OKLAHOMA MONTHLY CLIMATE SUMMARY
AUGUST 2006

OKLAHOMA CLIMATOLOGICAL SURVEY

WE'VE MOVED

The Oklahoma Climatological Survey has moved to its new home in the National Weather Center

Our new address:
120 David L. Boren Blvd., Suite 2900
Norman, OK 73072-7305

Oklahoma was at long last able to enjoy a relatively wet month within its long droughty period, finishing as the 39th wettest August on record. It was also the first month the state finished with a statewide average precipitation surplus since August of the previous year. Despite the rainfall, the heat continued for virtually the entire state. Save for the far northwest, Oklahoma continued to bake under the hot summer sun, roasting its way to the 16th warmest August on record. The state's year-to-date temperature remained the warmest on record at nearly 4 degrees above normal, with the summer season finishing as the 11th warmest. The year-to-date and seasonal precipitation totals ranked as the 14th driest and 27th driest on record, respectively.

Precipitation

The biggest surprise of the month was the deluge experienced by Kenton, the state's northwestern-most city. Its 8.27 inches of rain exceeded Kenton's total from the previous 11 months combined. That rainfall total, combined with the 4-5 inches from the rest of the Panhandle, propelled the region to its 7th wettest on record, over two inches above normal. A band of above normal precipitation totals extended from far southwestern Oklahoma through central and northeastern sections, as well as along the state's eastern border. A large area of south central and southeastern Oklahoma was once again 40-60 percent of normal for the month. South central Oklahoma continued with the worst of the droughty conditions with January-August and summer periods ranked as the 3rd driest and 11th driest on record, respectively. The year-to-date precipitation deficit for south central Oklahoma fell to nearly 10 inches.

Temperature

While parts of the Panhandle were between 1-2 degrees below normal, the remainder of the state struggled along at 3 degrees above normal or higher. A rather cool final week of the month stopped August from being unbearable, but even with that final week the month finished over three degrees above normal. The Panhandle rode that cool weather to finish just below normal, the 47th coolest August on record for that area. South central and southeastern parts of the state were close to five degrees above normal to go along with their meager precipitation totals.

August 2006 Statewide Extremes

Description	Extreme	Station	Date
High Temperature	109ºF	Claremore, Webbers Falls	Aug 10
Low Temperature	50ºF	Boise City	Aug 29
High Precipitation	8.27 in.	Kenton	
Low Precipitation	0.53 in.	McAlester	

August Daily Highlights

August 1-4: August started much as the rest of the summer before it – hot and dry. Highs soared into the triple-digits statewide. A cold front entered the Panhandle on the 2nd and generated a light shower, but the rest of the state continued to bake. Oklahoma City tied its record for highest minimum temperature at 81 degrees. The cold front provided the state with much-needed rainfall for the next couple of days, accompanied by a bit of severe weather. Most of the severe weather consisted of high winds. Reports of quarter-sized hail were scattered across the state. Freedom received over two inches of rainfall on the 4th.

August 5-10: The state returned to the hot and dry weather after the wayward cold front's exit. Highs once again soared into the 100s nearly statewide, while lows struggled to fall below 80 degrees. There were scattered showers and storms each day, with occasional bouts of severe weather. The rainfall from those storms was hit and miss, however, which is often the case with summertime storms.

August 11-16: A weak frontal boundary was followed a few days later by a stronger cold front, both of which triggered more showers and thunderstorms. Severe weather was a bit more widespread with these storms as high winds were once again the primary culprit. Several instances of winds greater than 70 mph were reported on the 14th and 16th. Kenton received nearly three inches of rain on the 13th, and nearly five inches total for the six-day period. That was in addition to Kenton's high temperature of 67 degrees on the 14th, a 24-degree drop from the previous day's high temperature. Behind the cold front, which stalled in central Oklahoma, high temperatures were an autumnal 70-80 degrees. Temperatures ahead of the front remained in triple digits, however.

August 17-24: A return to the heat for all areas besides the Panhandle. A couple of days of quiet, albeit hot, weather were interrupted by another cold front. Scattered rain and cooler weather was a result. The Mesonet site at Retrop recorded well over three inches of rainfall to lead the state, with other amounts widely varying between 1-3 inches in northern Oklahoma. The severe weather was largely confined to high winds, with a few reports of nickel- to quarter-sized hail. As with the previous fronts, those areas north of the stalled cold front were quite pleasant with highs in the 70s and 80s, while the area south of the front continued very hot.

August 25-31: A slow moving cold front brought relief in the form of showers, thunderstorms, and cooler temperatures during this last week of August. A secondary and even stronger cold front brought more relief on the 28th, lowering high temperatures into the 70s and 80s, over 10 degrees below normal for that time of the year. Several rainfall reports from central Oklahoma exceeded three inches on the 26th, while flash flooding was reported in Wagoner County. High temperatures on the 29th were in the 70s and 80s statewide as the rainfall ended and cooler high pressure built in from the north. The month's final three days were quite pleasant with calm conditions, sunny skies, and high temperatures in the 80s.

August 2006 Statewide Statistics

Temperature

	Average	Depart.	Rank (1892-2006)
Month (Aug)	83.8ºF	3.4ºF	16th Warmest
Season-to-Date (Jun-Aug)	81.9ºF	2.4ºF	11th Warmest
Year -to-Date (Jan-Aug)	65.5ºF	3.6ºF	1st Warmest

Precipitation

	Total	Depart.	Rank (1892-2006)
Month (Aug)	3.17 in.	-0.40 in.	39th Wettest
Season-to-Date (Jun-Aug)	7.29 in.	-2.48 in.	27th Driest
Year-to-Date (Jan-Aug)	17.70 in.	-6.96 in.	14th Driest

Depart. = Departure from 30-year normal

August 2006 Severe Weather

Significant Tornadoes (F2 or greater)

No significant tornadoes reported in the state.

Hail (2 inches in diameter or greater)

No significant hail reported in the state.

Flooding

Location	County	Day
Broken Arrow	Tulsa	23
1 E Oneta	Wagoner	27

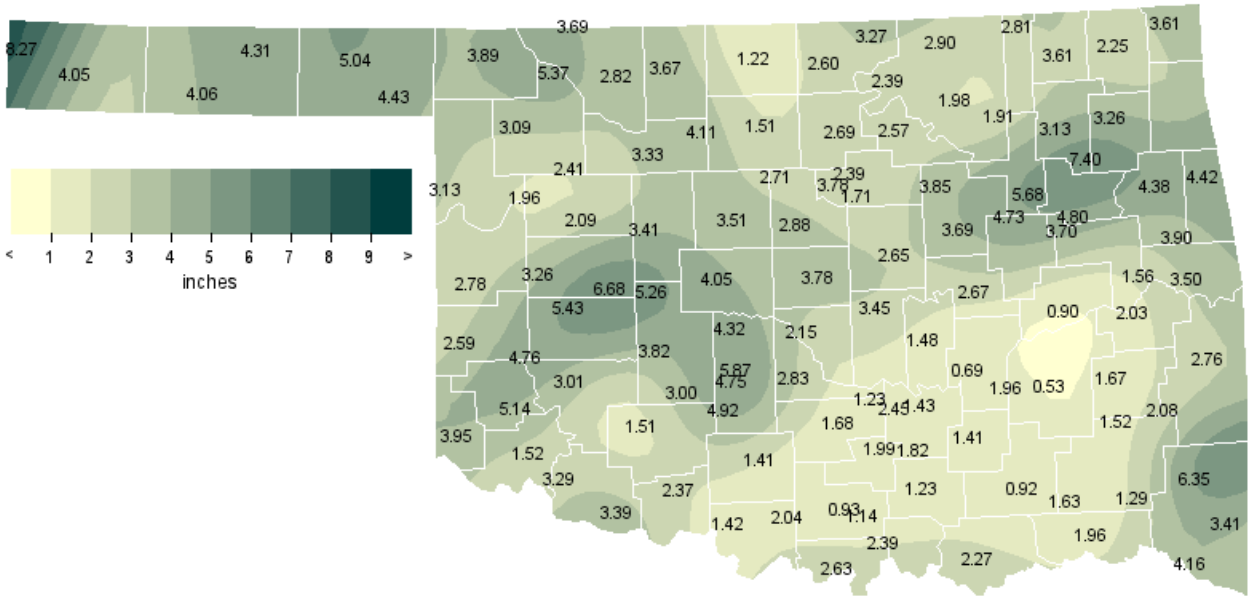
Wind Gusts (70 mph or greater)

Speed (m.p.h.)	Location	County	Day
70	6 S Haskell	Muskogee	14
76	Tipton Mesonet	Tillman	16
70	Davidson	Tillman	16
70	7 SSW Alva	Woods	16
70	4 S Pryor	Mayes	21
70	1 S Wagoner	Wagoner	21
70	1 S Pryor	Mayes	21
80	Cherokee Mesonet	Alfalfa	25
72	Marshall Mesonet	Logan	26

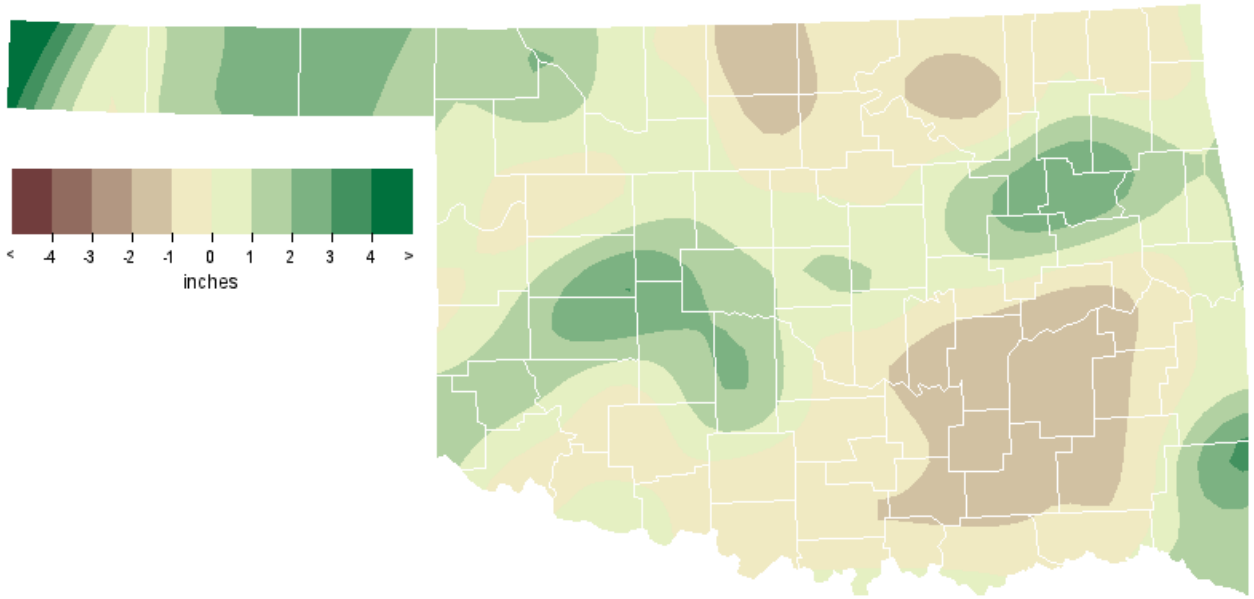
Record Event Report

Description	Day	Location	Record	Previous Record	Year
Warmest Low Temperature (tied)	2	Oklahoma City	81	81	1932
Warmest Low Temperature (tied)	10	Oklahoma City	81	81	1937
Warmest High Temperature	25	McAlester	104	103	2000
Warmest Low Temperature	25	Oklahoma City	80	78	1936
Warmest High Temperature	25	Oklahoma City	105	102	1988, 2000
Daily Maximum Rainfall	27	Oklahoma City	1.99 inches	1.16 inches	1896

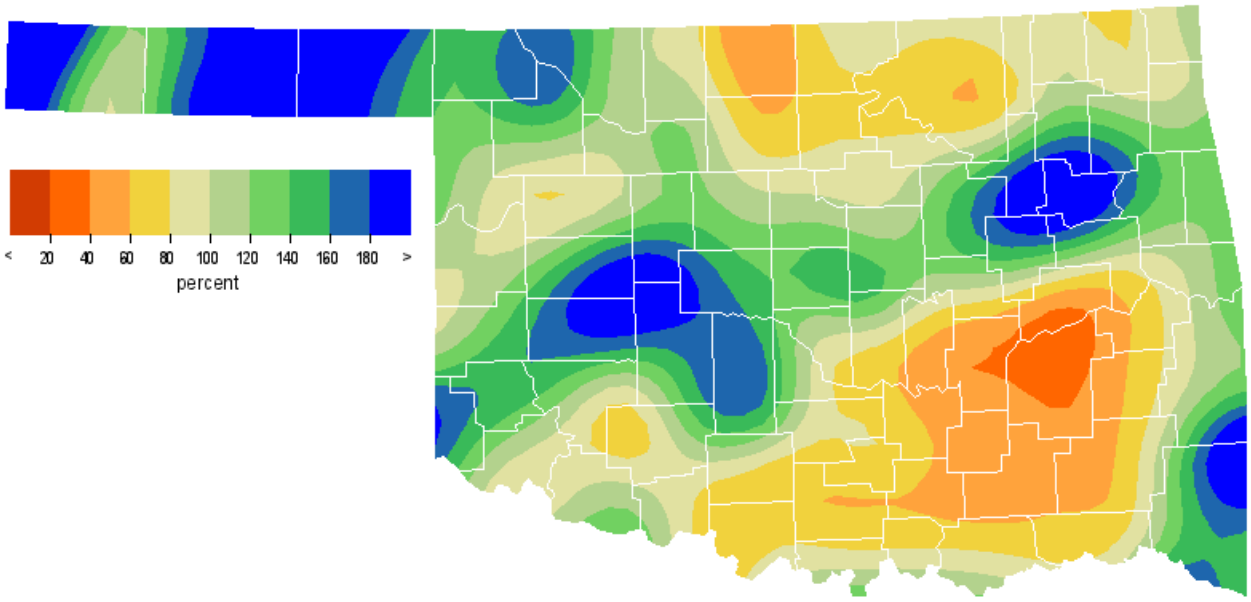
August 2006 Observed Precipitation



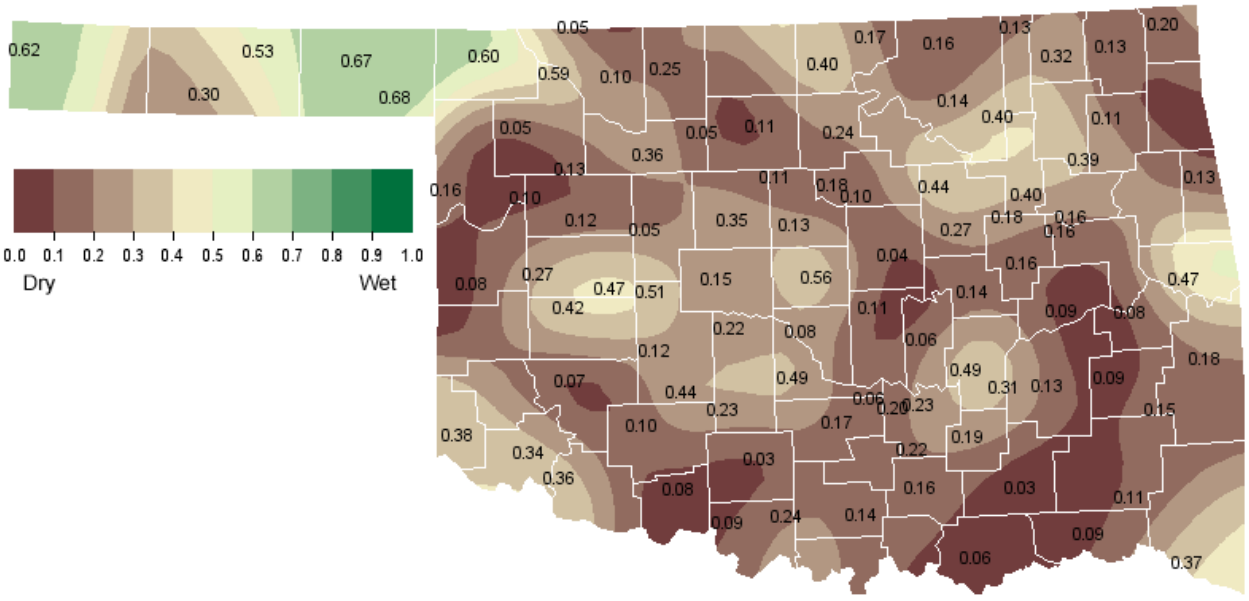
August 2006 Departure from Normal Precipitation



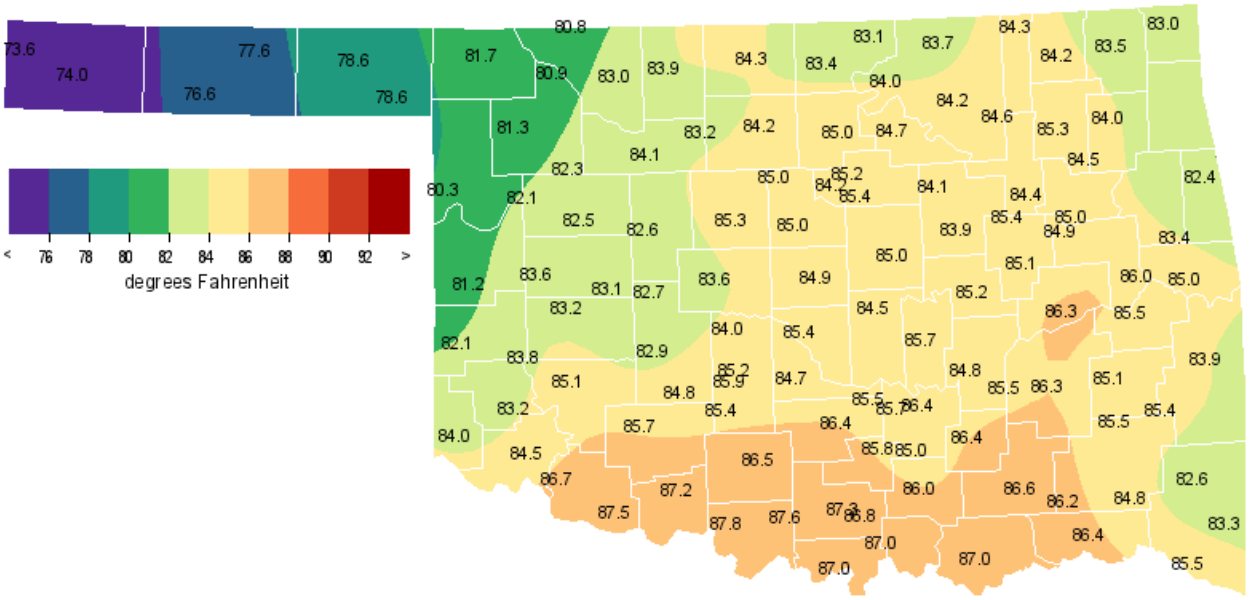
August 2006 Percent of Normal Precipitation



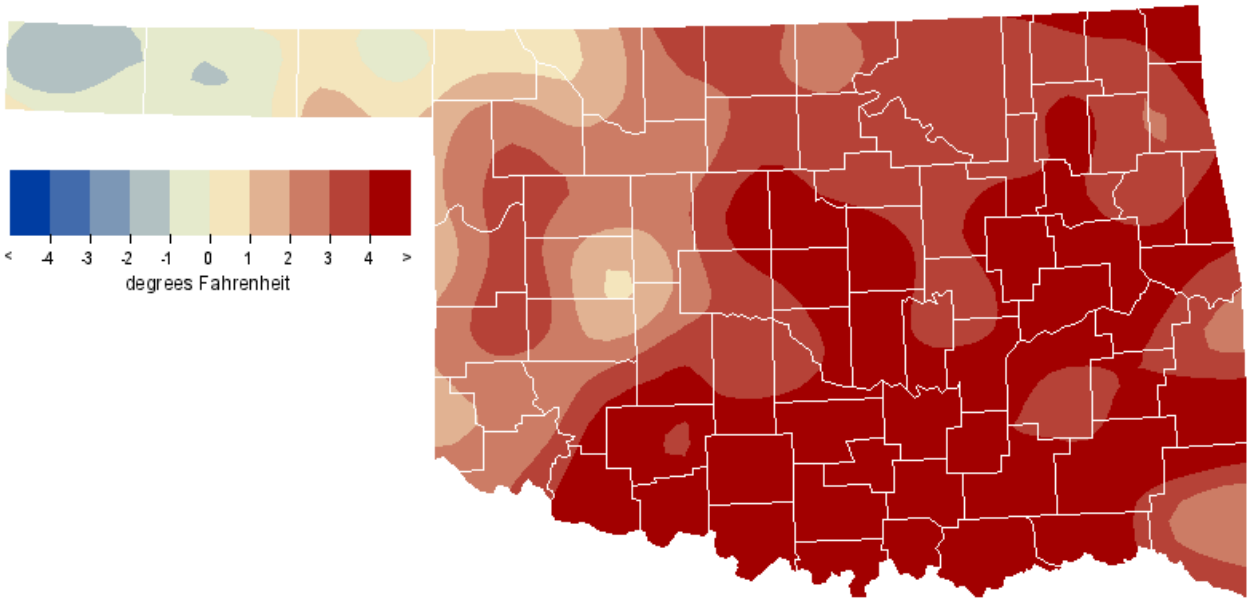
August 2006 Average Soil Moisture at 25cm



August 2006 Average Temperature



August 2006 Departure from Normal Temperature



Mesonet Monthly Summary for August 2006

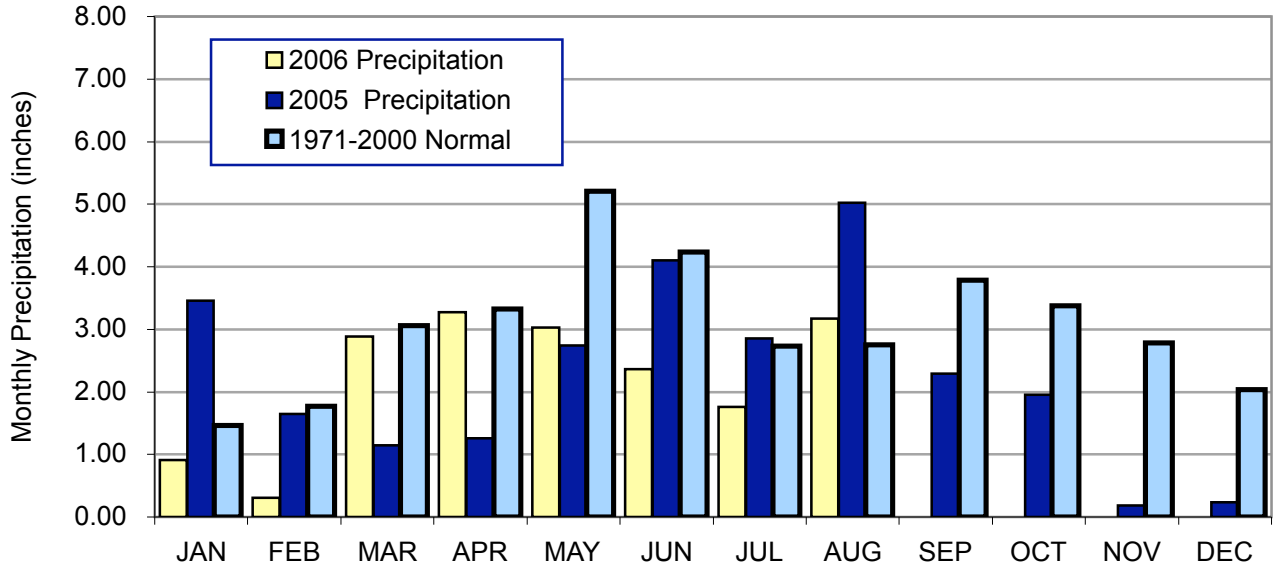
NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	80.3	103	10	58	29	0	474	3.13	.81	27
Beaver	78.6	102	10	55	29	0	421	5.04	1.53	3
Boise City	73.9	97	9	50	29	****	****	4.05	1.28	14
Buffalo	81.7	105	10	56	29	0	517	3.89	1.70	3
NORTH CENTRAL										
Blackwell	83.4	107	25	57	30	0	570	2.60	.72	26
Breckinridge	84.2	107	25	55	30	0	595	1.51	.39	20
Cherokee	83.9	108	10	59	30	0	585	3.67	1.98	25
Fairview	84.1	105	10	59	30	0	592	3.33	1.18	26
Freedom	81.0	103	9	56	29	0	495	5.37	2.01	4
Lahoma	83.2	107	10	60	30	0	564	4.11	1.17	4
May Ranch	80.8	104	10	57	29	0	489	3.69	.77	14
NORTHEAST										
Bixby	84.4	104	10	59	30	****	****	5.57	1.79	26
Burbank	84.0	107	10	57	30	0	588	2.39	.89	21
Copan	84.2	106	6	59	30	0	596	2.81	2.00	26
Foraker	83.7	108	10	59	29	0	579	2.90	.85	26
Jay	84.2	106	10	56	31	****	****	2.27	1.27	26
Miami	83.3	104	6	57	31	****	****	3.61	2.20	26
Nowata	84.2	107	10	57	31	0	596	3.61	1.53	26
Pawnee	84.8	107	10	57	30	0	614	2.57	.63	21
WEST CENTRAL										
Bessie	83.2	104	10	62	29	0	565	5.43	1.71	14
Butler	83.6	106	10	60	29	0	577	3.26	.82	14
Camargo	82.2	104	10	59	30	0	533	1.96	.71	14
Cheyenne	81.1	101	10	57	29	0	501	2.78	1.27	3
Erick	82.2	104	10	59	29	0	532	2.59	.46	14
CENTRAL										
Bowlegs	85.6	105	17	58	30	0	638	1.48	.39	3
Bristow	83.9	106	10	57	30	0	587	3.69	1.20	26
Chandler	85.0	106	10	58	30	0	621	2.65	.96	26
Chickasha	85.3	105	6	60	30	0	630	5.87	3.53	26
El Reno	83.6	105	10	56	30	0	577	4.05	1.72	26
Guthrie	85.0	106	10	59	30	0	621	2.88	.71	26
Kingfisher	85.3	107	10	58	30	0	628	3.51	1.29	26
Marena	84.2	106	10	58	30	0	597	3.78	1.16	27
Minco	84.1	103	25	61	30	0	591	4.32	2.83	26
Oilton	84.0	107	10	55	30	0	590	3.85	2.27	14
EAST CENTRAL										
Calvin	85.1	105	18	55	30	****	****	.67	.27	14
Cookson	83.4	105	10	54	30	0	569	3.90	1.79	14
Eufaula	86.3	106	10	59	30	0	661	.90	.48	14
Haskell	85.0	106	10	59	30	0	619	3.70	.92	19
McAlester	86.2	105	18	57	30	0	659	.53	.15	27
Okmulgee	85.4	107	10	57	30	****	****	1.42	.40	27
Sallisaw	84.9	104	3	58	31	0	617	3.50	1.07	14
SOUTHWEST										
Altus	84.6	103	6	63	30	0	606	1.52	.67	27
Fort Cobb	83.0	103	10	61	30	0	557	3.82	.91	27
Hinton	82.7	103	10	59	30	0	550	5.26	1.36	3
Hobart	85.0	104	24	62	29	0	621	3.01	1.59	27
Hollis	83.9	104	10	61	29	0	586	3.95	1.38	20
Mangum	83.1	104	10	61	30	0	562	5.14	1.90	21
SOUTH CENTRAL										
Ada	86.4	106	18	58	30	0	664	1.43	.68	23
Burneyville	87.1	106	18	60	30	0	684	2.63	1.68	27
Byars	85.5	104	18	60	30	0	637	1.23	.67	27
Centrahoma	86.4	105	18	58	30	0	664	1.41	1.12	28
Durant	87.0	104	18	64	30	0	683	2.27	.88	27
Ketchum Ranch	86.5	106	18	60	30	0	668	1.41	.53	26
Lane	86.6	105	18	60	30	0	669	.92	.39	20
Madill	87.0	105	18	60	30	0	682	2.39	.98	20
Pauls Valley	86.3	105	18	59	30	0	661	1.68	.81	27
SOUTHEAST										
Antlers	86.2	107	18	57	30	0	657	1.63	1.35	28
Clayton	85.6	105	10	56	31	0	637	1.52	.97	12
Cloudy	84.7	105	18	58	31	0	612	1.29	.63	28
Hugo	86.4	104	18	62	30	0	664	1.96	.77	28
Idabel	85.5	105	18	60	31	0	636	4.16	2.89	27

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	76.6	100	10	52	29	1	360	4.06	1.49	19
Hooker	77.6	102	7	53	29	0	391	4.31	1.69	19
Kenton	73.6	96	9	51	29	1	269	8.27	2.88	13
Slapout	78.5	102	10	55	29	0	420	4.43	1.57	3
Medford	84.4	107	25	58	30	0	601	1.22	.47	25
Newkirk	83.1	107	10	58	30	0	562	3.27	1.05	25
Red Rock	85.0	108	10	56	30	****	****	2.69	1.43	26
Seiling	82.2	105	10	58	30	0	535	2.41	.88	26
Woodward	81.4	106	10	57	29	0	507	3.09	.86	14
Alva	83.0	107	10	58	30	0	558	2.82	.56	27
Pryor	84.0	107	10	57	30	0	589	3.26	.95	21
Skiatook	84.6	107	10	60	30	0	607	1.91	.79	21
Vinita	83.5	104	9	57	30	0	574	2.25	.92	26
Wynona	84.2	108	10	58	30	0	596	*****	1.15	26
Porter	85.0	106	10	60	30	0	621	4.80	1.77	26
Inola	84.5	107	10	59	30	0	603	7.40	3.30	26
Claremore	85.3	109	10	60	30	0	629	3.13	1.36	21
Putnam	82.5	104	6	60	29	0	542	2.09	.60	19
Retrop	83.8	105	10	61	29	0	583	4.76	1.97	20
Watonga	82.7	104	10	59	30	0	547	3.41	.89	14
Weatherford	83.1	104	10	61	29	0	562	6.68	1.85	26
Okemah	85.2	106	18	59	30	0	626	2.67	.74	26
Perkins	85.4	107	10	58	30	0	633	1.71	.78	15
Shawnee	84.5	105	10	59	30	0	605	3.45	1.15	26
Spencer	84.9	105	10	58	30	0	617	3.78	1.33	14
Stillwater	85.2	107	10	58	30	0	627	2.39	.91	21
Washington	84.7	106	18	59	30	0	612	2.83	2.05	26
Ninnekah	85.9	105	10	59	30	0	648	4.75	2.90	26
Acme	85.4	105	6	58	30	0	633	4.92	3.38	26
Norman	85.4	104	25	59	30	0	632	2.15	1.04	26
Marshall	84.9	107	10	58	30	0	616	2.71	1.66	26
Stigler	85.5	106	10	58	31	0	637	2.03	.59	15
Stuart	85.5	105	18	59	31	0	636	1.96	1.17	20
Tahlequah	*****	***	***	***	***	****	****	4.38	1.66	21
Webbers Falls	86.0	109	10	57	31	0	650	1.56	.44	15
Westville	82.4	103	10	56	30	0	539	4.42	1.17	4
Hectorville	85.4	107	10	60	30	0	633	4.73	1.75	26
Medicine Park	85.7	104	6	63	29	0	642	1.51	.77	26
Tipton	86.7	105	10	63	30	0	672	3.29	1.18	22
Walters	87.2	106	24	62	30	0	688	2.37	.80	15
Apache	84.8	104	10	62	30	0	613	3.00	1.02	26
Grandfield	87.5	107	24	63	30	0	699	3.39	1.79	21
Ringling	87.5	106	18	62	30	0	698	2.04	.74	27
Sulphur	85.8	105	18	56	30	0	644	1.99	.84	23
Tishomingo	86.0	105	6	59	30	0	651	1.23	.80	23
Waurika	87.8	107	24	61	30	0	706	1.42	.76	28
Vanoss	85.7	106	18	57	30	0	641	2.45	1.09	27
Newport	87.3	106	18	61	30	0	690	.93	.45	27
Ardmore	86.7	105	18	61	30	0	674	1.14	.36	28
Fittstown	85.0	104	18	58	30	0	620	1.82	.60	28
Mt Herman	82.6	100	10	58	31	0	546	6.35	1.94	6
Talihina	85.5	105	18	57	31	0	635	2.08	1.60	26
Wilburton	85.1	105	10	55	30	0	624	1.67	.83	3
Wister	83.9	104	10	53	31	0	585	2.76	1.13	3
Broken Bow	83.2	105	15	58	30	0	565	3.41	1.62	21

August 2006 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Aug-05
Panhandle	4.65	2.14	7th Wettest	5.68 (1977)	0.47 (1913)	4.02
North Central	3.06	0.01	51st Wettest	7.69 (1974)	0.09 (1913)	6.46
Northeast	3.45	0.27	46th Wettest	8.03 (1964)	0.02 (2000)	5.71
West Central	3.66	0.94	26th Wettest	7.25 (2005)	0.05 (1913)	7.25
Central	3.37	0.74	33rd Wettest	7.21 (1906)	0.03 (2000)	7.17
East Central	2.69	-0.18	48th Driest	6.89 (1915)	0.00 (2000)	4.09
Southwest	3.30	0.61	28th Wettest	8.01 (1996)	0.00 (1913)	5.56
South Central	1.67	-0.87	39th Driest	8.46 (1915)	0.01 (2000)	5.82
Southeast	2.68	-0.03	48th Driest	8.73 (1915)	0.19 (1943)	3.10
Statewide	3.17	0.40	39th Wettest	6.54 (1906)	0.14 (2000)	5.54

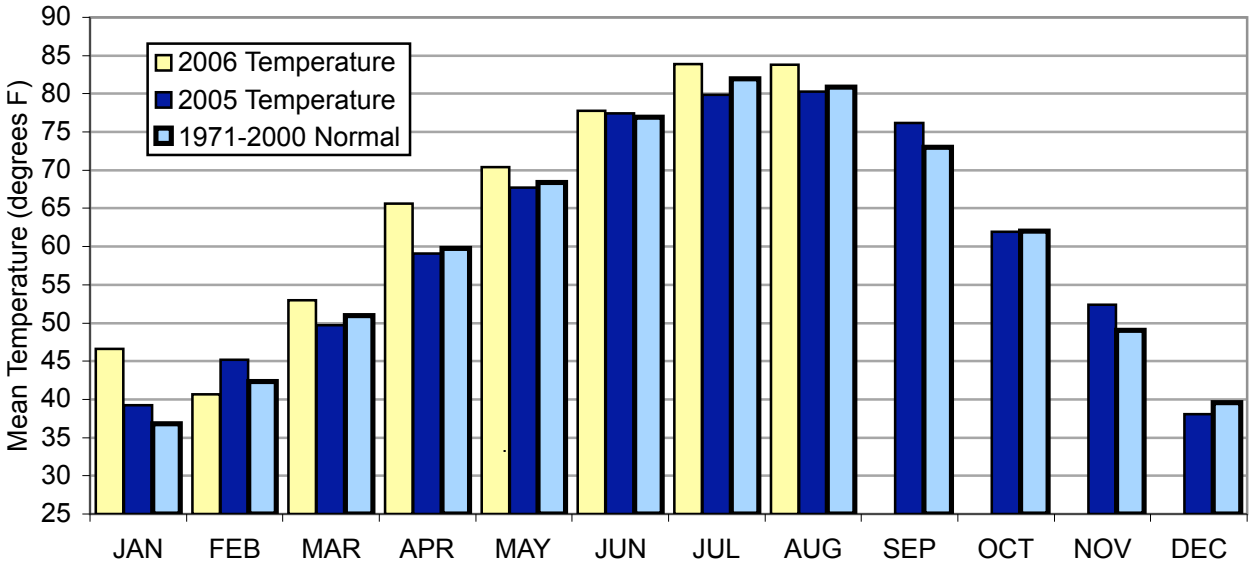
2005 and 2006 Statewide Precipitation Monthly Totals vs. Normal



August 2006 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Aug-05 (F)
Panhandle	77.6	-0.2	47th Coolest	83.1 (1983)	71.3 (1915)	77.4
North Central	83.0	2.3	29th Warmest	88.9 (1936)	72.3 (1915)	79.8
Northeast	84.2	4.4	11th Warmest	88.4 (1936)	71.7 (1915)	81.0
West Central	82.7	2.5	29th Warmest	87.4 (1936)	72.9 (1915)	78.8
Central	84.9	3.9	12th Warmest	88.3 (1936)	73.1 (1915)	80.2
East Central	85.0	4.6	9th Warmest	88.0 (1936)	73.0 (1915)	82.0
Southwest	84.9	3.1	19th Warmest	88.1 (1952)	75.4 (1915)	80.3
South Central	86.5	4.7	6th Warmest	87.6 (1934)	75.5 (1915)	81.4
Southeast	84.9	4.6	7th Warmest	87.3 (1943)	74.5 (1915)	81.6
Statewide	83.8	3.4	16th Warmest	87.2 (1936)	73.2 (1915)	80.3

2005 and 2006 Statewide Temperature Monthly Averages vs. Normal



Mesonet Extremes for August 2006

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	105	10th	Buffalo	50	29th	Boise City	8.27	Kenton	2.88	13th	Kenton
North Central	108	10th	Cherokee	55	30th	Breckenridge	5.37	Freedom	2.01	4th	Freedom
Northeast	109	10th	Claremore	57	31st	Nowata	7.40	Inola	3.30	26th	Inola
West Central	106	10th	Butler	57	29th	Cheyenne	6.68	Weatherford	1.97	20th	Retrop
Central	107	10th	Kingfisher	55	30th	Oilton	5.87	Chickasha	3.53	26th	Chickasha
East Central	109	10th	Webbers Falls	54	30th	Cookson	4.73	Hectorville	1.79	14th	Cookson
Southwest	107	24th	Grandfield	59	30th	Hinton	5.26	Hinton	1.90	21st	Mangum
South Central	107	24th	Waurika	56	30th	Sulphur	2.63	Burneyville	1.68	27th	Burneyville
Southeast	107	18th	Antlers	53	31st	Wister	6.35	Mt Herman	2.89	27th	Idabel
Statewide	109	10th	Webbers Falls	50	29th	Boise City	8.27	Kenton	3.53	26th	Chickasha

September Climatological 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 4th warmest month of the year. As such, climatologists consider it to be 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, Sept 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.

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

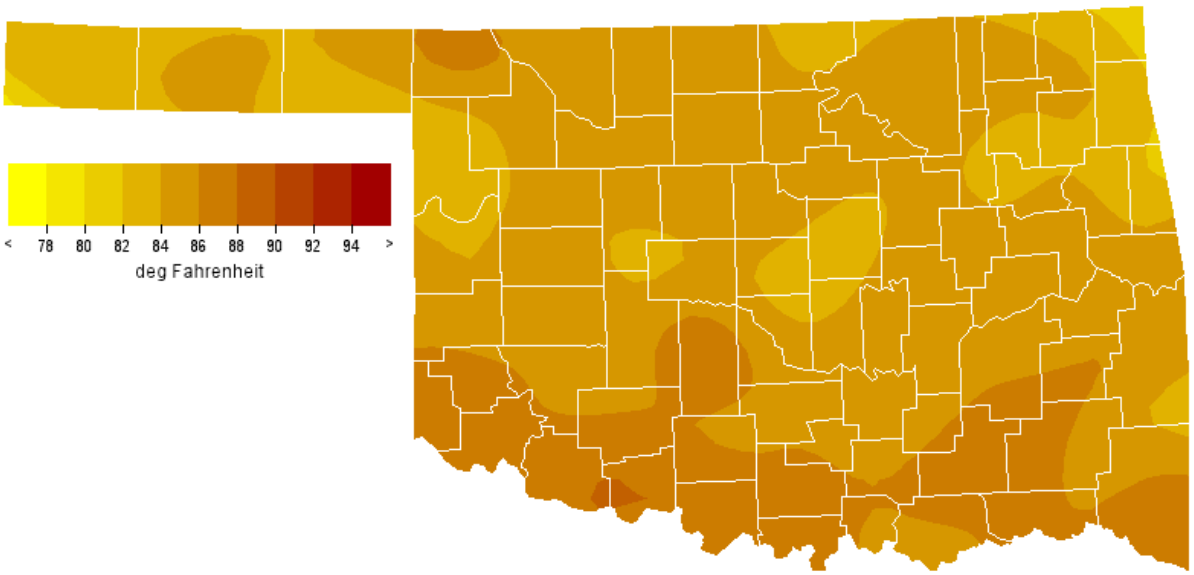
Statewide-averaged precipitation has varied between 0.27 inch in 1956 and 7.86 inches in 1945. Wyandotte recorded 16.82 inches in September 1945 to hold the monthly state record. The record daily precipitation at a regular reporting station is the 10.42 inches reported at Barnsdall on September 29, 1986. 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
Average September Tornadoes: 2.1
Most: 16 (1992)

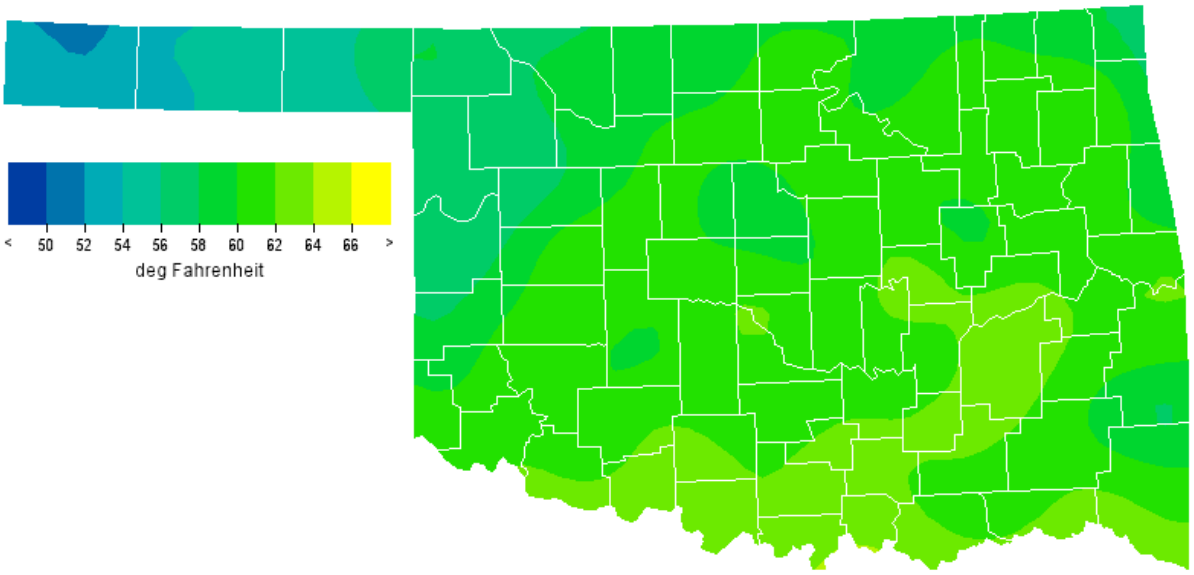
Tornadoes are slightly more frequent in September, averaging 2.1 each year, than they are during the previous two months. The most tornadoes reported in the state during September is 16 in 1992. No tornadoes were reported in the state during September in 18 of 52 years from 1950 through 2001 (the period 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.

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.

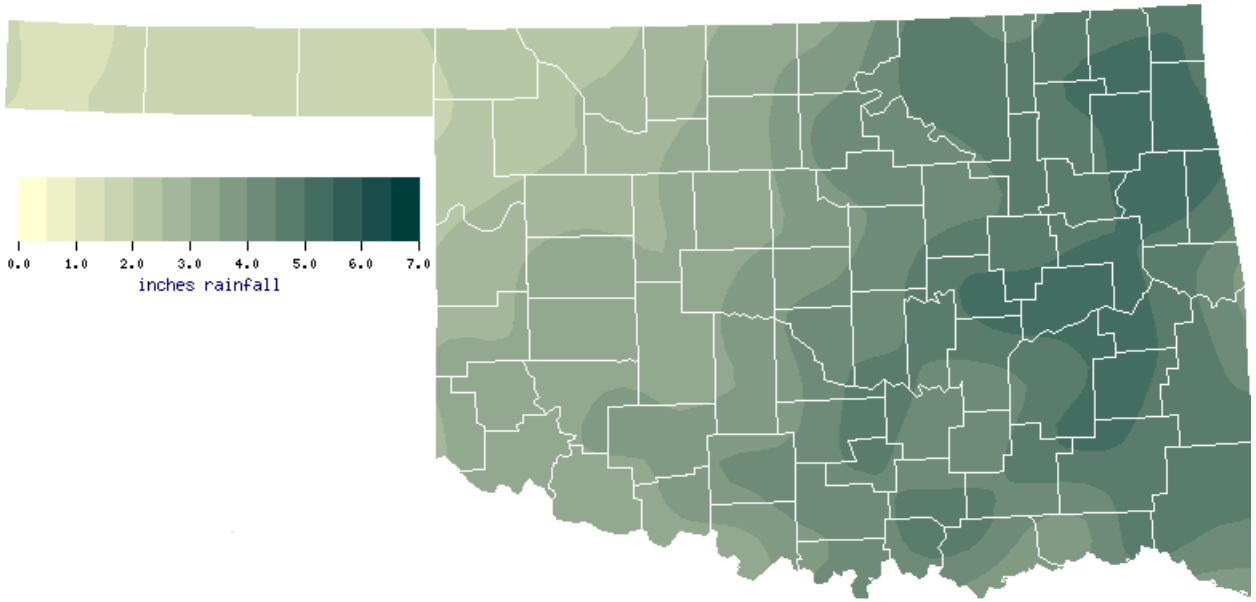
September Normal Monthly Maximum Temperature (1971-2000)



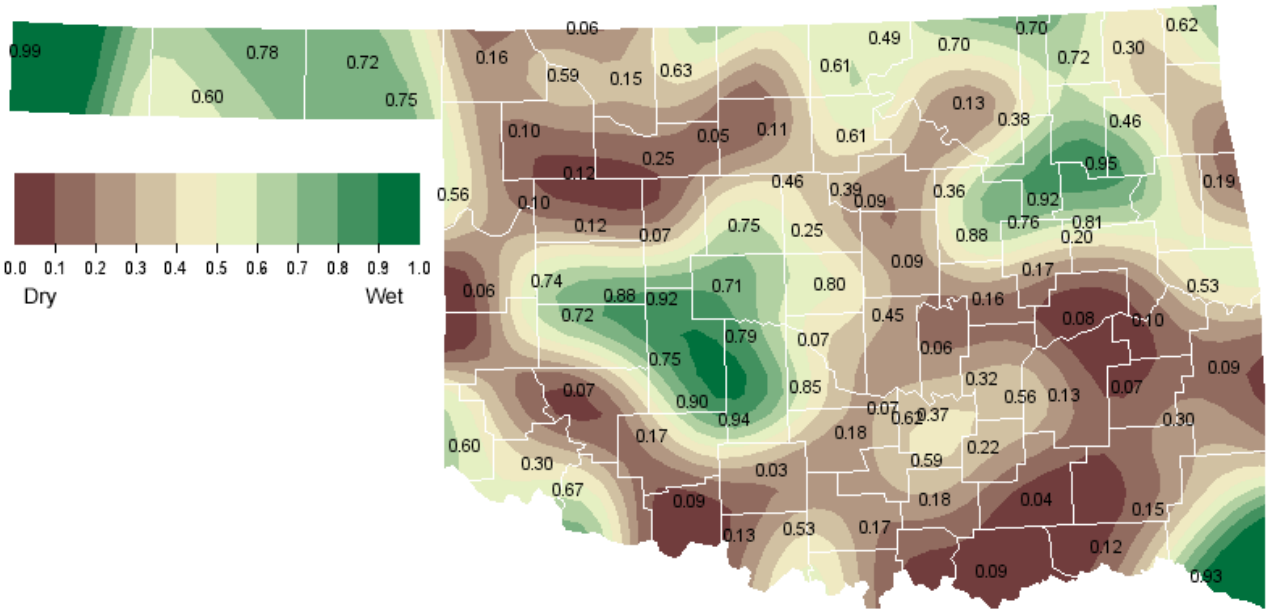
September Normal Monthly Minimum Temperature (1971-2000)



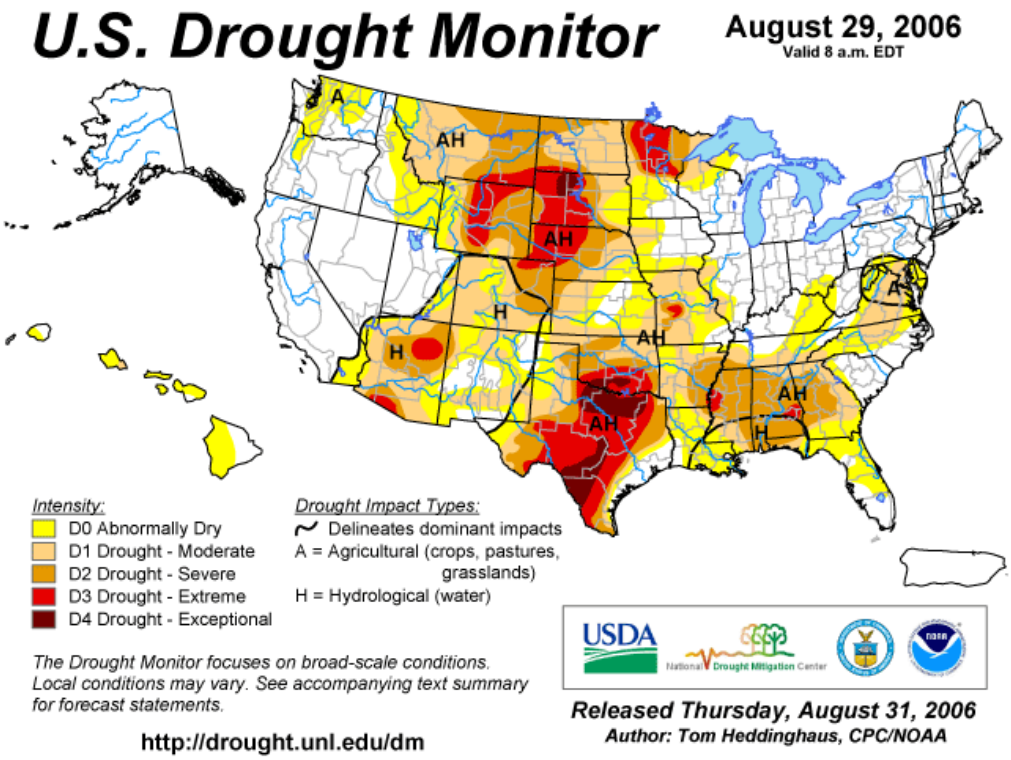
September Normal Precipitation (1971-2000)

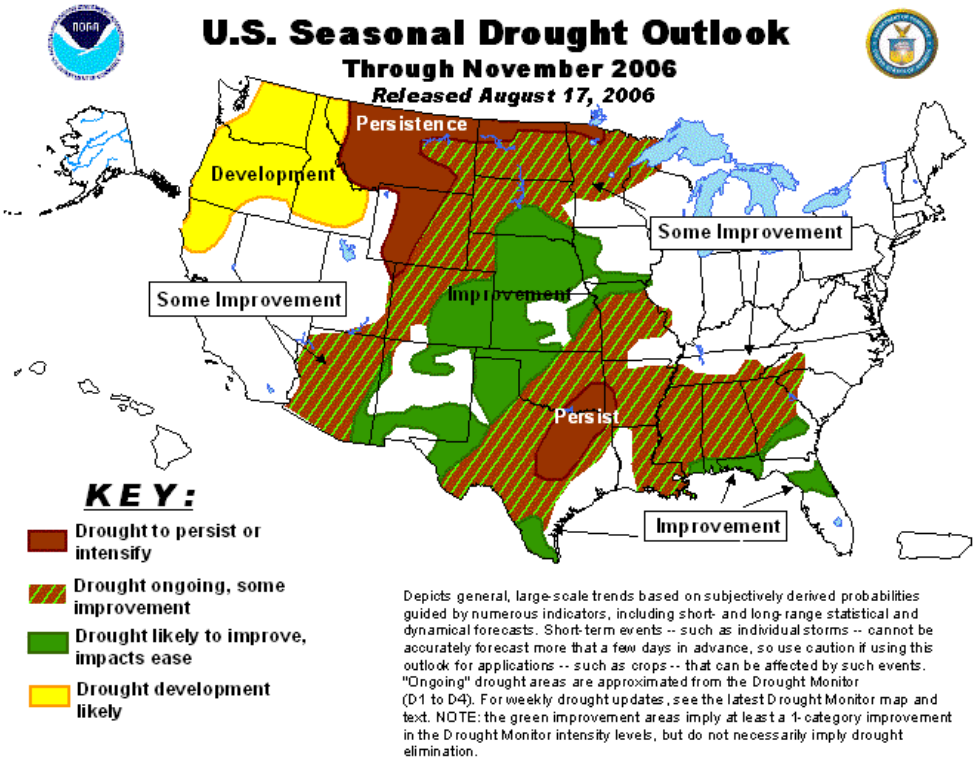


September 1, 2006 Soil Moisture Conditions at 25cm

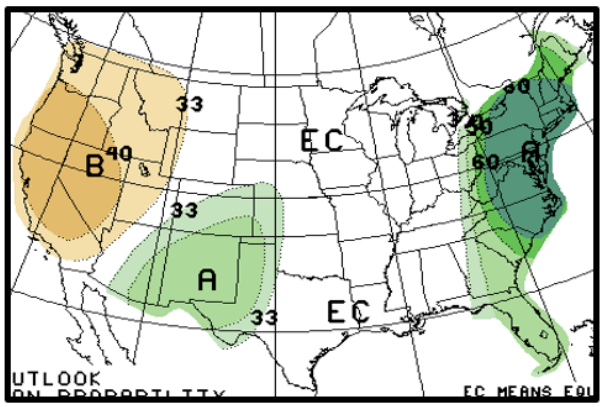


September 2006 Drought Indices





September 2006 U.S. Precipitation Forecast



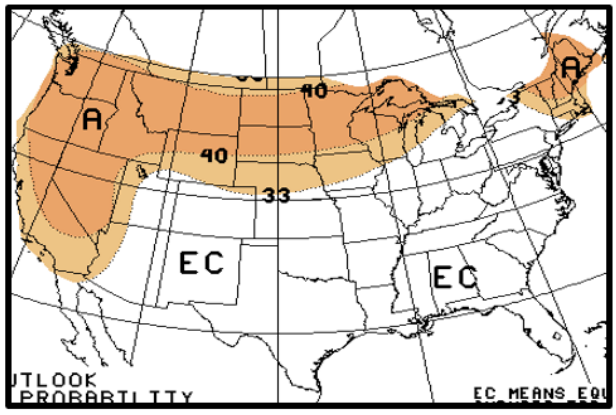
Percent Likelihood of Above or Below Average Precipitation*

5% - 10%
0% - 5%
A = Above

0% - 5%
5% - 10%
B = Below

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

September 2006 U.S. Temperature Forecast



Percent Likelihood of Above and Below Average Temperatures*

10% - 20%
5% - 10%
0% - 5%
A = Above

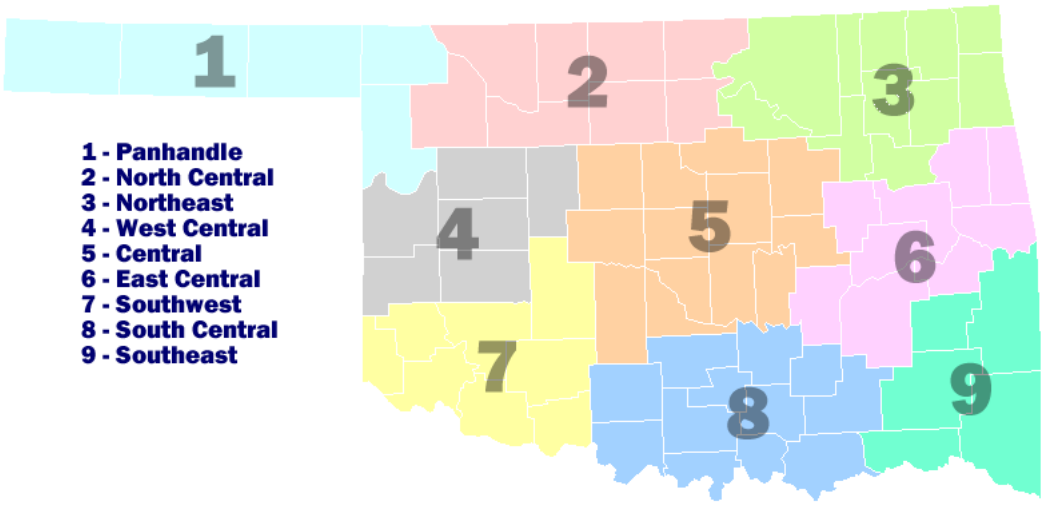
0% - 5%
5% - 10%
B = Below

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

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	72.0	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	3.90

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: 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.ocs.ou.edu or
http://www.ocs.ou.edu/
E-mail (ocs@ou.edu) or telephone (405/325-2541)

OKLAHOMA CLIMATOLOGICAL SURVEY

Oklahoma Climatological Survey is the State Climate Office for Oklahoma

Dr. Renee McPherson, Acting Director

Editor
Gary D. McManus, Climatologist

Contributors
Gary D. McManus
Mark A. Shafer, Director of Climate Information
Derek S. Arndt, Acting State Climatologist
Howard Johnson, Associate State Climatologist (Ret.)

Design
Stdrovia Blackburn, Graphic Design Manager
Kelly Stokes, Administration/Graphics

For more information, contact:
Oklahoma Climatological Survey
The University of Oklahoma
120 David L. Boren Blvd., Suite 2900
Norman, OK 73072-7305
tel: 405-325-2541
fax: 405-325-2550
e-mail: ocs@ou.edu
http://www.ocs.ou.edu