Oklahoma Monthly Climate Summary

JULY 2012

OKLAHOMA CLIMATOLOGICAL SURVEY

Heat exploded across Oklahoma during July thanks to a rapidly intensifying drought and a persistent upper-level ridge of high pressure. The combination of dry soils, wilting vegetation and a brutal summer sun led to the sixth warmest July on record for the state. Those records date back to 1895. According to preliminary data from the Oklahoma Mesonet, the statewide average temperature finished at 85.9 degrees, 4.3 degrees above normal. July becomes the 23rd month out of the last 28 to finish warmer than normal, a persistent signal that began in April 2010. The first two months of summer were the ninth warmest on record at 3.2 degrees above normal. The drought's impacts became more significant as the month progressed. The USDA rated the moisture levels of 96 percent of the state's topsoils and subsoils as either "poor" or "very poor" in a report released on July 30. That report also rated 64 percent of the state's pastures and rangelands as being in either "poor" or "very poor" condition. County-level USDA offices from across the state reported a rapid deterioration of crops and vegetation as well as diminishing stock ponds. The lush green growth of the state's warm and wet early spring was transformed into abundant fuel for wildfires as it became dormant or dead. Many large fires were reported during the latter half of the month.

July 2012 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	112°F	Several	31
Low Temperature	57°F	Camargo	12
High Precipitation	5.75 in.	Idabel	--
Low Precipitation	0.0 in.	Marshall, Spencer, Waurika	--

PRECIPITATION

The month was also the 15th driest July on record with a statewide average rainfall total of 1.11 inches, 1.63 inches below normal. The moisture deficit during July continued a dry streak that began in April and intensified during May, encompassing the bulk of Oklahoma's primary rainy season. The May-July statewide average rainfall total of 5.99 inches fell 6.25 inches below normal and ranked as the third driest such period on record. Three of the 120 Oklahoma Mesonet stations – Marshall, Spencer and Waurika – recorded no rainfall for the month of July and 10 recorded less than a tenth of an inch. Idabel led the state with 5.75 inches. July 31 marked the 55th day since the Mesonet stations at both Norman and Watonga recorded more than a tenth of an inch of rain in a single calendar day.

TEMPERATURE

The January-July statewide average of 63.9 degrees was easily the warmest on record for the first seven months of the year at 4.8 degrees above normal. The heat broke or tied four daily records during the month at Oklahoma City and twice at Tulsa, including that city's all-time high minimum temperature. Tulsa's temperature only dropped to 88 degrees on July 30, breaking the previous all-time record high minimum temperature of 87 degrees set on August 2, 2011, and July 16, 1980. The highest temperature recorded during the month was 112 degrees on July 31 at several locations. The century mark was reached at all 120 Mesonet stations on both July 29 and July 31.

JULY DAILY HIGHLIGHTS

JULY 1-5: The first day of July saw a few showers and storms in the Panhandle. Over a half of an inch fell in Goodwell. Showers the following day in the southeast provided similar totals. A weak mid-level disturbance produced some light rain on the third after midnight. The totals throughout the period were not significant. Temperatures throughout the first five days ranged from the mid-90s to triple-digits. Winds were strong from the south, gusting to 35 mph.

July 2012 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2012)
Month (July)	85.9°F	4.3°F	6th Warmest
Season-to-Date (Jun-July)	82.3°F	3.2°F	9th Warmest
Year-to-Date (Jan-July)	63.9°F	4.8°F	1st Warmest

Precipitation

	Average	Depart.	Rank (1895-2012)
Month (July)	1.11 in.	-1.63 in.	15th Driest
Season-to-Date (Jun-July)	3.86 in.	-3.14 in.	13th Driest
Year-to-Date (Jan-July)	17.92 in.	-3.97 in.	34th Driest

Depart. = departure from 30-year normal

JULY 6-10: A few showers and storms in eastern Oklahoma on the sixth set up a stormy few days across the state. Lows in the 70s gave way to highs in the 90s and 100s that day. More showers and storms occurred on the seventh, again mostly in eastern Oklahoma. Some of those storms were severe, producing strong winds that left trees damaged across LeFlore County. The Panhandle got into the act on the eighth with Hooker recorded more than 2 inches of rainfall that evening. The day was extremely hot and muggy ahead of a storm system. A 71 mph wind gust was reported near Miami in Ottawa County. More storms fired on the ninth ahead of an advancing cold front, which cooled down the state into the 80s and 90s. Storms in Grady County dropped more than 4 inches of rain near Minco late on the ninth and into the 10th. Other than that, rainfall totals were greatest in the central Panhandle, the southwest and southeastern Oklahoma.

JULY 11-19: This long period was punctuated by a series of weak mid-level disturbances that produced occasional showers and storms. Highs were mostly in the 90s and 100s across the state, and rainfall totals were negligible.

JULY 20-24: Virtually no rain fell during this period and the temperatures ramped into high gear, rising into the 100s across most of the state under the influence of an upper-level ridge of high pressure. Storms on the 26th produced winds of greater than 70 mph near Durant in Bryan County. Most severe reports were of strong winds, although some large hail was also reported.

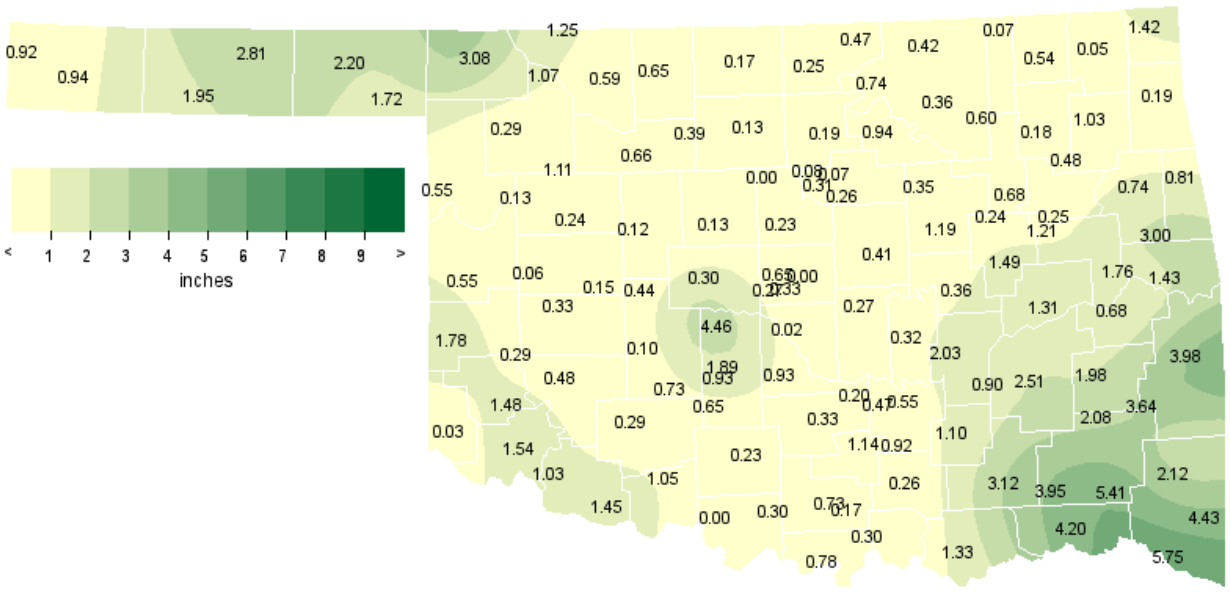
JULY 25-27: Another round of storms hit the state during this period thanks to a cold front that had sagged into northern Oklahoma. It did little to cool things down, but did manage to produce some severe weather with the storms. The Mesonet site at Freedom recorded a wind gust of 94 mph on the 25th. The highest rain totals occurred down in eastern Oklahoma. Broken Bow recorded 4.2 inches of rain during these three days. Highs were mostly in the 100s each day.

JULY 28-31: This period saw the hottest weather of the year to date. Lows were mostly in the 70s and 80s and highs soared into the triple-digits. The month's highest temperature of 112 degrees occurred at several locations on the 31st. All 120 Oklahoma Mesonet stations reached 100 degrees on both the 29th and 31st.

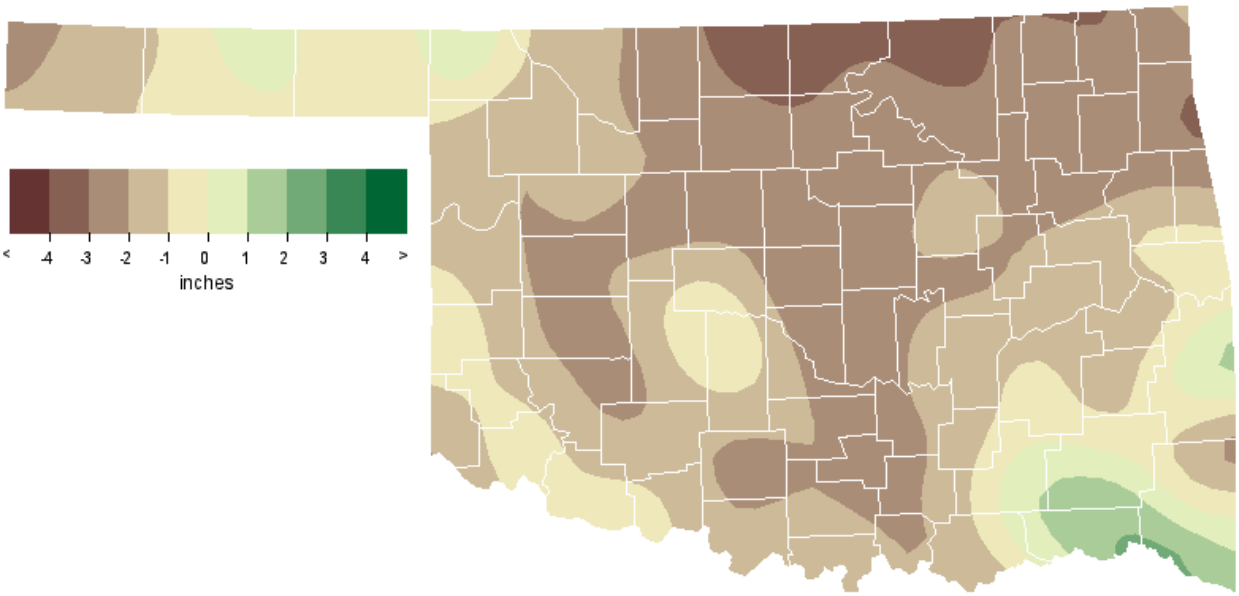
Wind Gusts (70 mph or greater)

Speed (m.p.h.)	Location	County	Day
71	2 NE Miami	Ottawa	8
94	16 NNE Freedom	Woods	25
72	2 SW Durant	Bryan	26
70	2 SW Durant	Bryan	26

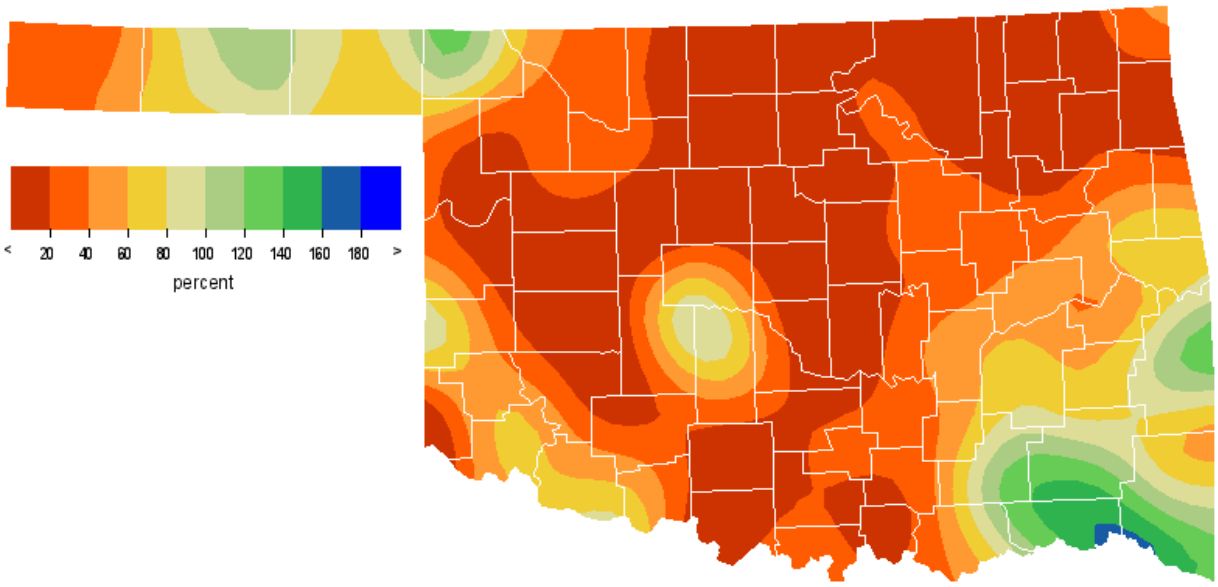
JULY 2012 OBSERVED PRECIPITATION



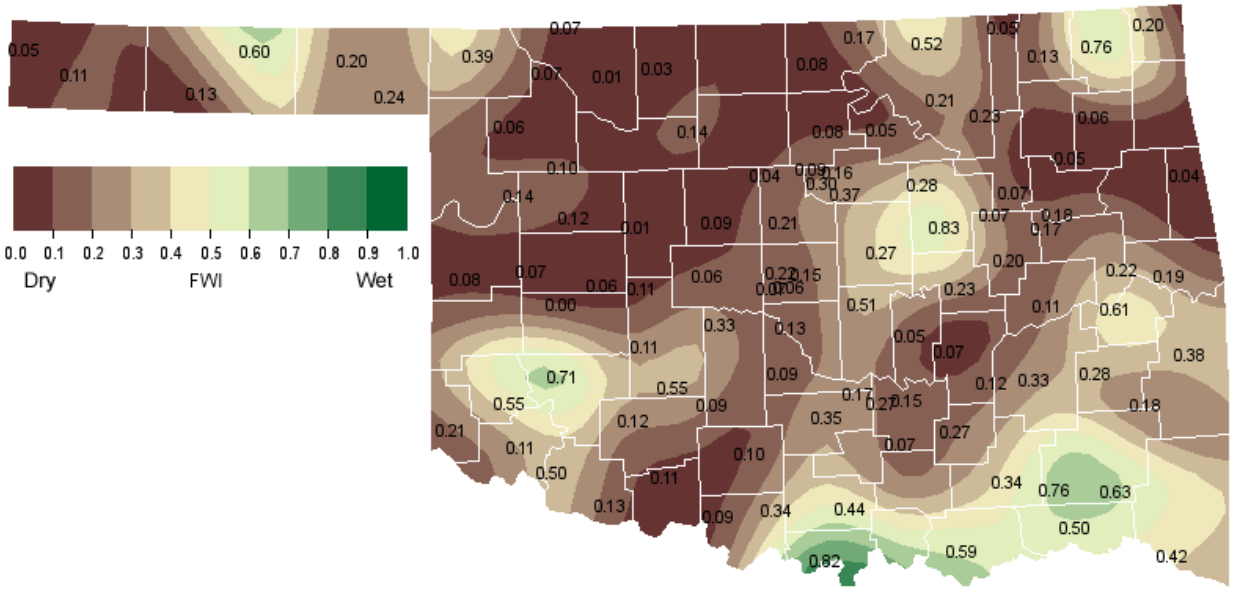
JULY 2012 DEPARTURE FROM NORMAL PRECIPITATION



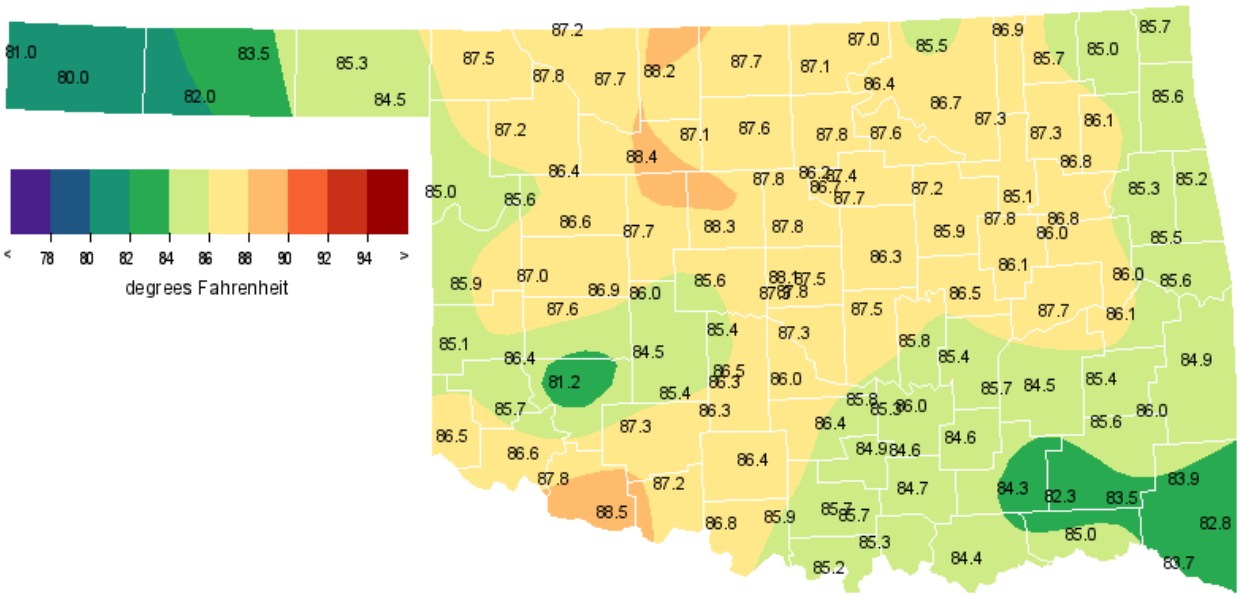
JULY 2012 PERCENT OF NORMAL PRECIPITATION



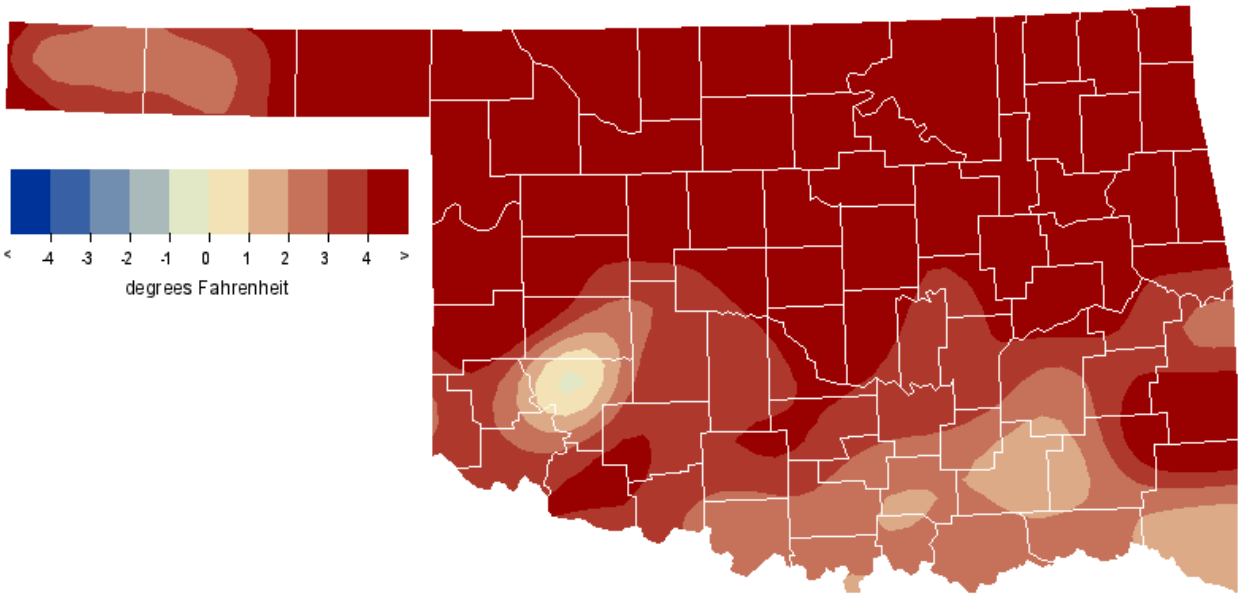
JULY 2012 AVERAGE SOIL MOISTURE AT 25CM



JULY 2012 AVERAGE TEMPERATURE



JULY 2012 DEPARTURE FROM NORMAL TEMPERATURE

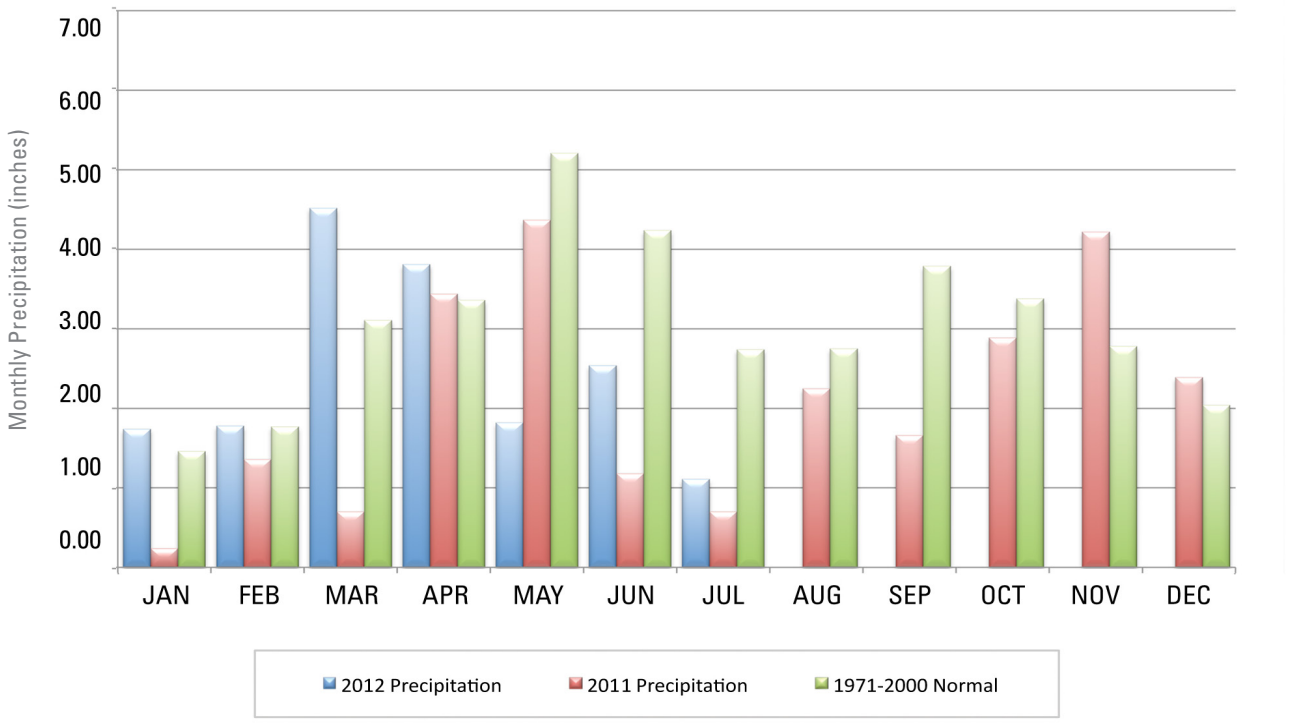


MESONET MONTHLY SUMMARY FOR JULY 2012

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	85.0	107	31	63	12	0	620	.55	.49	9
Beaver	85.3	106	25	60	12	0	629	2.20	.65	9
Boise City	80.0	100	29	60	11	0	465	.94	.64	8
Buffalo	87.5	108	30	64	12	0	696	3.08	1.97	10
NORTH CENTRAL										
Alva	87.6	110	30	61	12	0	702	.59	.28	10
Blackwell	87.1	111	31	64	21	0	685	.25	.20	19
Breckinridge	87.5	110	31	63	21	0	699	.13	.12	19
Cherokee	88.1	111	30	65	12	0	716	.65	.34	9
Fairview	88.4	110	31	66	12	0	725	.66	.23	19
Freedom	87.7	110	30	60	12	0	705	1.07	.44	10
Lahoma	87.1	110	30	66	12	0	685	.39	.30	19
NORTHEAST										
Bixby	85.0	106	31	63	15	0	621	.68	.54	19
Burbank	86.4	111	31	66	21	0	664	.74	.58	11
Claremore	87.3	110	31	64	15	0	691	.18	.08	19
Copan	87.0	110	31	63	15	0	683	.07	.07	13
Foraker	85.4	110	31	64	15	0	633	.42	.25	13
Inola	86.7	111	31	61	15	0	674	.48	.40	7
Jay	85.6	108	30	61	15	0	637	.19	.09	15
Miami	85.7	108	30	63	15	0	642	1.42	.72	8
WEST CENTRAL										
Bessie	87.6	111	31	65	12	0	701	.33	.26	10
Butler	87.0	111	31	63	12	0	681	.06	.02	9
Camargo	85.6	109	31	57	12	0	638	.13	.11	9
Cheyenne	85.9	107	31	67	12	0	648	.55	.35	15
Erick	85.2	110	31	65	12	0	625	1.78	1.78	10
CENTRAL										
Acme	86.3	110	31	66	15	0	660	.65	.54	9
Bowlegs	85.8	109	20	62	15	0	646	.32	.16	10
Bristow	85.9	110	31	62	15	0	647	1.19	.55	13
Lake Carl Blac	86.3	111	31	63	21	0	659	.08	.06	14
Chandler	86.3	109	31	66	15	0	661	.41	.22	8
Chickasha	86.5	110	31	67	15	0	667	1.89	1.28	9
El Reno	85.7	110	31	61	12	0	641	.30	.30	9
Guthrie	87.8	109	31	67	15	0	708	.23	.12	9
Kingfisher	88.2	111	31	65	12	0	720	.13	.13	9
Marena	86.7	110	31	66	15	0	671	.31	.20	8
Minco	85.4	108	31	67	15	0	633	4.46	2.76	10
Marshall	87.7	111	30	65	11	0	705	.00	.00	1
EAST CENTRAL										
Cookson	85.5	107	20	61	15	0	636	3.00	2.54	26
Eufaula	87.7	109	29	65	15	0	705	1.31	.98	26
Haskell	86.0	109	31	62	15	0	652	1.21	1.13	19
Hectorville	87.7	111	31	64	15	0	704	.24	.17	10
Holdenville	85.3	107	20	65	15	0	631	2.03	.66	9
McAlester	84.5	106	31	64	15	0	606	2.51	1.65	8
Okmulgee	86.1	109	20	60	15	0	654	1.49	1.47	26
SOUTHWEST										
Altus	86.6	110	31	68	12	0	670	1.54	1.41	10
Apache	85.3	109	31	65	15	0	630	.73	.73	9
Fort Cobb	84.5	107	31	66	12	0	605	.10	.10	10
Grandfield	88.5	112	31	69	12	0	729	1.45	1.33	9
Hinton	85.9	109	31	66	11	0	649	.44	.24	10
Hobart	86.9	107	30	66	12	****	****	.48	.36	10
SOUTH CENTRAL										
Ada	86.0	107	29	62	15	0	652	.55	.18	7
Ardmore	85.6	107	31	66	15	0	639	.17	.17	9
Burneyville	85.2	108	21	65	15	0	627	.78	.69	26
Byars	85.8	106	31	64	15	0	645	.20	.17	7
Centrahoma	84.6	107	31	64	15	0	606	1.10	.32	8
Durant	84.4	106	31	67	15	0	602	1.33	.49	14
Fittstown	84.7	106	30	64	15	0	610	.92	.32	2
Ketchum Ranch	86.5	109	31	68	15	0	665	.23	.17	3
Lane	84.3	105	30	67	15	0	598	3.12	1.26	9
SOUTHEAST										
Antlers	82.3	103	20	65	1	0	536	3.95	1.54	10
Antlers	*****	***	***	***	***	****	****	*****	*****	***
Broken Bow	82.8	105	20	64	4	0	552	4.43	1.15	26
Clayton	85.6	109	20	66	15	0	640	2.08	.64	14
Cloudy	83.5	102	21	67	1	0	573	5.41	1.44	14
Hugo	84.9	104	20	68	14	0	618	4.20	1.56	26

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	82.1	103	31	61	12	0	529	1.95	1.00	8
Hooker	83.5	105	21	63	12	0	573	2.81	2.53	8
Kenton	81.0	101	29	59	11	0	496	.92	.56	8
Slapout	84.4	107	31	62	12	0	603	1.72	.67	9
May Ranch	87.2	108	30	65	11	0	688	1.25	.70	25
Medford	87.6	110	30	65	21	0	701	.17	.14	19
Newkirk	87.1	110	30	67	14	0	684	.47	.44	19
Red Rock	87.7	110	31	66	21	0	705	.19	.16	19
Seiling	86.4	110	31	60	12	0	664	1.11	1.05	9
Woodward	87.2	109	31	61	12	0	687	.29	.21	10
Nowata	85.6	111	31	63	15	0	639	.54	.39	13
Pawnee	87.6	112	31	66	21	0	700	.94	.70	8
Porter	86.8	109	31	63	15	0	675	.25	.10	26
Pryor	86.1	110	31	60	15	0	655	1.03	.58	7
Skiatook	87.2	111	31	64	15	0	689	.60	.39	13
Vinita	85.0	109	31	61	15	0	619	.05	.03	7
Wynona	86.7	112	31	65	15	0	674	.36	.27	19
Putnam	86.6	109	31	64	11	0	671	.24	.20	9
Retrop	86.4	110	31	67	12	0	663	.29	.27	14
Watonga	87.6	110	31	67	11	0	702	.12	.08	10
Weatherford	86.9	110	31	67	11	0	680	.15	.15	9
Ninnekah	86.3	110	31	66	15	0	659	.93	.81	9
Norman	87.4	108	20	67	15	0	693	.02	.01	9
Oilton	87.2	111	31	61	21	0	689	.35	.25	26
OKC East	87.7	108	31	69	15	0	704	.33	.26	11
OKC North	88.1	108	31	68	15	0	718	.65	.39	10
OKC West	87.3	107	20	70	15	0	692	.27	.15	9
Okemah	86.5	110	31	64	15	0	666	.36	.13	19
Perkins	87.7	110	31	66	15	0	704	.26	.18	8
Shawnee	87.5	108	20	67	15	0	697	.27	.16	14
Spencer	87.5	108	31	66	15	0	699	.00	.00	1
Stillwater	87.4	110	31	66	21	0	694	.07	.07	14
Washington	85.9	109	31	64	15	0	649	.93	.79	9
Sallisaw	85.6	108	20	67	15	0	639	1.43	.49	9
Stigler	86.1	108	31	64	15	0	653	.68	.60	26
Stuart	85.7	108	20	64	15	0	641	.90	.53	14
Tahlequah	85.2	108	30	61	15	0	626	.74	.59	8
Webbers Falls	85.9	107	30	67	15	0	649	1.76	.99	26
Westville	85.2	106	31	62	15	0	627	.81	.49	6
Hollis	86.5	110	31	66	12	0	668	.03	.03	10
Mangum	85.7	112	31	64	12	0	642	1.48	1.47	9
Medicine Park	87.2	110	31	69	17	0	688	.29	.16	9
Tipton	87.8	110	31	69	10	0	707	1.03	.88	10
Walters	*****	***	***	***	***	****	****	*****	*****	***
Idabel	83.7	105	20	68	1	0	580	5.75	3.22	27
Mt Herman	83.8	107	20	67	15	0	584	2.12	.86	27
Talihina	86.0	110	20	66	15	0	650	3.64	1.58	26
Wilburton	85.2	108	20	66	11	0	628	1.98	.90	26
Wister	85.0	107	30	65	5	0	619	3.98	.87	9

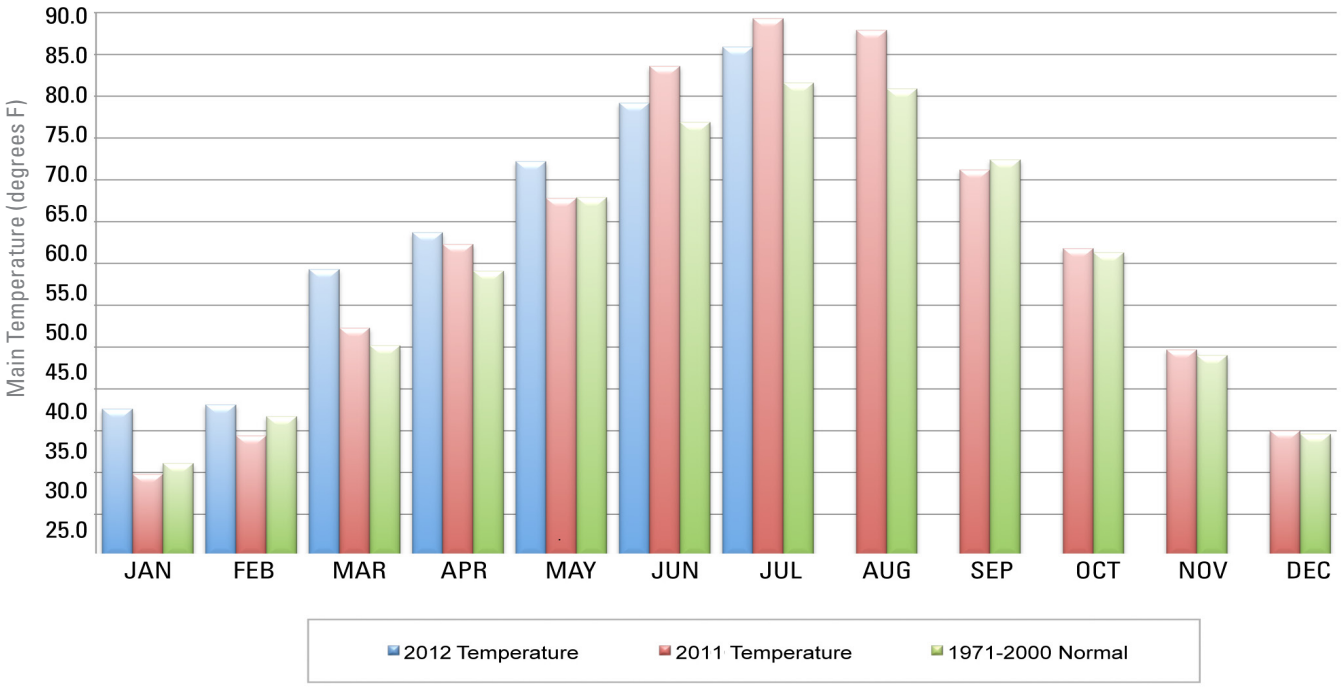
2011 AND 2012 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



July 2012 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	July-11
Panhandle	1.77	-0.75	37th Driest	9.79 (1950)	0.37 (1935)	0.71
North Central	0.56	-2.42	7th Driest	9.06 (1950)	0.13 (1983)	1.10
Northeast	0.53	-2.63	9th Driest	9.31 (1959)	0.00 (1914)	1.46
West Central	0.41	-1.72	7th Driest	7.21 (1950)	0.05 (1936)	0.45
Central	0.60	-1.97	8th Driest	10.17 (1950)	0.16 (1980)	0.59
East Central	1.39	-1.59	30th Driest	10.15 (1950)	0.17 (1930)	0.60
Southwest	0.78	-1.40	17th Driest	7.35 (2010)	0.03 (1980)	0.22
South Central	0.70	-1.84	13th Driest	8.45 (1950)	0.08 (1998)	0.35
Southeast	3.75	0.17	53rd Wettest	13.02 (1950)	0.00 (1930)	0.73
Statewide	1.11	-1.63	15th Driest	9.26 (1950)	0.41 (1980)	0.71

2011 AND 2012 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



July 2012 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	July-11 (F)
Panhandle	83.6	4.0	6th Warmest	87.3 (2011)	73.2 (1906)	87.3
North Central	87.5	5.3	6th Warmest	89.6 (1954)	75.8 (1950)	89.2
Northeast	86.3	5.4	6th Warmest	89.2 (1954)	75.0 (1906)	88.3
West Central	86.5	4.8	6th Warmest	90.0 (2011)	75.8 (1906)	90.0
Central	86.9	4.9	6th Warmest	90.3 (2011)	75.8 (1906)	90.3
East Central	85.9	4.6	6th Warmest	89.5 (2011)	75.9 (1906)	89.5
Southwest	86.1	2.9	14th Warmest	91.6 (2011)	77.9 (1906)	91.6
South Central	85.4	2.7	13th Warmest	90.1 (2011)	77.2 (1906)	90.1
Southeast	84.3	3.4	12th Warmest	87.5 (1954)	76.4 (2004)	87.0
Statewide	85.9	4.3	6th Warmest	89.3 (2011)	75.9 (1906)	89.3

RECORD EVENT REPORTS

Description	Day	Location	Record	Previous Record	Year
Low Temperature	1	Tulsa	50	51	1982
Low Temperature	1	Bartlesville	48	51	2004
Daily Maximum Rainfall	4	Tulsa	3.32 in.	2.87 in.	1985
Daily Maximum Rainfall	12	McAlester	1.38 in.	0.66 in.	1989
High Minimum Temperature	19	Tulsa	80	80	1980
High Temperature	25	Tulsa	105	105	1933
High Temperature	25	McAlester	101	101	1956
High Temperature	26	Oklahoma City	104	104	1918
High Temperature	26	McAlester	103	103	1953
High Minimum Temperature	27	Tulsa	80	80	2011
High Temperature	28	McAlester	100	100	1954

MESONET EXTREMES FOR JULY 2012

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	30th	Buffalo	59	11th	Kenton	3.08	Buffalo	2.53	8th	Hooker
North Central	111	30th	Cherokee	60	12th	Freedom	1.25	May Ranch	1.05	9th	Seiling
Northeast	112	31st	Wynona	60	15th	Pryor	1.42	Miami	0.72	8th	Miami
West Central	111	31st	Bessie	57	12th	Camargo	1.78	Erick	1.78	10th	Erick
Central	111	31st	Oilton	61	12th	El Reno	4.46	Minco	2.76	10th	Minco
East Central	111	31st	Hectorville	60	15th	Okmulgee	3.00	Cookson	2.54	26th	Cookson
Southwest	112	31st	Mangum	64	12th	Mangum	1.54	Altus	1.47	9th	Mangum
South Central	109	31st	Waurika	62	15th	Ada	3.12	Lane	1.26	9th	Lane
Southeast	110	20th	Talihina	64	4th	Broken Bow	5.75	Idabel	3.22	27th	Idabel
Statewide	112	31st	Mangum	57	12th	Camargo	5.75	Idabel	3.22	27th	Idabel

AUGUST 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 1895, occurred in 2011 when the state's average monthly temperature was a scorching 87.9 degrees. 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.

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.

Temperature

Mean	80.9 degrees
Warmest August	2011, 87.9 degrees
Coolest August	1915, 73.2 degrees
Hottest recorded	120 degrees, Poteau, August 10, 1936 Altus, August 12, 1936
Coldest recorded	41 degrees, Goodwell, August 15, 1915
Hottest Location	Waurika, 84.1 degrees
Coolest Location	Boise City, 75.3 degrees

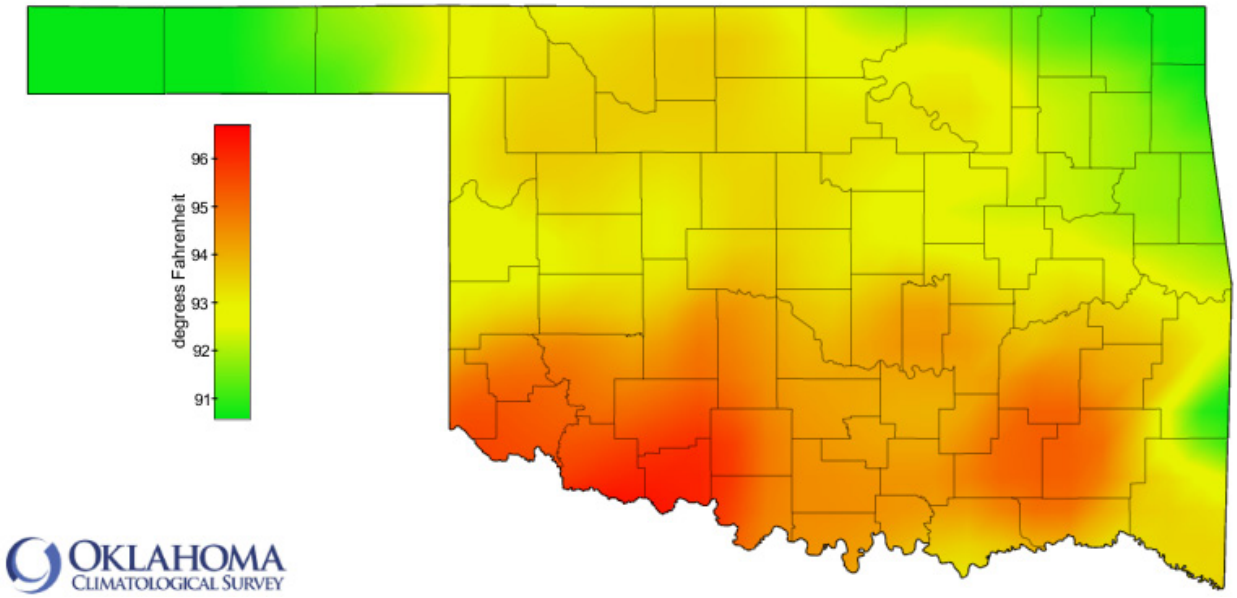
Precipitation

Mean	2.84 inches
Wettest Year	1906, 6.54 inches
Driest Year	2000, 0.14 inches
Wettest location	Pawnee, 3.76 inches
Driest location	Meeker, 1.93 inches
Most recorded	15.15 inches, Holdenville, 1906

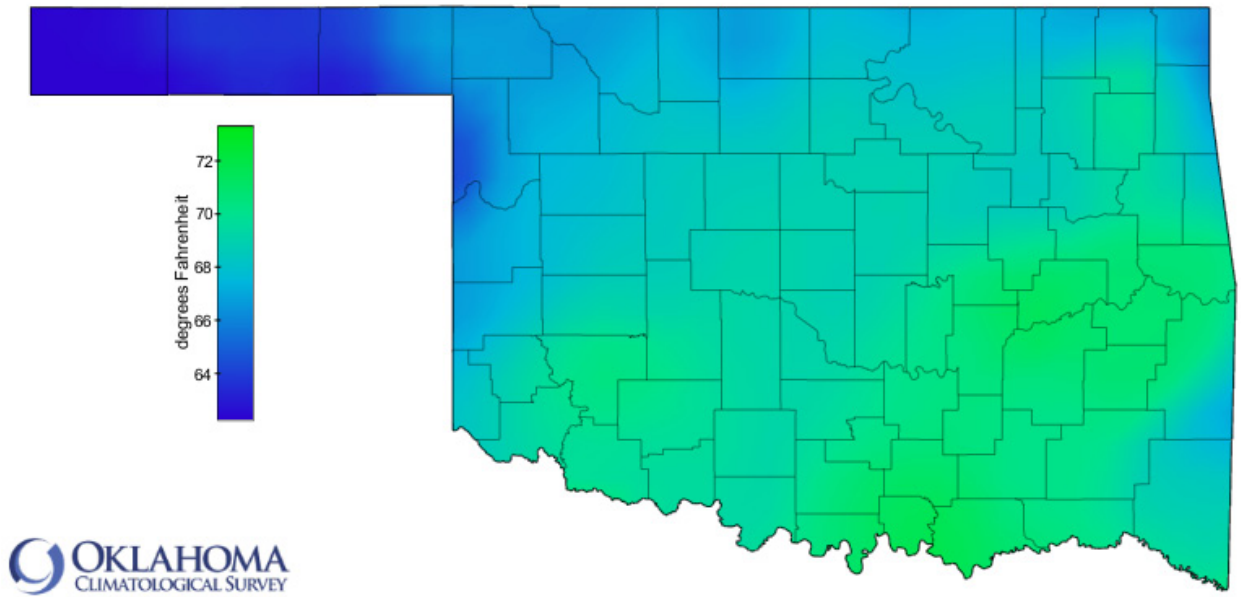
Tornadoes

Average August Tornadoes	1.4
Most	13 (1979)

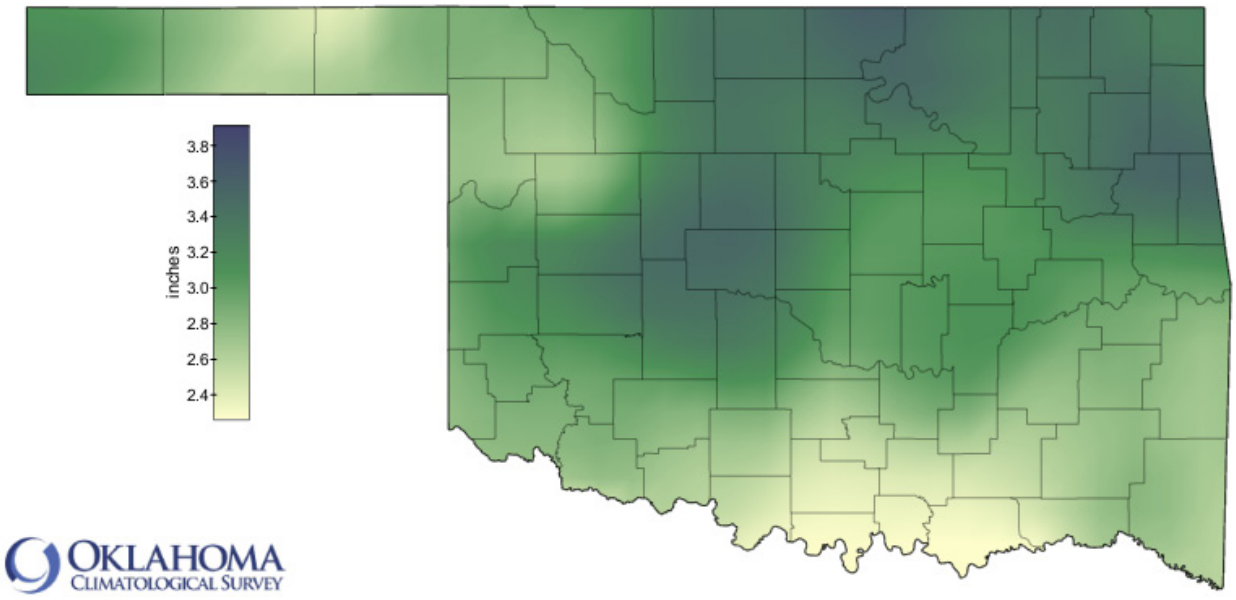
AUGUST NORMAL DAILY MAXIMUM TEMPERATURE (1981-2010)



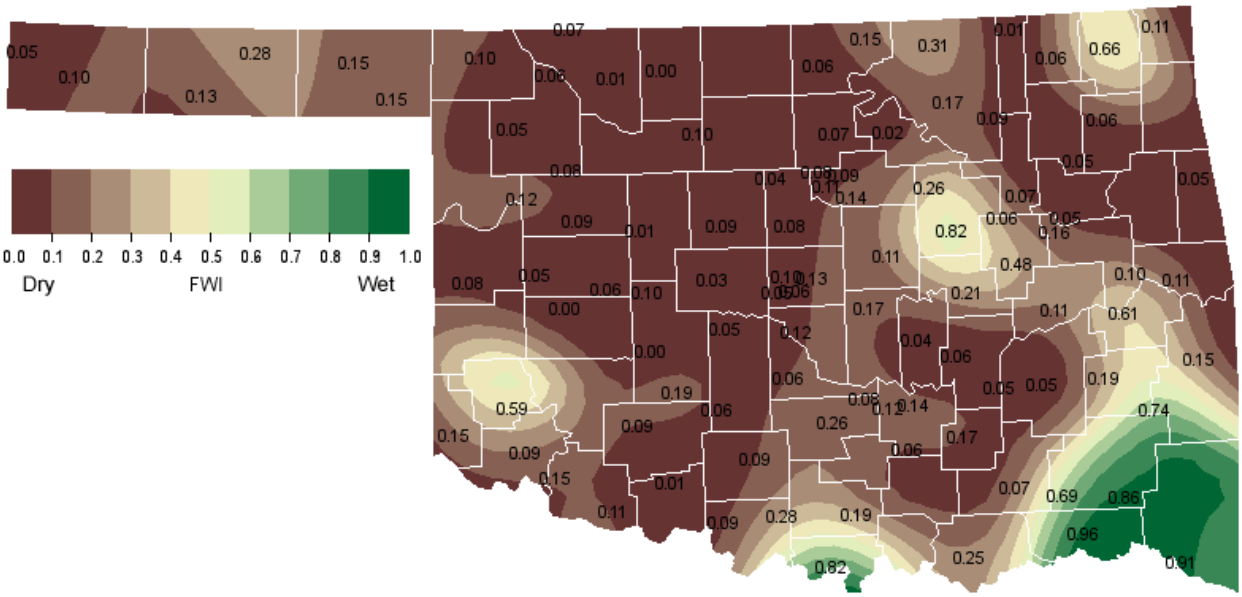
AUGUST NORMAL DAILY MINIMUM TEMPERATURE (1981-2010)



AUGUST NORMAL PRECIPITATION (1981-2010)



AUGUST 1, 2012 SOIL MOISTURE CONDITIONS AT 25CM



AUGUST 2012 DROUGHT INDICES

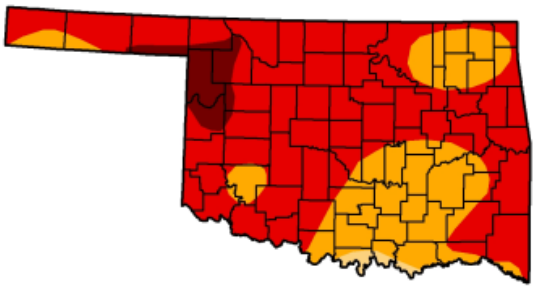
U.S. Drought Monitor

July 31, 2012
Valid 7 a.m. EST

Oklahoma

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	98.99	71.60	5.20
Last Week (07/24/2012 map)	0.00	100.00	99.90	91.24	50.39	2.71
3 Months Ago (05/01/2012 map)	75.68	24.32	14.11	9.78	3.27	0.00
Start of Calendar Year (12/27/2011 map)	14.83	85.17	78.76	50.55	27.48	3.33
Start of Water Year (09/27/2011 map)	0.00	100.00	100.00	100.00	78.97	66.42
One Year Ago (07/26/2011 map)	0.00	100.00	100.00	95.45	67.69	52.20



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://droughtmonitor.unl.edu

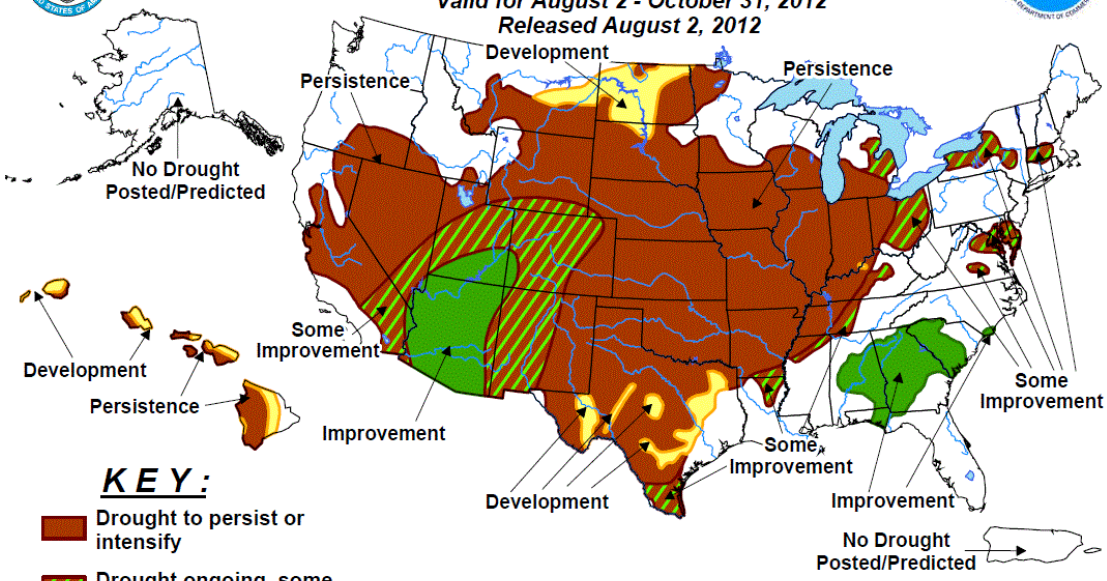
USDA · National Drought Mitigation Center

Released Thursday, August 2, 2012
Mark Svoboda, National Drought Mitigation Center

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for August 2 - October 31, 2012
Released August 2, 2012

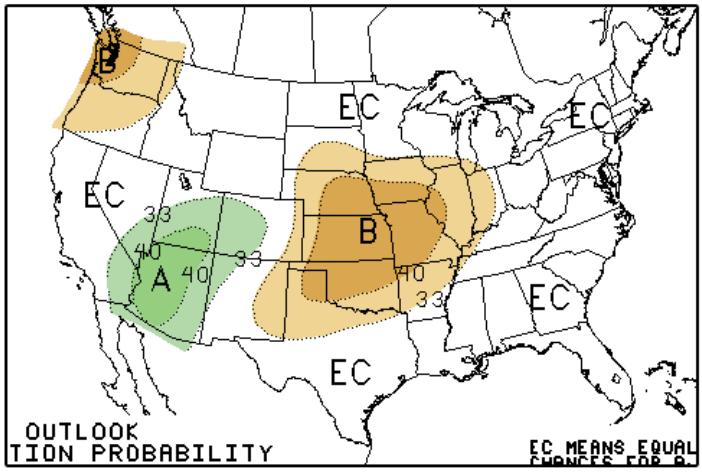


KEY:

- 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 2012 U.S. PRECIPITATION FORECAST



Percent Likelihood of Above or Below Average Precipitation*

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

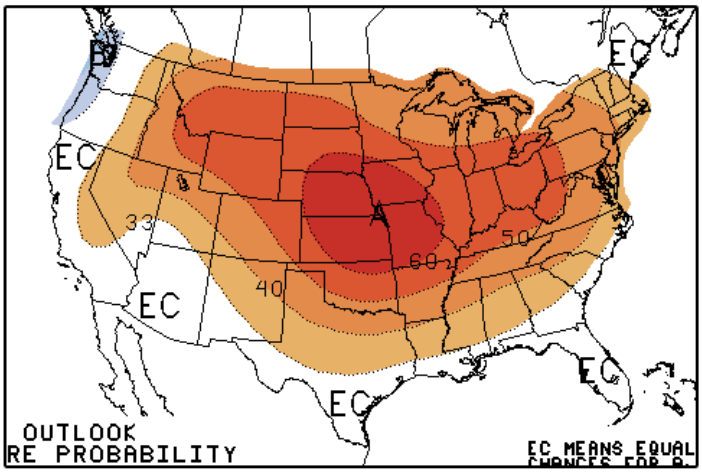
A = Above

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

B = Below

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

AUGUST 2012 U.S. TEMPERATURE FORECAST



Percent Likelihood of Above or Below Average Temperatures*

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

A = Above

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

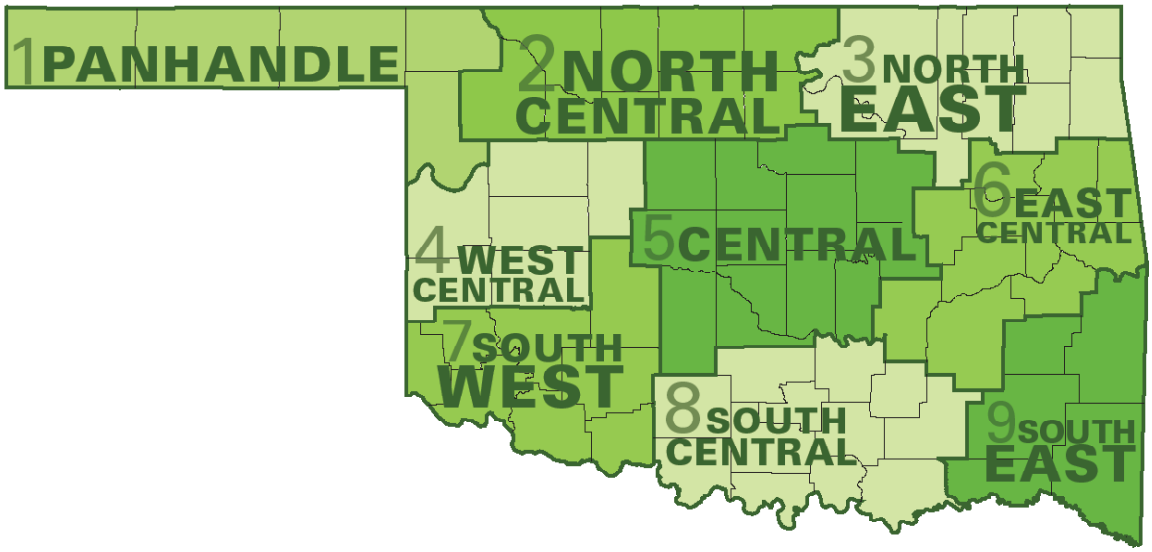
B = Below

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

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	93.0	67.7	80.4	2.63
5	93.2	68.8	81.0	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/

OKLAHOMA CLIMATOLOGICAL SURVEY

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