OKLAHOMA MONTHLY CLIMATE SUMMARY
JULY 2008

OKLAHOMA CLIMATOLOGICAL SURVEY

July was fairly normal for these parts, both statistically and weather-wise. The month ended as the 53rd warmest and 47th driest out of the 114 years on record. The northern half of the state saw the most rain and accounted for the bulk of the near-normal total while the southeast went thirsty. Severe weather was thankfully sparse after a few months of tumultuous weather. Drought conditions lessened somewhat in the Oklahoma Panhandle with 2-4 inches of much-needed rainfall. Cimarron County, however, continued with conditions compared to the Dust Bowl days, according to long-time residents of the area.

July 2008 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	109°F	Grandfield	28
Low Temperature	52°F	Boise City	13
High Precipitation	8.17 in.	Pryor	
Low Precipitation	0.22 in.	Newport	

Precipitation

The heaviest rain may have fallen in the northeast where the surplus was well over an inch, but the most significant rainfall occurred in the Panhandle. Exceptional drought conditions have gone largely unabated throughout the year in that area. On average, July brought the Panhandle more than three inches of rain, their 46th wettest such total on record. The southeast was not as fortunate, however, with their 14th driest July on record. The January-July period was still disastrous for the Panhandle, despite their recent bounty. The year-to-date precipitation total amounted to the 10th driest on record. The northeast, on the other hand, experienced their second wettest January-July on record.

Temperature

The temperature statistics were fairly normal for the month. And, as is the norm during July, areas that received plentiful precipitation were a bit below normal. The month's warmest temperature of 109 degrees occurred at the Grandfield Mesonet site on the 28th. The coolest reading of 52 degrees was recorded at Boise City on the 13th. For the year thus far, the statewide average temperature stood at a few tenths of a degree above normal to rank as the 42nd warmest on record.

July Daily Highlights

July 1-6: The first six days of the month were quite typical for July with sunny skies and hot temperatures on tap. A bit of rain fell in the drought-plagued Panhandle on the second. Nearly four inches fell in Adair County with a few locations in southern Oklahoma picking up an inch on the third and fourth. High temperatures were mainly in the 90s and 100s throughout the period.

July 7-10: Widespread rains finally fell across the state with the bulk of the heavy amounts found in the northern one-third. Between 1-4 inches fell across that area. Goodwell in the Oklahoma Panhandle garnered a whopping three inches. Another 1-3 inches fell across south central Oklahoma. Despite the rains, the period was devoid of any severe weather of note. The cold front that generated the rain cooled the state down with high temperatures on the ninth and tenth in the 80s and 90s.

July 11-13: The state's only real bout with severe weather occurred on the 12th with storms generated along a cold front, mostly strong winds and hail. A 70 mph wind gust was reported in Mayes County and 2.90 inches of rain fell in one hour according to the Breckenridge Mesonet site. Flash

flooding was reported in Weatherford. The cold front cooled the state down from 90s and 100s to 70s and 80s, about 10 degrees below the seasonal normals.

July 14-18: This five-day period was mostly dry except for spotty showers once again across western Oklahoma. The rains were heavy in some places, but most areas across the state received next to nothing. Highs were in the 90s and 100s throughout the five days.

July 19-26: The heat ramped up to full force during these seven days under the influence of an upper-level ridge of high pressure. Low temperatures were mostly in the 70s with a few 80s and highs soared into the triple-digits. Just a few showers formed from time to time in the northeast.

July 27-31: The state's highest temperature of 109 degrees occurred at Grandfield on the 28th. Remnants of Tropical Storm Dolly brought a bit of moisture to a parched state. Amounts were generally less than an inch, but a few places along the Kansas border received between 2-4 inches. Highs were once again into the upper 90s and 100s.

July 2008 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2008)
Month (July)	81.4ºF	-0.2ºF	53rd Warmest
Season-to-Date (Jun-Jul)	79.7ºF	0.6ºF	39th Warmest
Year-to-Date (Jan-Jul)	59.4ºF	0.3ºF	42nd Warmest

Precipitation

	Total	Depart.	Rank (1895-2008)
Month (July)	2.46 in.	-1.05 in.	36th Driest
Season-to-Date (Jun-Jul)	8.09 in.	1.09 in.	35th Wettest
Year-to-Date (Jan-Jul)	24.32 in.	2.43 in.	26th Wettest

Depart. = Departure from 30-year normal

Record Event Reports

Description	Day	Location	Record	Previous Record	Year
Warmest Minimum Temperature (tied)	2	Oklahoma City	74	74	1980
Warmest Minimum Temperature	3	Oklahoma City	76	75	1925
Warmest Minimum Temperature	4	Oklahoma City	78	75	1911
Warmest Minimum Temperature (tied)	7	Oklahoma City	78	78	1980
Daily Rainfall	9	Oklahoma City	3.04 inches	2.56 inches	1995
Daily Rainfall	16	Tulsa	2.20 inches	2.09 inches	2004
Coolest Minimum Temperature	30	McAlester	59	61	2006

July 2008 Severe Weather

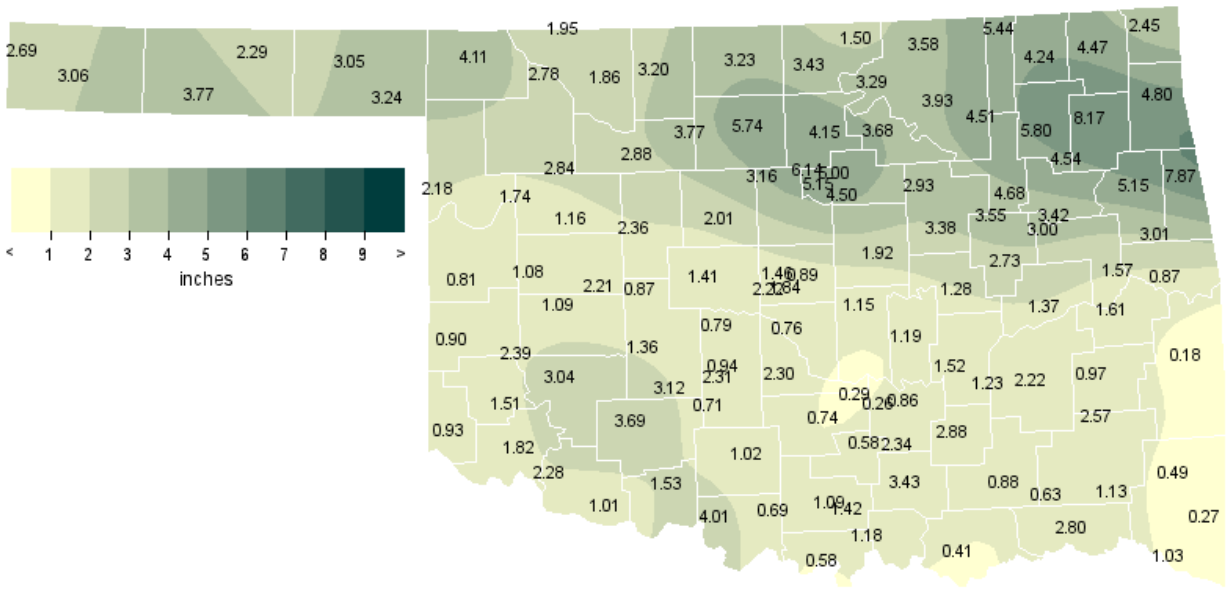
Wind Gusts (70 mph or greater)

Speed (m.p.h)	Location	County	Day
70	S Locust Grove	Mayes	12

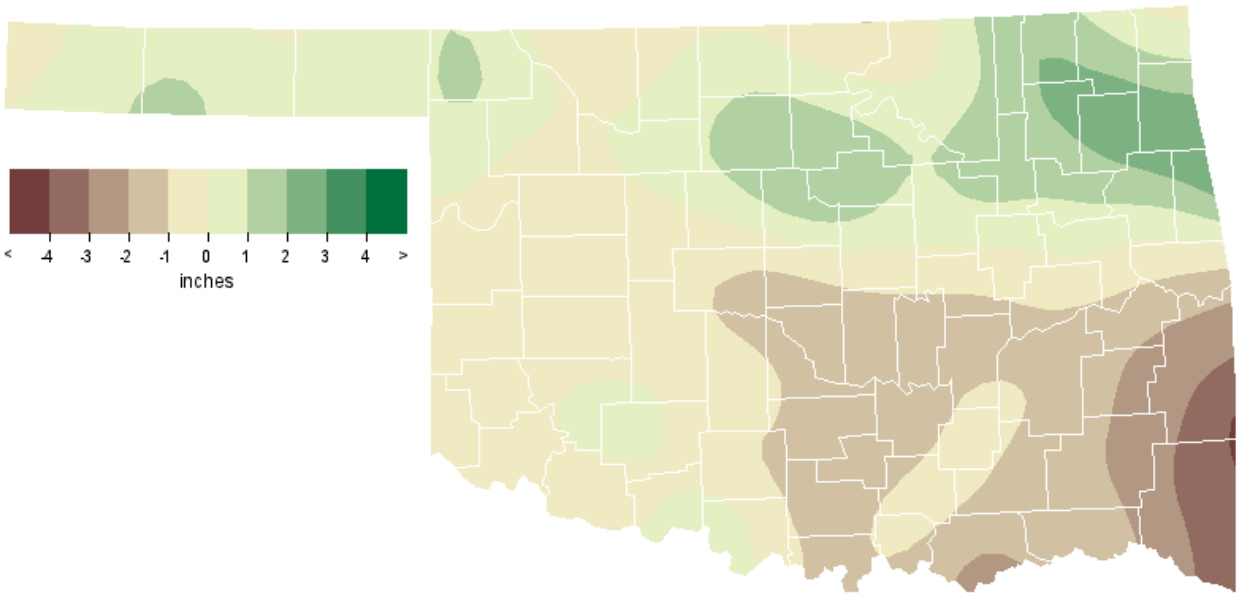
Flooding

Location	County	Day
Weatherford	Custer	12

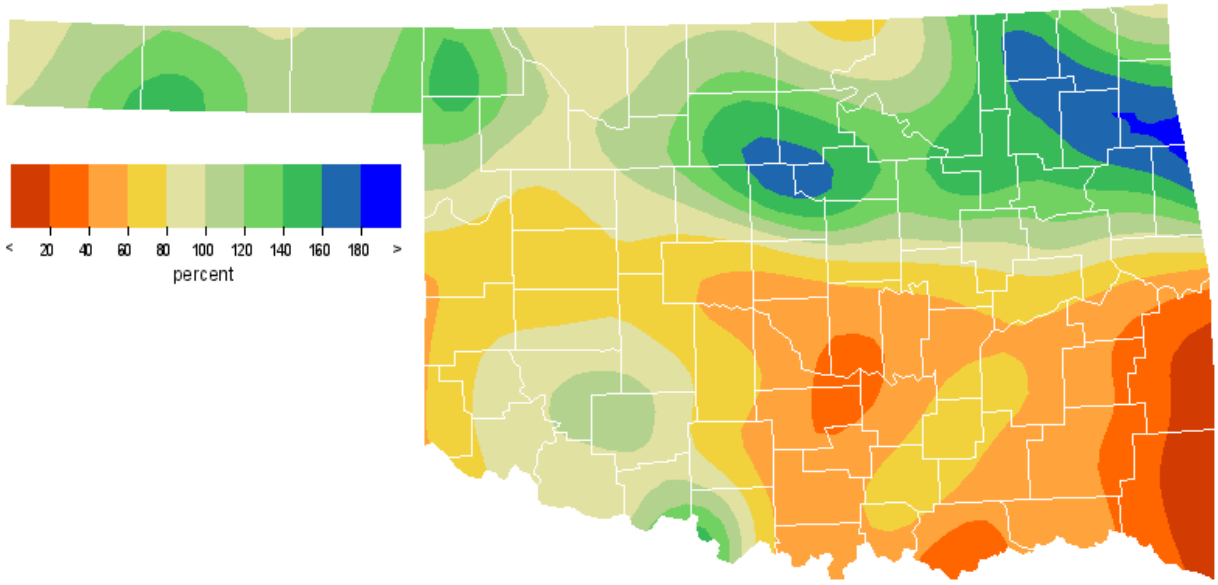
July 2008 Observed Precipitation



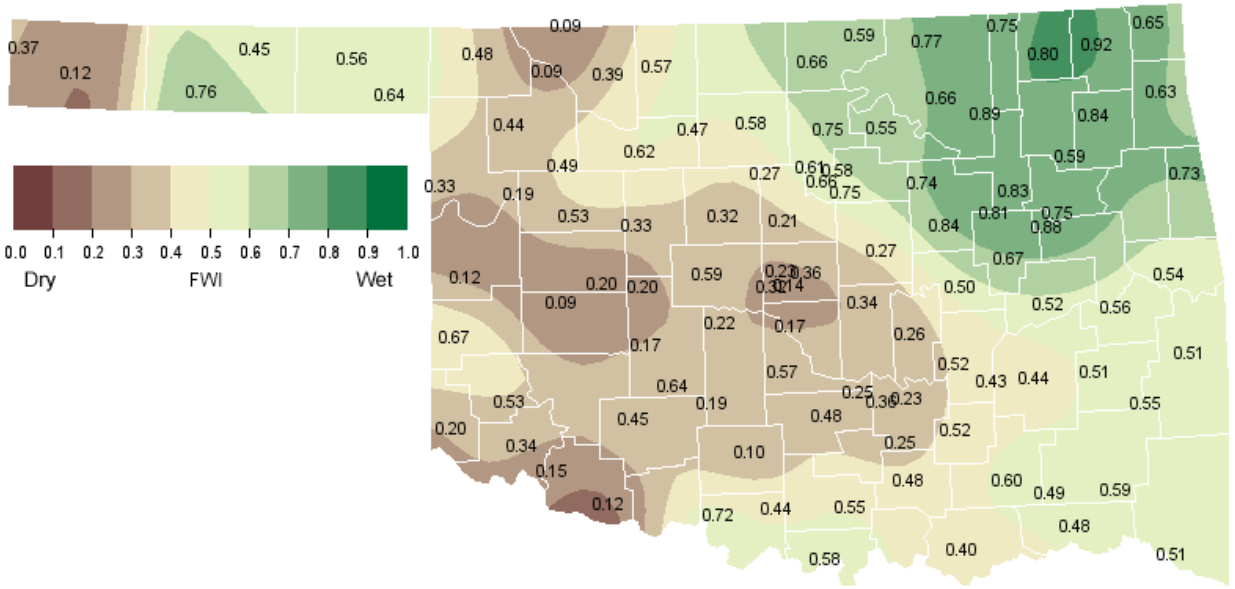
July 2008 Departure from Normal Precipitation



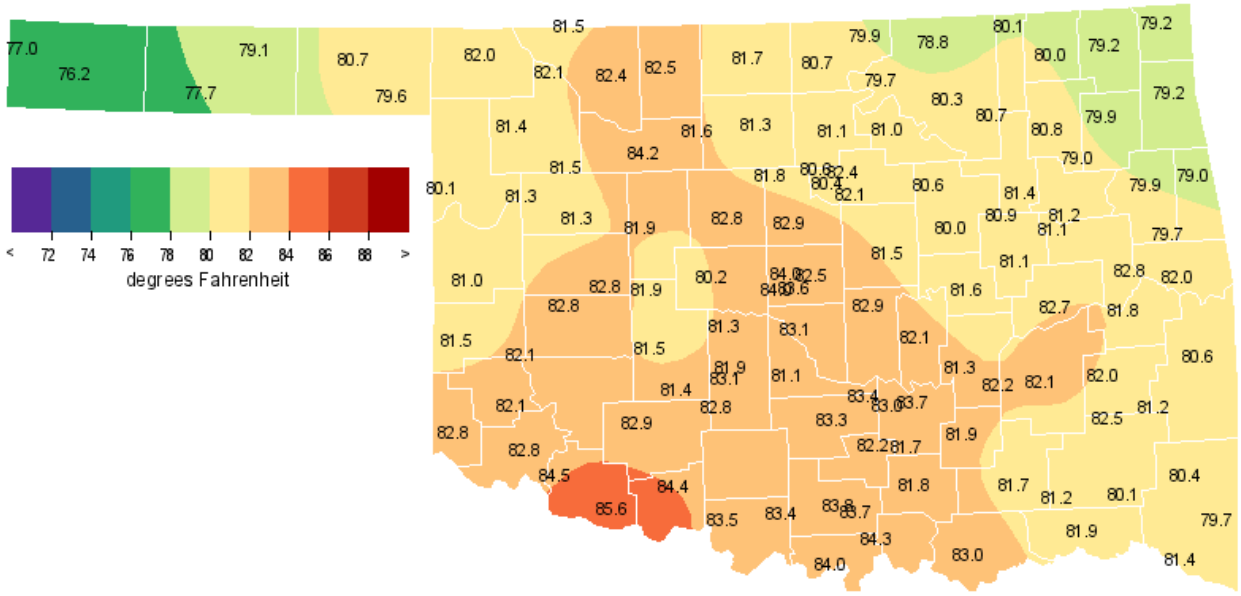
July 2008 Percent of Normal Precipitation



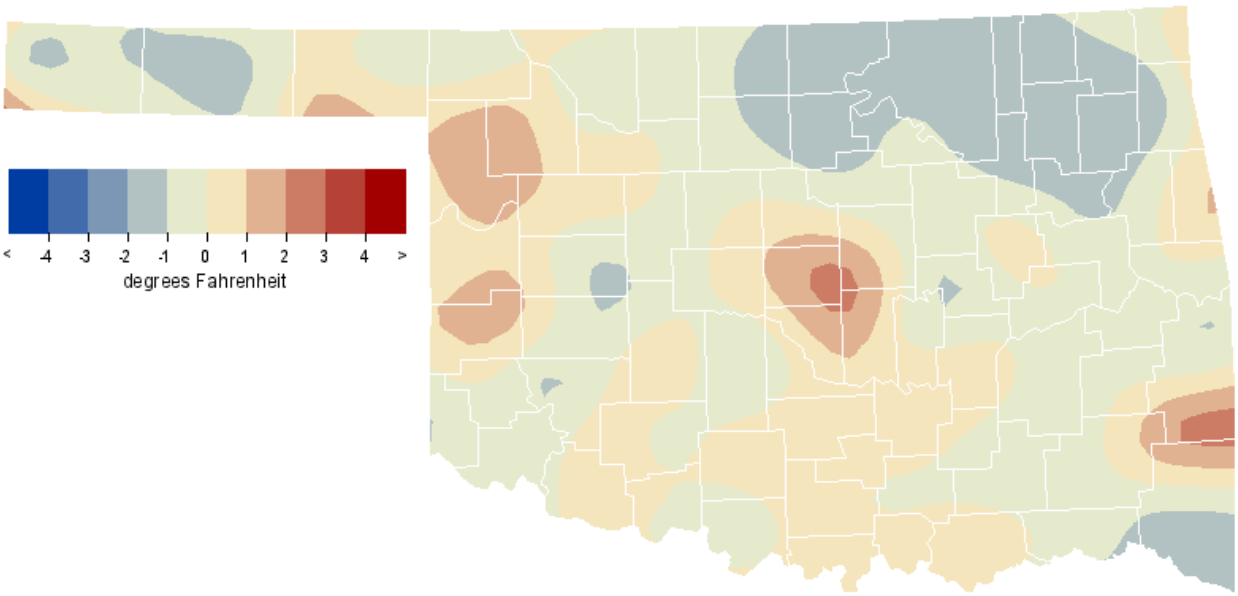
July 2008 Average Soil Moisture at 25cm



July 2008 Average Temperature



July 2008 Departure from Normal Temperature



Mesonet Monthly Summary for July 2008

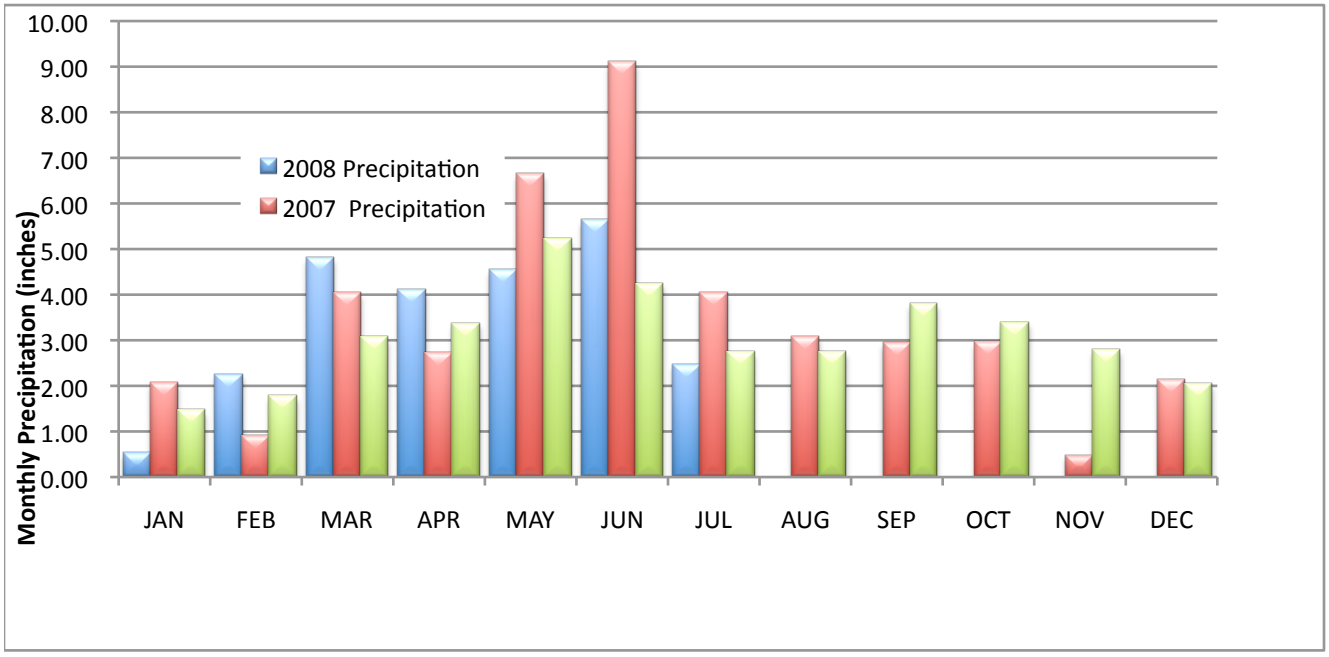
NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	80.1	102	27	60	14	0	469	2.18	.85	8
Beaver	80.6	102	27	58	31	0	484	3.05	1.16	8
Boise City	76.2	98	28	52	13	0	346	3.06	1.60	18
Buffalo	82.0	103	27	57	14	0	526	4.11	.93	16
NORTH CENTRAL										
Alva	82.4	103	27	54	14	0	538	1.86	.97	9
Blackwell	80.7	99	28	59	14	0	486	3.43	.92	9
Breckinridge	81.3	103	28	58	14	0	506	5.74	3.10	12
Cherokee	82.5	104	28	57	14	0	541	3.20	1.15	9
Fairview	84.2	105	27	58	14	0	594	2.88	1.37	9
Freedom	82.1	104	27	58	14	0	531	2.78	.89	9
Lahoma	81.6	104	28	59	14	0	514	3.77	1.46	9
NORTHEAST										
Bixby	81.4	100	28	61	14	0	509	4.68	1.62	12
Burbank	79.6	97	28	58	14	0	454	3.29	1.47	9
Claremore	80.9	97	28	60	14	0	492	5.80	2.20	9
Copan	80.1	98	22	59	14	0	467	5.44	1.64	29
Foraker	78.8	96	22	60	14	0	427	3.58	1.74	29
Inola	79.0	98	28	59	14	0	435	4.54	1.91	9
Jay	79.2	96	28	57	14	0	442	4.80	1.82	9
Miami	79.2	96	26	58	14	0	442	2.45	.51	8
WEST CENTRAL										
Bessie	82.8	104	28	64	14	0	551	1.09	.33	18
Butler	82.3	102	27	60	14	****	****	1.08	.58	18
Camargo	81.2	103	27	58	14	0	503	1.74	.73	9
Cheyenne	81.0	101	28	64	4	0	497	.81	.42	9
Erick	81.4	104	28	62	21	0	509	.90	.59	8
CENTRAL										
Acme	82.7	103	28	64	14	0	550	.71	.41	13
Bowlegs	82.0	103	28	63	14	0	528	1.19	.65	13
Bristow	79.9	99	28	57	14	0	463	3.38	1.76	12
Lake Carl Blac	80.6	100	27	57	14	0	484	6.14	3.68	12
Chandler	81.4	100	28	64	14	0	510	1.92	.81	13
Chickasha	81.9	105	28	61	1	0	525	.94	.50	13
El Reno	80.2	101	28	57	14	0	472	1.41	.54	13
Guthrie	82.9	104	28	61	14	0	554	*****	*****	***
Kingfisher	82.7	104	28	57	14	0	550	2.01	.65	12
Marena	80.4	100	27	61	14	0	476	5.15	2.49	12
Minco	81.3	103	28	63	14	0	505	.79	.45	29
Marshall	81.8	103	28	56	14	0	520	3.16	1.52	12
EAST CENTRAL										
Calvin	81.2	102	28	63	1	0	503	1.52	.86	30
Cookson	79.7	100	28	55	14	0	455	3.01	1.32	9
Eufaula	82.7	103	28	64	15	0	547	1.37	.54	10
Haskell	81.1	100	28	61	14	0	500	3.00	.70	30
Hectorville	80.9	100	28	62	14	0	494	3.55	.87	8
McAlester	82.1	101	28	62	1	0	529	2.22	1.01	9
Okmulgee	81.1	102	28	61	14	0	499	2.73	.83	3
SOUTHWEST										
Altus	82.8	103	28	65	1	0	550	1.82	.70	29
Apache	81.3	102	28	61	1	0	506	3.12	1.00	16
Fort Cobb	81.4	98	28	63	1	0	509	1.36	.48	29
Grandfield	85.6	109	28	66	1	0	639	1.01	.55	29
Hinton	81.9	101	27	62	14	0	524	.87	.54	12
Hobart	83.4	103	28	63	1	****	****	.85	.62	12
SOUTH CENTRAL										
Ada	83.7	103	27	64	14	0	580	.86	.35	30
Ardmore	83.6	102	28	67	14	0	577	1.42	1.38	9
Burneyville	84.0	104	28	64	18	0	588	.58	.45	9
Byars	83.4	103	28	64	14	0	571	.29	.22	13
Centrahoma	81.9	102	28	66	17	0	525	2.88	1.33	30
Durant	82.9	102	27	66	1	0	556	.41	.32	30
Fittstown	81.6	102	28	64	1	0	515	2.34	1.40	9
Ketchum Ranch	*****	***	***	***	***	****	****	1.02	.44	9
Lane	81.7	101	28	63	17	0	517	.88	.55	30
SOUTHEAST										
Antlers	81.2	102	28	61	17	0	501	.63	.52	31
Broken Bow	79.7	101	27	59	1	0	456	.27	.24	31
Clayton	82.5	105	28	61	17	0	542	2.57	2.13	9
Cloudy	80.1	101	28	61	1	0	467	1.13	.54	31
Hugo	81.9	100	28	64	1	0	523	2.80	1.67	4

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	77.7	100	31	60	13	0	394	3.77	2.50	10
Hooker	79.1	104	31	57	13	0	437	2.29	1.24	10
Kenton	77.0	101	31	53	13	0	372	2.69	1.52	7
Slapout	79.6	101	27	60	13	0	452	3.24	1.45	10
May Ranch	81.5	102	22	59	14	0	512	1.95	.68	8
Medford	81.8	104	28	58	14	0	520	3.23	1.09	8
Newkirk	79.9	97	26	63	14	0	461	1.50	.64	29
Red Rock	81.0	101	28	58	14	0	497	4.15	2.07	9
Seiling	81.4	102	22	57	14	****	****	2.84	1.09	9
Woodward	81.4	101	27	62	14	0	509	1.06	.81	16
Nowata	80.0	96	22	58	14	0	465	4.24	1.26	27
Pawnee	80.9	99	28	59	14	0	494	3.68	2.46	9
Porter	81.2	101	28	63	14	0	503	3.42	.75	9
Pryor	79.9	97	22	59	14	0	462	8.17	2.59	9
Skiatook	80.7	96	27	63	14	0	488	4.51	1.87	9
Vinita	79.2	95	22	57	14	0	439	4.47	1.72	12
Wynona	80.3	96	28	60	14	0	473	3.93	1.69	9
Putnam	81.2	101	27	61	14	0	504	1.16	1.00	9
Retrop	82.1	103	28	65	4	0	531	2.39	.84	13
Watonga	81.9	100	27	62	14	0	525	2.36	1.87	12
Weatherford	82.7	103	28	64	14	0	548	2.21	1.24	12
Ninnekah	83.2	106	28	63	1	0	564	2.31	1.31	9
Norman	83.1	102	28	64	14	0	561	.76	.42	13
Oilton	80.7	100	28	57	14	0	486	2.93	1.29	9
OKC E	83.6	103	28	61	14	0	576	1.84	.82	9
OKC N	83.9	104	28	62	14	0	587	1.46	.56	9
OKC W	84.0	102	28	65	14	0	588	2.22	1.65	9
Okemah	81.6	102	28	62	1	0	515	1.28	.45	9
Perkins	82.1	102	27	60	14	0	530	4.50	2.61	12
Shawnee	82.9	104	28	61	14	0	556	1.15	.38	13
Spencer	82.5	102	28	59	14	0	543	.89	.36	9
Stillwater	82.4	102	28	59	14	0	539	5.00	2.96	12
Washington	81.1	103	28	64	1	0	499	2.30	1.48	3
Sallisaw	82.0	103	28	60	1	0	528	.87	.35	13
Stigler	81.8	103	28	61	1	0	519	1.61	1.04	30
Stuart	82.2	102	28	66	16	0	535	1.23	.42	13
Tahlequah	79.8	99	28	57	14	0	460	5.15	2.44	9
Webbers Falls	82.8	105	28	62	1	0	551	1.57	.60	13
Westville	79.0	99	28	59	1	0	433	7.87	3.68	3
Hollis	82.8	105	28	66	1	0	552	.93	.52	13
Mangum	82.1	106	28	60	1	0	529	1.51	1.03	13
Medicine Park	82.8	105	28	67	1	0	553	3.69	1.63	15
Tipton	84.6	108	28	64	1	0	608	2.28	1.02	9
Walters	84.4	108	28	64	1	0	601	1.53	.61	15
Madill	84.3	103	28	67	1	0	598	1.18	1.09	9
Newport	84.0	104	28	65	1	****	****	.22	.13	4
Pauls Valley	83.3	103	28	66	14	0	568	.74	.41	13
Ringling	83.3	104	28	66	1	0	567	.69	.69	9
Sulphur	82.2	103	28	66	14	0	534	.58	.28	9
Tishomingo	81.7	102	28	64	3	0	519	3.43	2.65	9
Vanoss	83.0	102	28	64	14	0	557	.26	.20	13
Waurika	83.5	104	28	66	1	0	575	4.01	1.76	9
Idabel	81.4	101	28	62	1	0	507	1.03	.49	31
Mt Herman	80.4	100	27	60	1	0	477	.49	.19	31
Talihina	81.3	102	28	59	1	****	****	*****	*****	***
Wilburton	82.0	103	28	62	1	0	526	.97	.45	10
Wister	80.6	105	28	57	15	0	483	.18	.07	9

July 2008 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Jul-07
Panhandle	3.05	0.53	46th Wettest	9.79 (1950)	0.37 (1935)	1.67
North Central	3.11	0.13	50th Wettest	9.06 (1950)	0.13 (1983)	3.11
Northeast	4.47	1.31	32nd Wettest	9.31 (1959)	0.00 (1914)	3.05
West Central	1.53	-0.60	37th Driest	7.21 (1950)	0.05 (1936)	2.42
Central	2.32	-0.25	45th Driest	10.17 (1950)	0.16 (1980)	5.69
East Central	2.75	-0.23	52nd Driest	10.15 (1950)	0.17 (1930)	5.12
Southwest	1.92	-0.26	53rd Driest	6.30 (1975)	0.03 (1980)	1.97
South Central	1.33	-1.21	33rd Driest	8.45 (1950)	0.08 (1998)	4.79
Southeast	1.12	-2.46	14th Driest	13.02 (1950)	0.00 (1930)	8.40
Statewide	2.46	-0.28	47th Driest	9.26 (1950)	0.41 (1980)	4.04

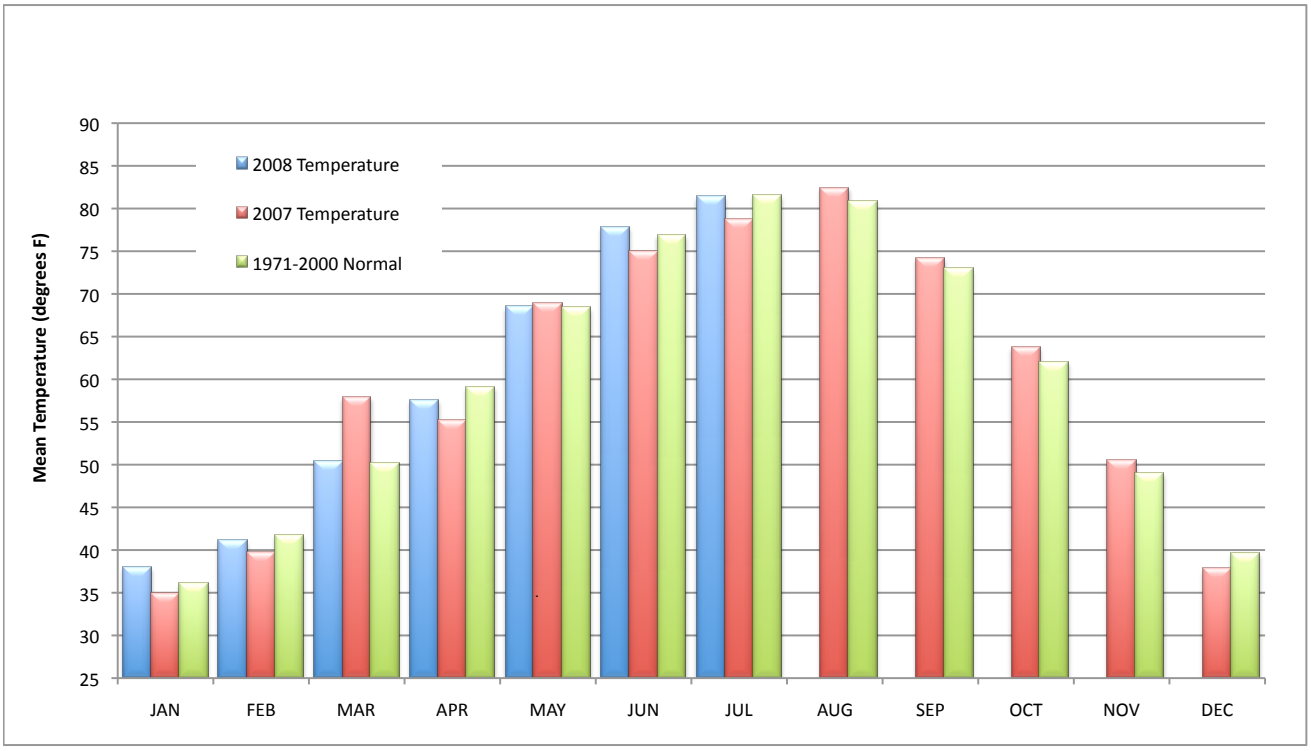
2007 and 2008 Statewide Precipitation Monthly Totals vs. Normal



July 2008 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Jul-07 (F)
Panhandle	79.0	-0.5	53rd Warmest	85.4 (1980)	73.2 (1906)	77.7
North Central	81.7	-0.5	54th Coolest	89.6 (1954)	75.8 (1950)	78.9
Northeast	80.0	-0.9	48th Coolest	89.2 (1954)	75.0 (1906)	78.9
West Central	81.8	0.1	49th Warmest	88.1 (1954)	75.8 (1906)	78.1
Central	82.1	0.1	46th Warmest	88.6 (1954)	75.8 (1906)	79.1
East Central	81.3	0.0	53rd Warmest	88.7 (1954)	75.9 (1906)	78.6
Southwest	83.0	-0.2	55th Warmest	89.1 (1980)	77.9 (1906)	79.3
South Central	83.0	0.3	45th Warmest	89.1 (1998)	77.2 (1906)	79.0
Southeast	81.1	0.2	55th Warmest	87.5 (1954)	76.4 (2004)	78.1
Statewide	81.4	-0.2	53rd Warmest	88.1 (1954)	75.9 (1906)	78.7

2007 and 2008 Statewide Temperature Monthly Averages vs. Normal



Mesonet Extremes for July 2008

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	104	31st	Hooker	52	13th	Boise City	4.11	Buffalo	2.5	10th	Goodwell
North Central	105	27th	Fairview	54	14th	Alva	5.74	Breckinridge	3.10	12th	Breckinridge
Northeast	101	28th	Porter	57	14th	Vinita	8.17	Pryor	2.59	9th	Pryor
West Central	104	28th	Bessie	58	14th	Camargo	2.39	Retrop	1.87	12th	Watonga
Central	106	28th	Ninnekah	56	14th	Marshall	6.14	Lake Carl Blac	3.68	12th	Lake Carl Blac
East Central	105	28th	Webbers Falls	55	14th	Cookson	7.87	Westville	3.68	3rd	Westville
Southwest	109	28th	Grandfield	60	1st	Mangum	3.69	Medicine Park	2.19	13th	Hobart
South Central	104	28th	Newport	63	17th	Lane	4.01	Waurika	2.65	9th	Tishomingo
Southeast	105	28th	Clayton	57	15th	Wister	2.80	Hugo	2.13	9th	Clayton
Statewide	109	28th	Grandfield	52	13th	Boise City	8.17	Pryor	3.68	12th	Lake Carl Blac

August Climatological Outlook

According to published daily normal temperatures, the hottest period of the long Oklahoma summer extends from mid-July through mid-August. The gradually shortening days and the occasional arrival of cooler weather from the North frequently bring the state modest relief from the heat by late August. Overall, August, the third and final month of the climatological summer, is Oklahoma's second hottest, fifth driest, and least windy month. Tornado frequency is at its lowest of the March-through-October warm season. Lightning deaths are more frequent in August than during any other month.

The normal statewide monthly temperature is 80.9 degrees Fahrenheit. Oklahoma's hottest August, according to National Weather Service records that date from 1892, occurred in 1936 when the state's average monthly temperature was a scorching 87.2 degrees. This is the second highest statewide-averaged monthly temperature (all months) recorded in Oklahoma during the 111 years with comprehensive records. The state's record daily maximum temperature of 120 degrees was equaled at Altus and Poteau on August 12 and 10, 1936, respectively. Relatively cool weather prevailed during August 1915, when the state recorded its lowest August statewide-average monthly temperature, 73.2 degrees. The lowest daily minimum temperature of 39 degrees was recorded at Dacoma on August 26, 1910.

Temperature
Mean: 80.9 degrees
Hottest August: 1936, 87.9 degrees
Coolest August: 1915, 73.9 degrees
Hottest location: Waurika, 84.1 degrees
Coolest location: Boise City, 75.3 degrees
Hottest recorded: 120 degrees, Poteau, August 10, 1936
Altus, August 12, 1936
Coldest recorded: 41 degrees, Goodwell, August 15, 1915

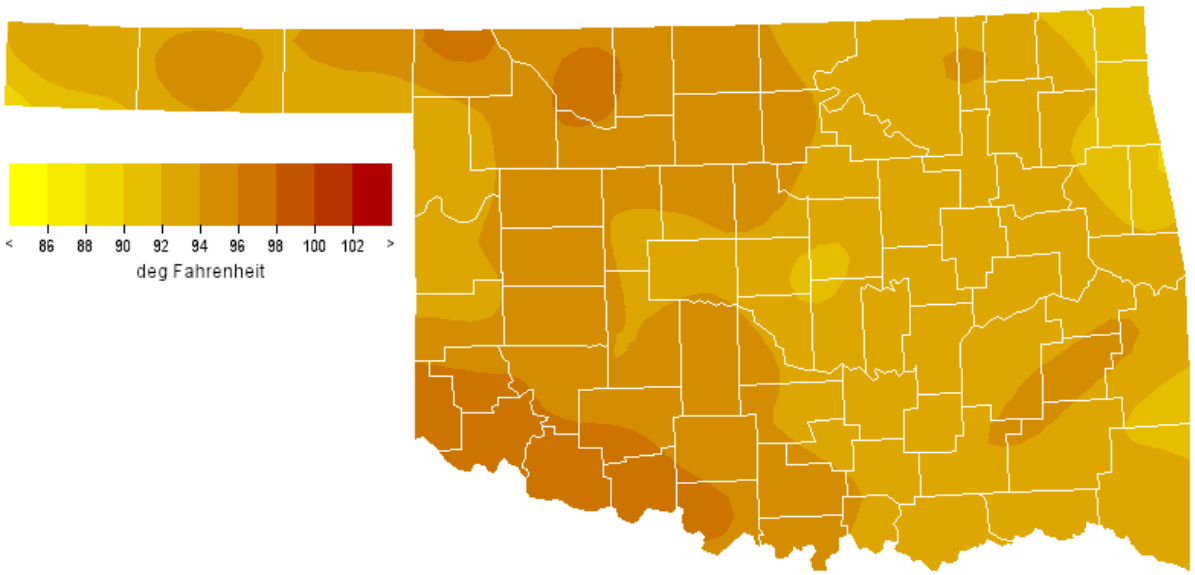
Isolated or widely scattered thunderstorms provide most of the state's August precipitation. As a result, little systematic variation can be seen in the statewide precipitation pattern. At 3.76 inches, Pawnee has the greatest normal precipitation for the month. Meeker, near the center of the state, has the lowest normal monthly accumulation, 1.93 inches. Statewide-averaged monthly precipitation during August has ranged from 6.54 inches in 1906 to a dismal 0.14 inch during the droughty summer of 2000. The greatest August precipitation recorded by any reporting station was 15.15 inches at Holdenville in 1906. A 10.34-inch deluge at Carter Tower in northern McCurtain County on August 28, 1947 is the greatest daily precipitation recorded at a regular observing station during August. Precipitation is observed (.01 inch or more) on an average of as many as 7.8 days at Stilwell and as few as 3.5 days at Bixby. Daily rainfall events of two inches or greater are no more than an every-other-year occurrence everywhere in the state.

Precipitation
Mean: 2.84 inches
Wettest year: 1906, 6.54 inches
Driest year: 2000, 0.18 inches
Wettest location: Pawnee, 3.76 inches
Driest location: Meeker, 1.93 inches
Most recorded: 15.15 inches, Holdenville, 1906

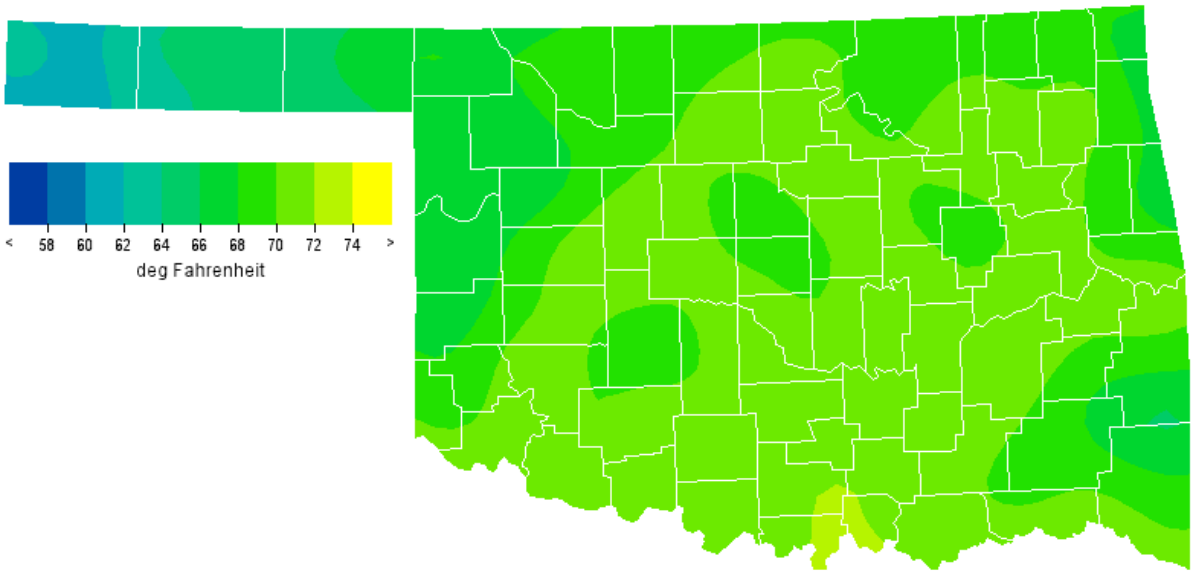
Severe weather appears in the state during August, but its effects are more notable anecdotally than they are apparent in statistics. The exception is that August has presented the state with more lightning deaths (21) than any other month since such record-keeping began in 1959. Only July among the months accounts for more total casualties (deaths and injuries) from lightning strikes. The average number of tornado for the month of August is 1.4. Of the 80 August tornadoes reported in the state between 1950 and 2003, no fatalities and only three injuries (1 in 1959 and 2 in 1982) resulted. Oklahoma's August tornado totals include a high of 13 in 1979. No tornadoes were observed during 22 of the 54 years with comprehensive statistics.

Tornadoes
Average August Tornadoes: 2
Most: 13 (1979)

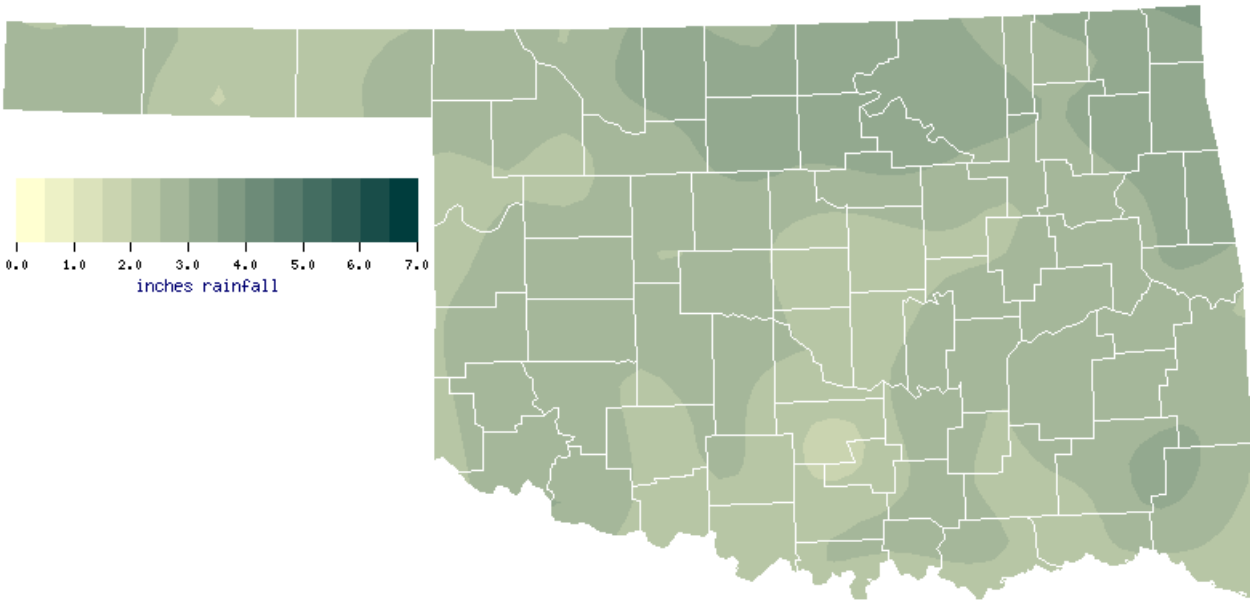
August Normal Daily Maximum Temperature (1971-2000)



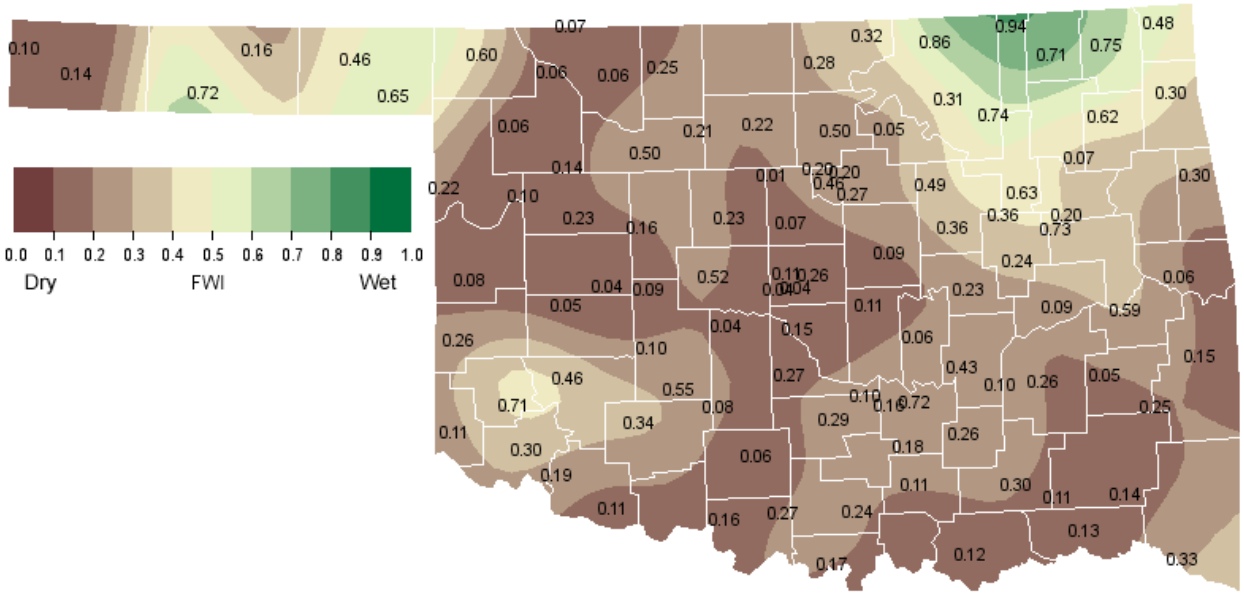
August Normal Daily Minimum Temperature (1971-2000)



August Normal Precipitation (1971-2000)



August 1, 2008 Soil Moisture Conditions at 25cm



August 2008 Drought Indices

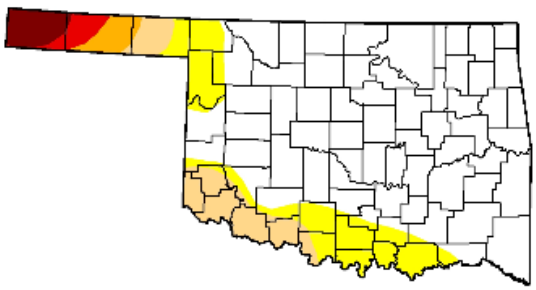
U.S. Drought Monitor

Oklahoma

July 29, 2008
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	74.0	26.0	13.0	5.6	3.9	2.4
Last Week (07/22/2008 map)	74.0	26.0	13.0	5.6	3.9	2.4
3 Months Ago (05/06/2008 map)	88.6	11.4	8.2	4.5	0.0	0.0
Start of Calendar Year (01/01/2008 map)	83.4	16.6	7.1	0.0	0.0	0.0
Start of Water Year (10/02/2007 map)	95.6	4.4	0.0	0.0	0.0	0.0
One Year Ago (07/31/2007 map)	97.8	2.2	0.0	0.0	0.0	0.0



Intensity:

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

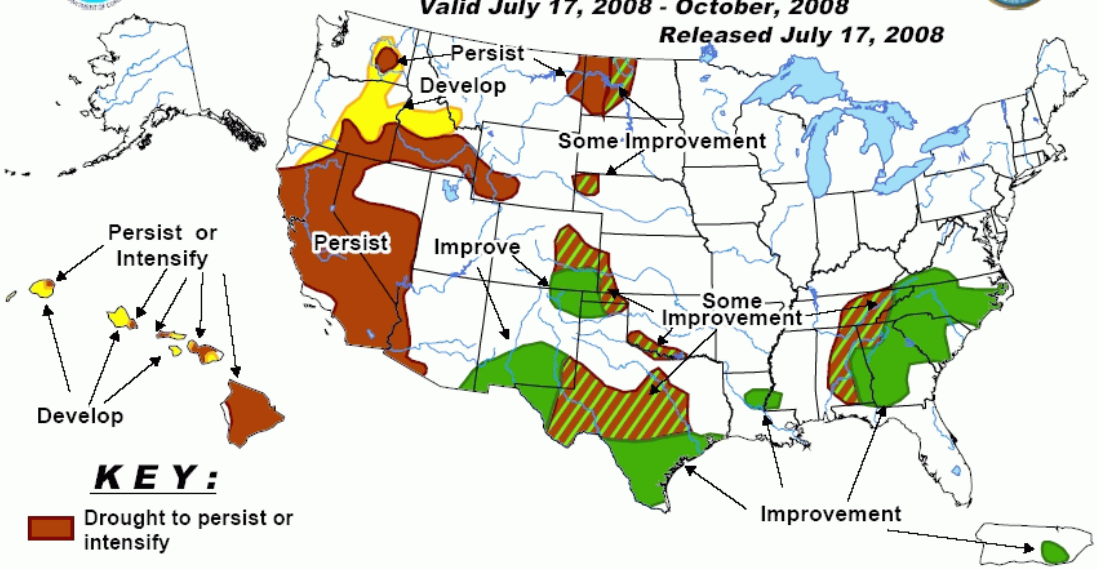
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements

http://drought.unl.edu/dm

Released Thursday, July 31, 2008
Author: B. Fuchs, NDMC, and L. Edwards, WRCC

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period
Valid July 17, 2008 - October, 2008
Released July 17, 2008

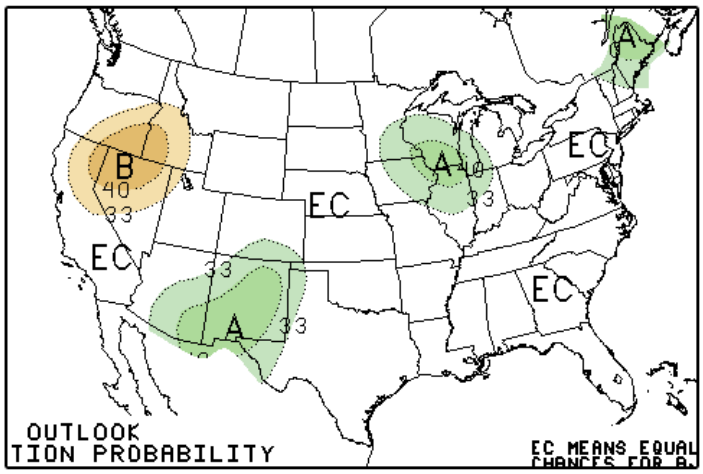


KEY:

- Drought to persist or intensify
- Drought ongoing, some improvement
- Drought likely to improve, impacts ease
- Drought development likely

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

August 2008 U.S. Precipitation Forecast



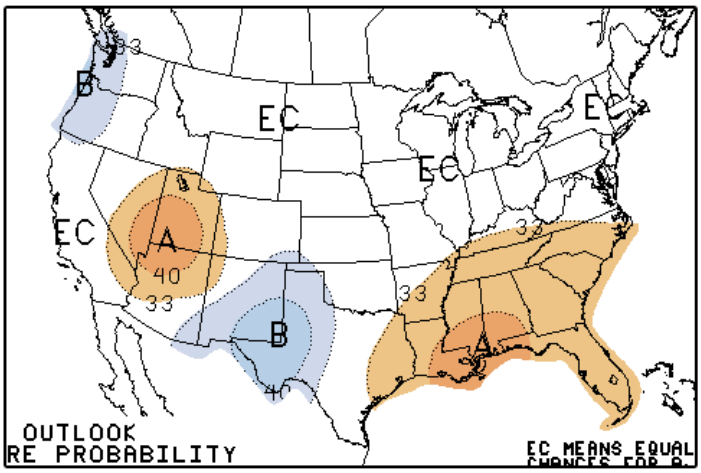
Percent Likelihood of Above or Below Average Precipitation*

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

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

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

August 2008 U.S. Temperature Forecast



Percent Likelihood of Above and Below Average Temperatures*

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

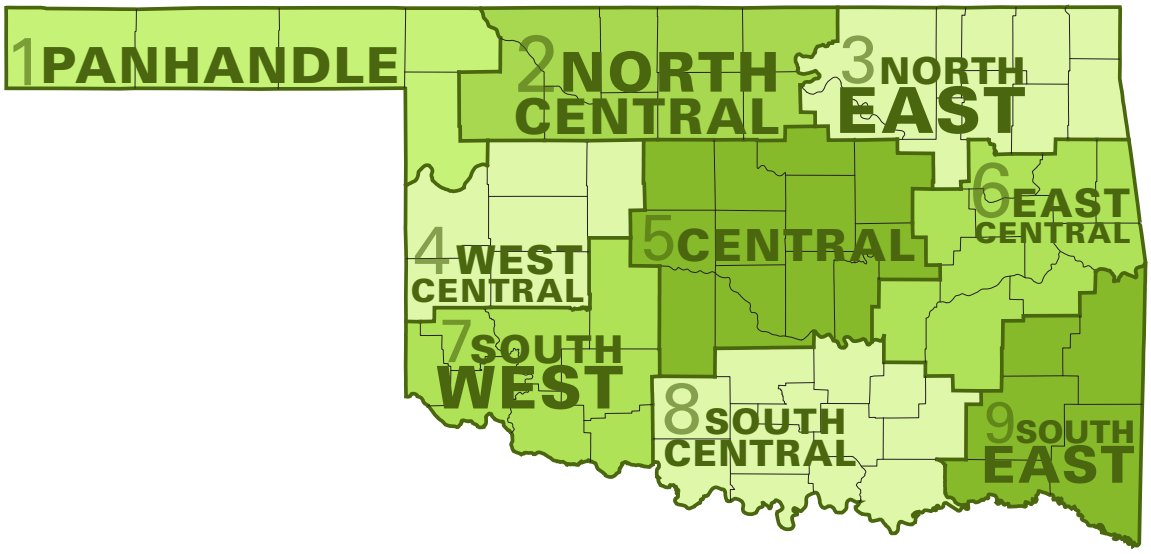
0% - 5%
5% - 10%
B = Below

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

August Climate Normals

Climate Division	Max. Temperature (°F)	Min. Temperature (°F)	Avg. Temperature (°F)	Precipitation (inches)
1	92.3	64.1	78.2	2.48
2	93.4	67.6	80.6	3.01
3	92.6	68.1	80.4	3.13
4	93	67.7	80.4	2.63
5	93.2	68.8	81	2.61
6	92.6	68.5	80.6	2.77
7	94.7	68.8	81.8	2.6
8	94.1	69.5	81.8	2.49
9	93.5	67.7	80.6	2.72
Statewide	93.3	68	80.7	2.73

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.mesonet.org or
http://climate.ok.gov/
E-mail (ocs@ou.edu) or telephone (405/325-2541)

OKLAHOMA CLIMATOLOGICAL SURVEY

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