Oklahoma Monthly Climate Summary

AUGUST 2010

OKLAHOMA CLIMATOLOGICAL SURVEY

August lived up to Oklahoma's penchant for monotonously dry summer months and even threw in a goodly amount of heat to boot. Dry conditions in the southern half of the state overwhelmed abundant rains along the Kansas border to propel the month to the 35th driest August on record. As with any dry summer month, excessive heat tagged along and August finished as the 18th warmest on record at 3 degrees above normal. The heat and lack of rainfall combined in a rapid-onset drought situation, or flash drought, in the southern half of the state. The flooding rains of early July were no match for the plant-wilting force of the August sun. The summer ended as the 12th warmest on record but those early rains during June and July did help the season finish as the 48th wettest. Very little in the way of severe weather occurred during August, although a few storms managed to throw severe winds towards the ground at times.

PRECIPITATION

East central and southeastern Oklahoma bore the brunt of the dry weather, finishing with their 7th- and 8th-driest August on record, respectively. The east central region received an average rainfall total of 0.75 inches, more than 2 inches below normal. The Panhandle uncharacteristically came out on top in the moisture sweepstakes with an average of 3.56 inches, more than an inch above normal, to rank as the 28th wettest August for that region. The statewide average ended almost an inch below normal at 1.96 inches. The highest total for the month was 7.50 inches recorded at Kenton. Ft. Cobb trailed all others with a meager tenth of an inch. Adding the rains of June and July thrust the summer a bit above normal at 10.39 inches. For the year, the running total remained below normal by more than an inch and ranked as the 58th driest such period on record.

August 2010 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	109°F	Freedom	2, 13
Low Temperature	46°F	4 locations	25, 26
High Precipitation	7.50 in.	Kenton	--
Low Precipitation	0.10 in.	Ft. Cobb	--

TEMPERATURE

The warmth was somewhat atypical of recent Augusts, but with dry weather dominating, it was not unexpected. A large part of the state finished 2-3 degrees above normal for the month. A few pockets of cool air were found in the rainiest parts of the state, but those areas were still less than a degree below normal. Excessive heat in June and August overwhelmed a normal July and allowed summer to finish more than 2 degrees above normal. The southeast was nearly 4 degrees above normal to rank as the eighth warmest summer on record for that region, helped by its fifth warmest August. The January-August period managed to creep above normal finally by a tenth of a degree, the 48th warmest such period on record.

August 2010 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2010)
Month (August)	83.4°F	3.0°F	18th Warmest
Season-to-Date (Jun-Aug)	81.9°F	2.3°F	12th Warmest
Year-to-Date (Jan-Aug)	62.0°F	0.1°F	48th Warmest

Precipitation

	Average	Depart.	Rank (1895-2010)
Month (August)	1.96 in.	-0.81 in.	35th Driest
Season-to-Date (Jun-Aug)	10.39 in.	0.62 in.	48th Wettest
Year-to-Date (Jan-Aug)	23.52 in.	-1.14 in.	58th Driest

Depart. = departure from 30-year normal

AUGUST DAILY HIGHLIGHTS

AUGUST 1-3: August began hot with highs in the 100s across most of the state for the first three days thanks to an upper-level ridge of high pressure. Low temperatures were a bit more reasonable in the upper 60s and 70s, but little relief was felt in the afternoons as heat indices climbed to near 110 degrees in parts of the state.

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AUGUST 4-8: A slow-moving cold front brought the state some relief on the fourth. The front provided some cooler air and a focus for showers and storms for a few days. The northwest had isolated areas with nearly 2 inches of rainfall thanks to a few thunderstorms. Those storms also produced high winds and hail for brief periods. Temperatures were about 15 degrees cooler behind the front with 80s for highs. Storm totals in the northeast also approached 3 inches on the seventh while a few spots in the southeast had up to 2 inches. Still, most of the state was brutally hot during this period with 100s for highs and excessive heat indices.

AUGUST 9-13: This five-day period was pure summer with hot days and nights. Lows were generally in the upper-70s with a few 80s at times. Highs were generally in the upper-90s to triple-digits. Freedom once again hit 109 degrees on the 13th. Very little rain fell during this time, and heat indices were oppressive each day.

AUGUST 14-18: A cold front and a couple of upper-level disturbances provided a bit of relief for the state. The front entered the northwest on the 14th and immediately generated a few showers and storms. The storms helped cool the northwest down while areas to the south remained in the 100s. The cold front sagged farther south on the 15th and the northwest basked in 70-80 degree weather while enjoying some nice rains. A couple of upper-level disturbances over the next couple of days brought more rainfall to parts of the state following the action due to the cold front. Northern Oklahoma benefited over this five-day period with over 5 inches of rainfall in localized areas with surrounding 3-5 inch amounts. Temperatures remained out of triple-digits on the 17th and 18th, and northern Oklahoma had 80s on those days. The rains brought some cool weather to the far northwest on the 15th and 16th. Highs in the northwest on those days remained in the 70s.

AUGUST 19-23: Very little rain fell during this five-day period, although totals of more than an inch were found across far southern Oklahoma and parts of the Panhandle. Temperatures soared above 100 degrees over much of the state on these days and heat indices were in the 105-110 degree range. A wet microburst hit Norman on the 21st with winds of up to 80 mph and very heavy localized rainfall. Some damage was reported in that city due to the high winds.

AUGUST 24-31: A strong cold front on the 24th brought the state a much-needed cool down. The front also generated showers and storms that dropped more than 4 inches of rain at Shawnee. Other areas up and down south I-35 had from 1-2 inches. The front dropped temperatures into the 70s in the afternoon and brought northerly winds gusting to 45 mph. The next few days were very pleasant with cooler temperatures and dry air. Ft. Supply reached 41 degrees on the 25th to set a record low for August for that location. Temperatures crept up to the 80s and 90s again by the 28th. An upper-level trough in the lee of the Rockies kicked up the southerly flow and August once again felt like summer for the last few days of the month. Highs on those days were near 100 degrees and heat indices were well over the triple-digit mark.

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AUGUST 2010 SEVERE WEATHER

Wind Gusts (70 mph or greater)

Speed (m.p.h)	Location	County	Day
70	Fanshawe	LeFlore	1
78	Braman	Kay	4
70	Tulsa	Tulsa	14
80	2 NE Norman	Cleveland	21

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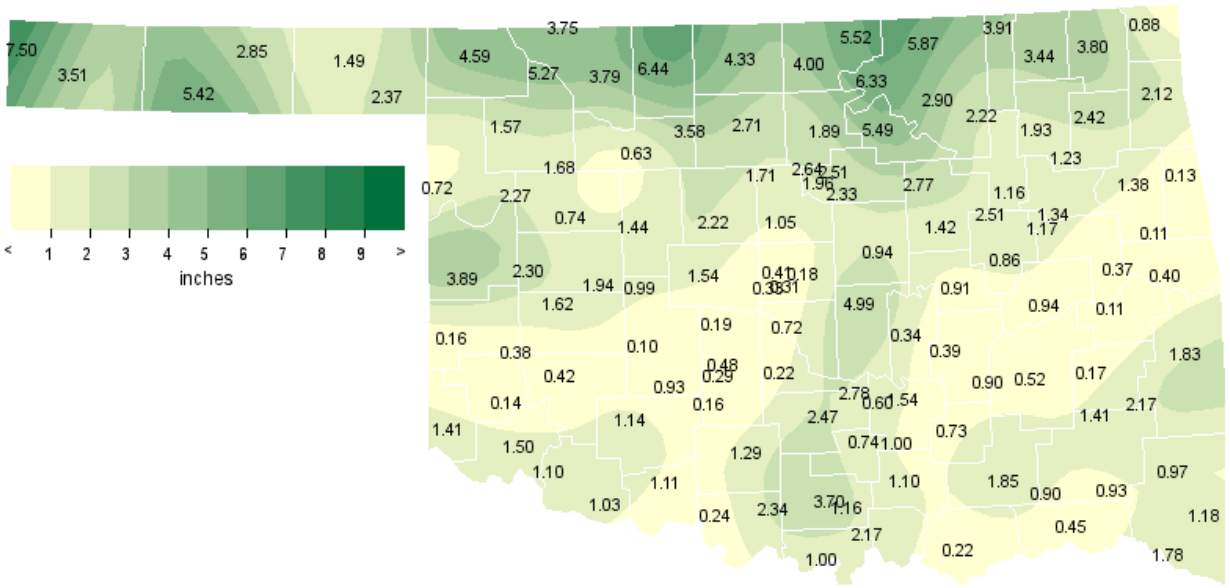
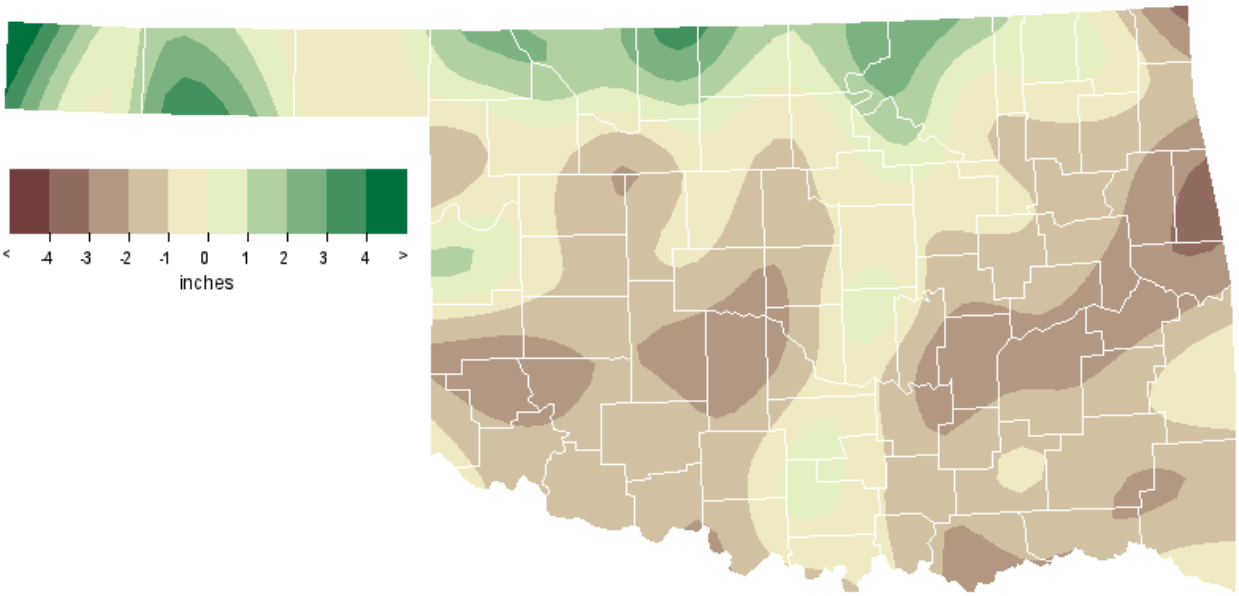
AUGUST 2010 OBSERVED PRECIPITATION



AUGUST 2010 DEPARTURE FROM NORMAL PRECIPITATION



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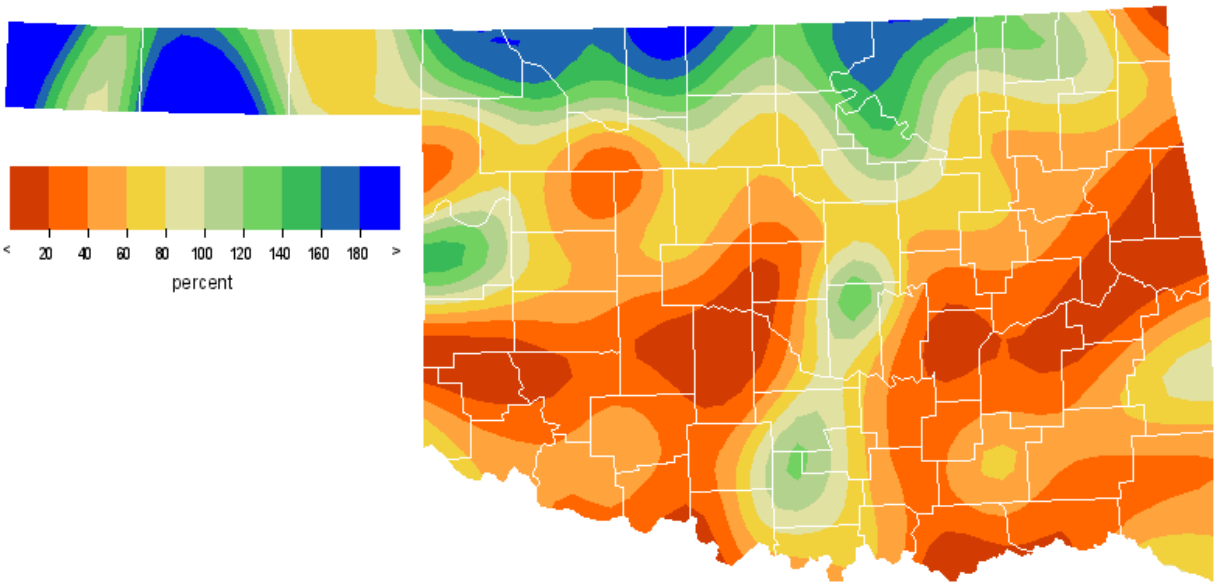
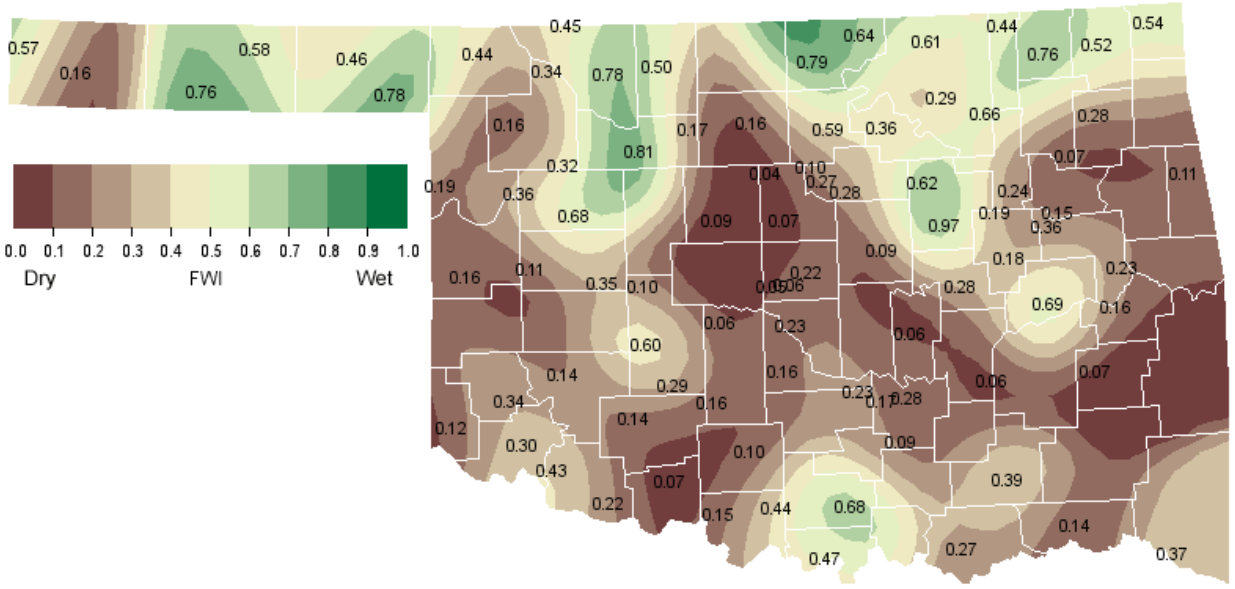
AUGUST 2010 PERCENT OF NORMAL PRECIPITATION



AUGUST 2010 AVERAGE SOIL MOISTURE AT 25CM



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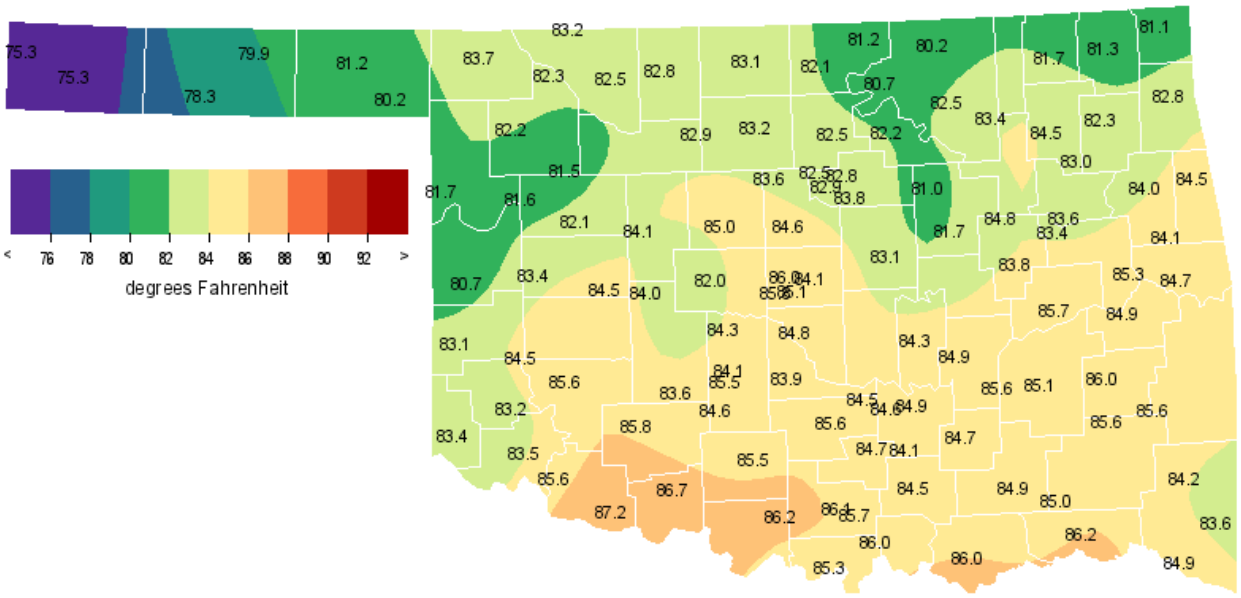
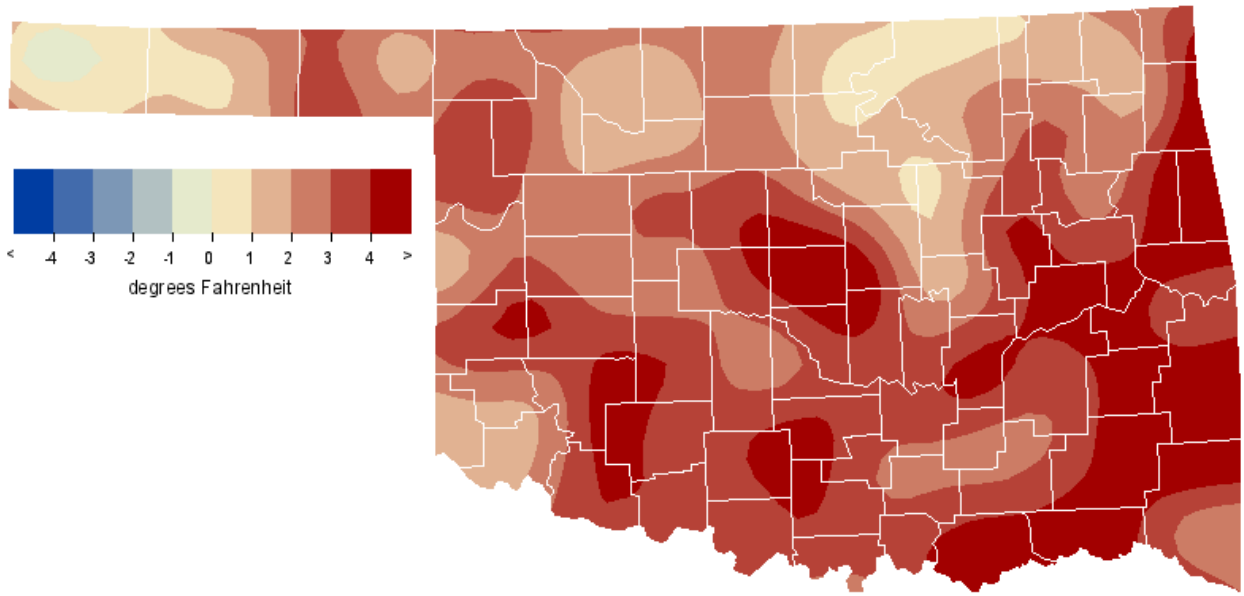
AUGUST 2010 AVERAGE TEMPERATURE



AUGUST 2010 DEPARTURE FROM NORMAL TEMPERATURE



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MESONET MONTHLY SUMMARY FOR JUNE 2010

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	81.6	105	2	49	26	0	516	.72	.28	4
Beaver	81.2	105	2	46	26	1	503	1.49	1.15	16
Boise City	75.2	98	3	47	26	3	320	3.51	1.10	5
Buffalo	83.7	108	2	52	26	0	580	4.59	2.86	17
NORTH CENTRAL										
Alva	82.5	108	2	50	26	0	543	3.79	1.70	5
Blackwell	82.2	106	13	53	25	0	534	4.00	3.35	17
Breckinridge	83.2	107	13	52	26	0	564	2.71	1.25	31
Cherokee	82.7	108	13	56	26	0	550	6.44	2.65	17
Fairview	84.4	107	13	50	27	****	****	.63	.23	5
Freedom	82.3	109	13	50	25	0	537	5.27	2.57	17
Lahoma	82.9	108	13	55	27	0	554	3.58	1.32	15
NORTHEAST										
Bixby	83.3	103	2	53	27	****	****	1.16	.92	17
Burbank	80.6	104	13	53	26	0	485	6.33	3.47	17
Claremore	84.5	106	13	54	26	0	603	1.93	1.89	17
Copan	*****	***	***	***	***	****	****	3.91	1.94	17
Foraker	80.3	102	14	54	25	0	473	5.87	3.11	17
Inola	83.0	103	13	51	26	0	558	1.23	.96	17
Jay	82.8	103	2	51	26	0	551	2.12	1.40	8
Miami	81.1	99	12	49	26	0	498	.88	.38	5
WEST CENTRAL										
Bessie	84.7	106	14	54	26	****	****	1.62	1.04	16
Butler	83.4	107	13	49	26	0	570	2.30	.97	17
Camargo	81.6	105	13	47	26	0	515	2.27	1.57	17
Cheyenne	80.7	100	2	52	25	0	487	3.89	1.35	4
Erick	83.1	107	23	46	26	0	561	.16	.08	16
CENTRAL										
Acme	84.5	104	23	53	26	0	606	.16	.15	31
Bowlegs	84.3	103	13	54	27	0	597	.34	.34	24
Bristow	81.7	101	13	51	26	0	517	1.42	.78	17
Lake Carl Blac	82.5	106	2	51	27	0	542	2.64	1.20	17
Chandler	83.1	101	14	55	27	0	560	.94	.72	17
Chickasha	84.1	104	2	53	27	0	593	.48	.38	31
El Reno	82.0	104	23	51	26	0	527	1.54	1.46	24
Guthrie	84.6	105	13	52	26	0	608	1.05	.43	16
Kingfisher	85.0	108	13	54	26	0	621	2.22	1.25	24
Marena	82.9	105	13	55	26	0	555	1.96	.88	17
Minco	84.3	104	23	56	26	0	599	.19	.16	24
Marshall	83.6	106	13	50	27	0	576	1.71	.54	17
EAST CENTRAL										
Cookson	84.1	104	14	50	26	0	593	.11	.11	17
Eufaula	85.7	104	13	57	27	0	642	.94	.94	17
Haskell	83.4	103	13	53	27	0	570	1.17	1.10	17
Hectorville	84.8	104	14	59	26	0	613	2.51	1.24	17
Holdenville	84.9	103	13	54	26	0	617	.39	.15	21
McAlester	85.2	103	15	53	27	0	625	.52	.38	17
Okmulgee	83.8	104	2	52	27	0	584	.86	.43	17
SOUTHWEST										
Altus	83.5	102	15	55	26	0	573	1.50	1.12	16
Apache	83.6	103	23	52	26	0	578	.93	.83	31
Fort Cobb	83.1	102	23	56	26	****	****	.10	.06	21
Grandfield	87.2	108	23	58	26	0	689	1.03	.46	16
Hinton	84.0	105	2	52	26	0	590	.99	.68	16
Hobart	85.6	105	23	53	26	0	637	.42	.42	16
SOUTH CENTRAL										
Ada	84.9	103	13	54	27	0	617	1.54	1.18	17
Ardmore	85.7	103	1	60	28	0	642	1.16	1.01	24
Burneyville	85.3	105	23	57	27	0	630	1.00	.53	6
Byars	84.5	102	13	57	26	0	604	2.78	1.87	24
Centrahoma	84.6	103	12	54	27	0	608	.73	.25	17
Durant	86.0	104	22	61	27	0	650	.22	.16	17
Fittstown	84.1	102	13	57	28	0	593	1.00	.50	7
Ketchum Ranch	85.5	106	23	60	27	0	636	1.29	.67	25
Lane	84.9	102	13	57	27	0	617	1.85	1.01	15
SOUTHEAST										
Antlers	85.0	105	22	54	28	0	620	.90	.60	8
Broken Bow	83.6	103	22	54	27	0	576	1.18	.63	15
Clayton	85.6	105	2	55	27	0	639	1.41	.95	8
Cloudy	85.3	105	22	61	28	****	****	.93	.43	8
Hugo	86.2	103	22	59	27	0	658	.45	.39	8

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	78.3	103	14	49	26	1	414	5.42	3.16	16
Hooker	79.9	104	2	50	26	0	461	2.85	1.49	5
Kenton	75.3	98	3	49	26	1	320	7.50	3.48	16
Slapout	80.2	104	14	49	27	0	472	2.37	2.24	16
May Ranch	83.1	108	13	55	25	0	563	3.75	2.51	17
Medford	83.1	107	2	54	25	0	560	4.33	2.11	17
Newkirk	81.2	104	13	54	25	0	502	5.52	2.77	17
Red Rock	82.5	106	13	51	27	0	542	1.89	1.27	17
Seiling	81.5	104	23	46	26	0	510	1.68	1.33	5
Woodward	82.2	106	13	49	26	0	532	1.57	.61	5
Nowata	81.8	104	2	49	26	0	520	3.44	1.60	17
Pawnee	82.2	104	14	55	26	0	533	5.49	3.44	17
Porter	83.5	103	13	55	27	0	575	1.34	.95	17
Pryor	82.3	103	13	51	26	0	535	2.42	.99	17
Skiatook	83.3	103	14	58	26	0	568	2.22	1.47	17
Vinita	81.3	102	4	50	26	0	506	3.80	3.02	7
Wynona	82.5	105	13	53	26	0	543	2.90	2.41	17
Putnam	82.1	104	14	52	26	0	529	.74	.28	5
Retrop	84.5	105	23	53	26	0	605	.38	.32	21
Watonga	84.1	105	13	53	25	0	592	1.44	.90	31
Weatherford	84.5	105	13	57	25	0	604	1.94	1.76	16
Ninnekah	85.5	105	23	55	26	0	635	.29	.19	31
Norman	84.8	102	13	57	26	0	614	.72	.57	24
Oilton	81.0	102	14	48	26	0	495	2.77	1.89	17
OKC East	85.1	103	13	54	26	0	623	.31	.26	24
OKC North	85.9	104	13	57	26	0	649	.41	.38	24
OKC West	85.8	103	13	60	27	0	644	.33	.27	24
Okemah	*****	***	***	***	***	****	****	.91	.50	7
Perkins	83.8	106	13	55	26	0	584	2.33	1.32	17
Shawnee	84.7	104	13	56	26	****	****	4.99	4.59	24
Spencer	84.1	102	13	52	26	0	594	.18	.12	24
Stillwater	82.8	104	13	51	26	0	553	2.51	1.47	17
Washington	83.9	104	23	55	27	0	585	.22	.11	31
Sallisaw	84.8	102	2	54	26	0	613	.40	.24	7
Stigler	84.9	104	13	53	26	0	616	.11	.10	17
Stuart	85.6	103	13	57	27	0	639	.90	.64	24
Tahlequah	84.0	102	13	55	26	0	589	1.38	.76	6
Webbers Falls	85.3	105	13	55	26	0	629	.37	.31	7
Westville	84.5	104	2	57	26	0	605	.13	.12	17
Hollis	83.4	105	14	55	26	0	569	1.41	.67	15
Mangum	83.1	105	23	49	26	0	562	.14	.07	21
Medicine Park	85.7	105	23	64	26	0	642	1.14	.62	16
Tipton	85.7	106	23	53	26	0	640	1.10	.62	17
Walters	86.7	107	23	60	26	0	672	1.11	.65	18
Madill	85.9	104	1	61	27	0	649	2.17	.78	18
Newport	86.1	105	1	60	28	0	655	3.70	3.17	24
Pauls Valley	85.7	104	23	60	27	0	641	2.47	2.00	24
Ringling	86.2	105	1	61	27	0	658	2.34	1.79	21
Sulphur	84.7	103	13	59	27	0	610	.74	.38	21
Tishomingo	84.5	103	13	57	28	0	605	1.10	.56	15
Vanoss	84.6	103	2	55	27	0	608	.60	.39	18
Waurika	*****	***	***	***	***	****	****	.24	.16	21
Idabel	84.9	104	22	58	28	0	617	1.78	1.13	5
Mt Herman	84.2	101	5	57	27	0	596	.97	.48	21
Talihina	85.6	107	1	53	27	0	638	2.17	.93	5
Wilburton	86.0	106	15	55	27	0	651	.17	.10	21
Wister	84.3	106	1	51	27	****	****	1.83	1.28	5

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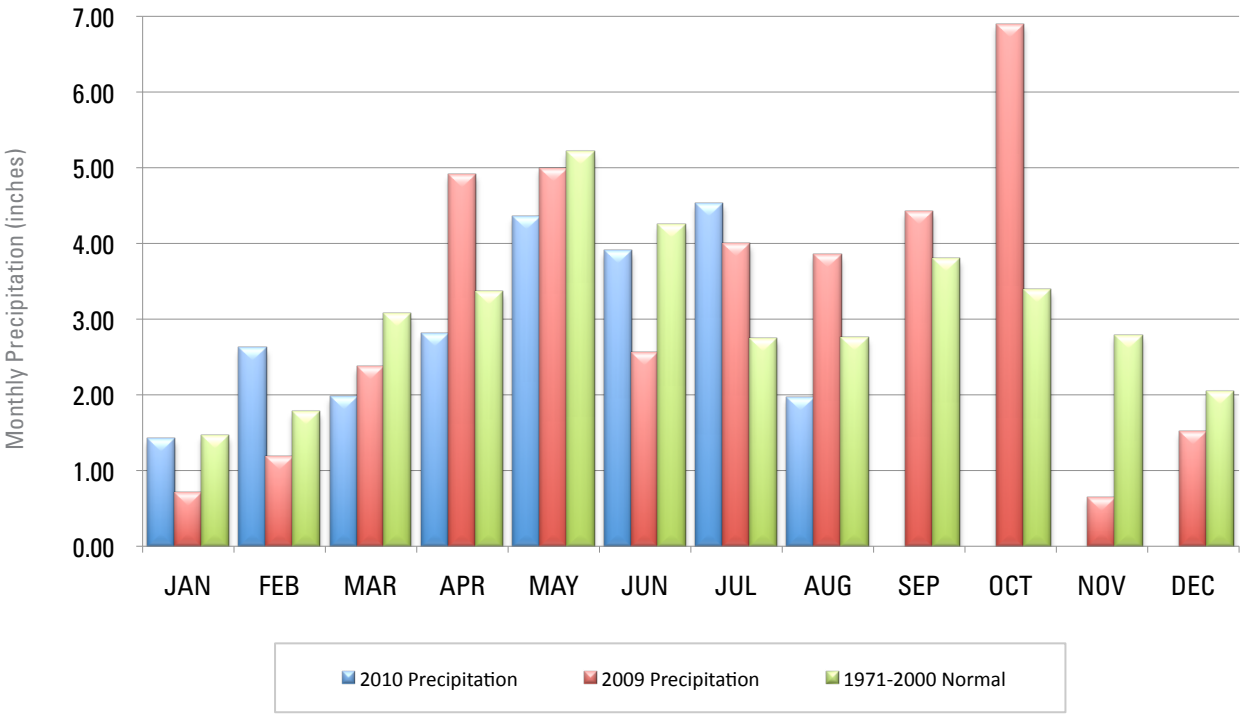
2009 AND 2010 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



August 2010 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Aug-09
Panhandle	3.56	1.05	28th Wettest	5.68 (1977)	0.47 (1913)	2.27
North Central	3.47	0.42	42nd Wettest	7.69 (1974)	0.09 (1913)	5.92
Northeast	3.00	-0.18	56th Driest	8.03 (1964)	0.02 (2000)	4.63
West Central	1.64	-1.08	35th Driest	7.25 (2005)	0.05 (1913)	4.01
Central	1.28	-1.35	25th Driest	7.21 (1906)	0.03 (2000)	5.09
East Central	0.75	-2.12	7th Driest	6.89 (1915)	0.00 (2000)	4.33
Southwest	0.90	-1.79	23rd Driest	8.01 (1996)	0.00 (1913)	2.03
South Central	1.47	-1.07	33rd Driest	8.46 (1915)	0.01 (2000)	2.20
Southeast	1.18	-1.53	8th Driest	8.73 (1915)	0.19 (1943)	3.61
Statewide	1.96	-0.81	35th Driest	6.54 (1906)	0.14 (2000)	3.85

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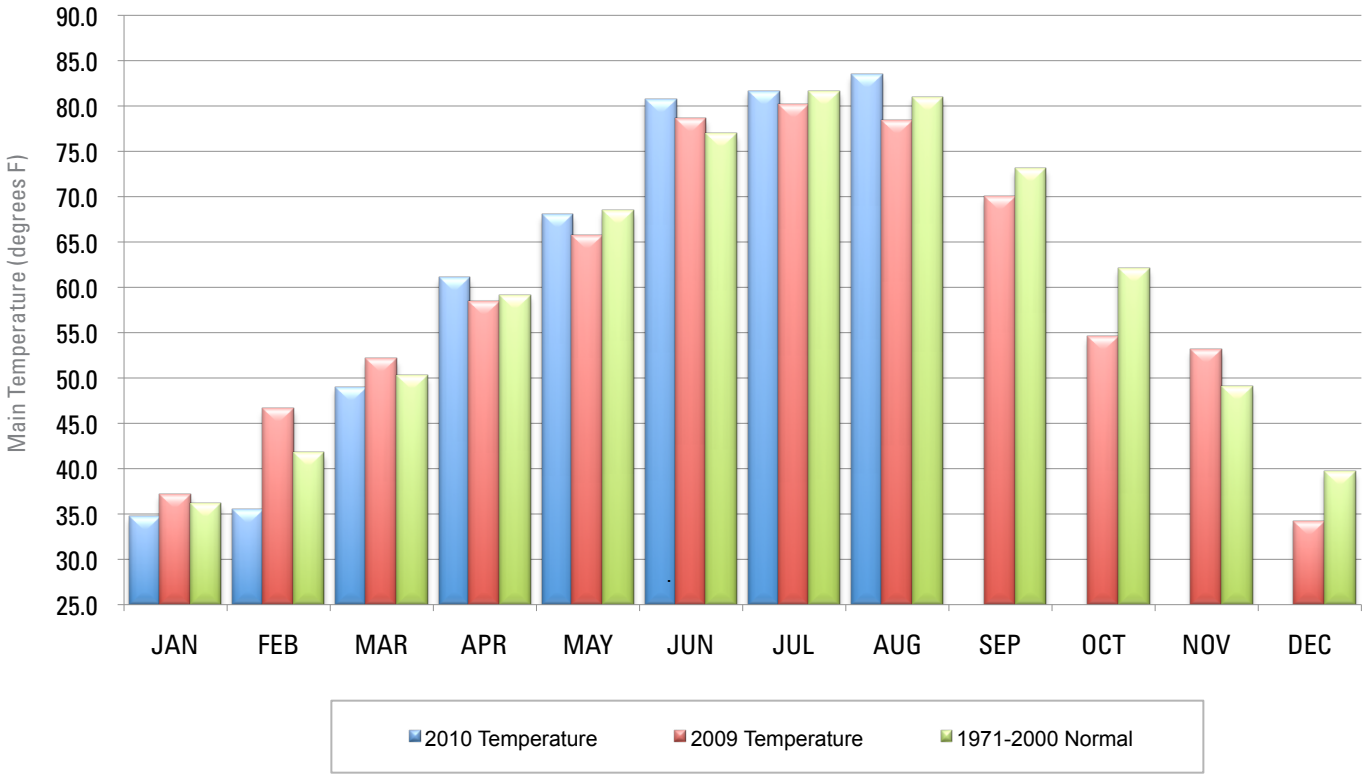
2009 AND 2010 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



June 2010 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Aug-09 (F)
Panhandle	79.5	1.7	35th Warmest	83.1 (1983)	71.3 (1915)	76.7
North Central	82.5	1.8	38th Warmest	88.9 (1936)	72.3 (1915)	78.1
Northeast	82.3	2.5	30th Warmest	88.4 (1936)	71.7 (1915)	76.3
West Central	83.0	2.8	27th Warmest	87.4 (1936)	72.9 (1915)	79.2
Central	83.9	2.9	21st Warmest	88.3 (1936)	73.1 (1915)	78.4
East Central	84.7	4.3	11th Warmest	88.0 (1936)	73.0 (1915)	77.3
Southwest	84.9	3.1	20th Warmest	88.1 (1952)	75.4 (1915)	81.6
South Central	85.2	3.4	14th Warmest	87.6 (1934)	75.5 (1915)	80.4
Southeast	85.1	4.8	5th Warmest	87.3 (1943)	74.5 (1915)	77.6
Statewide	83.4	3.0	18th Warmest	87.2 (1936)	73.2 (1915)	78.4

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MESONET EXTREMES FOR AUGUST 2010

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	108	2nd	Buffalo	46	26th	Beaver	7.50	Kenton	3.48	16th	Kenton
North Central	109	13th	Freedom	46	26th	Seiling	6.44	Cherokee	3.35	17th	Blackwell
Northeast	106	13th	Claremore	49	26th	Nowata	6.33	Burbank	3.47	17th	Burbank
West Central	107	23rd	Erick	46	26th	Erick	3.89	Cheyenne	1.76	16th	Weatherford
Central	108	13th	Kingfisher	48	26th	Oilton	4.99	Shawnee	4.59	24th	Shawnee
East Central	105	13th	Webbers Falls	50	26th	Cookson	2.51	Hectorville	1.24	17th	Hectorville
Southwest	108	23rd	Grandfield	49	26th	Mangum	1.50	Altus	1.12	16th	Altus
South Central	106	23rd	Ketchum Ranch	54	27th		3.70	Newport	3.17	24th	Newport
Southeast	107	1st	Talihina	53	27th	Talihina	2.17	Talihina	1.28	5th	Wister
Statewide	109	13th	Freedom	46	26th	Seiling	7.50	Kenton	4.59	24th	Shawnee

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SEPTEMBER OUTLOOK

Summer's heat fades as precipitation increases across most of Oklahoma during September. The statewide-averaged normal temperature for the month, 73.0 degrees, makes September the fourth warmest month of the year. As such, climatologists consider it the first month of the autumn transitional season. Monthly precipitation decreases in extreme northwestern portions of the state, even as the rest of the state enjoys a second rainy season. Normal monthly precipitation, averaged statewide, is 3.80 inches, an increase of more than one inch over either of the two previous months. An increasing frequency of fronts, bringing cooler air from the northern plains, leads to the lower temperatures, an effect that often isn't apparent before the middle of the month.

Temperature

Mean	73.0 degrees
Hottest September	1931, 79.8 degrees
Coolest September	1974, 64.7 degrees
Hottest location	Waurika, 76.8 degrees
Coolest location	Boise City, 68.0 degrees
Hottest recorded	115 degrees, Alva, September 3, 1939 and 1947
Coldest recorded	25 degrees, Boise City, September 30, 1985

Freezes are uncommon in September, but stations in the extreme northwest experience a freeze before the end of September in about 10 percent of years. The earliest reported freeze is September 15, in 1993 at Freedom (28 degrees), Gage (30 degrees), and Hammon (30 degrees), and in 1947 at Kenton (31 degrees). Hot weather is most evident in the southwest. Chattanooga averages 16 days in September with a high temperature of 90 degrees or more, including four days in which the temperature reaches 100 degrees or more. Conversely, Kansas and Stilwell each average only six September days with the high temperature in the 90s. Triple digit temperatures occur only about once every third year at Miami, Kenton, and Boise City.

Statewide-averaged precipitation has varied between 0.27 inch in 1956 and 7.86 inches in 1945. Wyandotte recorded 16.82 inches in September 1945 to hold the monthly state record. The record daily precipitation at a regular reporting station is the 10.42 inches reported at Barnsdall on September 29, 1986. Snow is rare in September, But Boise City reported 4 inches for the month in 1984 and Kenton recorded 3 inches on September 17, 1971, the earliest snowfall in the state since at least 1910.

Tornadoes are slightly more frequent in September, averaging 2.1 each year, than they are during the previous two months. The most tornadoes reported in the state during September is 16 in 1992. No tornadoes were reported in the state during September in 18 of 52 years from 1950 through 2001 (the period of comprehensive records). Two people killed in Pottawattomie County on September 14, 1957 are the only tornado-related deaths recorded in September during that period.

Precipitation

Mean	3.80 inches
Wettest September	1945, 7.86 inches
Driest September	1956, 0.27 inches
Wettest location	Kansas, 5.56 inches
Driest location	Regnier, 1.44 inches
Most recorded	16.82 inches, Wyandotte, 1945

Tornadoes

Average September Tornadoes	2.1
Most	16 (1992)

Floods present a more common weather hazard than tornadoes in September. Residual moisture from tropical disturbances, usually from the Gulf of Mexico but occasionally from the Pacific Ocean, interacts with slow moving frontal systems in the state from time-to-time during the autumn months. Widespread heavy downpours are the typical result, frequently leading to flooding on larger rivers and streams. On other occasions, a frontal system will stall within the state and successive thunderstorms will form along the frontal boundary and follow each other along a narrow path, thereby producing intense rain over a limited area and causing dangerous flash flooding.

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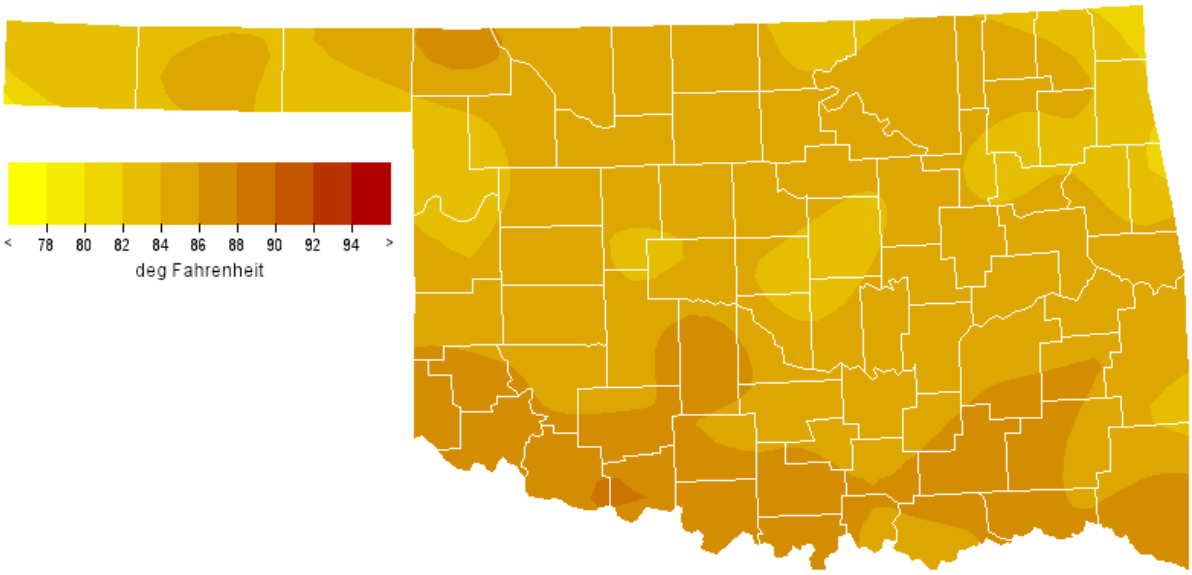
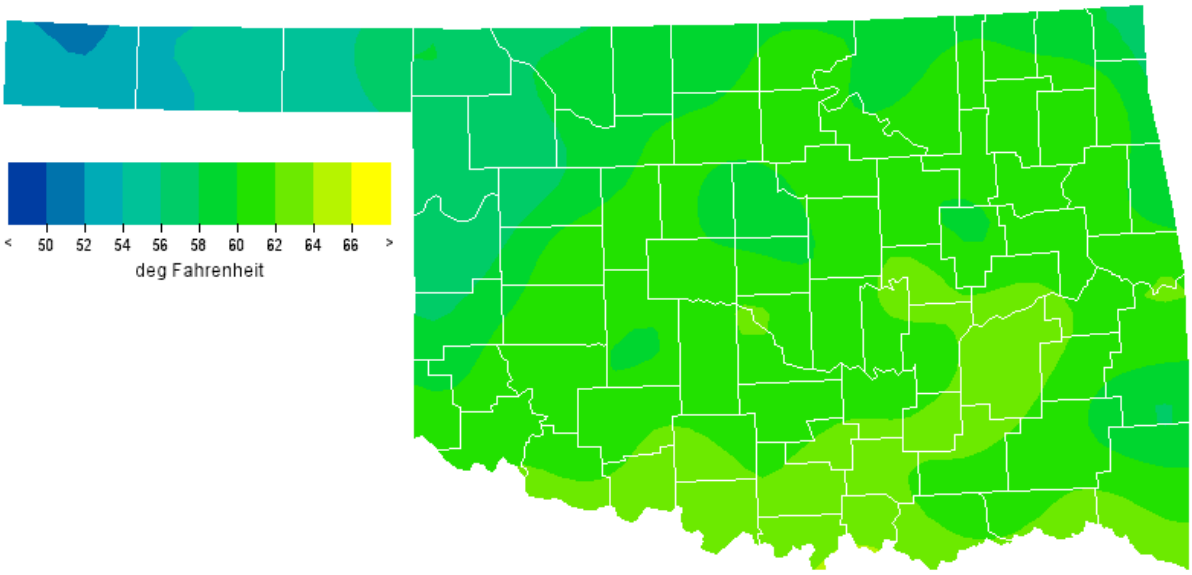
SEPTEMBER NORMAL DAILY MAXIMUM TEMPERATURE (1971-2000)



SEPTEMBER NORMAL DAILY MINIMUM TEMPERATURE (1971-2000)



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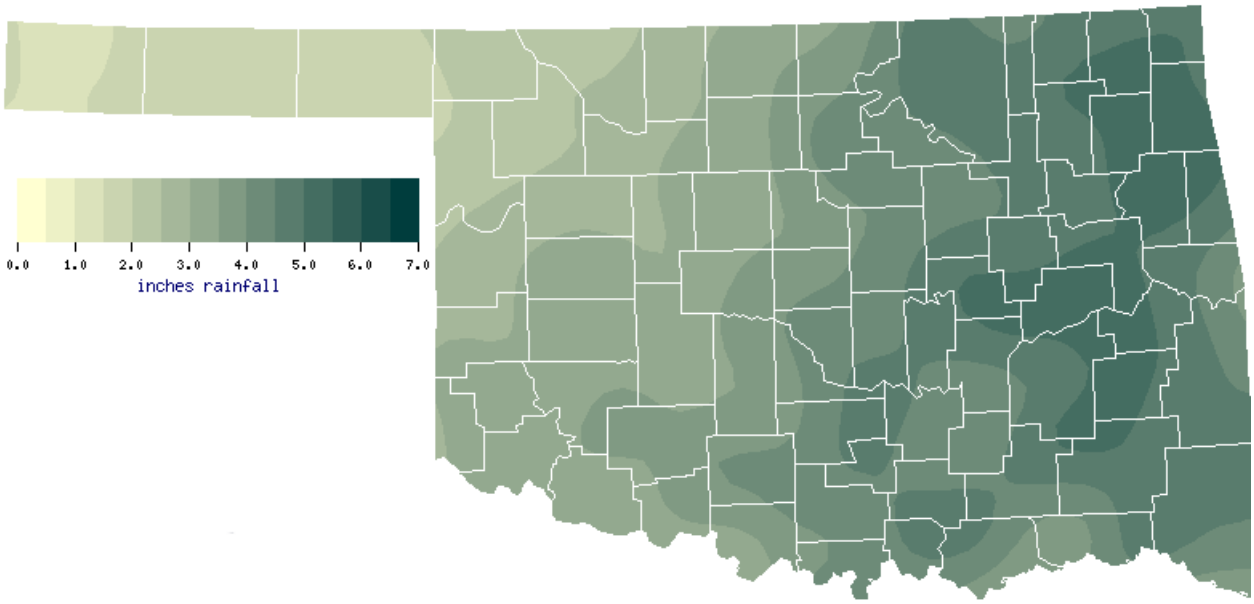
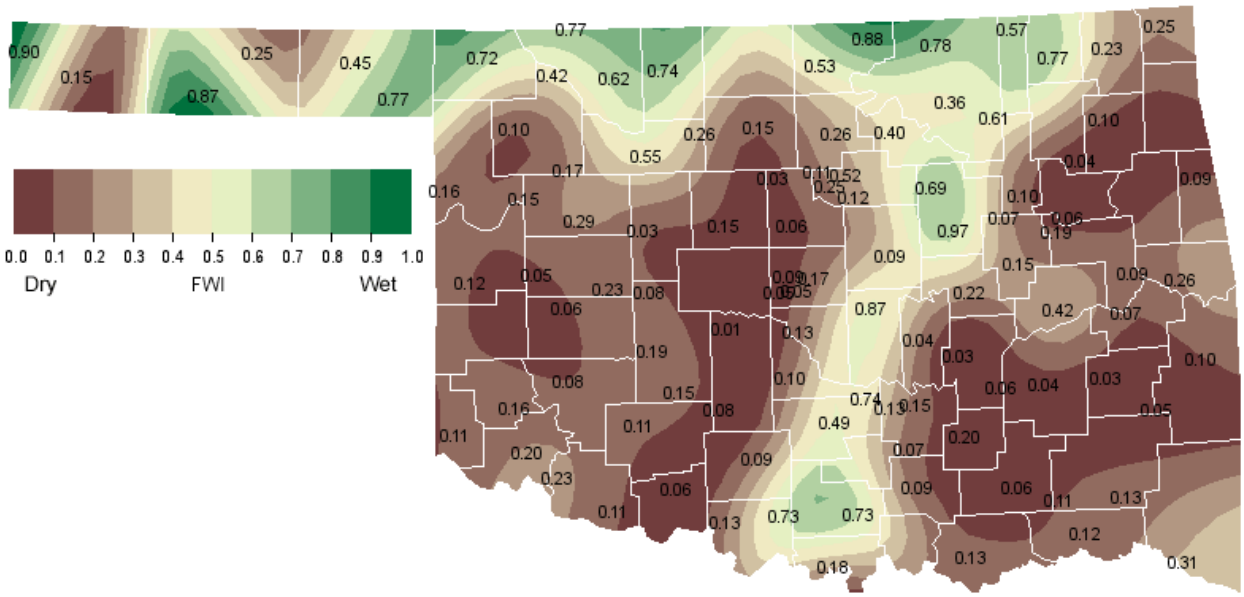
SEPTEMBER NORMAL PRECIPITATION (1971-2000)



SEPTEMBER 1, 2010 SOIL MOISTURE CONDITIONS AT 25CM



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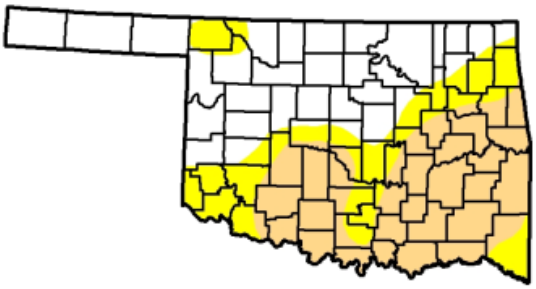
SEPTEMBER 2010 DROUGHT INDICES

U.S. Drought Monitor
Oklahoma

August 31, 2010
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	42.3	57.7	36.2	0.0	0.0	0.0
Last Week (08/24/2010 map)	41.4	58.6	36.5	0.0	0.0	0.0
3 Months Ago (06/08/2010 map)	77.8	22.2	4.4	0.0	0.0	0.0
Start of Calendar Year (01/05/2010 map)	100.0	0.0	0.0	0.0	0.0	0.0
Start of Water Year (10/06/2009 map)	98.0	2.0	0.0	0.0	0.0	0.0
One Year Ago (09/01/2009 map)	84.5	15.5	0.0	0.0	0.0	0.0



Intensity:

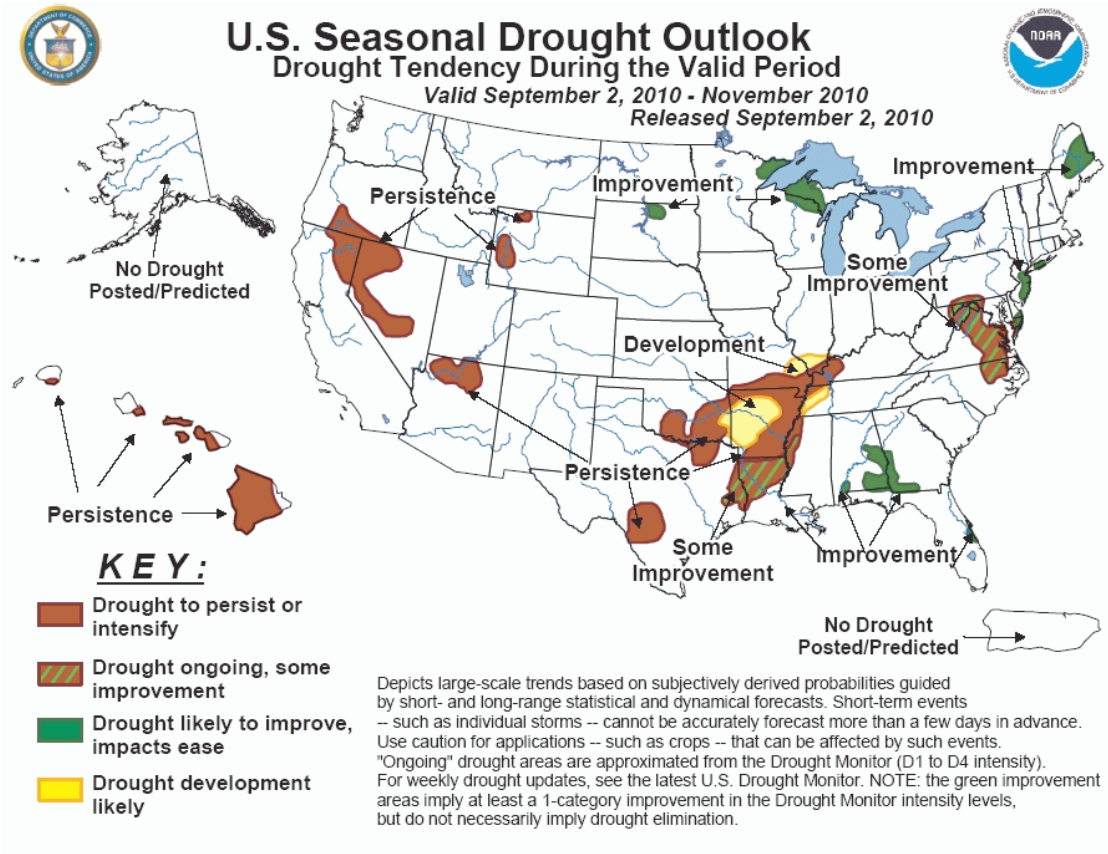
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

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

http://drought.unl.edu/dm

USDA National Drought Mitigation Center

Released Thursday, September 2, 2010
Author: Brad Rippey, U.S. Department of Agriculture



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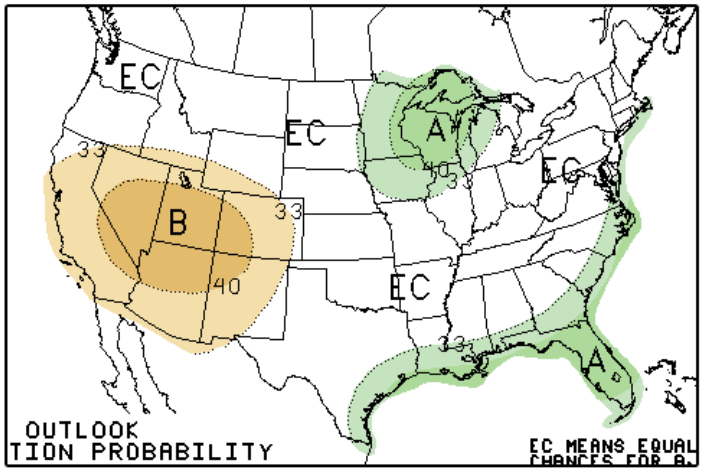
SEPTEMBER 2010 U.S. PRECIPITATION FORECAST



Percent Likelihood of Above or Below Average Precipitation*

- 5% - 10%
- 0% - 5%

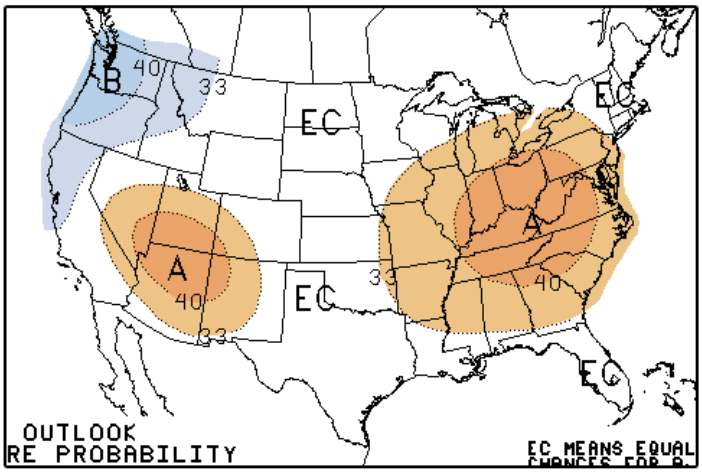
A = Above

- 0% - 5%
- 5% - 10%

B = Below

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

SEPTEMBER 2010 U.S. TEMPERATURE FORECAST



Percent Likelihood of Above or Below Average Temperatures*

- 10% - 20%
- 5% - 10%
- 0% - 5%

A = Above

- 0% - 5%
- 5% - 10%

B = Below

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

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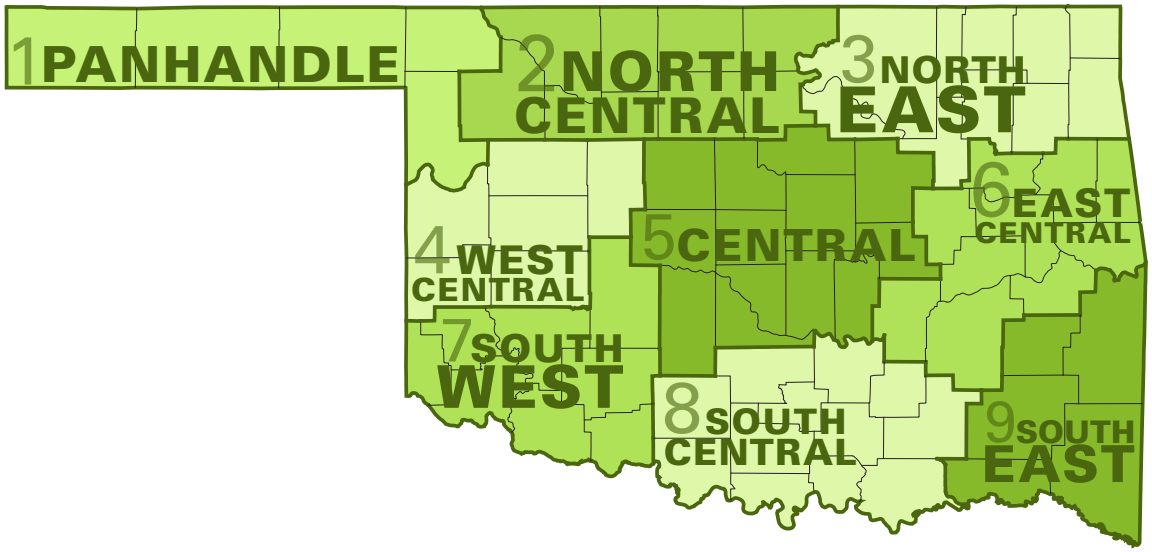
SEPTEMBER CLIMATE NORMALS

Climate Division	Max. Temperature (°F)	Min. Temperature (°F)	Avg. Temperature (°F)	Precipitation (inches)
1	84.5	55.6	70.1	1.86
2	84.8	59.2	72	3.13
3	84.1	60.5	72.3	4.83
4	84.7	59.5	72.1	2.95
5	84.8	61.0	72.9	4.03
6	84.5	61.3	72.9	4.88
7	86.4	61.0	73.7	3.34
8	86.2	62.3	74.3	4.27
9	85.9	60.9	73.4	4.52
Statewide	85.1	60.3	72.7	3.9

Oklahoma Climate Divisions



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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: 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/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

Oklahoma Climatological Survey is the State Climate Office for Oklahoma

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