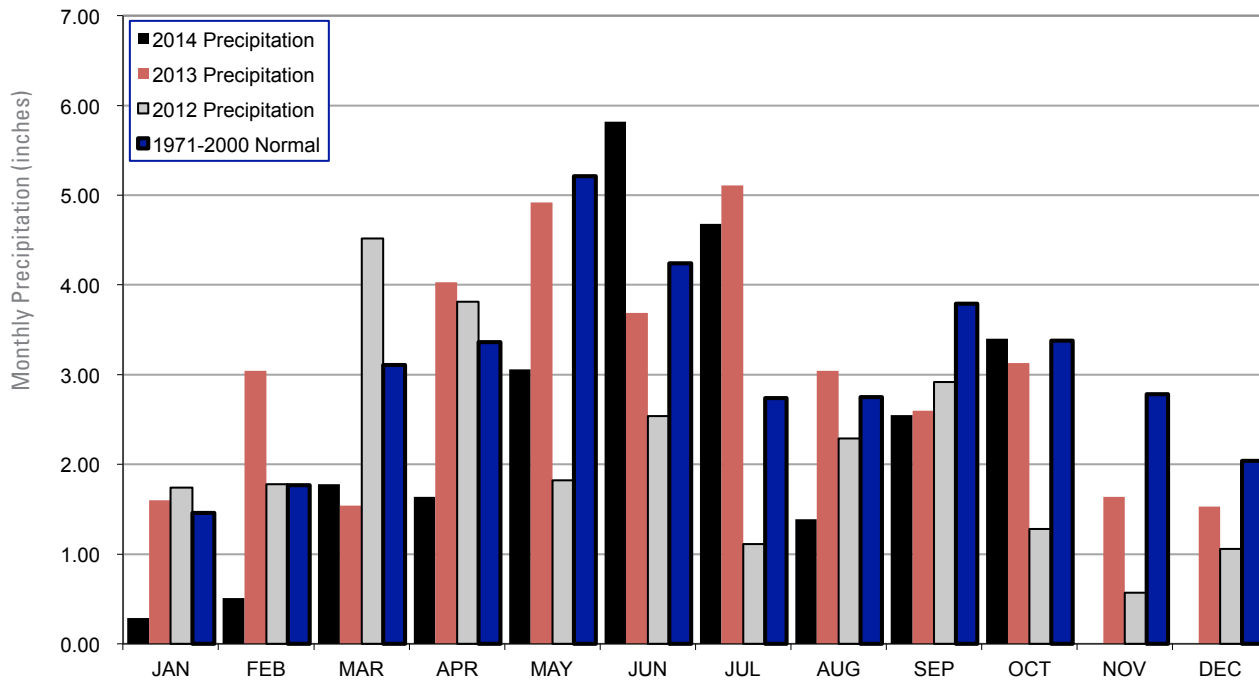
OCTOBER 2014 AVERAGE TEMPERATURE



OCTOBER 2014 DEPARTURE FROM NORMAL TEMPERATURE



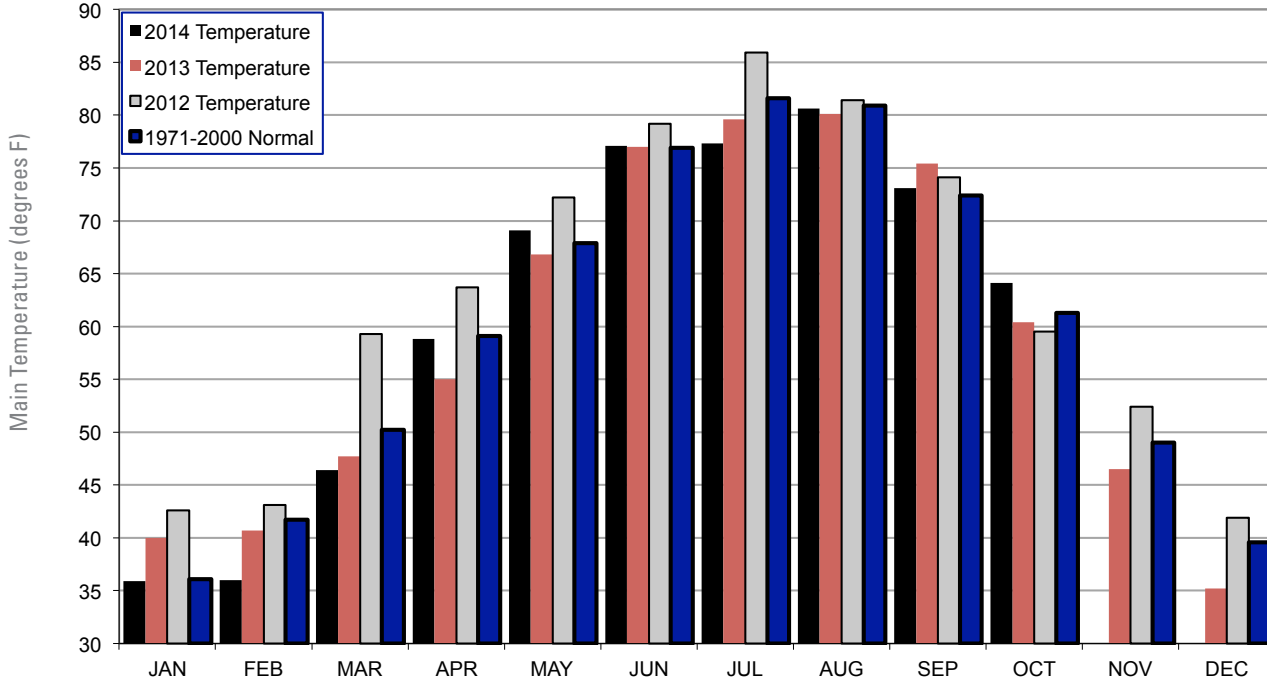
2012, 2013 AND 2014 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



October 2014 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	
Panhandle	1.51	-0.19	47th Wettest	6.84 (1923)	0.03 (2001)	0.72
North Central	2.40	-0.51	50th Wettest	8.97 (1998)	0.00 (1952)	1.95
Northeast	5.97	2.19	16th Wettest	14.98 (1941)	0.05 (1952)	4.04
West Central	2.31	-0.45	49th Wettest	9.57 (1923)	0.00 (1952)	1.52
Central	3.01	-0.74	50th Wettest	13.34 (1941)	0.03 (1952)	3.16
East Central	5.68	1.24	26th Wettest	14.00 (1941)	0.15 (1963)	4.72
Southwest	1.34	-1.81	39th Driest	11.03 (1983)	0.00 (1952)	1.71
South Central	3.07	-1.30	59th Driest	14.83 (1981)	0.09 (1921)	3.89
Southeast	5.47	0.51	33rd Wettest	12.89 (1984)	0.20 (1924)	6.25
Statewide	3.40	-0.14	41st Wettest	10.75 (1941)	0.14 (1952)	3.09

2012, 2013 AND 2014 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



October 2014 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	
Panhandle	60.3	2.9	17th Warmest	65.9 (1963)	50.1 (1925)	56.4
North Central	63.4	3.7	14th Warmest	68.9 (1963)	51.6 (1925)	58.7
Northeast	63.0	2.8	32nd Warmest	70.2 (1963)	53.9 (1925)	59.3
West Central	64.2	3.9	13th Warmest	68.5 (1963)	52.1 (1925)	59.7
Central	65.0	3.6	18th Warmest	70.2 (1963)	55.0 (2009)	61.1
East Central	63.7	2.0	37th Warmest	70.9 (1963)	55.5 (1976)	61.1
Southwest	66.5	4.0	8th Warmest	70.2 (1963)	55.4 (1925)	62.8
South Central	66.2	2.9	23rd Warmest	71.0 (1963)	56.8 (1976)	63.0
Southeast	64.6	2.6	32nd Warmest	69.8 (1963)	55.3 (1976)	62.0
Statewide	64.1	3.2	20th Warmest	69.5 (1963)	54.6 (1925)	60.4

RECORD EVENT REPORTS OCTOBER 2014

Description	Day	Location	Record	Previous Record	Year
Daily rainfall	10	McAlester	2.54	2.49	2004
Daily high temperature	25	Oklahoma City	92	87	1939
Daily high temperature	25	McAlester	88	86	1963

MESONET EXTREMES FOR OCTOBER 2014

Climate Division	High Temp (F)			Low Temp (F)			High Monthly Rainfall (inches)		High Daily Rainfall (inches)		
	Day	Station	Day	Day	Station	Station	Day	Station			
Panhandle	95	7th	Arnett	27	31st	Kenton	1.72	Arnett	1.23	9th	Goodwell
North Central	96	1st	Lahoma	28	31st		4.08	Newkirk	1.65	13th	Fairview
Northeast	93	1st	Talala	26	31st	Jay	9.04	Vinita	4.49	10th	Copan
West Central	96	7th	Retrop	32	29th	Camargo	3.28	Weatherford	2.11	9th	Cheyenne
Central	96	7th	Acme	23	31st	Oilton	5.47	Bristow	2.01	13th	Bristow
East Central	92	1st	Hectorville	30	31st	Okmulgee	8.49	Cookson	3.25	10th	Cookson
Southwest	99	7th	Walters	34	4th	Mangum	2.13	Fort Cobb	0.79	13th	Fort Cobb
South Central	99	7th	Waurika	30	31st	Ada	5.18	Burneyville	2.69	12th	Burneyville
Southeast	92	2nd	Idabel	32	31st	Antlers	7.82	Broken Bow	3.76	10th	Wilburton
Statewide	99	7th	Waurika	23	31st	Oilton	9.04	Vinita	4.49	10th	Copan

NOVEMBER OUTLOOK

Oklahoma’s weather descends rather rapidly during November from the pleasantries of autumn into the chill of early winter. The state’s normal temperature (averaged statewide) during the month, 49.0 degrees Fahrenheit, is the 4th lowest of any of the year’s 12 months. Based on monthly averages across the state, November is 13 degrees cooler than October, easily Oklahoma’s largest temperature difference between consecutive months. The increasingly frequent intrusions of cooler (and sometimes frigid) air, frequently accompanied by some dreary, dismal weather, are usually separated by interludes of gorgeous autumn days. The pleasant interludes provide farmers with an opportunity to complete the harvest of peanuts, cotton, and sorghum, or to finish drilling the new wheat crop. The statewide-averaged November normal precipitation is 2.78 inches, making November the 6th wettest of the months in Oklahoma. Snow, sleet, and ice are frequent late-November visitors to the state, too often creating travel hazards during the long Thanksgiving weekend.

Temperature

Mean	49.0 degrees
Warmest November	1989, 56.2 degrees
Coollest November	1929, 42.6 degrees
Warmest location	Waurika, 53.4 degrees
Coollest location	Turpin, 42.8 degrees
Hottest recorded	95 degrees, Waukomis, November 1, 1914 and Colgate, November 1, 1937
Cooldest recorded	-15 degrees, Kenton, November 28, 1976

Statewide-averaged monthly temperature extremes for the Novembers since 1892 have varied between 56.0 degrees in 1999 and 41.3 degrees in 1929. The range of normal daily average temperatures across the state, as published by the National Climatic Data Center, is from 53.4 degrees at Waurika to 42.8 degrees at Turpin. Normal daily maximum temperatures fall between Waurika’s 65.3 degrees and Newkirk’s 56.6 degrees. Normal daily minimum temperatures range from 42.9 degrees at Okemah to 28.4 degrees at three panhandle reporting stations (Turpin, Boise City, and Beaver). Hot weather is rare, but not absent, during the

month. Colgate set a state record for November’s highest temperature when the thermometer registered 95 degrees on November 1, 1937. November’s coldest day, according to the Oklahoma record book, occurred on November 28, 1976 when a temperature of 15 degrees below zero (-15) was reported at Kenton.

Precipitation

Mean	2.78 inches
Wettest November	1909, 5.72 inches
Driest November	1910, 0.12 inches
Wettest location	Carnasaw Fire Tower, 5.64 inches
Driest location	Goodwell and Regnier, 0.61 inches
Most recorded	17.01 inches, Idabel, 2000

Tornadoes

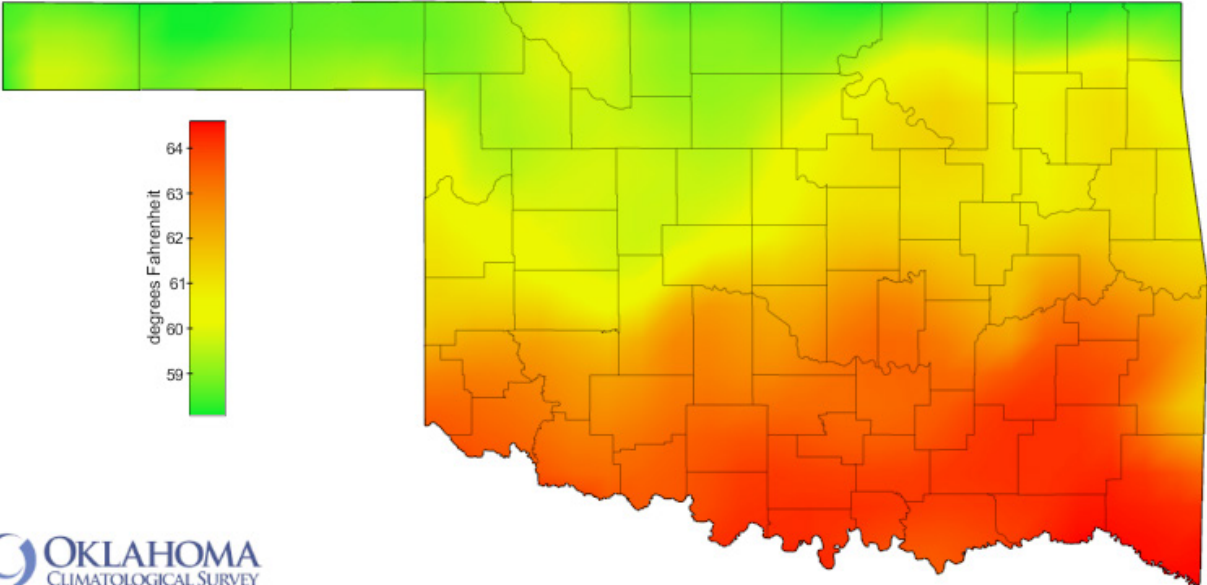
Average November Tornadoes (1950-2013)	1.5
Most	12 (1958)

November precipitation is highly variable from year-to-year. The state’s driest recorded November, a statewide averaged precipitation of 0.12 inches was attained three times in 1910, 1949, and 1989. The record high precipitation for November is 5.72 inches in 1909. During much of the state’s history, November was thought of as a much drier month than it is today. During the period from 1931 through 1960, the statewide-averaged precipitation during November across Oklahoma was only 1.87 inches, nearly a full inch less than the currently established monthly normal (compiled from 1971 through 2000). Annual precipitation across Oklahoma compiled from the earlier was a full 3.25 inches less than the value currently in use. Increased precipitation during November has contributed more to the recent increases in annual precipitation than any other month. At individual locations within Oklahoma, November normal precipitation ranges 5.64 inches at the Carnasaw Fire Tower in McCurtain County to 0.61 inch at the panhandle’s Goodwell and Regnier.

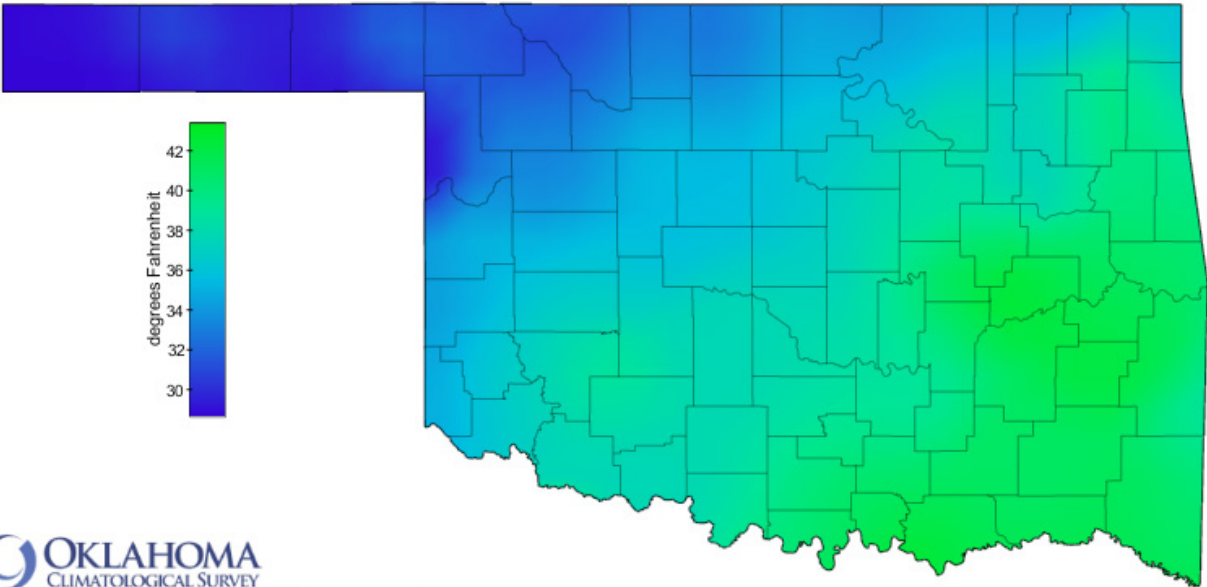
Stilwell averages 9.6 days with measurable precipitation (at least 0.01 inch), whereas Leedey averages a mere 2.4 such days. Ponca City holds the record for most precipitation in one day at a recognized reporting site during November: 11.11 inches on November 20, 1979. Idabel recorded 17.01 inches of precipitation during November 2000 to establish the record for total precipitation during the month at a regular reporting station.

Severe and dangerous weather takes on a myriad of forms during November. There were 76 November tornadoes reported in the state from 1950 through 2003. Twelve of those were recorded on November 17, 1958 to establish the state record for most November tornadoes, both during a month and on a day. A tornado that struck Camel Creek School and the town of Bethany on November 19, 1930 killed 23 people. On November 4, 1922, a tornado between Shamrock and Drumright resulted in 11 deaths. The most recent November tornado fatalities occurred on November 19, 1973 when five people were killed in Blanchard. There were no tornadoes reported within the state during 32 of those 54 Novembers.

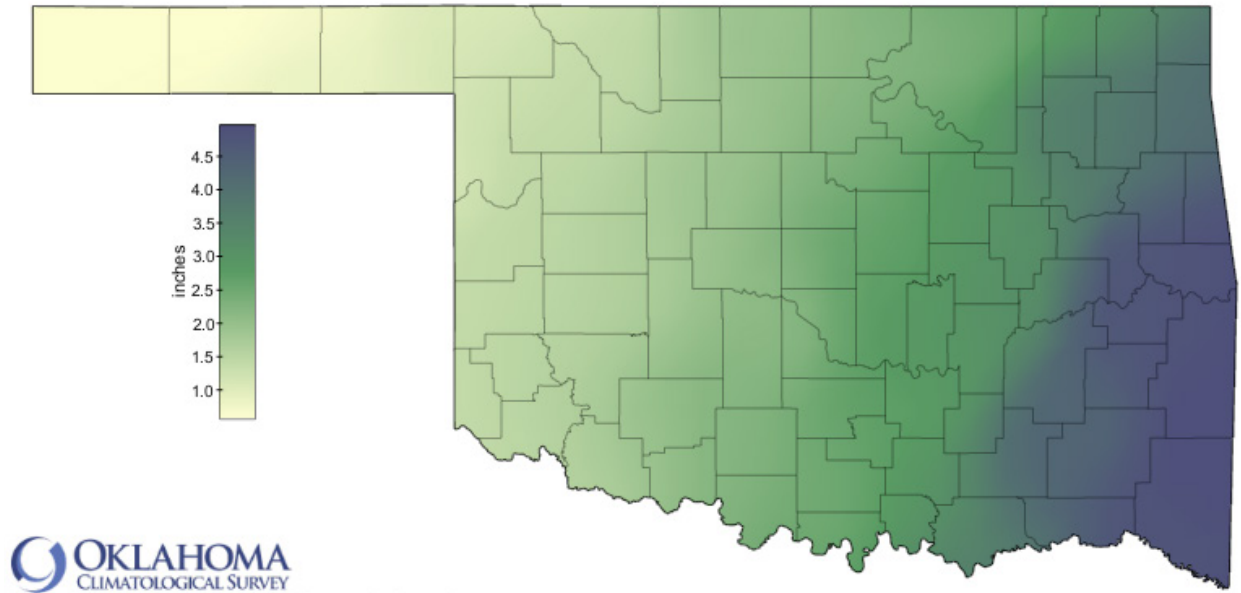
NOVEMBER NORMAL DAILY MAXIMUM TEMPERATURE (1981-2010)



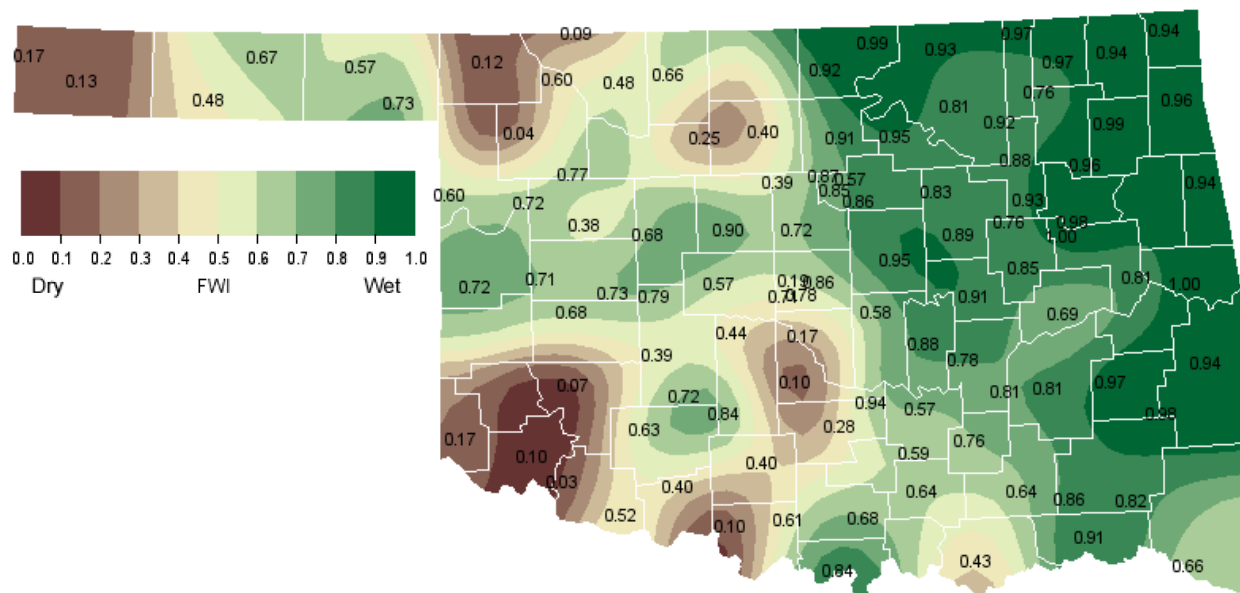
NOVEMBER NORMAL DAILY MINIMUM TEMPERATURE (1981-2010)



NOVEMBER NORMAL PRECIPITATION (1981-2010)



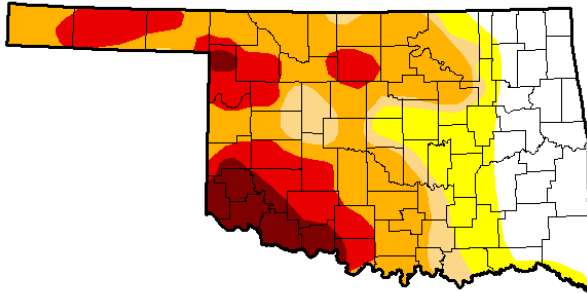
NOVEMBER 1, 2014 SOIL MOISTURE CONDITIONS AT 25CM



NOVEMBER 2014 DROUGHT INDICES

U.S. Drought Monitor Oklahoma

October 28, 2014
(Released Thursday, Oct. 30, 2014)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	21.40	78.60	64.49	56.08	23.00	6.86
Last Week <i>10/21/2014</i>	22.15	77.85	64.49	55.44	20.87	4.84
3 Months Ago <i>7/29/2014</i>	12.06	87.94	76.16	60.09	23.36	4.48
Start of Calendar Year <i>1/29/2013</i>	50.84	49.16	38.17	18.99	4.84	2.40
Start of Water Year <i>9/20/2014</i>	8.55	91.45	73.31	58.13	20.92	4.64
One Year Ago <i>10/28/2013</i>	47.79	52.21	30.50	14.58	4.42	1.47

Intensity:

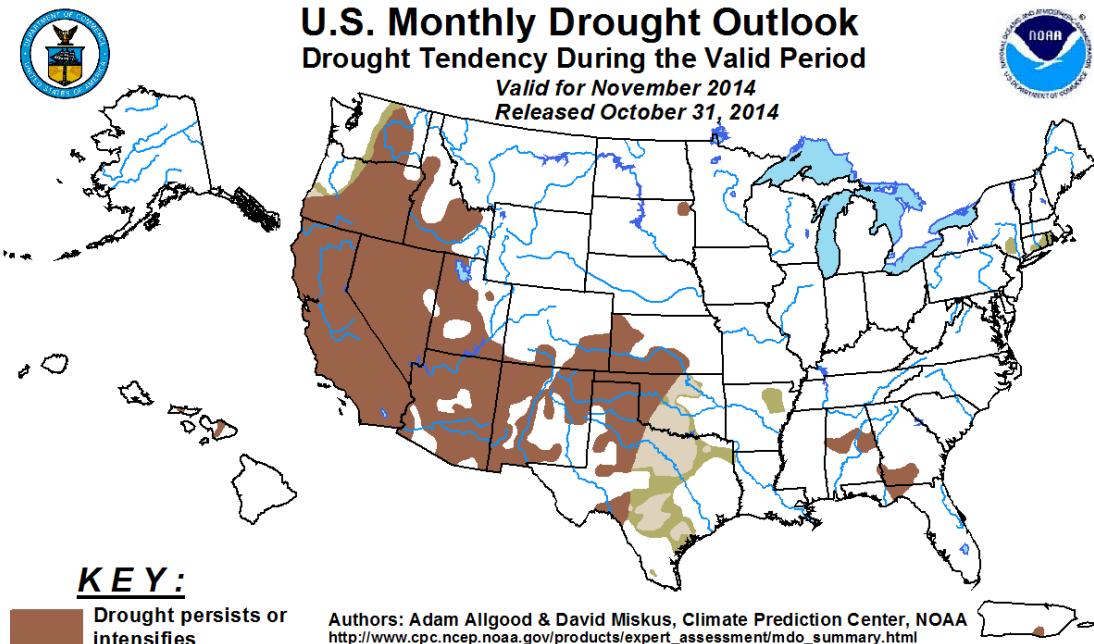
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

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<http://droughtmonitor.unl.edu/>



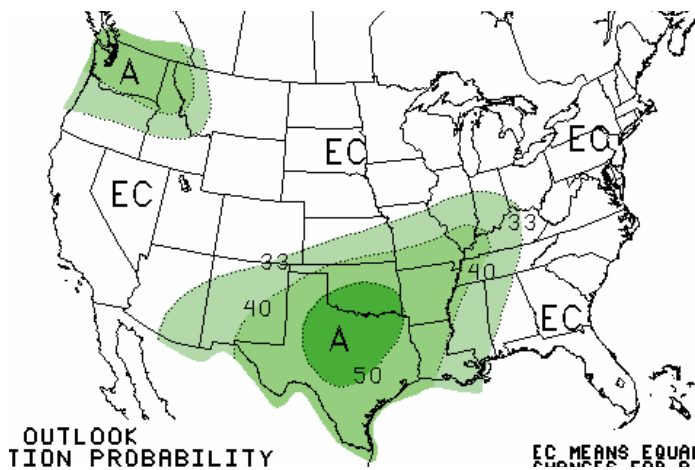
- KEY:**
- Drought persists or intensifies
 - Drought remains but improves
 - Drought removal likely
 - Drought development likely

Authors: Adam Allgood & David Miskus, Climate Prediction Center, NOAA
http://www.cpc.ncep.noaa.gov/products/expert_assessment/mdo_summary.html

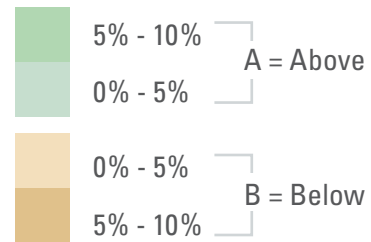
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor.

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain. The green areas imply drought removal by the end of the period (D0 or none)

NOVEMBER 2014 U.S. PRECIPITATION FORECAST

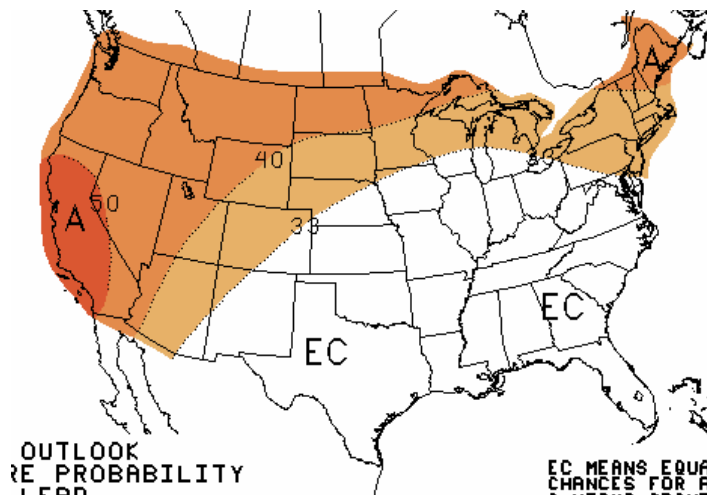


Percent Likelihood of Above or Below Average Precipitation*

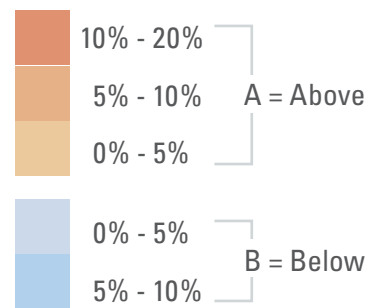


*EC indicates no forecasted anomalies due to lack of model skill.

NOVEMBER 2014 U.S. TEMPERATURE FORECAST



Percent Likelihood of Above or Below Average Temperatures*

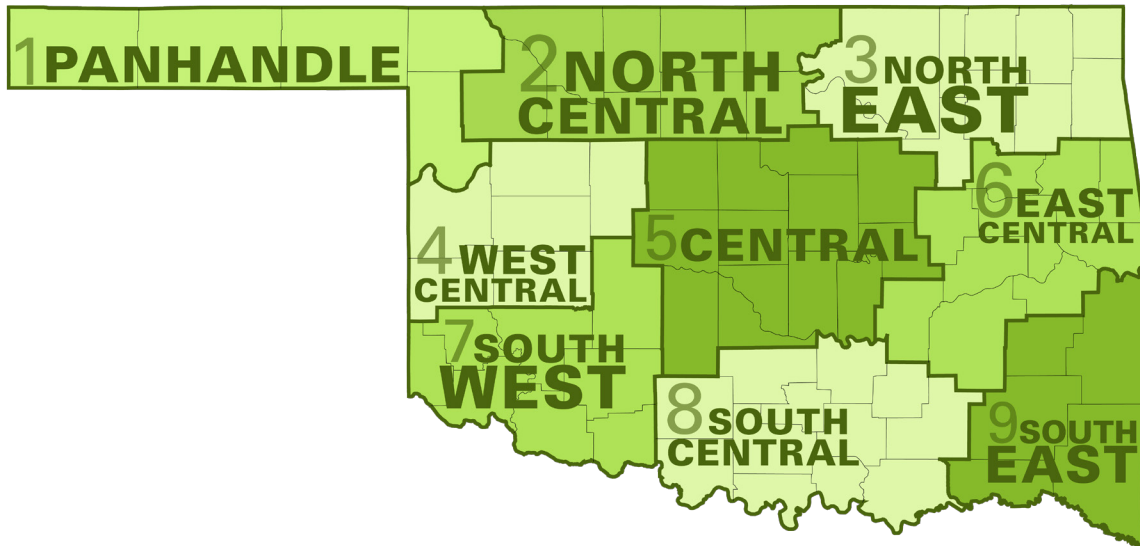


*EC indicates no forecasted anomalies due to lack of model skill.

NOVEMBER CLIMATE NORMALS

Climate Division	Max. Temperature (°F)	Min. Temperature (°F)	Avg. Temperature (°F)	Precipitation (inches)
1	59.0	31.0	45.0	0.83
2	59.2	35.0	47.1	1.73
3	59.9	37.9	48.9	3.15
4	60.2	35.7	48.0	1.49
5	61.2	38.5	49.8	2.41
6	61.7	39.8	50.8	3.88
7	62.5	38.4	50.5	1.71
8	63.7	40.9	52.3	2.89
9	62.8	40.3	51.6	4.65
Statewide	61.1	37.5	49.3	2.51

Oklahoma Climate Divisions



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.

SEVERE WEATHER REPORTS: Only the most significant events are listed. Tornadoes of F2 or greater strength (on the 0-5 Fujita scale), hail of two inches diameter or greater, and wind speeds of 70 miles per hour or above are listed. National Weather Service defines storms as severe when they produce a tornado, hail of three-quarters inch or greater, or wind speeds above 57 miles per hour (50 knots). For additional reports, contact the Oklahoma Climatological Survey, Storm Prediction Center, or your local National Weather Service forecast office.

SOIL MOISTURE: The soil moisture variable displayed is the Fractional Water Index (FWI), measured at a depth of 25 cm. This unitless value ranges from very dry soil having a value of 0, to saturated soils having a value of 1.

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 Climatic Data Center (more than about 4-5 months old):

<http://www4.ncdc.noaa.gov/cgi-win/wwwcgi.dll?wwEvent~Storms>

SEASONAL OUTLOOKS

Climate Prediction Center:

http://www.cpc.ncep.noaa.gov/products/OUTLOOKS_index.html

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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