## Oklahoma Monthly Climate Summary

# **OCTOBER 2011**



September brought Oklahomans relief from the heat and October did its part with a bit of drought relief. The drought conditions remain quite severe across the state despite the rain, however. The statewide average rainfall total was 2.89 inches, about a half of an inch below normal and the 52nd wettest October since 1895. The month was also a bit on the warm side at more than a half a degree above normal. The statewide average temperature of 61.9 degrees ranks as the 53rd warmest October on record. The rains came at a very opportune time for Oklahoma's wheat crop, already in jeopardy due to the drought, and eased dangerous wildfire conditions. Combined with September, the fall's first two months fell 2.64 inches below normal to rank as the 36th driest on record. The season was also off to a cool start with a September-October statewide average of 66.4 degrees, the 46th coolest such period on record and about a half a degree below normal.

#### **October 2011 Statewide Extremes**

Description	Extreme	Station	Day
High Temperature	96°F	Beaver	3
Low Temperature	23°F	Nowata	20
High Precipitation	7.08 in.	Ketchum Ranch	
Low Precipitation	0.17 in.	Kenton	

#### **PRECIPITATION**

Data from the Oklahoma Mesonet show above normal rainfall amounts, substantial in some areas, from south central through central Oklahoma. Along that path, Oklahoma Mesonet stations reported 4-7 inches of rain with widespread totals of 3-4 inches radiating outward. The heaviest rains fell from Jefferson through eastern Kingfisher and western Logan counties. Unfortunately, some parts of the state remained significantly below normal after missing a couple of the month's rain chances. Much of the Panhandle had less than an inch of rain but did see a light dusting of snow during the month's last week. The Mesonet station at Ketchum Ranch near Duncan led the state with 7.08 inches of rain while Kenton came in with the least at 0.17 inches. Of the 120 Mesonet stations across the state, 61 recorded at least 3 inches of rain for the month. The January-October statewide average precipitation total finished at 18.84 inches, approximately 13 inches below normal.

### **TEMPERATURE**

October's highest temperature of 96 degrees was recorded at Beaver on the third and the lowest, 23 degrees, occurred at three different northeastern locations on the 20th. Nearly all of the state was warmer than normal but portions of central through northwestern Oklahoma were a notch above at 2-4 degrees above normal.

## OCTOBER DAILY HIGHLIGHTS

**OCTOBER 1-4:** The first four days of the month were quiet and tranquil. Lots of clear skies led to highs in the 80s for the most part, although a few 90s surfaced from time to time.

**OCTOBER 5-12:** This eight-day period saw heavy rainfall from south central through north central Oklahoma. Close to 5 inches fell in Tillman County with 3-4 inches widespread up and down the I-35 corridor. Most of western Oklahoma saw between 1-2 inches. The rain was welcome relief for an area of the state plagued by severe drought for over a year. A cold front through the state on the 12th cleared the moisture out and highs still climbed into the 70s and 80s.

**OCTOBER 13-16:** A quiet and warm period, these four days saw highs in the 70s the 13th and 14th and into the 90s the final two days.

#### **October 2011 Statewide Statistics**

#### Temperature

	Average	Depart.	Rank (1895-2011)
Month (October)	61.9°F	0.6°F	53rd Warmest
Season-to- Date (Sep-Oct)	66.4°F	-0.4°F	46th Coolest
Year-to-Date (Jan-Oct)	65.2°F	2.3°F	8th Warmest

### Precipitation

	Average	Depart.	Rank (1895-2011)
Month (October)	2.89 in.	-0.49 in.	52nd Wettest
Season-to-Date (Sep-Oct)	4.55 in.	-2.64 in.	36th Driest
Year-to-Date (Jan-Oct)	18.84 in.	-13.01 in.	3rd Driest

Depart. = departure from 30-year normal

OCTOBER 17-21: A stationary front on the 17th generated showers and storms. Some of the storms were severe with large hail and strong winds. The rainfall amounts were mostly under an inch, isolated in eastern Oklahoma. Following the front, the weather was quite cool with lows in the 30s and 40s the next couple of days. Surface high pressure and calm winds led to the first freeze for many sections of the state on the 20th. Lows were in the 20s and 30s statewide. An increase in moisture kept low temperatures 10 degrees warmer on the 21st, and highs rose into the 70s.

OCTOBER 22-25: A warm front lifting along the Red River into Oklahoma provided the kick for lots of severe weather on the 22nd. Large hail was reported with several storms, including 2-3 inch diameter hail in central and east central Oklahoma. Following that excitement, the weather warmed up quite nicely for late October. Highs were in the 70s and 80s for the most part with a few 90s recorded on the 25th.

OCTOBER 26-31: More rain on the 26th and 27th brought relief once again to southern Oklahoma. Following the front that helped produce the rain, lows for the remainder of the period were cool in the 20s to 40s. Highs finally warmed up by Halloween to the 70s.

# **OCTOBER 2011 SEVERE WEATHER**

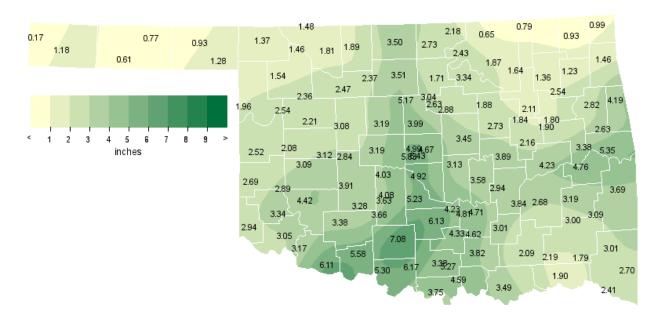
# Hail (2 inches in diameter or greater)

Size (in.)	Location	County	Day
2.75	7 NW Ada	Pontotoc	22
2.00	Tuttle	Grady	22
2.75	5 E Union City	Canadian	22
2.75	3 NNW Ada	Pontotoc	22
3.75	5 E Union City	Canadian	22
2.50	Addington	Jefferson	22
2.75	Cromwell	Seminole	22
2.00	6 NW Mustang	Canadian	22
2.75	Byng	Pontotoc	22
3.00	2 NE Ada	Pontotoc	22
2.75	3 NNW Ada	Pontotoc	22
2.75	5 ENE Terral	Jefferson	22
2.75	3 W Boley	Okfuskee	22
2.00	2 NNE Bearden	Okfuskee	22
3.00	2 SE Okemah	Okfuskee	22

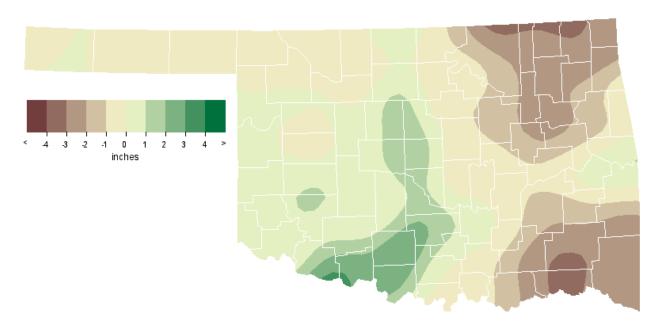
# Wind Gusts (70 mph or greater)

Speed (m.p.h)	Location	County	Day
71	4 W Hectorville	Okmulgee	22

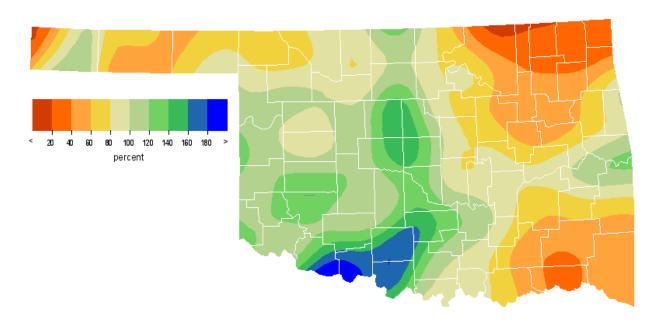
## **OCTOBER 2011 OBSERVED PRECIPITATION**



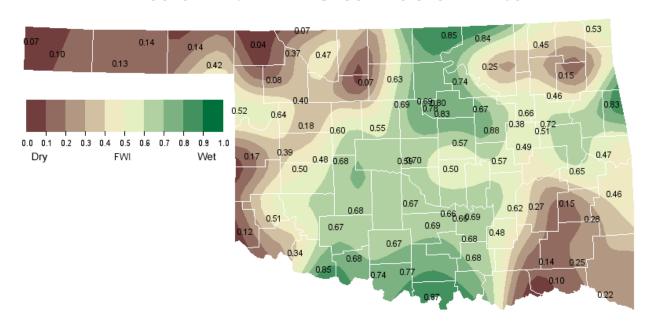
# **OCTOBER 2011 DEPARTURE FROM NORMAL PRECIPITATION**



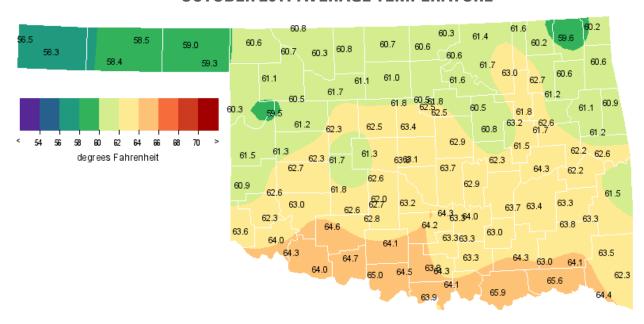
# **OCTOBER 2011 PERCENT OF NORMAL PRECIPITATION**



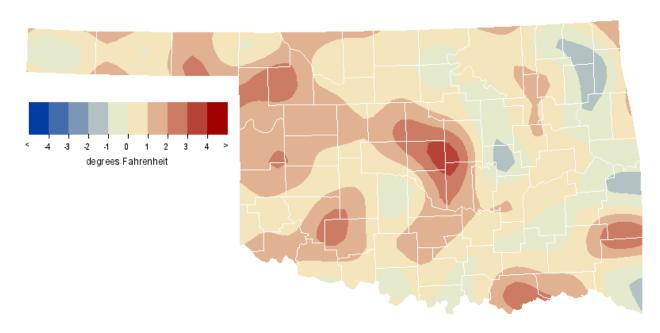
# **OCTOBER 2011 AVERAGE SOIL MOISTURE AT 25CM**



## **OCTOBER 2011 AVERAGE TEMPERATURE**



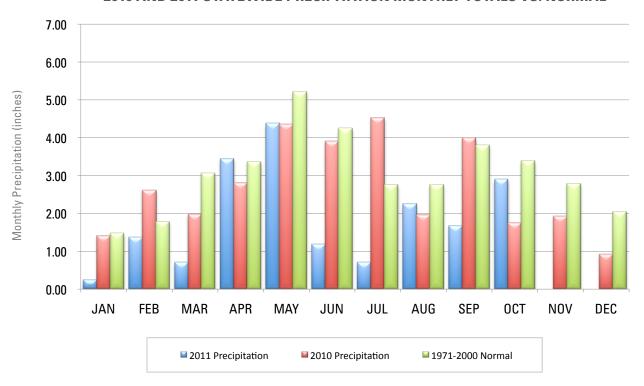
# **OCTOBER 2011 DEPARTURE FROM NORMAL TEMPERATURE**



# **MESONET MONTHLY SUMMARY FOR OCTOBER 2011**

NAME	MEAN TEMP		DAY	LOW TEMP	DAY	HDD	CDD		HIGH 24-HR	DAY	NAME	MEAN TEMP		DAY	LOW TEMP	DAY	HDD	CDD		HIGH 24-HR	DAY
PANHANDLE Arnett Beaver Boise City Buffalo	60.3 59.0 56.3 60.5	91 96 89 95	3 3 2 3	28 26 28 29	28 28 28 28	189 236 287 195	42 49 16 57	1.96 .93 1.18 1.37	.93 .60 .64	9 8 7 9	Goodwell Hooker Kenton Slapout	58.4 58.6 56.5 59.2	91 93 90 94	2 2 2 3	29 29 28 30	28 28 28 28	242 237 286 215	38 37 22 37	.61 .77 .17 1.28	.32 .43 .11 .63	8 8 27 8
NORTH CENTRAL Alva Blackwell Breckinridge Cherokee Fairview Freedom Lahoma	60.3 60.5 61.0 60.8 61.7 60.8 61.1	93 87 89 92 91 92 91	3 3 3 3 3 3 3	28 27 32 29 33 28 32	28 20 20 28 20 28 20	198 191 179 188 162 185 179	52 52 54 59 60 55 59	1.81 2.73 3.51 1.89 2.47 1.46 2.37	1.07 1.21 1.89 .98 1.49 .81	8 22 9 8 8 8	May Ranch Medford Newkirk Red Rock Seiling Woodward	60.8 60.8 60.3 61.0 60.5 61.1	93 90 86 88 90 91	3 3 4 4 3 3	34 30 29 28 29 29	20 28 20 20 28 28	184 182 182 **** 193 178	53 51 35 **** 53 55	1.48 3.50 2.18 1.66 2.36 1.54	.78 1.73 1.52 1.11 1.42 .74	8 9 9 9 8 8
NORTHEAST Bixby Burbank Claremore Copan Foraker Inola Jay Miami	61.8 60.6 62.6 61.6 61.4 61.2 60.5	91 86 91 88 87 88 87	16 4 16 16 4 16 16	26 30 26 28 26 25 29	20 20 20	161 189 147 175 169 177 196 200	62 52 74 69 58 59 58	2.11 2.43 1.36 .79 .65 2.54 1.46	.64 1.74 .65 .35 .23 .97 .40	27 9 22 17 22 22 10	Nowata Pawnee Porter Pryor Skiatook Vinita Wynona	60.2 61.6 62.7 60.6 63.0 59.6 61.7	90 86 91 89 89 88	16 4 16 16 16 16	23 27 27 23 29 25 24	20 20 20 20 20 20 20	210 168 149 190 131 210 165	61 62 77 55 69 43 63	***** 3.34 1.80 1.23 1.64 .93 1.87	***** 1.55 .91 .43 .92 .54 1.51	*** 9 27 22 22 10 22
WEST CENTRAL Bessie Butler Camargo Cheyenne Erick	62.7 61.3 59.5 61.4 60.9	90 90 91 88 90	3 3 3 3 16	37 33 29 34 33	28 20 28 28 28	145 178 208 170 179	73 62 37 59 51	3.09 2.08 2.54 2.52 2.69	1.64 1.25 1.24 1.31 1.32	8 8 8 8	Putnam Retrop Watonga Weatherford	61.3 62.6 62.3 62.3	89 90 90 90	3 16 3 3	33 35 37 36	28 28 28 28	175 145 157 155	60 71 73 72	2.21 2.89 3.08 3.12	1.32 1.45 1.68 1.94	8 8 8
CENTRAL Acme Bowlegs Bristow Lake Carl Blac Chandler Chickasha El Reno Guthrie Kingfisher Marena Minco Marshall	62.8 62.8 60.8 60.5 62.9 61.3 63.4 62.5 62.5 62.6 61.7	88 88 89 89 90 89 92 88 87 88	3 16 16 3 16 3 16 3 16 3	33 28 25 28 30 32 30 33 33 32 35	20 20 20 20 20 20 29 20 20 20 20 20 20	149 145 190 192 142 155 176 140 155 151 139 167	80 77 58 53 78 60 60 90 77 73 65 65	3.66 3.58 2.73 3.04 4.08 3.19 3.99 3.19 2.63 4.03 5.17	1.90 1.86 .76 1.38 1.71 1.43 1.02 1.74 1.39 1.43 1.23 2.26	8 9 27 9 9 8 9 9 9	Ninnekah Norman Oilton OKC East OKC North OKC West Okemah Perkins Shawnee Spencer Stillwater Washington	62.7 62.8 60.4 63.1 29.3 63.7 62.4 62.5 63.7 63.5 61.7 63.2	89 87 88 87 87 88 89 88 87 88	3 3 16 16 16 16 16 4 16 4	33 34 24 34 *** 36 26 31 33 34 30 35	20 20 25 20 20 20 20	200 141 126 128 155 151 130	72 **** 58 81 81 89 75 73 89 ****	3.63 4.92 1.88 5.43 4.99 3.89 2.88 3.13 4.67 *****	1.68 2.45 .68 2.00 2.05 2.48 2.12 1.81 2.21 2.22 *****	8 9 9 9 9 22 9 9 ***
EAST CENTRAL Cookson Eufaula Haskell Hectorville Holdenville McAlester Okmulgee	61.2 64.3 61.6 63.1 64.4 63.4 61.5	89 91 90 89 89 89	16 16 16 16 16 16	24 32 26 29 33 28 25	20 20 20 20 20 20 20	179 122 167 133 **** 141 171	62 99 63 75 **** 92	2.63 4.23 1.90 1.84 2.94 2.68 2.16	1.14 1.82 .85 .76 .99 1.20	27 22 27 27 27 27 27	Sallisaw Stigler Stuart Tahlequah Webbers Falls Westville	62.6 62.3 63.7 61.0 62.2 60.9	89 89 88 89 91 86	16 16 16 16 16	27 28 32 23 25 28	20 20 20 20 20 20	150 150 121 184 154 182	75 66 80 62 67 54	5.35 4.76 3.84 2.82 3.38 4.19	2.22 2.66 1.59 .82 1.46 1.54	22 22 22 27 27 27
SOUTHWEST Altus Apache Fort Cobb Grandfield Hinton Hobart	63.9 62.6 61.8 63.9 61.7 62.9	92 88 89 90 88 90	7 3 16 3 3 3	36 36 34 39 35 36	28 29 20 28	126 141 152 115 163 143	93 67 53 82 61 79	3.05 3.28 3.91 6.11 2.84 4.42	1.38 1.33 2.70	8 8 27 8 8	Hollis Mangum Medicine Park Tipton Walters	63.5 62.3 64.5 64.3 64.7	93 92 88 91 90	16 16 3 7 3	35 33 41 35 35	29 28 19	127 150 114 120 110	82 68 99 99	2.94 3.34 3.38 3.17 5.58	1.46 1.54 2.14 1.84 2.85	8 8 8 8
SOUTH CENTRAL Ada Ardmore Burneyville Byars Centrahoma Durant Fittstown Ketchum Ranch Lane	64.0 64.3 63.9 64.3 63.1 65.9 63.3 64.1 64.3	89 88 89 87 89 87 88 91	16 16 16 16 15 16 3 7	31 36 30 35 28 37 32 35 29	29 29 20 20 20 20 20	125 102 120 116 135 91 128 112	94 80 86 93 74 119 74 85 96	4.71 5.27 3.75 4.23 3.01 3.49 4.62 7.08 2.09	2.71 1.70 2.45 1.06 1.33 2.36	9 9 9 9 9 9 8 27	Madill Newport Pauls Valley Ringling Sulphur Tishomingo Vanoss Waurika	64.1 63.9 64.2 64.5 63.3 63.3 65.0	87 87 88 87 87 87 89	4 16 16 3 16 16 16 3	32 36 34 35 30 33 31 34		113 108 114 106 138 126 136 104	84 73 88 90 85 74 85 103	4.59 3.38 6.13 6.17 4.33 3.82 4.81 5.30	2.18 1.87 2.06 2.43 2.77 1.61 2.78 3.16	9 9 9 8 9 9 9
SOUTHEAST Antlers Antlers Broken Bow Clayton Cloudy Hugo	63.1 ***** 62.2 63.8 64.1 65.6	90 *** 89 91 88 89	16 16 16	28 *** 28 30 30 35	*** 20 20	137 **** 147 136 123 93	61 100 95	2.19 ***** 2.70 3.00 1.79 1.90	.89 **** .89 1.28 .91 1.03	22 *** 17 17 22 22	Idabel Mt Herman Talihina Wilburton Wister	64.4 63.4 63.2 63.2 61.5	89 87 91 91	16 16 16 16	31 28 27 27 27	20 20 20 20 20	114 133 146 144 170	96 85 91 89 61	2.41 3.01 3.09 3.19 3.69	.59 1.30 1.48 1.21 1.74	22 22 22 22 22 22

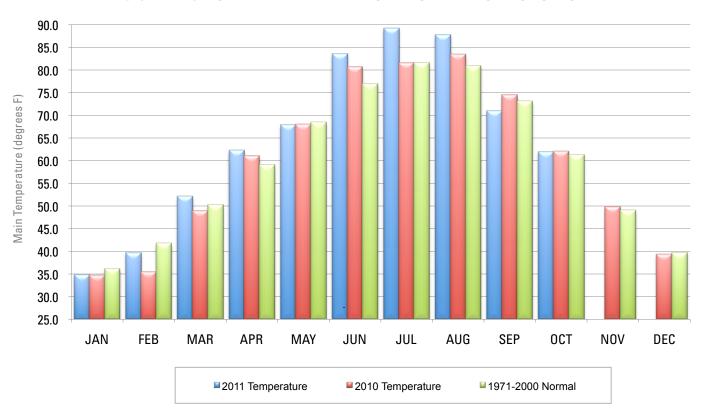
## 2010 AND 2011 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



## **October 2011 Mesonet Precipitation Comparison**

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Oct-10
Panhandle	1.03	-0.48	51st Driest	6.41 (2000)	0.03 (1952)	1.19
North Central	2.23	-0.43	52nd Wettest	9.65 (1998)	0.00 (1952)	1.34
Northeast	1.65	-1.98	30th Driest	17.33 (1941)	0.05 (1917)	1.06
West Central	2.69	0.13	42nd Wettest	9.41 (1986)	0.00 (1910)	2.07
Central	3.88	0.22	36th Wettest	13.51 (1941)	0.00 (1917)	1.67
East Central	3.29	-0.98	55th Driest	14.75 (1941)	0.19 (1904)	1.47
Southwest	3.82	0.84	30th Wettest	11.44 (1983)	0.00 (1952)	3.01
South Central	4.52	0.27	37th Wettest	14.61 (1981)	0.00 (1917)	1.92
Southeast	2.70	-2.26	43rd Driest	13.21 (2009)	0.10 (1921)	2.16
Statewide	2.89	-0.49	52nd Wettest	11.32 (1941)	0.14 (1952)	1.72

## 2010 AND 2011 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



# **October 2011 Mesonet Temperature Comparison**

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Oct-10 (F)
Panhandle	58.6	0.8	46th Warmest	66.4 (1963)	50.9 (1925)	60.8
North Central	60.8	0.4	56th Warmest	69.6 (1963)	52.1 (1925)	61.7
Northeast	61.3	0.6	49th Warmest	70.0 (1963)	52.9 (1925)	61.9
West Central	61.6	1.1	42nd Warmest	69.0 (1963)	53.2 (2009)	62.9
Central	62.4	0.5	51st Warmest	70.3 (1963)	54.5 (1925)	62.8
East Central	62.3	0.2	59th Coolest	71.2 (1963)	55.3 (2009)	62.4
Southwest	63.3	0.8	45th Warmest	70.5 (1963)	55.4 (1925)	64.0
South Central	64.0	0.5	54th Warmest	71.5 (1963)	56.4 (1976)	62.9
Southeast	63.5	1.1	49th Warmest	70.6 (1963)	55.7 (1976)	61.4
Statewide	61.9	0.6	53rd Warmest	69.9 (1963)	54.4 (1925)	62.3

# **RECORD EVENT REPORTS**

Description	Day	Location	Record	Previous Record	Year
Low Temperature	1	Bartlesville	35	36	2003
Daily Maximum Rainfall	9	Oklahoma City	2.71 inches	2.35	2001
Low Temperature	20	Tulsa	30	30	1976

# **MESONET EXTREMES FOR OCTOBER 2011**

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	96	3rd	Beaver	26	28th	Beaver	1.96	Arnett	0.93	9th	Arnett
North Central	93	3rd	Alva	27	20th	Blackwell	3.51	Breckinridge	1.89	9th	Breckinridge
Northeast	91	16th	Porter	23	20th	Nowata	3.34	Pawnee	1.74	9th	Burbank
West Central	91	3rd	Camargo	29	28th	Camargo	3.12	Weatherford	1.94	8th	Weatherford
Central	92	3rd	Kingfisher	24	20th	Oilton	5.83	Oklahoma City West	2.48	9th	Oklahoma City West
East Central	91	16th	Webbers Falls	23	20th	Tahlequah	5.35	Sallisaw	2.66	22nd	Stigler
Southwest	93	16th	Hollis	33	29th	Mangum	6.11	Grandfield	2.85	8th	Walters
South Central	91	7th	Lane	28	20th	Centrahoma	7.08	Ketchum Ranch	3.16	8th	Waurika
Southeast	91	16th	Wilburton	27	20th	Talihina	3.69	Wister	1.74	22nd	Wister
Statewide	96	3rd	Beaver	23	20th	Nowata	7.08	Ketchum Ranch	3.16	8th	Waurika

# **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

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

### **Temperature**

	40.0.1
Mean	49.0 degrees
Warmest November	1989, 56.2 degrees
Coolest November	1929, 42.6 degrees
Warmest location	Waurika, 53.4 degrees
Coolest location	Turpin, 42.8 degrees
Hottest recorded	95 degrees, Waukomis, November 1, 1914 Coalgate, November 1, 1937
Coldest recorded	-15 degrees, Kenton, November 28, 1976

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.

## **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

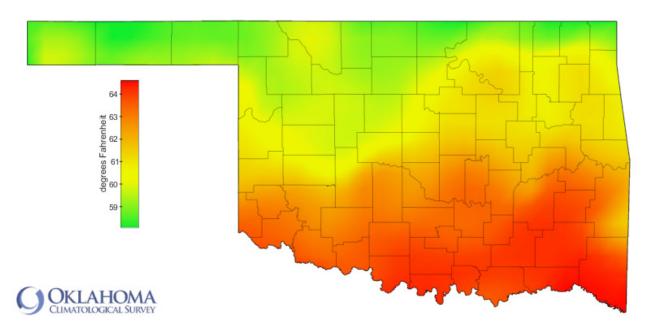
#### **Tornadoes**

Average November Tornadoes	1
Most	12 (1958)

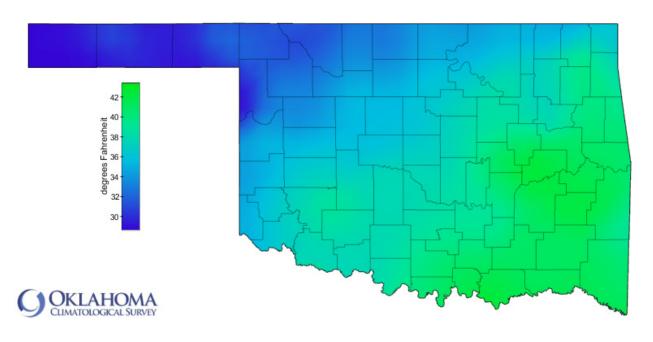
Oklahoma was only 1.87 inches, nearly a full inch less than the currently established monthly normal (compiled from 1971 through 2000). Annual precipitation across Oklahoma compiled from the earlier was a full 3.25 inches less than the value currently in use. Increased precipitation during November has 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.

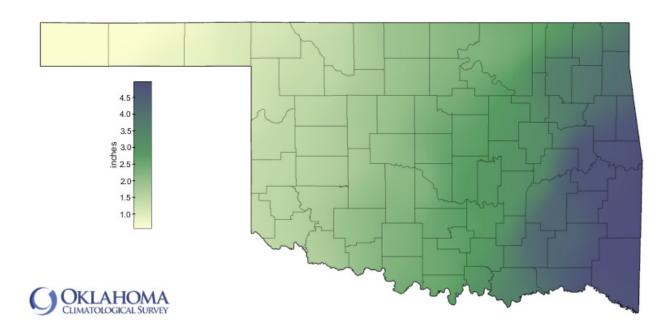
# **NOVEMBER NORMAL DAILY MAXIMUM TEMPERATURE (1981-2010)**



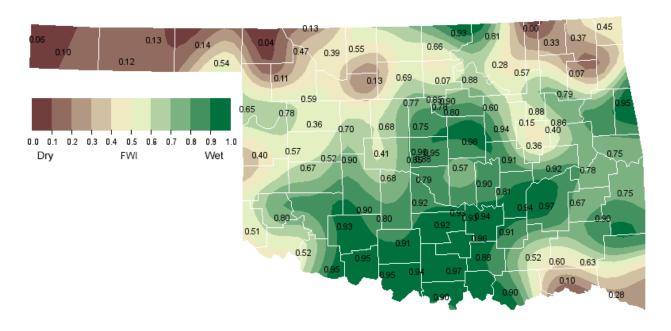
# **NOVEMBER NORMAL DAILY MINIMUM TEMPERATURE (1981-2010)**



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



# **NOVEMBER 1, 2011 SOIL MOISTURE CONDITIONS AT 25CM**



#### **NOVEMBER 2011 DROUGHT INDICES**

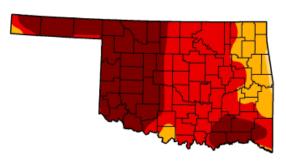
# U.S. Drought Monitor

November 1, 2011

Valid 7 a.m. EST

#### Oklahoma

Drought Conditions (Percent Area) 0.00 100.00 100.00 99.28 85.48 42.87 Current Last Week 100.00 100.00 86.26 54.84 0.00 99.89 (10/25/2011 map 3 Months Ago 100.00 100.00 0.00 100.00 88.10 64.30 (08/02/2011 map) 13.82 86.18 47.90 1.50 0.00 0.00 (12/28/2010 map) Start of Water Year 0.00 100.00 100.00 100.00 78.97 66.42 09/27/2011 map One Year Ago 72.01 27.99 0.00 0.00 (10/26/2010 map)



#### Intensity:



D3 Drought - Extreme
D4 Drought - Exceptional

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

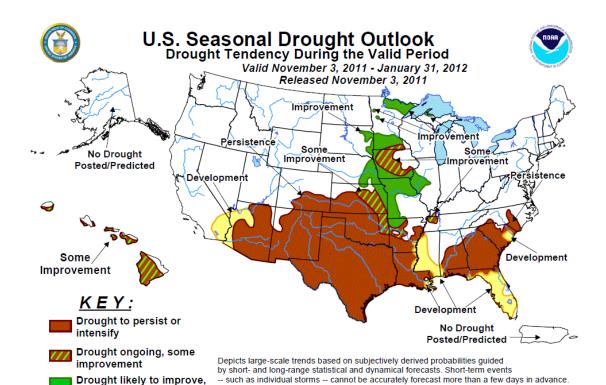
# USDA National Drought Mitigation Center





http://droughtmonitor.unl.edu

Released Thursday, November 3, 2011 Brian Fuchs, National Drought Mitigation Center



but do not necessarily imply drought elimination.

Use caution for applications -- such as crops -- that can be affected by such events.

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

"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

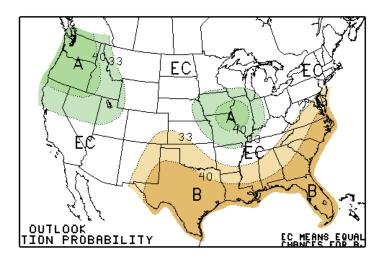
15

impacts ease

likely

**Drought development** 

## **NOVEMBER 2011 U.S. PRECIPITATION FORECAST**

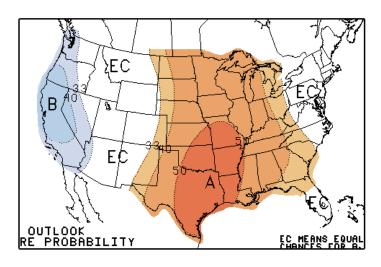


Percent Likelihood of Above or Below Average Precipitation\*

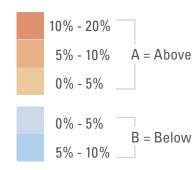


\*EC indicates no forecasted anomalies due to lack of model skill.

## **NOVEMBER 2011 U.S. TEMPERATURE FORECAST**



Percent Likelihood of Above or Below Average Temperatures\*

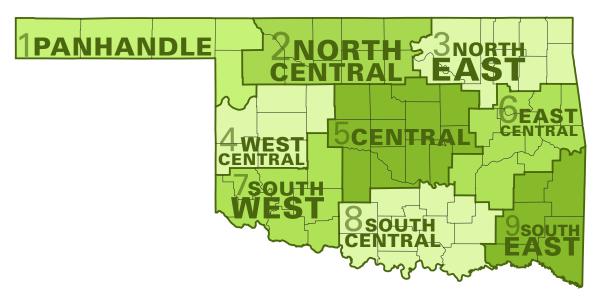


\*EC indicates no forecasted anomalies due to lack of model skill.

## **NOVEMBER CLIMATE NORMALS**

Climate Division	Max. Temperature (°F)	Min. Temperature (°F)	Avg. Temperature (°F)	Precipitation (inches)
1	58.8	30.2	44.6	1.0
2	58.1	33.4	45.8	2.1
3	60.0	37.5	48.8	3.6
4	59.0	34.3	46.7	1.7
5	60.3	37.2	48.8	2.7
6	60.9	39.0	50.0	4.2
7	61.7	36.3	49.0	1.7
8	62.7	39.2	51.0	3.1
9	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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