OKLAHOMA MONTHLY CLIMATE SUMMARY
JULY 2007

OKLAHOMA CLIMATOLOGICAL SURVEY

Wet summer months in Oklahoma tend to beget cool summer months, and that is exactly what occurred during July. Heavy rains in central and southeastern Oklahoma propelled the statewide average to the 24th wettest since 1895, boasting a surplus of more than an inch. The precipitation and cloud cover helped keep the statewide average temperature below normal by nearly three degrees, the 11th coolest July on the record books. Only three triple-digit temperatures were recorded by the Oklahoma Mesonet's 119 observing sites through July during 2007. Of the nearly 12,000 high temperature observations reported by the network, the lone 100-degree readings were: 103 degrees at Goodwell on July 8; 101 degrees at Hooker, also on July 8; 100 degrees at Tipton on June 19. Widespread flooding was the main severe weather concern as 56 flood warnings were issued during the month. Coupled with the wettest June since records began, the June-July rainfall statewide average rainfall total was the wettest on record, more than six inches above normal. The year-to-date total is on a similar track, ranked as the 5th wettest on record. The June-July statewide average temperature was more than two degrees below normal and the 13th coolest on record. The year-to-date temperature, on the other hand, was slightly below normal. According to preliminary data, only one tornado touched down during July, the 42nd of the year.

Precipitation

While central and southeastern Oklahoma were beset with the heavy rainfall, other areas of the state were just as decidedly dry. Between 6-12 inches fell in the southeast, but less than an inch fell in some parts of western Oklahoma and the Panhandle. The Panhandle had a deficit of nearly an inch to rank as the 31st driest July for that area. Deficits for the month also occurred in the northeast and southwest. For the June-July period, only the Panhandle remained below normal, the 29th driest such period for that area. The same holds for the year thus far, with the Panhandle owning the lone deficit. Central Oklahoma's January-July period was the wettest on record at nearly 16 inches above normal. Cheyenne had the lowest total for July at 0.57 inches. Hugo led the pack with 12.99 inches.

Temperature

Areas in southern Oklahoma were more than four degrees below normal for the month, helping south central and southwestern Oklahoma to their 7th coolest July on record. Southeastern and west central sections were close behind, ranked as the 8th coolest on record. The drier air of the Panhandle helped keep temperatures a bit warmer during the month, but still cooler than normal by nearly two degrees. during the final week. Most of the state was between one and two degrees below normal for the month as a whole with the exception of the southeastern corner, which finished near normal for the month. The cool July weather dented the year-to-date warmth, dropping the statewide-averaged temperature for the January-July period to just over one degree above normal, the 24th warmest such period on record.

July 2007 Statewide Extremes

Description	Extreme	Station	Date
High Temperature	103ºF	Goodwell	July 8th,
Low Temperature	55ºF	Goodwell	July 1st
High Precipitation	12.99 in.	Hugo	
Low Precipitation	0.57 in.	Cheyenne	

July Daily Highlights

July 1-5: The day started quietly on the first but showers and storms persisted during the afternoon, associated with an upper-level low pressure system in northeastern Oklahoma. Many flood warnings were posted in the eastern half of the state. The rain helped keep temperatures 10-15 degrees below normal, generally in the 70s and 80s. More heavy rain was in store on the second as well, bringing more flood warnings in the east. The following three days saw more scattered showers and thunderstorms develop and produce heavy rain in localized areas. High temperatures throughout this period were generally in the 80s, although far northwestern Oklahoma and the Panhandle saw 90s with the rain-free conditions.

July 6-8: After some widely scattered showers popped up near a weak cold front, the weather quieted down considerably during this three-day period. Mostly sunny skies and light winds meant highs in the 90s, with a couple of triple-digit temperatures reported in the Panhandle. The Oklahoma Mesonet site at Goodwell recorded the month's highest temperature of 103 degrees on the eighth while Hooker reported 101 degrees.

An upper-level storm approached on the eighth and produced a few light showers in the Panhandle.

July 9-13: The upper-level system arrived in the state and generated severe thunderstorms, complete with severe winds and flooding rainfall. Wind gusts of at least 70 mph were reported in central Oklahoma on the ninth. A tornado touched down near Warner in Muskogee County. Rated EF1 on the Enhanced-Fujita scale, the twister tore the roof from a church and damaged houses. The tornado was the only one spotted during the month. Wayward outflow boundaries kept storms – and flooding – in the forecast for the next few days. The heaviest rainfall during the five-day period occurred in central through southeast Oklahoma with amounts ranging from 4-9 inches. Temperatures during this time were unseasonably cool due to the cloud cover and precipitation, holding in the 80s for the most part.

July 14-21: Very little rainfall at all fell throughout this eight-day period, definitely an anomaly for the warm season this year. The lack of rain and plenty of sunshine allowed temperatures to approach actual summer-like values in the 90s. Low temperatures fell into the 70s.

July 22-24: A stationary front generated showers and storms in the east on the 22nd, but amounts remained less than an inch. Heat indices approached 100 degrees during the afternoon. More storms fired the next couple of days as well. Heavy rain was accompanied by small hail and strong winds as a few of the storms exceeded severe limits on the 23rd. The weather calmed a bit on the 24th as the frontal system exited the state. High temperatures rose into the mid-80s to low 90s following its passage.

July 25-28: Much quieter weather for the next few days, but still not without a bit of precipitation. The heaviest rainfall occurred in the Panhandle on the 26th with the Oklahoma Mesonet site at Kenton reporting almost an inch. Temperatures during this period were 5-10 degrees below normal, generally in the upper 80s and low 90s.

July 29-31: Yet another wet period in a very wet year. The heavy rain was confined to a few localized areas, however. An outflow boundary from storms in Kansas pushed into the state on the 29th and generated a few heavy rain producers in the east. The heaviest rain was saved for the 30th and 31st, however. Kingfisher was hit hard by flooding on the 30th as over three inches of rain fell in a very short time. Heavy rain also struck far southeastern Oklahoma on both days. Amounts there approached seven inches. Flood warnings were issued for several locations in Bryan County. High temperatures for this period were once again below normal in the 80s and 90s

July 2007 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2007)
Month (July)	78.7ºF	-2.9ºF	11th Coolest
Season-to-Date (Jun-Jul)	76.9ºF	-2.2ºF	13th Coolest
Year-to-Date (Jan-Jul)	58.8ºF	-0.4ºF	53rd Coolest

Precipitation

	Total	Depart.	Rank (1895-2007)
Month (July)	4.04 in.	1.30 in.	24th Wettest
Season-to-Date (Jun-Jul)	13.14 in.	6.14 in.	1st Wettest
Year-to-Date (Jan-Jul)	29.49 in.	7.60 in.	5th Wettest

Depart. = Departure from 30-year normal

July 2007 Severe Weather

Significant Tornadoes (EF2 or greater)

No significant tornadoes were reported in the state.

Hail (2 inches in diameter or greater)

No significant hail were reported in the state.

Wind Gusts (70 mph or greater)

Speed (m.p.h)	Location	County	Day
70	Hinton	Caddo	9
70	Pink	Pottawatomie	9

Flooding

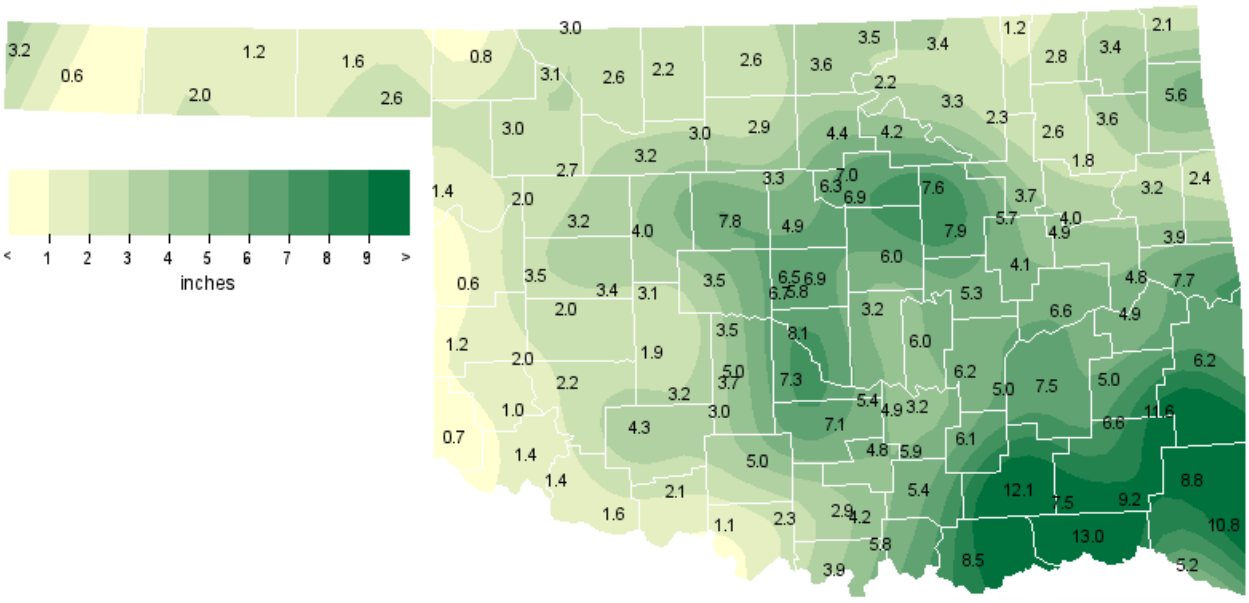
Location	County	Day
2 S Wilburton	Latimer	1
3 NW Moyers	Pushmataha	1
3 SE Wagoner	Wagoner	1
5 E Okemah	Okfuskee	1
5 W Hulbert	Cherokee	1
Talhina	LeFlore	1
14 WNW Clayton	Pittsburg	2
2 W McAlester	Pittsburg	2
4 E Finley	Pushmataha	2
5 W McAlester	Pittsburg	2
Atoka	Atoka	2
Haileyville	Pittsburg	2
Snow	Pushmataha	2
10 SE Tulsa	Tulsa	5
2 N Scrapper	Cherokee	5
3 SSW Short	Sequoyah	5
3 SW Scrapper	Cherokee	5
4 SE Pryor	Mayes	5
4 SW Tulsa	Tulsa	5
5 S Tulsa	Tulsa	5
9 S Tulsa	Tulsa	5
Muskogee	Muskogee	5
Sand Springs	Tulsa	5
Sapulpa	Creek	5
Tahlequah	Cherokee	5
1 SW Mason	Okfuskee	9
9 N Broken Bow	McCurtain	9
Broken Bow	McCurtain	9

Location	County	Day
Holdenville	Hughes	9
Wewoka	Seminole	9
1 S Pauls Valley	Garvin	10
2 N Fittstown	Pontotoc	10
2 N Pauls Valley	Garvin	10
7 S Ada	Pontotoc	10
8 ESE Tuttle	Grady	10
8 SSE Ada	Pontotoc	10
Cole	McClain	10
Durant	Bryan	10
Newcastle	McClain	10
Norman	Cleveland	10
Pauls Valley	Garvin	10
Shawnee	Pottawatomie	10
Turner Falls	Murray	10
Valliant	McCurtain	10
Wynnewood	Garvin	10
15 N Pawhuska	Osage	12
2 WSW Elgin	Osage	12
Guymon	Texas	12
Stillwater	Payne	13
3 SW Choctaw	Oklahoma	30
Kingfisher	Kingfisher	30
2 E Soper	Choctaw	31
2 N Bennington	Bryan	31
5 ENE Bennington	Bryan	31
8 SSE Bokchito	Bryan	31
Blue	Bryan	31

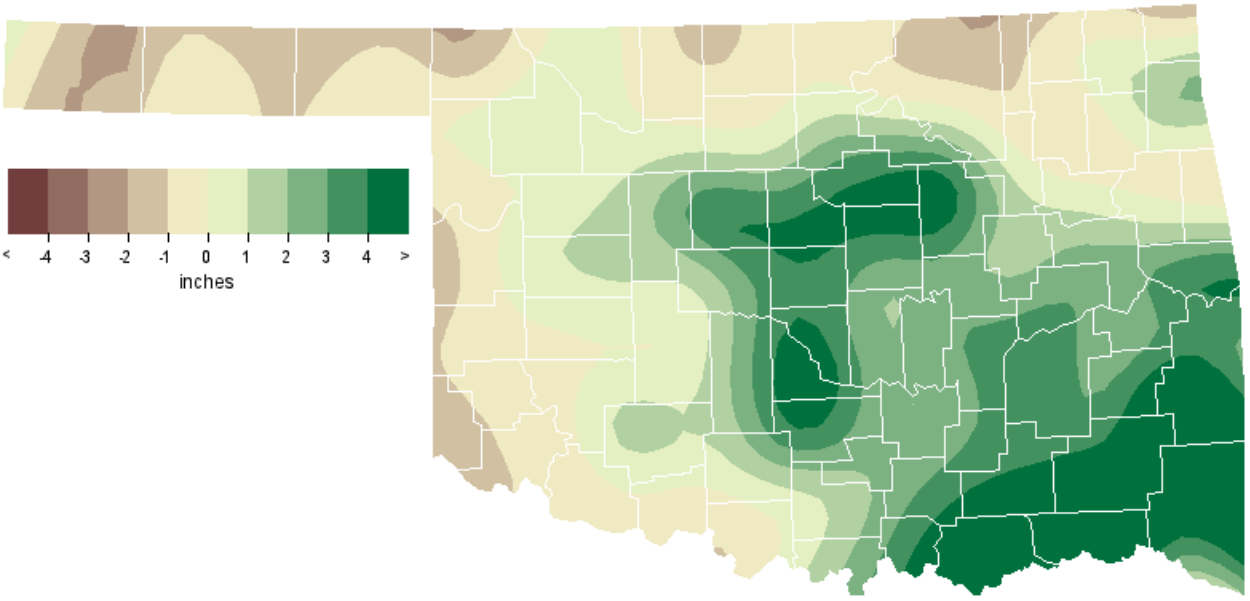
Record Event Reports

Description	Day	Location	Record	Previous Record	Year
Daily Minimum Temperature (tie)	25	McAlester	64	64	2004

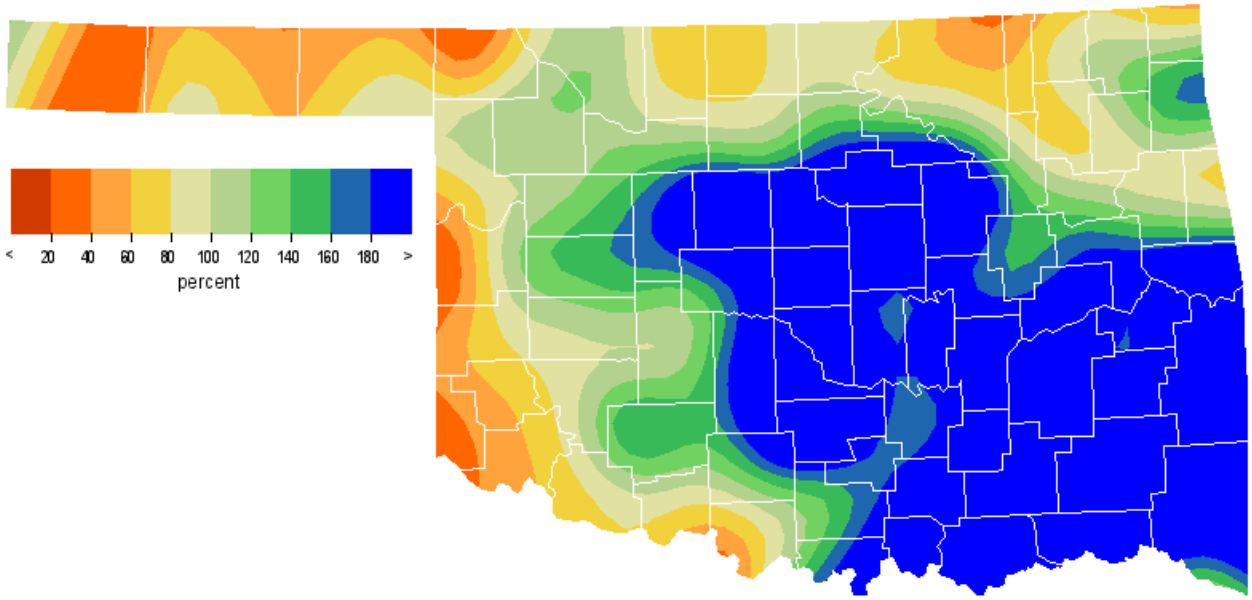
July 2007 Observed Precipitation



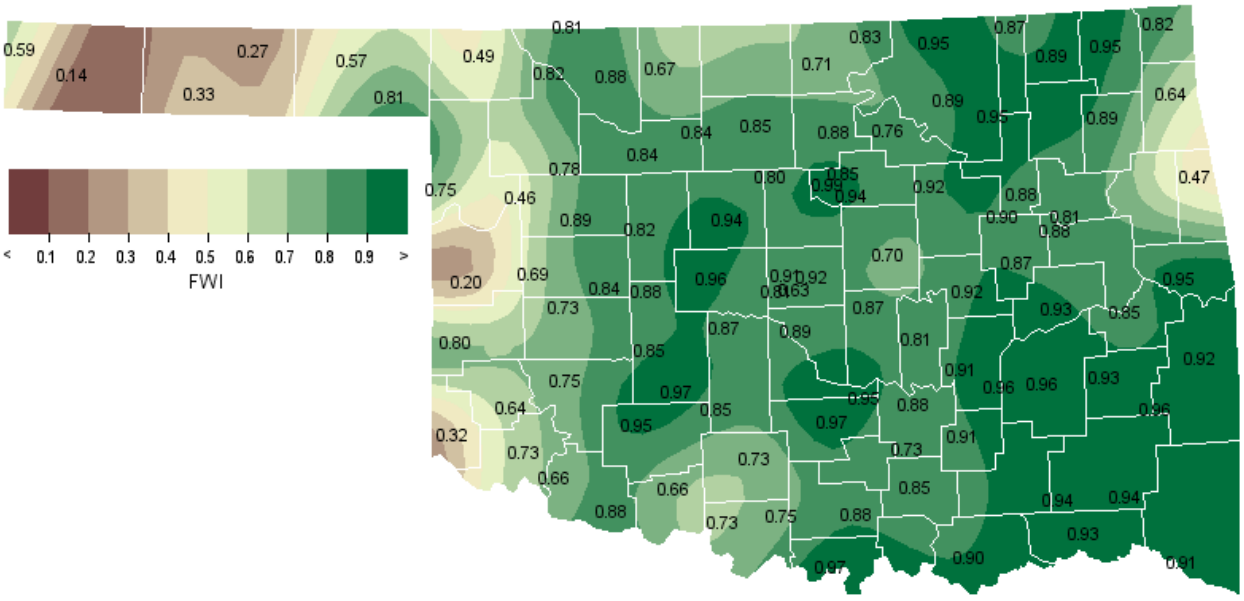
July 2007 Departure from Normal Precipitation



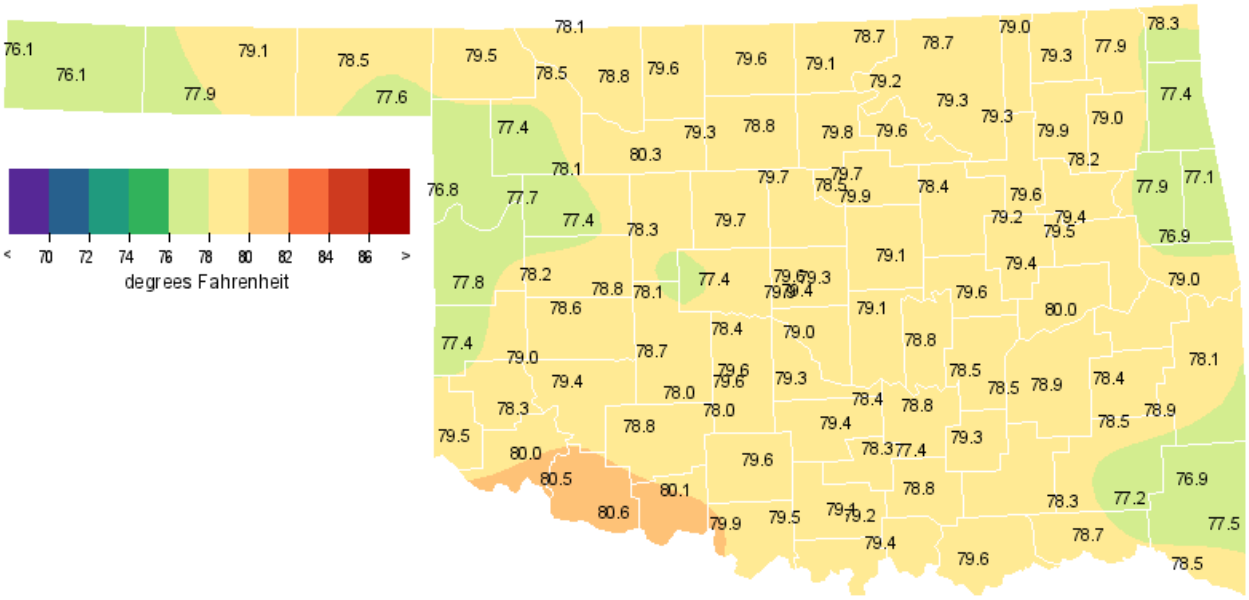
July 2007 Percent of Normal Precipitation



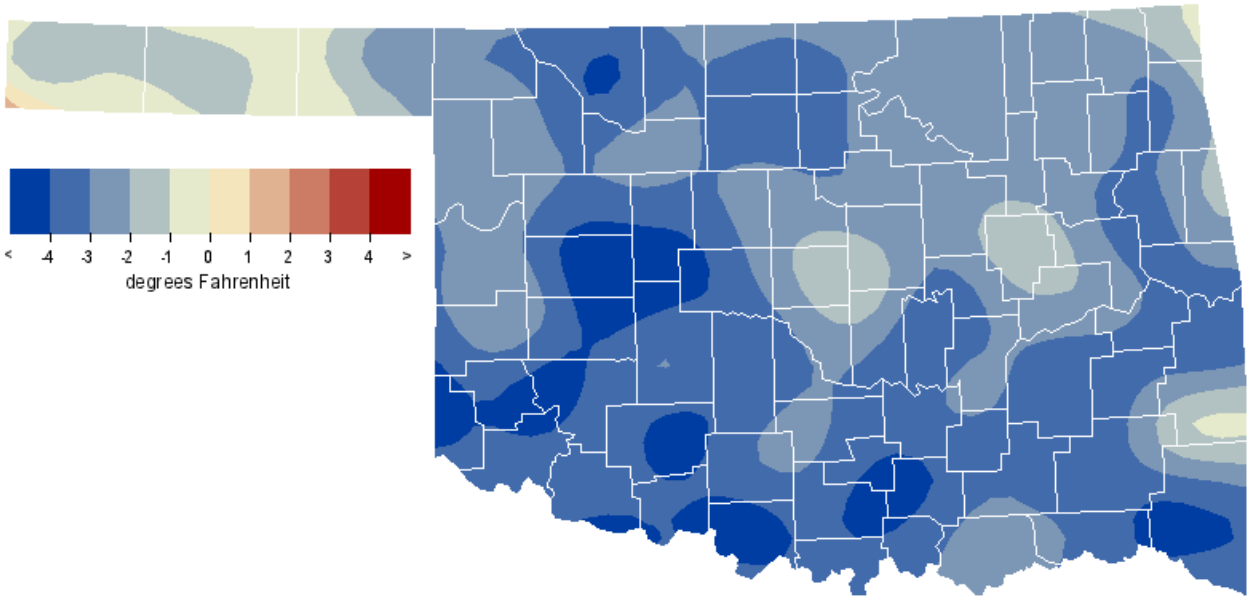
July 2007 Average Soil Moisture at 25cm



July 2007 Average Temperature



July 2007 Departure from Normal Temperature



Mesonet Monthly Summary for July 2007

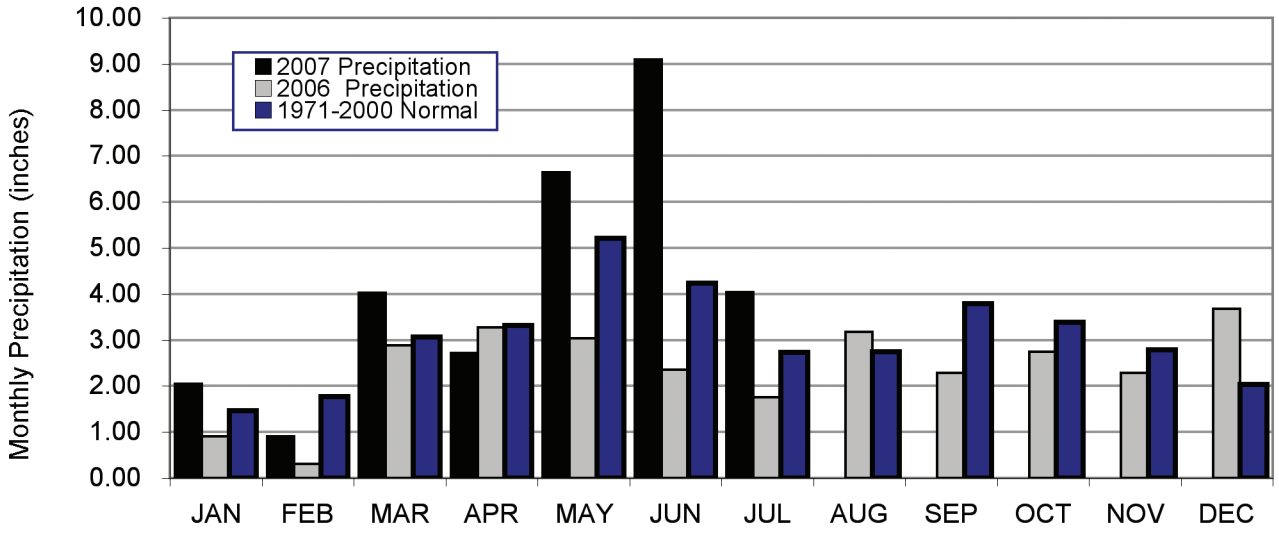
NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	76.8	94	23	61	1	0	366	1.40	.65	5
Beaver	78.5	99	8	57	1	0	420	1.62	1.22	31
Boise City	76.0	98	8	56	10	0	341	.60	.16	12
Buffalo	79.6	98	8	61	14	0	451	.77	.37	4
NORTH CENTRAL										
Alva	78.8	95	29	65	7	0	429	*****	*****	***
Blackwell	79.1	95	29	65	7	0	436	3.59	1.62	9
Breckinridge	78.7	96	15	65	7	0	426	2.92	1.12	13
Cherokee	79.6	96	29	64	7	0	452	2.22	1.46	12
Fairview	80.3	97	29	64	7	0	475	3.20	.97	5
Freedom	78.5	96	8	64	14	0	420	3.08	2.10	12
Lahoma	79.2	95	15	65	7	0	441	3.00	1.60	13
NORTHEAST										
Bixby	79.5	94	16	63	25	0	451	3.67	.82	12
Burbank	79.2	94	15	65	12	0	439	2.23	1.12	9
Claremore	79.8	96	16	64	25	0	460	2.60	.95	1
Copan	79.0	94	16	64	25	0	435	1.18	.72	12
Foraker	78.7	93	16	64	12	0	425	*****	*****	***
Inola	78.2	93	15	61	25	0	408	1.84	1.44	12
Jay	77.3	93	16	61	25	0	382	5.56	1.36	30
Miami	78.3	93	15	61	25	0	412	2.08	.43	20
WEST CENTRAL										
Bessie	78.6	94	23	65	1	0	422	1.96	.85	12
Butler	78.2	94	23	62	1	0	410	3.50	1.48	23
Camargo	77.7	95	29	61	14	0	393	1.96	1.01	30
Cheyenne	77.7	94	23	62	1	0	394	.57	.23	9
Erick	77.4	94	23	62	7	0	384	1.18	.89	13
CENTRAL										
Acme	78.0	94	29	64	14	0	404	2.95	1.85	13
Bowlegs	78.8	94	29	62	25	0	429	5.97	2.02	9
Bristow	*****	***	***	***	***	****	****	*****	*****	***
Chandler	79.2	93	29	66	25	0	441	5.99	1.58	13
Chickasha	79.6	96	29	63	25	0	453	4.99	2.30	2
El Reno	77.5	94	29	61	14	0	386	3.48	2.38	13
Guthrie	*****	***	***	***	***	****	****	*****	*****	***
Kingfisher	79.6	97	29	65	14	0	454	7.85	3.47	30
Marena	78.5	95	15	65	26	0	418	6.33	1.78	13
Minco	78.5	93	29	65	26	0	417	3.47	2.01	13
Marshall	79.7	96	15	64	7	0	456	3.26	1.29	13
Ninnekah	79.6	95	29	65	14	0	453	3.73	1.74	2
EAST CENTRAL										
Calvin	78.6	94	29	61	25	0	420	6.21	2.63	9
Cookson	76.8	92	29	60	24	0	365	3.86	1.37	5
Eufaula	80.0	95	28	64	25	0	465	6.57	2.31	2
Haskell	79.6	94	28	63	25	0	451	4.91	.94	12
Hectorville	79.2	94	15	65	25	0	440	5.05	2.78	13
McAlester	78.9	93	15	63	25	0	430	7.55	1.98	2
Okmulgee	79.4	94	28	61	25	0	447	4.06	.93	13
SOUTHWEST										
Altus	79.9	97	23	66	14	0	463	1.38	.56	13
Apache	78.0	93	29	64	25	0	404	*****	*****	***
Fort Cobb	78.6	92	29	65	25	0	422	1.88	1.58	13
Grandfield	80.7	97	10	65	25	0	486	1.60	.83	13
Hinton	78.1	94	29	64	1	0	407	3.10	.73	2
Hobart	79.4	96	23	64	14	0	445	2.24	.86	31
SOUTH CENTRAL										
Ada	78.8	93	29	62	25	0	428	3.17	.99	10
Ardmore	79.2	95	29	61	14	0	439	4.17	1.93	10
Burneyville	*****	***	***	***	***	****	****	3.94	1.75	1
Byars	78.4	92	29	66	25	0	415	5.44	1.88	10
Centrahoma	79.3	95	29	62	25	0	442	6.14	1.76	10
Durant	79.5	94	29	64	25	0	450	8.53	1.79	31
Fittstown	77.3	92	29	59	25	0	383	5.87	2.90	10
Ketchum Ranch	79.7	95	29	65	25	0	455	4.99	1.86	2
Lane	*****	***	***	***	***	****	****	*****	*****	***
SOUTHEAST										
Antlers	78.2	94	29	60	25	0	410	7.53	2.13	2
Broken Bow	77.5	95	29	58	24	0	389	10.78	3.29	9
Clayton	78.4	93	28	62	24	0	417	6.58	1.50	1
Cloudy	77.2	92	29	60	24	0	379	9.24	2.56	10
Hugo	78.6	94	29	64	24	0	423	12.99	3.51	31

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	77.9	103	8	55	1	0	399	2.00	2.00	12
Hooker	79.2	101	8	58	1	0	439	1.22	.60	11
Kenton	76.1	97	8	56	1	0	343	3.21	1.84	12
Slapout	77.5	97	8	61	1	0	389	2.55	1.29	12
May Ranch	78.0	93	30	64	14	0	404	3.01	1.72	12
Medford	79.7	96	15	65	7	0	455	2.56	1.34	9
Newkirk	78.7	93	15	65	12	0	424	3.54	1.17	9
Red Rock	79.9	95	15	66	7	0	461	4.38	1.18	12
Seiling	78.0	95	29	63	7	0	404	2.74	1.91	12
Woodward	77.3	92	15	64	12	0	383	3.03	2.21	12
Nowata	79.3	94	16	62	25	0	443	2.79	.79	10
Pawnee	79.6	94	29	65	12	0	452	4.19	1.59	13
Porter	79.4	94	16	63	25	0	448	4.01	1.17	2
Pryor	79.0	94	16	61	25	0	434	3.63	1.35	1
Skiatook	79.2	93	16	64	25	0	441	2.26	1.07	12
Vinita	77.9	93	28	60	25	0	401	3.41	.99	12
Wynona	79.4	94	16	64	25	0	445	3.28	1.33	29
Putnam	77.4	93	29	64	1	0	386	3.20	1.04	9
Retrop	79.0	96	23	64	1	0	435	2.04	.85	13
Watonga	78.2	93	29	64	1	0	411	3.99	1.96	13
Weatherford	78.8	94	29	64	1	0	429	3.41	.93	4
Norman	79.0	93	15	66	14	0	433	8.08	2.73	10
Oilton	78.4	94	15	62	25	0	415	7.63	2.56	9
OKC East	79.4	94	29	65	14	0	445	5.80	1.99	10
OKC North	79.7	93	29	67	13	0	454	6.55	2.48	10
OKC West	79.9	94	15	67	13	0	462	6.72	1.77	13
Okemah	79.7	93	16	64	25	0	455	5.32	1.17	30
Perkins	79.9	95	15	66	12	0	461	6.91	1.62	23
Shawnee	79.1	94	29	65	25	0	438	3.21	1.40	13
Spencer	79.3	94	15	66	14	0	443	6.93	2.72	10
Stillwater	79.7	95	15	66	7	0	456	7.01	2.86	13
Washington	79.2	94	29	64	25	0	441	7.30	3.71	10
Sallisaw	79.0	94	16	63	24	0	435	7.68	1.66	30
Stigler	*****	***	***	***	***	****	****	4.88	1.49	9
Stuart	78.5	93	29	62	25	0	419	4.96	1.46	9
Tahlequah	77.9	93	29	61	25	0	400	3.25	1.20	12
Webbers Falls	*****	***	***	***	***	****	****	*****	*****	***
Westville	77.1	92	29	62	25	0	374	2.36	.71	12
Hollis	79.5	97	23	63	16	0	450	.70	.36	11
Mangum	78.4	97	23	61	14	0	414	1.01	.51	4
Medicine Park	78.8	92	29	65	13	0	427	4.26	3.01	13
Tipton	80.4	96	23	66	26	0	479	1.38	1.17	13
Walters	80.1	95	30	65	25	0	468	2.11	1.40	13
Madill	79.4	94	29	62	25	0	448	5.81	2.46	10
Newport	79.1	95	29	64	25	0	436	2.93	1.36	10
Pauls Valley	79.3	94	29	65	25	0	444	7.07	2.82	10
Ringling	79.6	95	10	64	25	0	451	2.28	.57	13
Sulphur	78.3	93	29	61	25	0	411	4.79	2.58	10
Tishomingo	78.8	94	29	60	25	0	428	5.45	1.82	10
Vanoss	78.4	94	29	62	25	****	****	4.86	1.49	10
Waurika	79.9	98	10	63	25	0	463	1.14	.54	31
Idabel	78.5	94	29	61	24	0	419	5.21	1.45	3
Mt Herman	76.8	93	29	60	24	0	366	8.77	1.76	9
Talihina	78.9	94	28	59	24	0	432	11.63	2.61	9
Wilburton	78.3	93	28	63	25	0	413	5.01	1.55	1
Wister	78.1	94	29	58	24	0	405	6.22	1.68	2

July 2007 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Jul-06
Panhandle	1.67	-0.85	31st Driest	9.79 (1950)	0.37 (1935)	2.20
North Central	3.11	0.13	51st Wettest	9.06 (1950)	0.13 (1983)	1.39
Northeast	3.05	-0.11	57th Driest	9.31 (1959)	0.00 (1914)	3.47
West Central	2.42	0.29	48th Wettest	7.21 (1950)	0.05 (1936)	1.08
Central	5.69	3.12	10th Wettest	10.17 (1950)	0.16 (1980)	2.35
East Central	5.12	2.14	23rd Wettest	10.15 (1950)	0.17 (1930)	2.42
Southwest	1.97	-0.21	54th Driest	6.30 (1975)	0.03 (1980)	1.04
South Central	4.79	2.25	14th Wettest	8.45 (1950)	0.08 (1998)	0.66
Southeast	8.40	4.82	4th Wettest	13.02 (1950)	0.00 (1930)	0.65
Statewide	4.04	1.30	24th Wettest	9.26 (1950)	0.41 (1980)	1.76

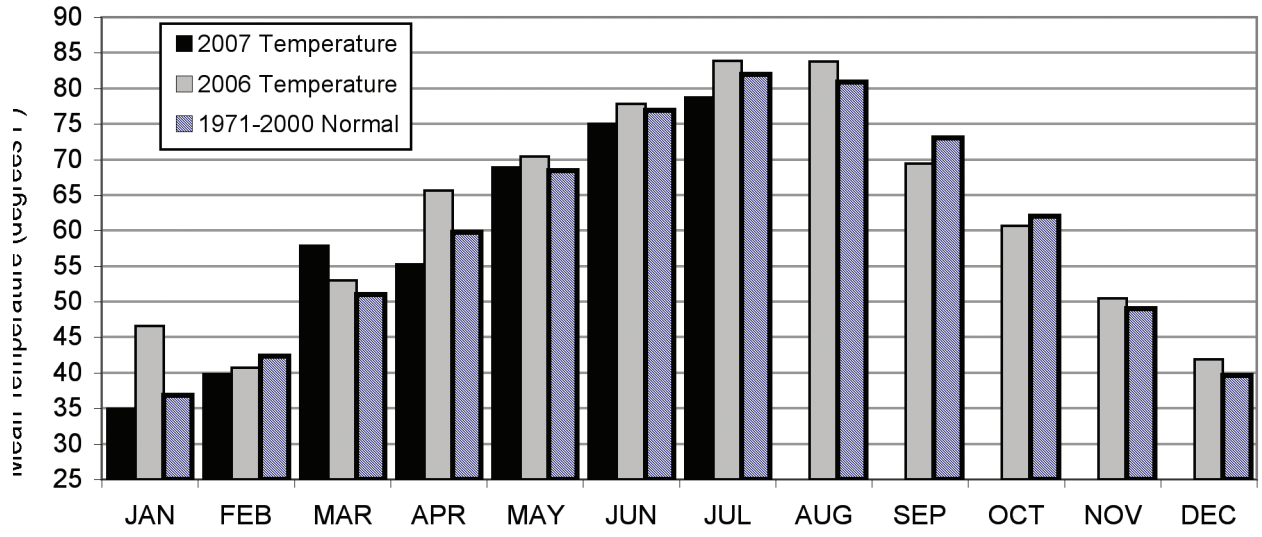
2006 and 2007 Statewide Precipitation Monthly Totals vs. Normal



July 2007 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Jul-06 (F)
Panhandle	77.7	-1.9	32nd Coolest	85.4 (1980)	73.2 (1906)	81.7
North Central	78.9	-3.3	12th Coolest	89.6 (1954)	75.8 (1950)	84.4
Northeast	78.9	-2.0	28th Coolest	89.2 (1954)	75.0 (1906)	82.4
West Central	78.1	-3.6	8th Coolest	88.1 (1954)	75.8 (1906)	84.5
Central	79.1	-2.9	19th Coolest	88.6 (1954)	75.8 (1906)	84.3
East Central	78.6	-2.7	18th Coolest	88.7 (1954)	75.9 (1906)	83.4
Southwest	79.3	-3.9	7th Coolest	89.1 (1980)	77.9 (1906)	85.6
South Central	79.0	-3.7	7th Coolest	89.1 (1998)	77.2 (1906)	86.4
Southeast	78.1	-2.8	8th Coolest	87.5 (1954)	76.4 (2004)	83.1
Statewide	78.7	-2.9	11th Coolest	88.1 (1954)	75.9 (1906)	84.0

2006 and 2007 Statewide Temperature Monthly Averages vs. Normal



Mesonet Extremes for July 2007

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	103	8th	Goodwell	55	1st	Goodwell	3.21	Kenton	2.00	12th	Goodwell
North Central	97	29th	Fairview	63	7th	Seiling	4.38	Red Rock	2.21	12th	Woodward
Northeast	96	16th	Claremore	60	25th	Vinita	5.56	Jay	1.59	13th	Pawnee
West Central	96	23rd	Retrop	61	14th	Camargo	3.99	Watonga	1.96	13th	Watonga
Central	97	29th	Kingfisher	61	14th	El Reno	8.08	Norman	3.71	10th	Washington
East Central	95	28th	Eufaula	60	24th	Cookson	7.68	Sallisaw	2.63	9th	Calvin
Southwest	97	23rd	Mangum	61	14th	Mangum	4.26	Medicine Park	3.01	13th	Medicine Park
South Central	98	10th	Waurika	59	25th	Fittstown	8.53	Durant	2.90	10th	Fittstown
Southeast	95	29th	Broken Bow	58	24th	Wister	12.99	Hugo	3.51	31st	Hugo
Statewide	103	8th	Goodwell	55	1st	Goodwell	12.99	Hugo	3.71	10th	Washington

August Climatological Outlook

NORMAN - 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.

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

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.

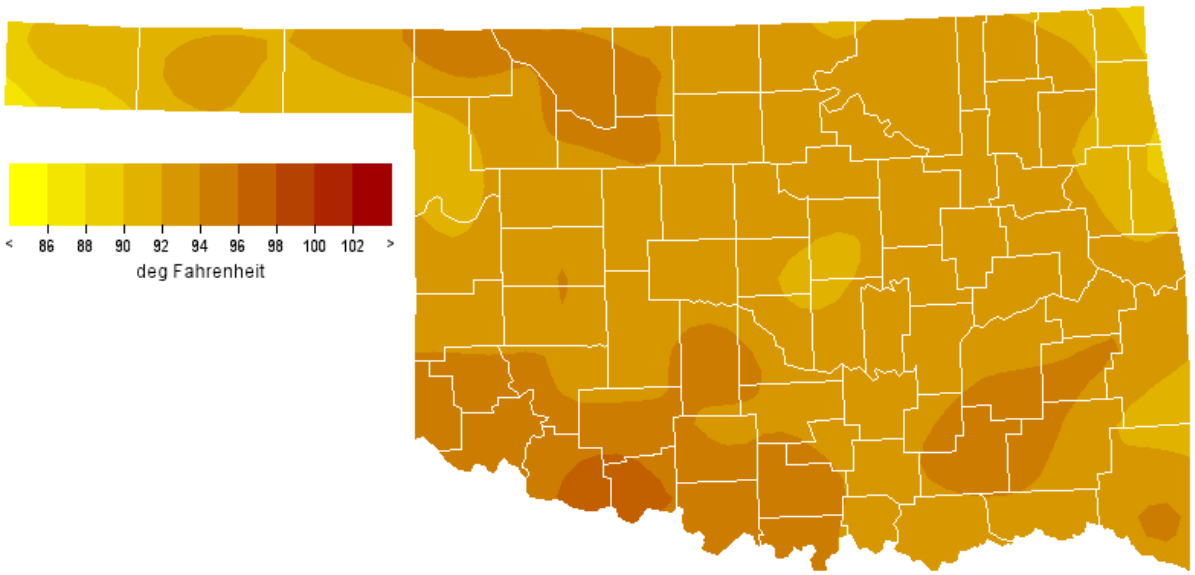
Temperature
Mean: 80.9 degrees
Hottest August: 1936, 87.9 degrees
Coolest August: 1915, 73.9 degrees
Hottest location: Waurika, 84.1 degrees
Coolest location: Boise City, 75.3 degrees
Hottest recorded: 120 degrees, Poteau, August 10, 1936
Altus, August 12, 1936
Coldest recorded: 41 degrees, Goodwell,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

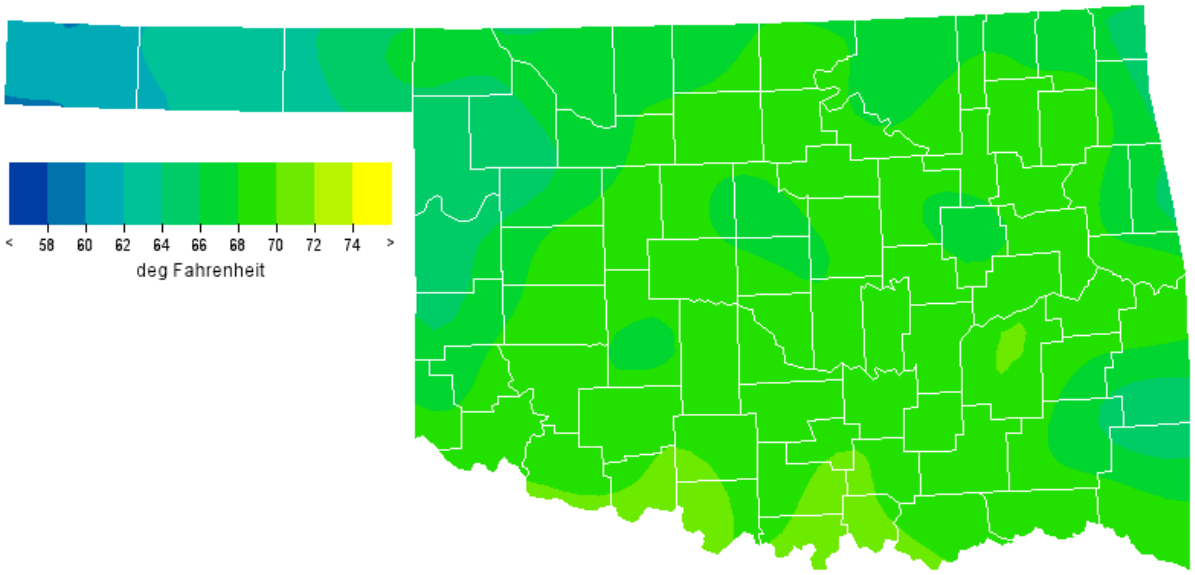
Severe weather appears in the state during August, but its effects are more notable anecdotally than they are apparent in statistics. The exception is that August has presented the state with more lightning deaths (21) than any other month since such record-keeping began in 1959. Only July among the 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)

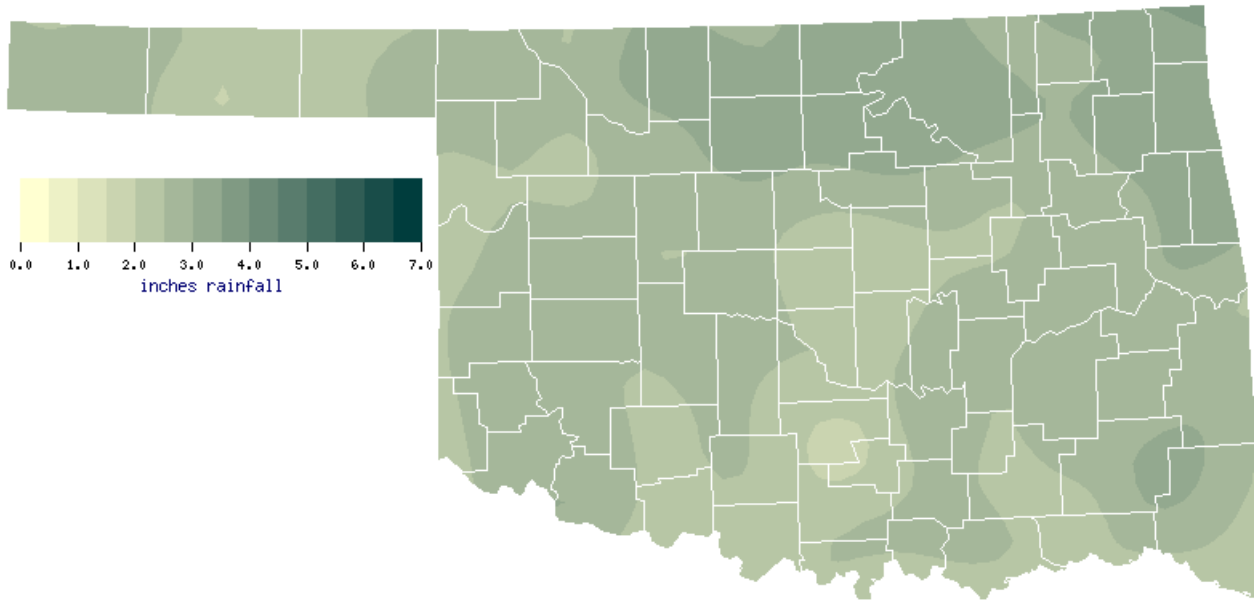
August Normal Daily Maximum Temperature (1971-2000)



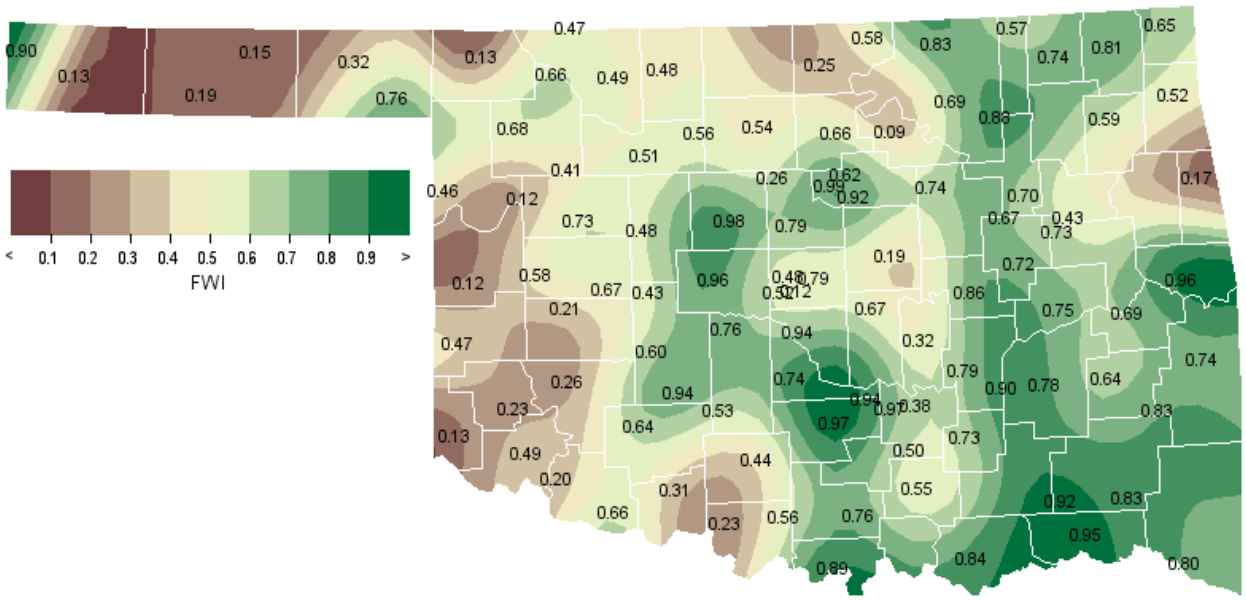
August Normal Daily Minimum Temperature (1971-2000)



August Normal Precipitation (1971-2000)



August 1, 2007 Soil Moisture Conditions at 25cm



August 2007 Drought Indices

U.S. Drought Monitor
Oklahoma

July 31, 2007
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	97.8	2.2	0.0	0.0	0.0	0.0
Last Week (07/24/2007 map)	97.8	2.2	0.0	0.0	0.0	0.0
3 Months Ago (05/08/2007 map)	100.0	0.0	0.0	0.0	0.0	0.0
Start of Calendar Year (01/02/2007 map)	31.3	68.7	39.8	24.5	18.2	0.0
Start of Water Year (10/03/2006 map)	2.7	97.3	92.7	46.2	16.6	0.0
One Year Ago (08/01/2006 map)	0.0	100.0	92.7	84.7	63.9	0.3

Intensity:

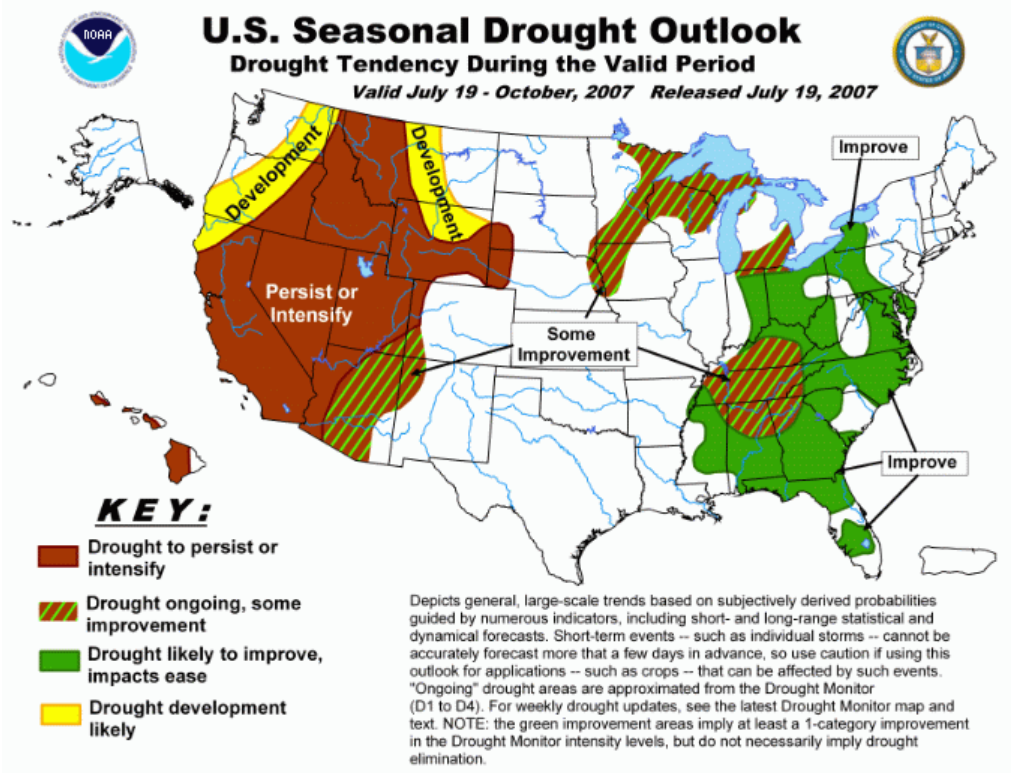
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

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

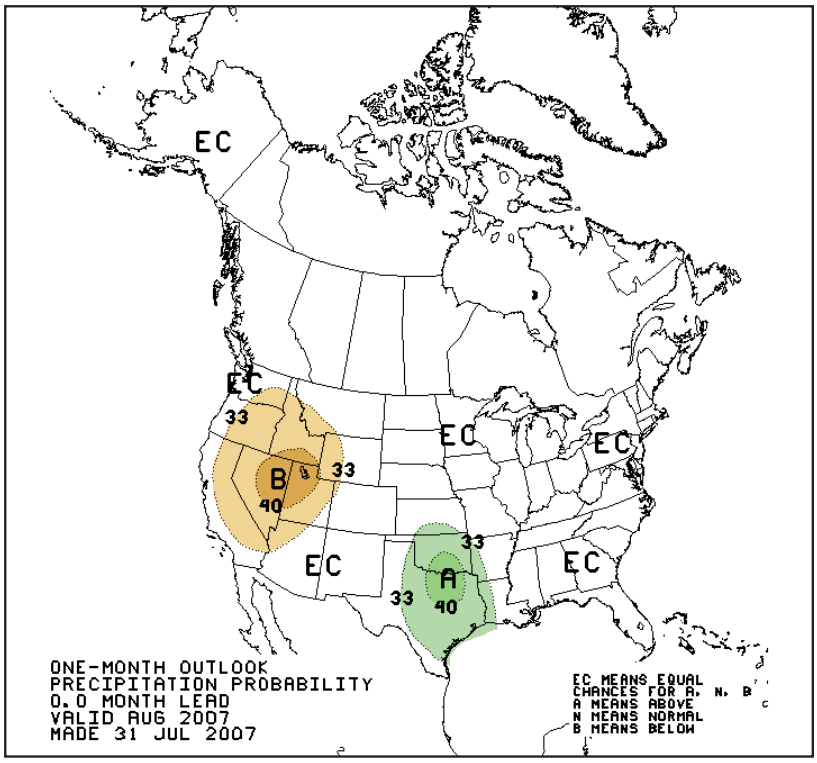
http://drought.unl.edu/dm

USDA National Drought Mitigation Center

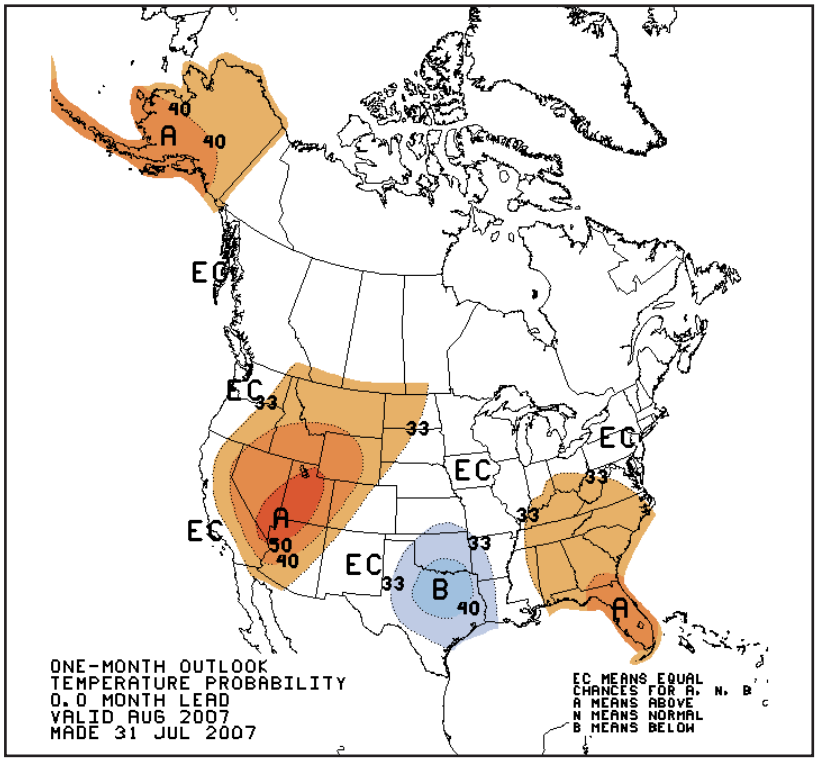
Released Thursday, August 2, 2007
Author: Brian Fuchs, National Drought Mitigation Center



August 2007 U.S. Precipitation Forecast



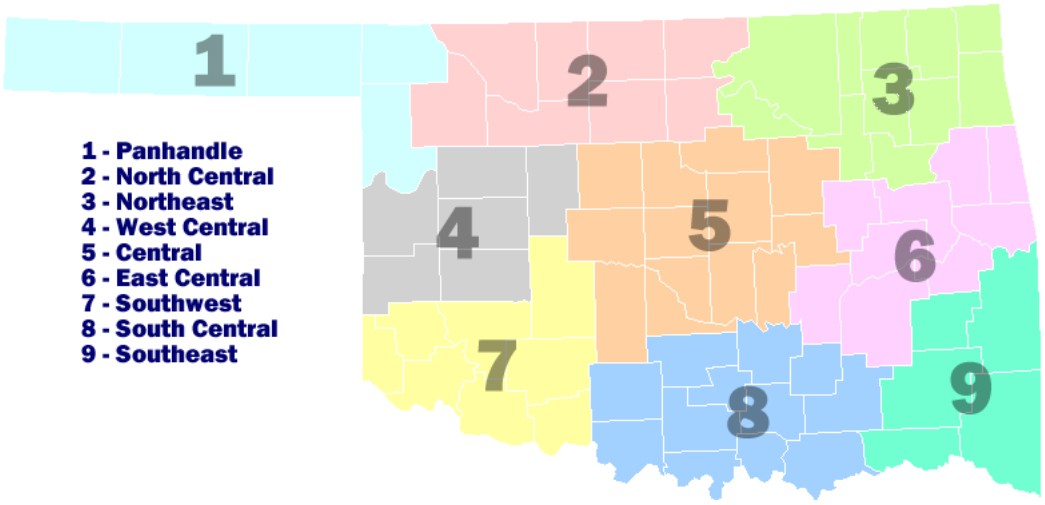
August 2007 U.S. Temperature Forecast



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

OKLAHOMA CLIMATOLOGICAL SURVEY

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