### Oklahoma Monthly Climate Summary

# **OCTOBER 2012**



It had been awhile since Oklahoma has seen a month like October. Eleven months, to be exact. Not since September 2011 had Oklahoma seen a month where the statewide average temperature finished on the cold side of normal. In fact, 25 of the 30 months prior to October were warmer than normal, starting with April 2010. According to data from the Oklahoma Mesonet, October became the 26th coolest on record with a statewide average of 59.7 degrees, 1.6 degrees below normal. Statewide records date back to 1895. Oklahoma seemed to be racing towards its warmest calendar year on record, a mark currently held by 1954 at 62.8 degrees. The cool October dealt that effort a major blow, however, bringing the two years into a virtual dead heat with two months remaining. The January-October statewide average temperature came in at 66.2 degrees, a mere tenth of a degree ahead of 1954. These values remain unofficial until the National Climatic Data Center releases its final numbers in a few months as data continue to trickle in

The cool month was due in large part to a couple of intrusions of frosty air. A strong arctic cold front plowed through the state during the month's first week, bringing one of the earliest fall freezes on record at some locations. The thermometer hit 31 degrees at Will Rogers World Airport on Oct. 8, the earliest freeze ever for the official Oklahoma City observing station. Another cold plunge of air from the Arctic provided a widespread freeze during October's final week, an early occurrence for southern parts of the state.

Although the heat may have faded during October, the dry weather did not. The Mesonet's statewide average rainfall total of 1.1 inches fell more than 2 inches below normal and ranked the month as the 15th driest October on record. Eighteen of the Mesonet's 120 stations recorded less than a tenth of an inch of rain for the month and 66 measured less than an inch. The Cheyenne and Retrop stations recorded no precipitation during October. By October 31, it had been up to 34 days since parts of northern and western Oklahoma had seen a tenth of an inch of rainfall in a single day, and as many as 48 days without at least a quarter of an inch. On the bright side, twelve stations recorded at least 3 inches of rain during the month with Oilton leading the way at 4.7 inches.

Although parts of the state have been in continual drought for more than two years, most of the state's current drought woes can be traced back to deficits beginning in May 2012. The May-October statewide average of 12.72 inches fell more than 9 inches below normal and ranked as the fourth driest such period on record. For the important wheat producing

area of north central Oklahoma, the statistics are even more dismal with deficits of more than 13 inches. The May-October rainfall total of 8.1 inches in that part of the state is the second lowest on record for that span.

The U.S. Drought Monitor report at the end of October showed that extreme-to-exceptional drought still covered more than two-thirds of the state. Virtually all of Oklahoma was covered by severe-to-exceptional drought.

#### October 2012 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	98°F	Mangum	21
Low Temperature	17°F	Beaver	27
High Precipitation	4.68 in.	Oilton	
Low Precipitation	0.00 in.	Cheyenne, Retrop	

#### October 2012 Statewide Statistics

#### Temperature

	Average	Depart.	Rank (1895-2012)
Month (October)	59.7°F	-1.6°F	26th Coolest
Season-to- Date (Sept - Oct)	66.8°F	0.0°F	56th Coolest
Year-to-Date (Jan-Oct)	66.3°F	3.5°F	1st Warmest

#### Precipitation

	Average	Depart.	Rank (1895-2012)
Month (October)	1.09 in.	-2.29 in.	15th Driest
Season-to-Date (Sept-Oct)	4.00 in.	-3.19 in.	24th Driest
Year-to-Date (Jan-Oct)	24.70 in.	-7.15 in.	22nd Driest

Depart. = departure from 30-year normal

### OCTOBER DAILY HIGHLIGHTS

**OCTOBER 1:** Lingering effects from the previous days' low-pressure system were present for the start of October. Scattered showers and thunderstorms were seen across the state, producing wind gusts as high as 47mph in Boise City and 50mph in Hinton. Even with the sporadic showers, however, rainfall amounts throughout Oklahoma remained negligible at less than a tenth of an inch. Maximum temperatures ranged between the low 70s to low 80s. Minimum temperatures ranged from the mid-upper 40s to the low 60s.

**OCTOBER 2-3:** The 2nd and 3rd of the month provided some sunny relief. With the absence of stormy weather, peak wind gusts only reached between 20 and 30 mph in much of the state. Winds became more southerly and averaged between 5-10 mph on the 2nd and 5-15 mph on the 3rd. Maximum temperatures measured in the low 70s to the low 80s. Minimum temperatures dropped by a couple degrees, ranging between 40 and 60 degrees.

OCTOBER 4-8: This five-day period was marked by numerous record events. A strong cold front pushed through the region, creating a significant 50 to 80 degree maximum temperature range. Daily records for lowest maximum temperature on the 6th were reported in Oklahoma City, Wichita Falls, Tulsa, and McAlester at 50 degrees. The lowest average temperature for that same day was 45 and 48 degrees in Tulsa and McAlester, respectively. Tulsa experienced record-breaking daily temperatures again on the 7th, measuring the lowest average (44) and minimum temperature (32). The 8th, Oklahoma City not only measured its lowest average temperature at 31 degrees for that day, but it fell witness to the earliest fall freeze on record. The 4th was the only day that peak wind gusts hit above 50 mph; all other days had gusts in the 20s and 30s. Although the northeast portion of the state did see small amounts of precipitation, most cities measured less than .1 inches.

**OCTOBER 9-10:** Another cold front moved into Oklahoma from the northwest on the 9th, bringing much cooler maximum temperatures to the state on the 10th. Maximum temperatures varied between the low 60s to mid-80s on the 9th, dropping by roughly 10 degrees the following day. Despite the cooler, cloudy weather, no rainfall was reported. Wind speeds averaged between 5 and 15 mph.

**OCTOBER 11-14:** Temperatures for this four-day period were unseasonably warm due to a passing warm front. The highs averaged in the upper 80s, peaking at 90 on the 11th and 13th. Lows ranged between the low 40s and upper 60s. On the 12th, scattered showers and thunderstorms moved into the state, becoming severe on the 13th, and finally moving out of the region on the 14th. The moist air from the front that was made available to the storm systems, allowed for heavy precipitation in many areas. Portions of central and north-central Oklahoma received the most precipitation, with many Mesonet stations seeing over an inch and a half. On the 13th, 4.6 inches of rain was reported in Oilton, 3.42 inches in Durant, and a daily record of 2.56 inches was set in Oklahoma City, breaking the previous record of 1.44 inches in 1923 for that day. Other effects of the storms on that day were made evident as wind gusts peaked at 80 mph in Ringling and Lehigh, and flash flood reports were called in from Tulsa County.

**OCTOBER 15-16:** Once storms migrated out of the region, sunny skies and calm winds made for some pleasant weather. Maximum temperatures were fairly high, ranging from the 70s to the low-90s; minimum temperatures measured between the low-40s to low-60s.

**OCTOBER 17-18:** A cold front moved through on the 17th, introducing higher wind speeds behind it (15-20 mph). The most noticeable drop in temperature from the front was seen on the 18th, when the highs dipped by more than 10 degrees and the low temperatures hit the freezing mark in the panhandle. The combination of high wind speeds and loose soil produced blowing dust in north-central Oklahoma, decreasing visibility to less than a mile on the 18th. Some areas had close to zero visibility, causing a car pile-up in Kay County.

**OCTOBER 19-21:** The clear, cool air on the 19th slowly transitioned into warmer air as winds became more southerly. This warming trend was so strong that it broke multiple maximum temperature records around the state. The highest temperature recorded was 98 in Mangum, followed by 97 in Altus and Hollis on the 21st. The lowest maximum temperatures reported on that day were still a warm 77 degrees in the far northeast. Average lows remained in the 30s, however, and wind speeds were between 5 and 15 mph.

OCTOBER 22: The 22nd was set apart from the surrounding days, as short-lasting showers and thunderstorms passed through and quickly moved out. The rainfall that did occur was less than a quarter of an inch and was fairly isolated to southern Oklahoma. Clayton was the only odd-ball that received .45 inches. Thunderstorm gusts measured as high as 56 mph in Bessie, but remained in the 40s for the other stormy areas. Average wind speeds were between 5 and 20 mph. High temperatures ranged from the upper 60s to mid-80s. Lows were generally between 40 and 70. This higher end of the low temperature spectrum allowed for Oklahoma City to break a daily record for warmest low temperature at 66 degrees.

**OCTOBER 23-28:** Unseasonably warm temperatures that were observed on Tuesday and Wednesday dropped abruptly as a strong cold front moved through on the 25th. The abnormal highs for this time decreased from the mid-90s all the way down into the 70s. As the air became colder and drier, many of the low temperatures fell below freezing. Beaver got as cold as 17 degrees on the 27th, with Buffalo and Camargo bottoming out at 18. The daily low temperatures in Bartlesville were deemed record events at 27 degrees on the 27th and 23 degrees on the 28th. The breezy winds that started on the 23rd gradually died down from 10-20 mph to 5-10 mph by the 28th.

**OCTOBER 29-31:** Mostly sunny skies and the changeover to southerly winds helped create slightly warmer weather for the end of the month. Highs ranged from the mid-60s to mid-80s, and lows varied between 20 degrees and 56 degrees. Winds remained calm and skies clear for a beautiful Halloween day.

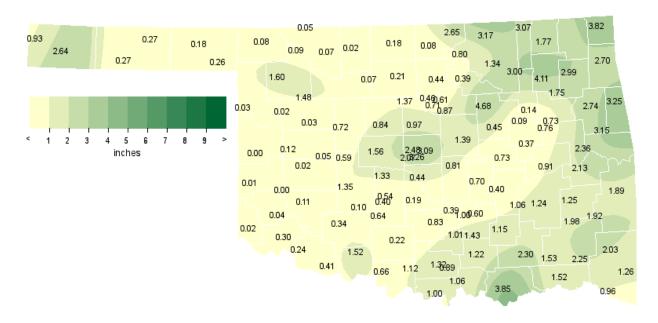
### **Flooding**

Location	County	Day
Tulsa	Tulsa	13

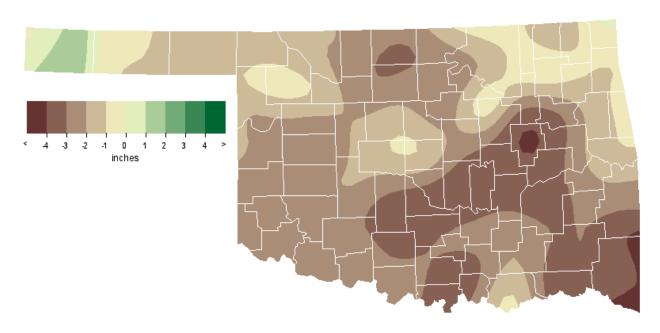
#### Wind Gusts (70 mph or greater)

Speed (m.p.h.)	Location	County	Day
80	1 N Ringling	Jefferson	13
80	4 SW Lehigh	Coal	13
70	2 S Wynona	Osage	13
72	7 E Centrailia	Craig	13

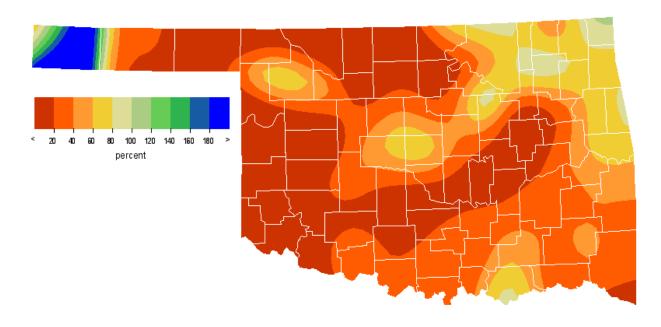
### **OCTOBER 2012 OBSERVED PRECIPITATION**



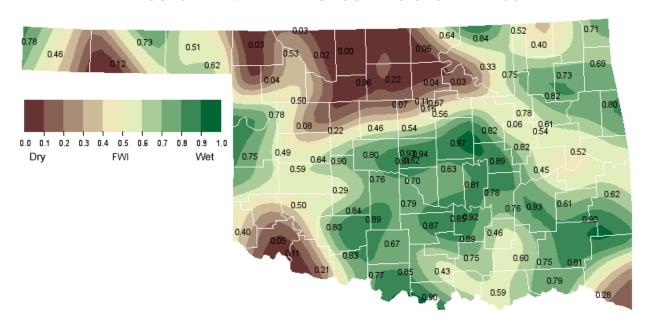
## **OCTOBER 2012 DEPARTURE FROM NORMAL PRECIPITATION**



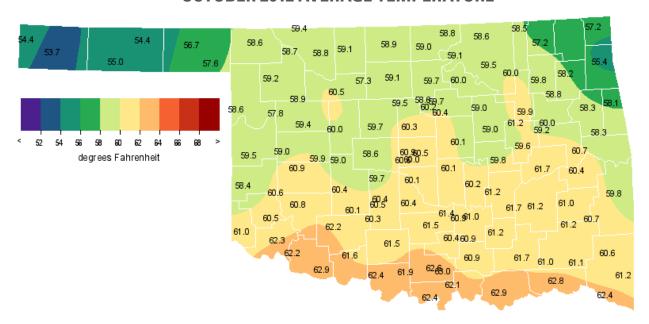
# **OCTOBER 2012 PERCENT OF NORMAL PRECIPITATION**



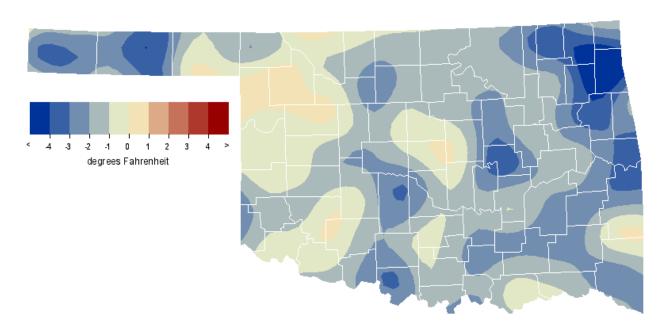
# **OCTOBER 2012 AVERAGE SOIL MOISTURE AT 25CM**



## **OCTOBER 2012 AVERAGE TEMPERATURE**



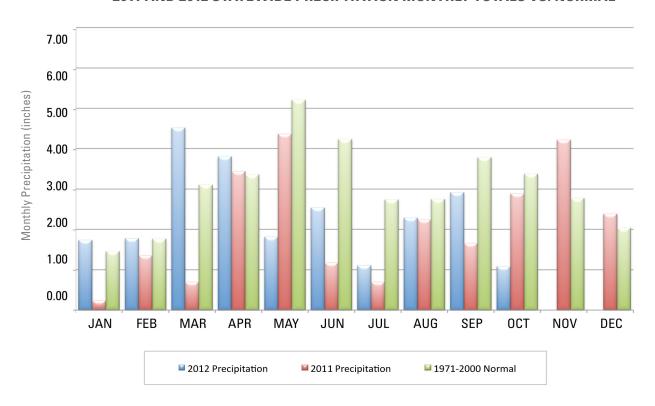
# **OCTOBER 2012 DEPARTURE FROM NORMAL TEMPERATURE**



# **MESONET MONTHLY SUMMARY FOR OCTOBER 2012**

NAME	MEAN TEMP			LOW TEMP	DAY	HDD	CDD		HIGH 24-HR	DAY	NAME	MEAN TEMP			LOW TEMP	DAY	HDD	CDD		HIGH 24-HR	DAY
PANHANDLE Arnett Beaver Boise City Buffalo	58.6 56.7 53.7 58.5	95 93 88 95	23 23 3 23	19 17 23 18	27 27 27 27	246 284 355 243	47 25 6 41	.03 .18 2.64 .08	.02 .17 2.01 .05	1 13 12 13	Goodwell Hooker Kenton Slapout	54.9 54.4 54.4 57.6	90 92 88 93	23 23 3 23	22 20 25 22	27 27 28 27	322 333 341 255	11 5 12 25	.27 .27 .93 .26	.27 .27 .86 .24	13 13 12 13
NORTH CENTRAL Alva Blackwell Breckinridge Cherokee Fairview Freedom Lahoma	58.8 59.0 59.1 59.1 60.5 58.7 25.2	95 92 89 94 93 95	23 21 21 21 21 23 21	21 21 21 22 25 21 ***	27 27 27 27 27 27 27 30	246 247 238 235 214 245 230	53 61 55 54 74 49 57	.07 .08 .21 .02 .47 .09	.04 .05 .17 .02 .46 .07	13 12 12 13 12 1	May Ranch Medford Newkirk Red Rock Seiling Woodward	59.4 58.9 58.8 59.7 58.9 59.3	93 91 88 91 93 94	23 21 21 21 21 21 23	22 20 24 23 19 20	27 27 27 27 27 27	233 252 247 236 244 233	60 62 53 72 55 55	.05 .18 2.65 .44 1.48 1.60	.02 .10 2.57 .33 1.45 1.53	12 13 12 13 12 12
NORTHEAST Bixby Burbank Claremore Copan Foraker Inola Jay Miami	59.9 59.2 59.7 58.5 58.6 58.7 57.3	86 89 85 85 88 84 81	15 21 15 24 21 15 4 24	25 25 28 25 25 27 24 26	28 28 27 28 27 28 28 28	228 244 226 260 258 247 ****	69 63 62 58 58 53 ****	.14 .80 4.11 3.07 3.17 1.75 2.70 3.82	.07 .79 2.02 1.55 1.60 1.34 1.79 2.11	13 13 12 13 13 12 12 12	Nowata Pawnee Porter Pryor Skiatook Vinita Wynona	57.1 60.0 60.0 58.2 60.0 56.9 59.6	84 89 84 83 85 83	15 21 21 15 15 24 21	23 23 29 26 29 25 26	28 28 28 27 28 28 28	293 226 218 271 222 293 236	49 71 64 60 68 41 68	1.77 .39 .73 2.99 3.00 3.00	.98 .37 .46 2.02 1.69 1.81	13 13 13 12 13 13
WEST CENTRAL Bessie Butler Camargo Cheyenne Erick	60.9 59.1 57.8 59.5 58.4	96 95 93 91 95	21 21 21 21 21	26 21 18 26 21	27 27 27 27 27	203 236 267 225 244	75 53 43 55 40	.02 .12 .02 .00	.01 .12 .01 .00	1 1 1 1	Putnam Retrop Watonga Weatherford	59.4 60.6 60.0 59.8	94 96 91 94	21 21 21 21	22 25 26 26	27 27 27 27	237 210 218 223	64 73 62 63	.03 .00 .72 .05	.02 .00 .70	12 1 12 12
CENTRAL Acme Bowlegs Bristow Lake Carl Blac Chandler Chickasha El Reno Guthrie Kingfisher Marena Minco Marshall	60.3 60.2 59.0 58.6 60.1 60.4 58.6 60.3 59.7 60.2 59.7	89 87 87 91 87 90 89 88 92 90 87	21 21 21 21 21 21 21 21 21 21 21 21	24 25 22 22 27 27 22 27 25 26 27 23	28 28 28 28 28 27 27 27 27 27 27	210 212 246 254 211 205 244 211 225 216 212 233	63 64 61 57 60 63 47 65 60 66 47 61	.64 .70 .45 .46 ***** .54 1.56 .97 .84 .71 1.33 1.37	.54 .56 .16 .26 ***** .49 .78 .63 .82 .46 1.17	13 13 13 13 *** 13 13 12 12 12 12 13 12	Ninnekah Norman Oilton Oklahoma City Oklahoma City Oklahoma City Okemah Perkins Shawnee Spencer Stillwater Washington	60.5 60.0 59.0 60.1 60.9 60.6 59.8 60.4 60.4 59.7 60.4	89 87 86 87 87 85 89 86 87 89	21 21 21 21 21 21 21 21 21 21 21 21	25 28 24 29 28 32 28 27 26 27 24 28	28 28 28 27 27 28 28 27 27 27 27	204 209 247 212 196 196 223 207 209 208 227 197	65 56 62 59 69 59 61 64 58 66 63	.40 .44 4.68 3.26 2.48 2.07 .73 .87 .81 3.09 .61	.19 .38 4.60 2.94 1.66 1.77 .32 .58 .39 2.50 .48 .13	13 13 13 13 13 13 13 13 13 13 13
EAST CENTRAL Cookson Eufaula Haskell Hectorville Holdenville McAlester Okmulgee	58.4 61.7 59.2 61.3 61.1 61.2 59.6	83 85 84 87 86 85 86	4 21 21 21 21 4 21	25 30 24 29 27 27 24	28 28 28 28 27 28 28	253 183 236 197 198 199 234	48 80 57 81 78 80 67	3.15 .91 .76 .09 .40 1.24	1.48 .72 .50 .06 .32 1.19	13 13 13 13 13 13	Sallisaw Stigler Stuart Tahlequah Webbers Falls Westville	***** 60.3 61.7 58.3 60.6 58.2	*** 86 85 82 87 81	*** 4 21 4 4	*** 28 30 26 29	*** 28 28 28 28 28	**** 202 186 252 197 250	**** 58 83 45 62 39	***** 2.13 1.06 2.74 2.36 3.25	***** 1.12 1.00 1.33 1.35 1.71	*** 12 13 12 12 12
SOUTHWEST Altus Apache Fort Cobb Grandfield Hinton Hobart	62.3 60.1 60.4 62.9 59.1 60.8	97 90 93 96 91 95	21 21 21 21 21 21	27 23 28 27 26 25	27 27 28 27 27 27	174 210 207 169 232 206	89 60 65 103 48 76	.30 .10 1.35 .41 .59	.29 .07 1.10 .22 .30	13 13 13 22 12	Hollis Mangum Medicine Park Tipton Walters	60.9 60.5 62.2 62.3 ****	97 98 93 96 ***	21 21 21 21 21	23 20 31 24 ***	27 27 27 27 ***	193 210 170 182 ****	67 70 85 96 ****	.02 .04 .34 .24	.01 .03 .26 .18	1 22 13 13 ***
SOUTH CENTRAL Ada Ardmore Burneyville Byars Centrahoma Durant Fittstown Ketchum Ranch Lane	61.0 63.0 62.5 61.4 61.2 63.0 60.9 61.6 61.7	86 87 88 86 87 85 85 89	21 21 21 21 21 4 21 21 4	25 32 25 28 24 33 30 28 30	28 27 28 27 28 29 28 27 28	197 160 177 185 195 161 188 179 183	72 99 98 73 79 97 60 73	.60 .89 1.00 .39 1.15 3.85 1.43 .22 2.30	.57 .81 .92 .39 1.12 3.42 1.42 .13 2.10	13 13 13 13 13 13 13 22	Madill Newport Pauls Valley Ringling Sulphur Tishomingo Vanoss Waurika	62.2 62.6 61.6 62.0 60.4 60.9 60.9	86 88 88 86 86 87 90	21 21 21 21 21 21 21 21	28 32 28 29 26 28 24 28	28 29 28 28 28 29 28	176 165 181 174 209 195 198 172	89 90 75 80 66 68 71 91	1.06 1.32 .83 1.12 1.01 **** 1.00 .66	.99	13 13 12 13 13 *** 13
SOUTHEAST Antlers Antlers Broken Bow Clayton Cloudy Hugo	61.0 ***** 61.3 61.3 61.2 62.8	86 *** 86 85 84 86	4 *** 4 4 4	28 *** 28 29 30 32	29 *** 29 29 29 27	196 **** 182 192 190 162	**** 66 76 71	1.26 1.98 2.25	1.42 ***** 1.00 1.41 1.92 1.42	13 13 13	Idabel Mt Herman Talihina Wilburton Wister	62.4 60.6 60.7 60.9 59.8	86 83 86 86 86	4 4 4 4	29 27 27 26 24	29 28 28 28 28	166 197 207 202 213	86 59 73 75 53	.96 2.03 1.92 1.25 1.89	.60 1.79 1.50 .77 .89	13 13 13 13 12

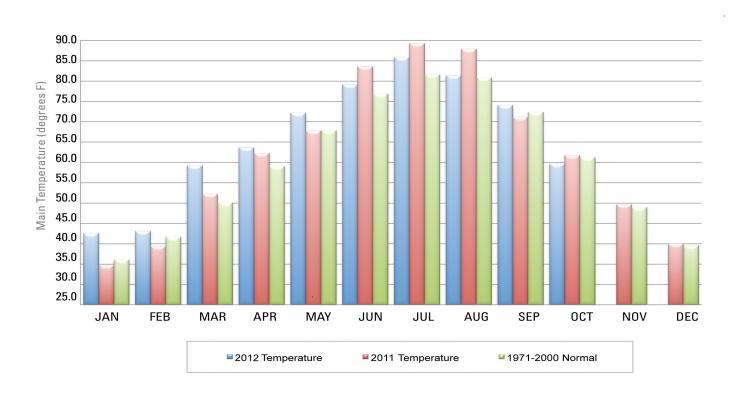
### 2011 AND 2012 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



# **October 2012 Mesonet Precipitation Comparison**

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Oct-11
Panhandle	0.58	-0.93	30th Driest	6.41 (2000)	0.03 (1952)	1.27
North Central	0.58	-2.08	16th Driest	9.65 (1998)	0.00 (1952)	2.22
Northeast	2.19	-1.44	40th Driest	17.33 (1941)	0.05 (1917)	1.83
West Central	0.11	-2.45	4th Driest	9.41 (1986)	0.00 (1910)	2.69
Central	1.27	-2.39	23rd Driest	13.51 (1941)	0.00 (1917)	3.89
East Central	1.54	-2.73	25th Driest	14.75 (1941)	0.19 (1904)	3.17
Southwest	0.46	-2.52	8th Driest	11.44 (1983)	0.00 (1952)	3.62
South Central	1.18	-3.07	22nd Driest	14.61 (1981)	0.00 (1917)	4.16
Southeast	1.66	-3.30	26th Driest	13.21 (2009)	0.10 (1921)	2.57
Statewide	1.09	-2.29	15th Driest	11.32 (1941)	0.14 (1952)	2.85

### 2011 AND 2012 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



## **October 2012 Mesonet Temperature Comparison**

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Oct-11 (F)
Panhandle	56.1	-1.7	27th Coolest	66.4 (1963)	50.9 (1925)	59.6
North Central	59.0	-1.4	28th Coolest	69.6 (1963)	52.1 (1925)	60.4
Northeast	58.6	-2.1	24th Coolest	70.0 (1963)	52.9 (1925)	60.8
West Central	59.5	-1.0	33rd Coolest	69.0 (1963)	53.2 (2009)	61.4
Central	59.9	-2.0	24th Coolest	70.3 (1963)	54.5 (1925)	62.6
East Central	60.1	-2.0	26th Coolest	71.2 (1963)	55.3 (2009)	62.5
Southwest	61.2	-1.3	33rd Coolest	70.5 (1963)	55.4 (1925)	63.4
South Central	61.7	-1.8	28th Coolest	71.5 (1963)	56.4 (1976)	63.8
Southeast	61.2	-1.2	34th Coolest	70.6 (1963)	55.7 (1976)	61.9
Statewide	59.7	-1.6	26th Coolest	69.9 (1963)	54.4 (1925)	61.8

# **RECORD EVENT REPORTS**

Description	Day	Location	Record	Previous Record	Year
Daily Coldest High Temperature	6	Oklahoma City	50	55	1891
Daily Low Maximum Temperature	6	Tulsa	50	57	1988
Daily Low Average Temperature	6	Tulsa	45	50	1976
Daily Low Maximum Temperature	6	McAlester	50	61	2000
Daily Low Average Temperature	6	McAlester	48	51	2001
Daily Low Temperature	7	Tulsa	32	33	1952
Daily Low Average Temperature	7	Tulsa	44	46	2000
Daily Cold Low Temperature	8	Oklahoma City	31	34	2000
Earliest Fall Freeze on Record	8	Oklahoma City		Oct. 9	2000
Daily Maximum Rainfall	13	Oklahoma City	2.56 in.	1.44 in.	1923
Daily Warmest Low Temperature	22	Oklahoma City	66	65	2004
Daily Low Temperature	27	Bartlesville	27	27	1957
Daily Low Temperature	28	Bartlesville	23	23	1925

# **MESONET EXTREMES FOR OCTOBER 2012**

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	95	23rd	Buffalo	17	27th	Beaver	2.64	Boise City	2.01	12th	Boise City
North Central	95	23rd	Freedom	19	27th	Seiling	2.65	Newkirk	2.57	12th	Newkirk
Northeast	89	21st	Burbank	23	28th	Nowata	4.11	Claremore	2.11	13th	Miami
West Central	96	21st	Retrop	18	27th	Camargo	0.72	Watonga	0.70	12th	Watonga
Central	92	21st	Kingfisher	22	28th	Lake Carl Blackwell	4.68	Oilton	4.60	13th	Oilton
East Central	87	4th	Webbers Falls	24	28th	Okmulgee	3.25	Westville	1.71	12th	Westville
Southwest	98	21st	Mangum	20	27th	Mangum	1.52	Walters	1.43	13th	Walters
South Central	90	21st	Waurika	24	28th	Vanoss	3.85	Durant	3.42	13th	Durant
Southeast	86	4th	Idabel	24	28th	Wister	2.25	Cloudy	1.92	13th	Cloudy
Statewide	98	21st	Mangum	17	27th	Beaver	4.68	Oilton	4.60	13th	Oilton

### Oklahoma Monthly Climate Summary

# **NOVEMBER OUTLOOK**

Oklahoma's weather descends rather rapidly during November from the pleasantry 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.

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. Coalgate 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.

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.

# **Temperature**

Mean	49.0 degrees
Warmest November	1989, 56.2 degrees
Coolest November	1929, 42.6 degrees
Hottest recorded	95 degrees, Waukomis, Nov. 1, 1914 Coalgate, Nov. 1, 1937
Coldest recorded	-15 degrees, Kenton, Nov. 28, 1976
Hottest Location	Waurika, 53.4 degrees
Coolest Location	Turpin, 42.8 degrees

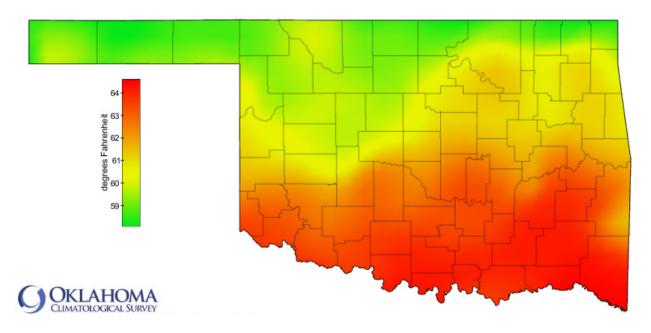
# **Precipitation**

Mean	2.78 inches
Wettest Year	1909, 5.72 inches
Driest Year	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

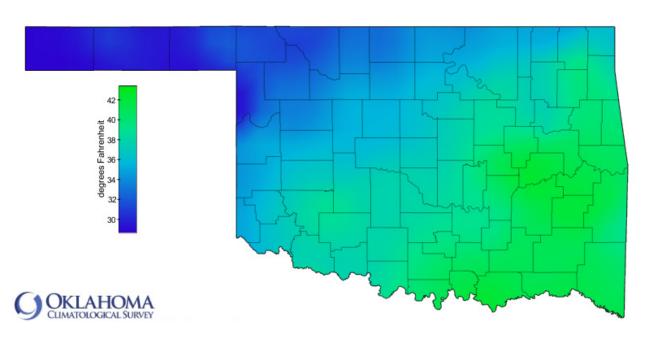
# **Tornadoes**

Average November Tornadoes	1.5
Most	12 (1958)

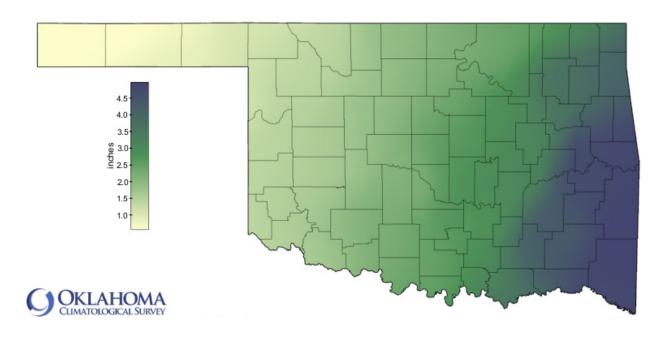
# **NOVEMBER NORMAL DAILY MAXIMUM TEMPERATURE (1981-2010)**



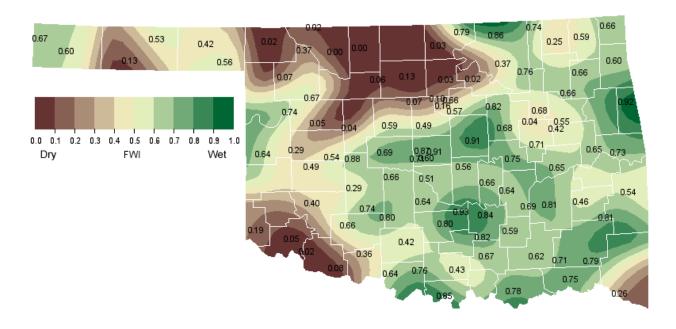
# **NOVEMBER NORMAL DAILY MINIMUM TEMPERATURE (1981-2010)**



# **NOVEMBER NORMAL PRECIPITATION (1981-2010)**



# **NOVEMBER 1, 2012 SOIL MOISTURE CONDITIONS AT 25CM**

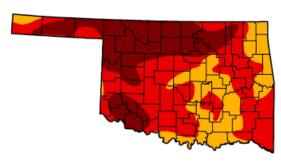


# U.S. Drought Monitor

November 6, 2012

### Oklahoma

Drought Conditions (Percent Area) 0.00 100.00 100.00 99.96 75.74 31.90 Current Last Week 100.00 100.00 67.64 27.13 0.00 99.43 (10/30/2012 map 3 Months Ago 100.00 100.00 0.00 100.00 96.78 16.03 (08/07/2012 map) 14.83 85.17 78.76 50.55 27.48 3.33 (12/27/2011 map) Start of Water Year 0.00 100.00 100.00 99.98 95.33 42.09 09/25/2012 map One Year Ago 0.00 100.00 100.00 85.48 (11/01/2011 map)



#### Intensity:





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





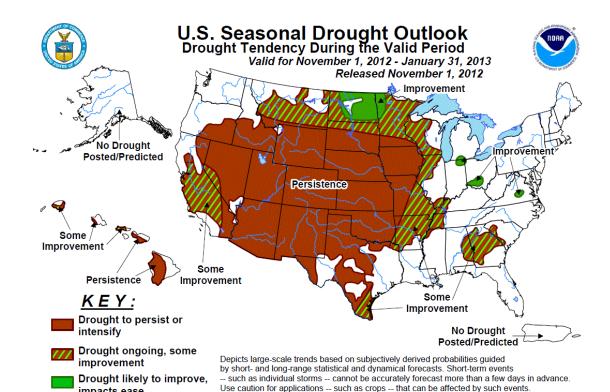


http://droughtmonitor.unl.edu

Released Thursday, November 8, 2012 David Miskus, Climate Prediction Center/NCEP/NWS/NOAA

"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 green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels,



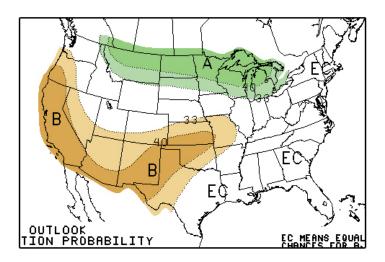
but do not necessarily imply drought elimination.

impacts ease

likely

**Drought development** 

### **NOVEMBER 2012 U.S. PRECIPITATION FORECAST**

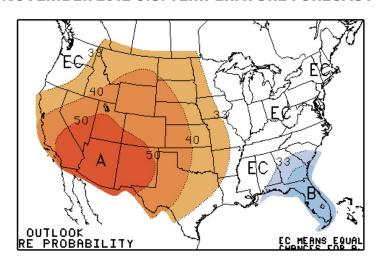


Percent Likelihood of Above or Below Average Precipitation\*

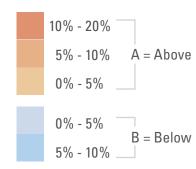


\*EC indicates no forecasted anomalies due to lack of model skill.

### **NOVEMBER 2012 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)
1.0	58.8	30.2	44.6	1.0
2.0	58.1	33.4	45.8	2.1
3.0	60.0	37.5	48.8	3.6
4.0	59.0	34.3	46.7	1.7
5.0	60.3	37.2	48.8	2.7
6.0	60.9	39.0	50.0	4.2
7.0	61.7	36.3	49.0	1.7
8.0	62.7	39.2	51.0	3.1
9.0	63.0	39.0	51.0	5.0
Statewide	60.5	36.4	48.5	2.9

## **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 may 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 may 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: <a href="http://aa.usno.navy.mil/data">http://aa.usno.navy.mil/data</a>

#### **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/wwcgi.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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