OKLAHOMA MONTHLY CLIMATE SUMMARY
September 2008

OKLAHOMA CLIMATOLOGICAL SURVEY

A triple dose of tropical mayhem brought parts of Oklahoma more rain that it could handle for the first two weeks of September. The sogginess was immediately followed by an upper-level ridge of high pressure which rounded out the month with two weeks of absolutely gorgeous weather. The remnants of Hurricane Gustav struck during the first week of the month and brought heavy rains to far eastern Oklahoma. Gustav was but a precursor to the big event, however, as the twin tropical cyclones Lowell and Ike picked Oklahoma as a favored vacation destination on their downward spiral the following week. The rains of those first two weeks propelled the month to rank as the 43rd wettest September on record. The month was significantly cool as well and ranked as the 15th coolest on record. Severe weather was present during those early-month storms, although most reports were of flooding due to the heavy rains. A few cases of tennis ball size hail were reported with a few of the storms. There have been no confirmed tornado touchdowns since late May according to preliminary data from the NWS.

Precipitation

The tropical moisture manifested itself as precipitation primarily in two sections of the state – north central and far-east central Oklahoma. Those two areas had surpluses of more than 4 inches in places. North central Oklahoma had an average surplus of over 3 inches to rank as the 3rd wettest September for that region. Some parts of the state were quite dry. South central through central Oklahoma had deficits of 2-4 inches. The Panhandle was also parched enough to rank as the 33rd driest September for that part of the state as well. The state as a whole was just a tad below normal. The year thus far is still decidedly wet with a surplus of nearly 4 inches, the 19th wettest January-September on record.

Temperature

Oklahoma's statewide average temperature was more than 2 degrees below normal. The relatively chilly reading was due to the abundant cloudiness and precipitation during the first half of the month. The temperatures across the state did not reach normal or above normal territory until the latter part of the month. The early cool weather was just too excessive to overcome by that time. The January-September period remained slightly below normal to rank as the 55th such coolest period on record.

September 2008 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	98ºF	Tipton	7
Low Temperature	38ºF	Beaver	30
High Precipitation	11.96 in.	Fairview	
Low Precipitation	0.20 in.	Kenton	

September Daily Highlights

September 1-4: September's first day was pleasant, if a bit hot, with just a smattering of clouds across the state. Some of those clouds were associated with the remnants of Hurricane Gustav which had come ashore near New Orleans before moving towards eastern Oklahoma. At the same time, a cold front was approaching the state from the northwest. The cold front and Gustav both arrived on the second. Temperatures dropped into the 60s and 70s behind the front, and rain began to fall in eastern Oklahoma from Gustav. Light showers formed near the front in the west. What remained of Gustav continued to move along the Oklahoma-Arkansas border over the next couple of days. The front stalled in eastern Oklahoma on the third. Temperatures only rose into the 60s and 70s on that day, and Oklahoma City set a record for coolest maximum temperature with a high of 68 degrees. Rain continued overnight as Gustav pulled away to the northeast before skies cleared later in the afternoon. Rainfall totals from Gustav approached 5 inches in east central Oklahoma but tapered off rather quickly to the west. Rain totals from the frontal passage in the western two-thirds were generally between a tenth of an inch and an inch.

September 5-10: Heavy rains fell during these six days, largely in north central Oklahoma. A meandering frontal system in northern Oklahoma provided the focus for several rounds of storms, mostly overnight, which inundated that area with up to 9 inches of rainfall. Other areas of the state had scattered rainfall amounts of an inch or a bit more, but nothing as organized as in the north. The frontal system kept northern Oklahoma in the 60s and 70s while southern parts of the state were in the 80s and 90s. The storms were severe on the fifth; large hail was common with the storms in northwestern Oklahoma, including hail up to the size of tennis balls near Sayre and Reydon in Beckham County.

September 11-13: Remnants of Hurricane Ike from the Atlantic Ocean drenched eastern Oklahoma with tropical rainfall amounts, while remnants of pacific tropical storm Lowell did the same to western Oklahoma. Northwestern areas definitely got the wet end of the stick, however, due to Lowell's interaction with a frontal boundary. Ike's remnants dropped 2-3 inches of rain across the eastern one-third of the state while parts of the northwest received nearly 12 inches. Fairview suffered severe flooding as 11.8 inches of rainfall was recorded by the Mesonet site there. Temperatures remained in the 70s and 80s, both lows and highs throughout this period. The remnants of both tropical cyclones moved away from the state on the 13th and left tranquil weather in their wake.

September 14-21: As the tropical systems exited, high pressure at the surface moved in and brought the state a slow warm-up to near normal temperatures over the next eight days. There was no significant precipitation to speak of other than a few amounts around a half of an inch in far eastern Oklahoma. Lows were mostly in the 40s and 50s and highs in the 70s and 80s.

September 22-30: High pressure remained and the weather warmed over the next seven days to near-normal to above-normal territory. Highs were mainly in the 80s with a few 90s after lows in the 50s.

September 29-30: A cold front finally found the state and passed through on the 29th. Highs were in the 70s for the most part after the cold front with lows in the 40s and 50s.

September 2008 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2008)
Month (September)	69.9ºF	-2.5ºF	15th Coolest
Year-to-Date (Jan-Sep)	62.7ºF	-0.2ºF	55th Coolest

Precipitation

	Total	Depart.	Rank (1895-2008)
Month (September)	3.58 in.	-0.23 in.	43rd Wettest
Year-to-Date (Jan-Sep)	32.28 in.	3.81 in.	19th Wettest

Depart. = Departure from 30-year normal

Record Event Reports

Description	Day	Location	Record	Previous Record	Year
Coldest Maximum Temperature	3	Oklahoma City	68 degrees	71 degrees	1971

September 2008 Severe Weather

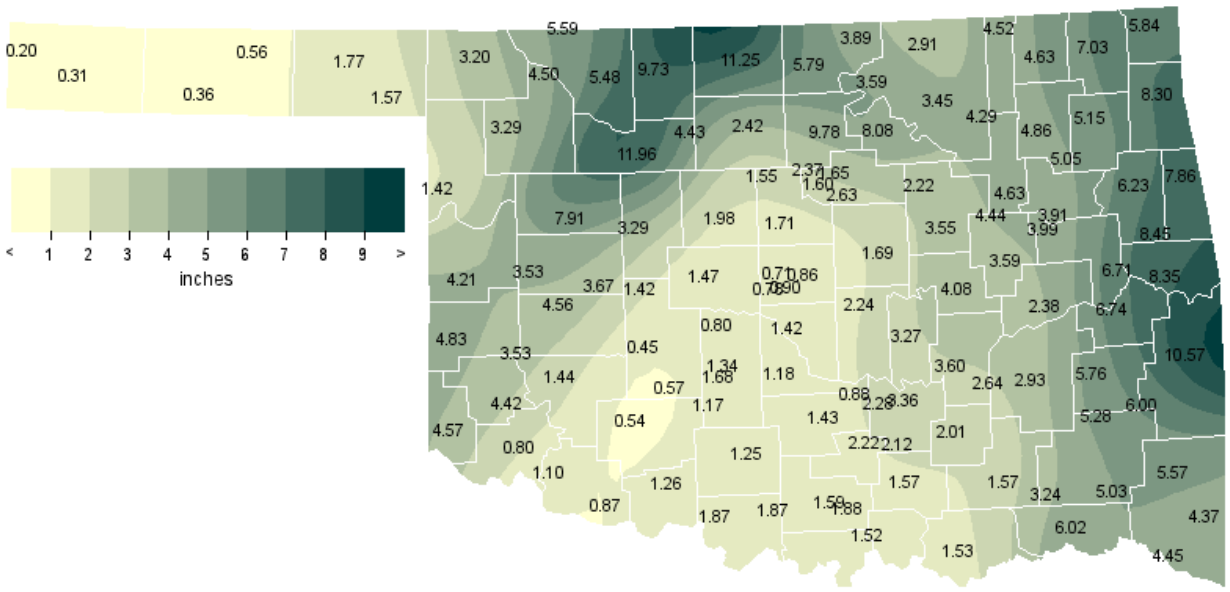
Hail (2 inches in diameter or greater)

Size (in.)	Location	County	Day
2.75	6 SSW Reydon	Roger Mills	5
2.50	8 S Reydon	Roger Mills	5
2.50	6 W Sayre	Beckham	5
2.50	7 WNW Sayre	Beckham	5

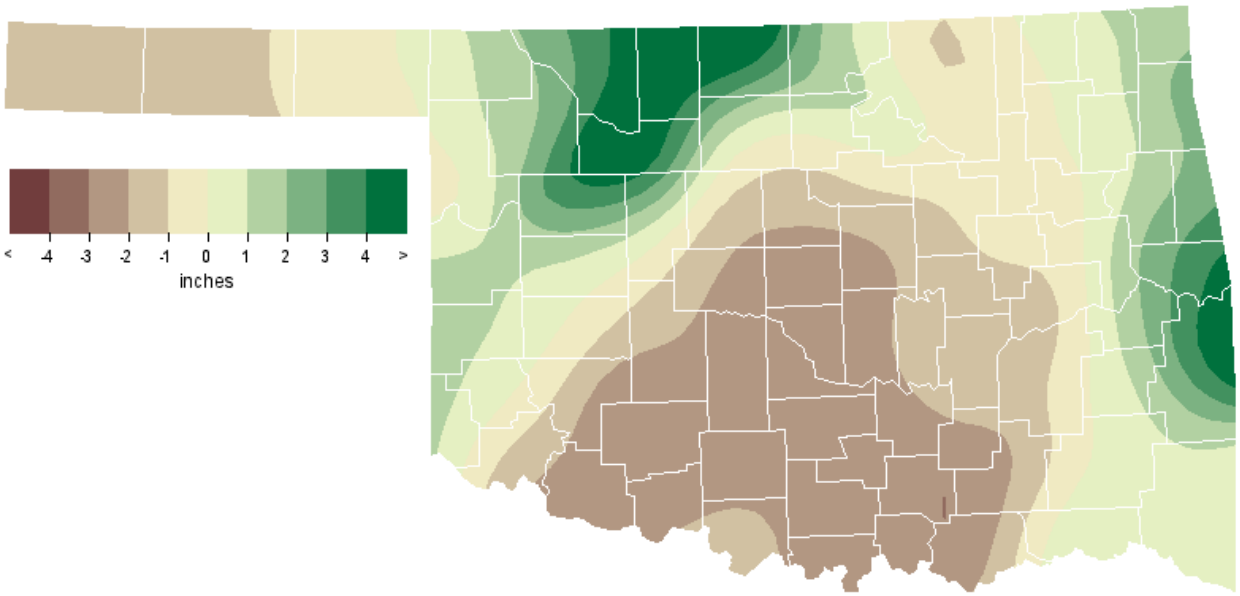
Flooding

Location	County	Day
Pocola	Le Flore	3
1 S Taloga	Dewey	11
Chester	Major	11
Cherokee	Alfalfa	12
Jet	Alfalfa	12
Nash	Grant	12
Medford	Grant	12
3 W Medford	Grant	12
Vici	Dewey	12
10 S Taloga	Dewey	12
Mutual	Woodward	12
Cleo Springs	Major	12
Roland	Sequoyah	13

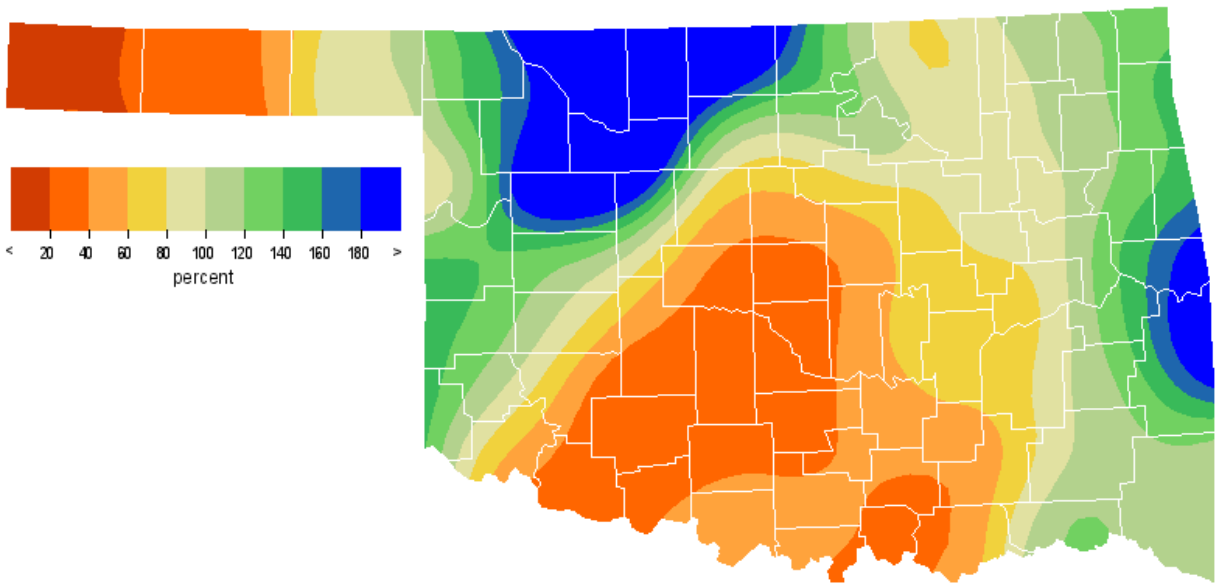
September 2008 Observed Precipitation



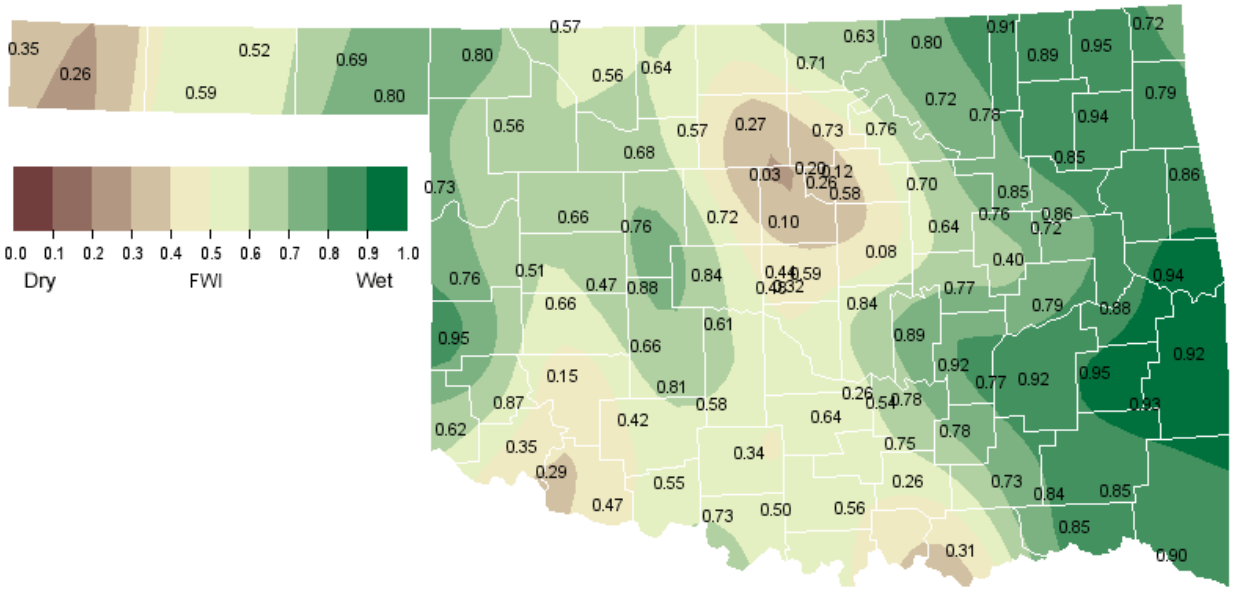
September 2008 Departure from Normal Precipitation



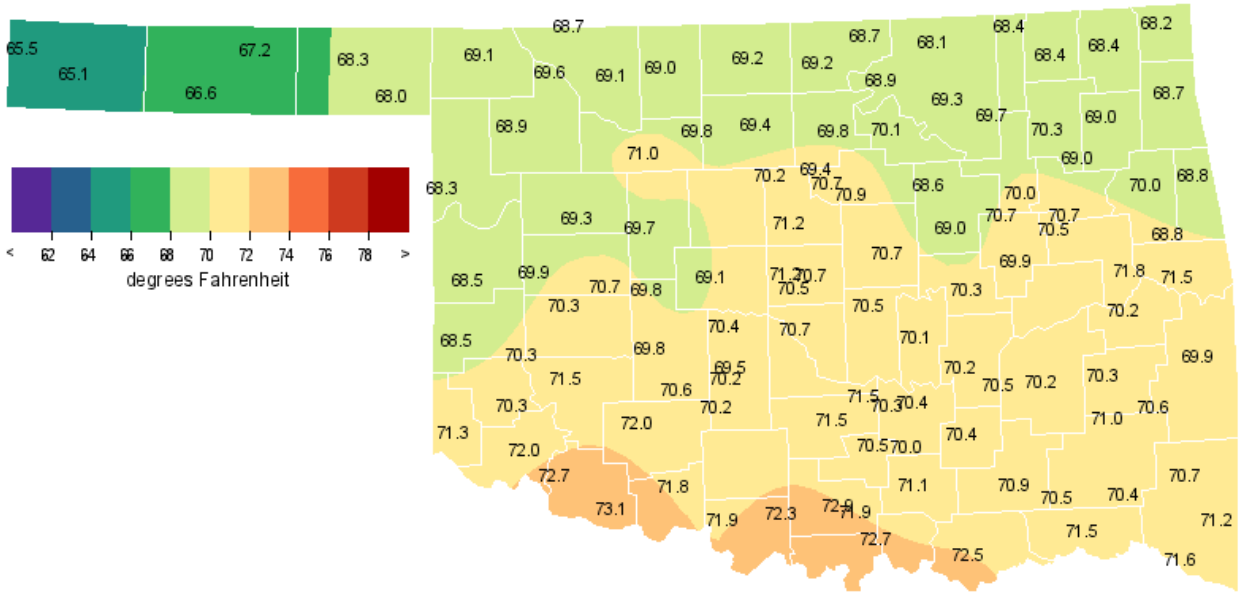
September 2008 Percent of Normal Precipitation



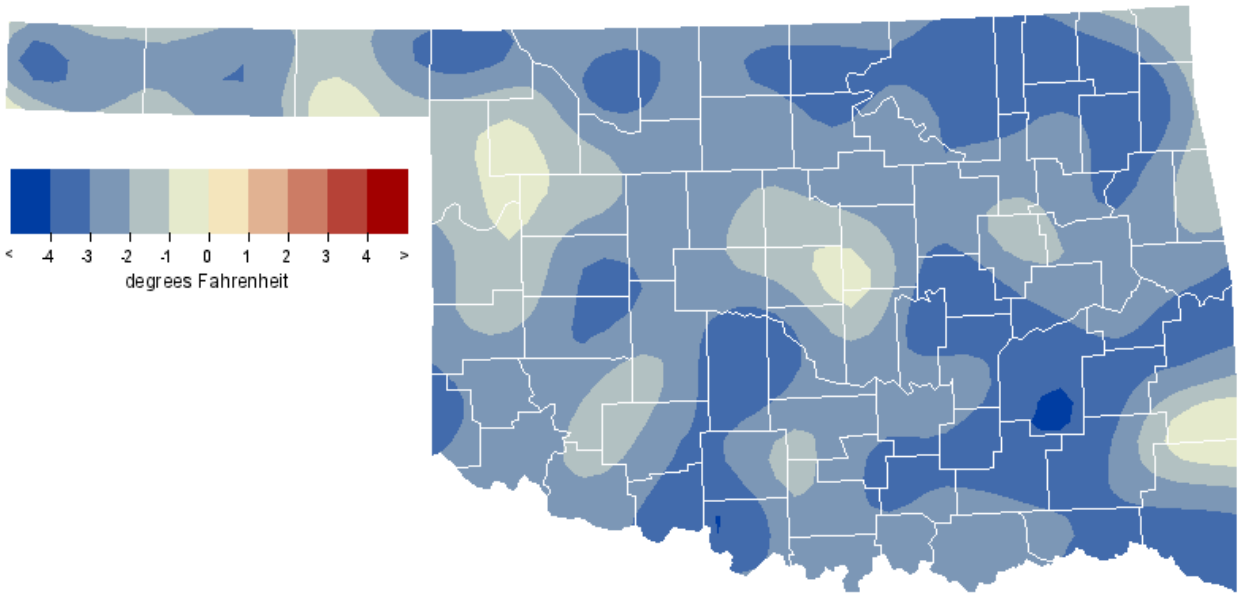
September 2008 Average Soil Moisture at 25cm



September2008 Average Temperature



September 2008 Departure from Normal Temperature



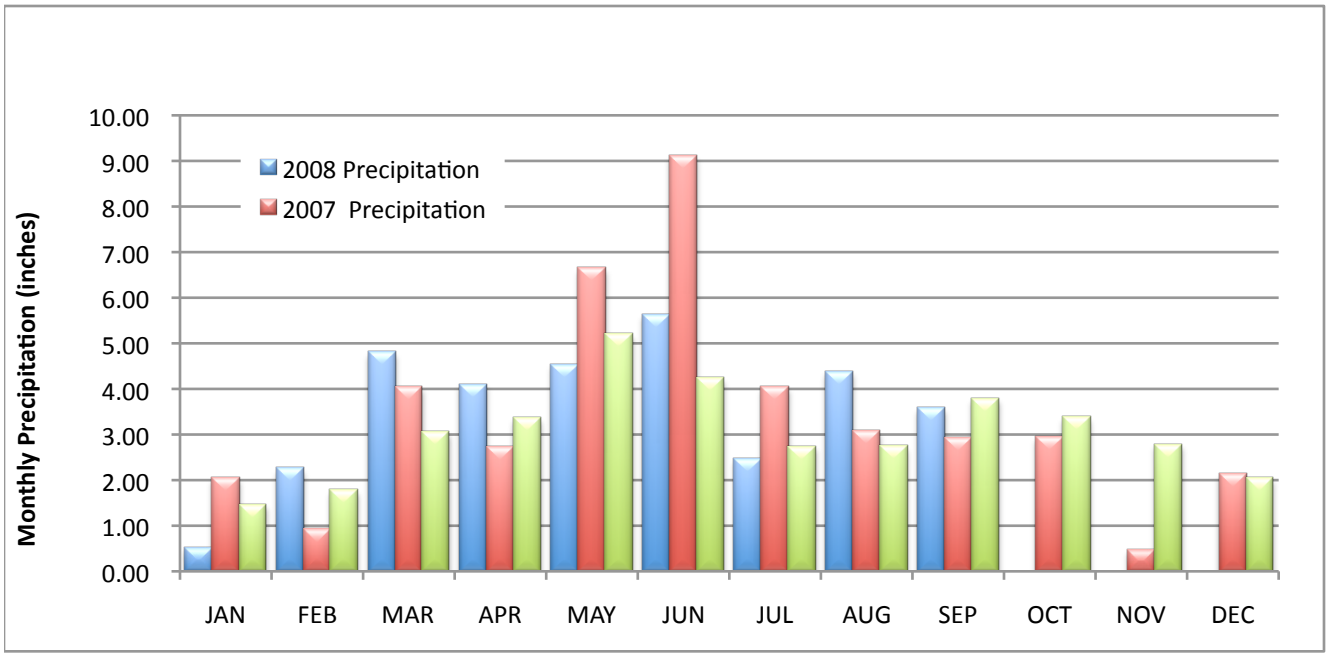
Mesonet Monthly Summary for September 2008

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	68.3	90	1	44	30	14	113	1.42	.79	11
Beaver	68.3	92	27	38	30	35	134	1.77	.98	3
Boise City	65.1	86	1	40	30	55	59	.31	.16	13
Buffalo	69.1	92	1	43	30	23	146	3.20	1.98	12
Goodwell	66.8	88	1	41	30	****	****	.36	.24	3
Hooker	67.3	91	24	42	30	****	****	.56	.25	3
Kenton	65.7	87	22	42	16	****	****	.20	.18	10
Slapout	68.3	91	1	47	30	****	****	1.57	1.35	12
NORTH CENTRAL										
Alva	69.3	93	1	43	30	****	****	5.48	3.44	12
Blackwell	69.2	93	1	45	30	20	147	5.79	1.47	12
Breckinridge	69.4	93	2	45	30	19	150	2.42	1.19	7
Cherokee	69.3	93	1	46	30	****	****	9.73	4.38	12
Fairview	71.2	94	1	50	30	****	****	11.96	9.13	12
Freedom	69.8	93	1	43	30	****	****	4.50	2.24	11
Lahoma	70.0	93	1	48	30	****	****	4.43	1.83	12
May Ranch	68.9	93	1	48	30	****	****	5.59	1.64	11
Medford	69.5	92	1	45	30	****	****	11.25	4.58	12
Newkirk	68.8	91	1	46	30	****	****	3.89	1.18	11
Red Rock	70.0	92	2	44	30	****	****	9.78	3.61	8
Seiling	*****	***	***	***	***	****	****	*****	*****	***
Woodward	69.1	91	1	41	30	****	****	3.29	1.61	12
NORTHEAST										
Bixby	70.0	92	1	47	16	13	162	4.63	1.57	3
Burbank	68.8	92	1	44	16	21	137	3.59	1.18	11
Claremore	70.6	90	1	47	30	****	****	4.84	1.99	13
Copan	68.6	89	1	45	16	****	****	4.51	2.01	13
Foraker	68.4	89	2	46	16	****	****	2.91	1.13	11
Inola	69.2	89	1	45	16	****	****	4.96	1.81	13
Jay	69.0	90	1	43	16	****	****	7.96	2.85	13
Miami	68.5	91	1	44	16	****	****	5.52	1.88	3
Nowata	68.6	89	1	44	16	****	****	4.61	2.11	13
Pawnee	70.3	92	2	44	30	****	****	8.08	2.23	7
Porter	70.9	91	1	48	16	****	****	3.90	1.71	13
Pryor	69.3	90	1	46	16	****	****	5.00	1.92	13
Skiatook	70.0	89	1	48	16	****	****	4.29	2.02	13
Vinita	68.6	91	1	44	16	****	****	6.86	3.29	13
Wynona	69.5	89	1	45	16	****	****	3.45	1.31	6
WEST CENTRAL										
Bessie	70.3	91	7	49	30	9	168	4.56	1.71	13
Butler	69.9	92	7	45	30	9	155	3.53	2.92	11
Camargo	*****	***	***	***	***	****	****	*****	*****	***
Cheyenne	68.7	87	1	48	30	****	****	4.21	2.65	11
Erick	68.7	88	1	45	30	****	****	4.83	3.53	11
Putnam	69.5	90	1	45	30	****	****	7.91	6.71	11
Retrop	70.5	91	7	50	16	****	****	3.53	2.16	11
Watonga	69.9	89	7	49	30	****	****	3.29	1.34	13
Weatherford	70.9	92	7	48	30	****	****	3.67	2.05	11
CENTRAL										
Acme	70.4	90	2	41	16	****	****	1.17	.64	10
Bowlegs	70.1	90	1	45	16	14	168	3.27	1.65	13
Bristow	69.0	90	12	42	16	20	140	3.55	1.76	13
Lake Carl Blac	69.6	93	2	43	16	****	****	2.37	.98	2
Chandler	70.7	90	12	45	16	10	181	1.69	.82	13
Chickasha	69.7	92	7	40	16	****	****	1.34	.76	2
El Reno	69.3	89	2	43	16	****	****	1.47	.77	11
Guthrie	71.6	92	2	46	16	****	****	1.71	1.13	11
Kingfisher	71.0	91	2	46	16	****	****	1.98	1.43	11
Marena	70.9	92	2	47	16	****	****	1.60	.65	13
Minco	70.6	90	2	50	30	****	****	.80	.26	13
Marshall	70.4	94	2	43	16	****	****	1.55	.99	11
Ninnekah	70.3	91	1	43	16	****	****	1.68	.74	10
Norman	70.7	90	7	46	16	****	****	1.42	.79	8
Oilton	68.9	91	1	40	30	****	****	2.22	1.30	13
OKC East	70.7	89	7	46	16	****	****	.90	.29	11
OKC North	71.4	89	2	48	16	****	****	.71	.30	13
OKC West	*****	***	***	***	***	****	****	.78	.45	13
Okemah	70.5	90	1	46	16	****	****	4.08	2.14	13
Perkins	71.2	91	2	47	16	****	****	2.63	1.13	13
Shawnee	70.7	90	7	47	16	****	****	2.24	.80	10
Spencer	71.0	89	2	45	16	****	****	.86	.32	10
Stillwater	71.1	93	1	44	16	****	****	1.65	.63	8
Washington	70.5	90	7	45	16	****	****	1.18	.78	10
EAST CENTRAL										
Calvin	70.2	91	1	44	16	10	165	3.60	2.30	13
Cookson	69.1	88	1	43	16	****	****	8.16	3.51	3
Eufaula	*****	***	***	***	***	****	****	2.38	1.05	13
Haskell	70.9	92	1	46	16	****	****	3.99	1.67	13
Hectorville	71.0	91	1	49	16	****	****	4.44	1.68	3
McAlester	70.4	89	1	44	16	****	****	2.93	1.12	3
Okmulgee	70.1	91	1	44	16	****	****	3.59	1.15	3
Sallisaw	71.8	91	12	47	16	****	****	8.16	3.00	13
Stigler	70.3	89	1	46	16	****	****	6.74	2.67	3
Stuart	70.7	91	1	47	16	****	****	2.64	1.00	13
Tahlequah	70.2	89	1	44	16	****	****	5.77	2.72	13
Webbers Falls	71.9	93	12	48	16	****	****	6.66	2.76	3
Westville	69.1	89	1	45	16	****	****	7.37	3.26	3
SOUTHWEST										
Altus	72.0	94	7	48	16	2	213	.80	.28	11
Apache	70.8	90	6	48	16	****	****	.57	.40	10
Fort Cobb	70.0	90	7	45	16	****	****	.45	.29	11
Grandfield	73.2	96	6	49	17	****	****	.87	.64	10
Hinton	70.0	90	7	47	16	****	****	1.42	1.30	11
Hobart	71.7	94	7	49	16	****	****	1.44	1.07	11
Hollis	71.4	92	7	52	16	****	****	4.57	4.01	11
Mangum	70.5	92	7	45	16	****	****	4.42	2.30	12
Medicine Park	72.1	91	7	54	16	****	****	.54	.33	10
Tipton	72.8	98	7	47	16	****	****	1.09	.30	13
Walters	71.8	93	6	45	16	****	****	1.26	.65	10
SOUTH CENTRAL										
Ada	70.4	91	7	44	16	12	176	3.36	2.47	13
Ardmore	72.0	91	1	48	16	****	****	1.88	1.05	13
Burneyville	72.0	92	7	44	16	****	****	1.42	.94	10
Byars	71.4	92	7	48	16	6	199	.88	.55	13
Centrahoma	70.3	92	1	43	16	14	175	2.01	1.34	13
Durant	72.6	91	1	49	17	****	****	1.53	.54	10
Fittstown	70.2	89	1	45	16	****	****	2.11	1.60	13
Ketchum Ranch	*****	***	***	***	***	****	****	1.25	.77	10
Lane	71.1	91	1	45	16	****	****	1.57	.68	10
Madill	72.8	91	1	46	16	****	****	1.52	.86	13
Newport	73.1	94	7	47	16	****	****	1.59	1.02	10
Pauls Valley	71.7	92	7	46	16	****	****	1.43	.65	10
Ringling	72.8	92	7	51	17	****	****	1.87	1.08	10
Sulphur	70.8	91	7	44	16	****	****	2.22	1.36	13
Tishomingo	71.2	91	1	45	16	****	****	1.57	1.07	13
Vanoss	70.6	92	7	43	16	****	****	2.28	1.76	13
Waurika	72.1	91	7	47	16	****	****	1.87	.97	10
SOUTHEAST										
Antlers	70.5	93	1	44	16	14	180	3.24	1.75	13
Broken Bow	71.3	90	11	47	16	****	****	4.37	1.90	13
Clayton	71.1	92	1	46	16	****	****	5.28	2.70	13
Cloudy	70.5	90	1	48	16	****	****	5.03	2.82	13
Hugo	71.6	91	1	48	16	****	****	6.02	2.49	2
Idabel	71.7	90	11	48	30	****	****	4.45	1.90	13
Mt Herman	70.8	88	1	45	16	****	****	5.54	2.43	2
Talihina	70.8	91	1	45	16	****	****	5.95	3.04	13
Wilburton	70.4	89	1	45	16	****	****	5.76	2.53	13
Wister	70.0	91	1	46	16	****	****	10.52	3.31	9

September 2008 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Sep-07
Panhandle	1.17	-0.71	33rd Driest	4.57 (1985)	0.05 (1956)	0.87
North Central	6.51	3.38	3rd Wettest	7.08 (1945)	0.04 (2000)	2.86
Northeast	5.08	0.30	38th Wettest	12.42 (1986)	0.13 (1948)	4.28
West Central	4.44	1.41	17th Wettest	8.64 (1986)	0.02 (2000)	3.35
Central	1.79	-2.32	23rd Driest	10.68 (1945)	0.19 (1956)	2.74
East Central	5.22	0.26	34th Wettest	10.40 (1970)	0.23 (1948)	5.18
Southwest	1.59	-1.80	35th Driest	8.68 (1936)	0.00 (1898)	1.98
South Central	1.81	-2.53	30th Driest	9.98 (1936)	0.00 (1909)	1.46
Southeast	5.63	1.06	30th Wettest	11.75 (1974)	0.29 (1948)	4.14
Statewide	3.58	-0.23	43rd Wettest	7.86 (1945)	0.27 (1956)	2.93

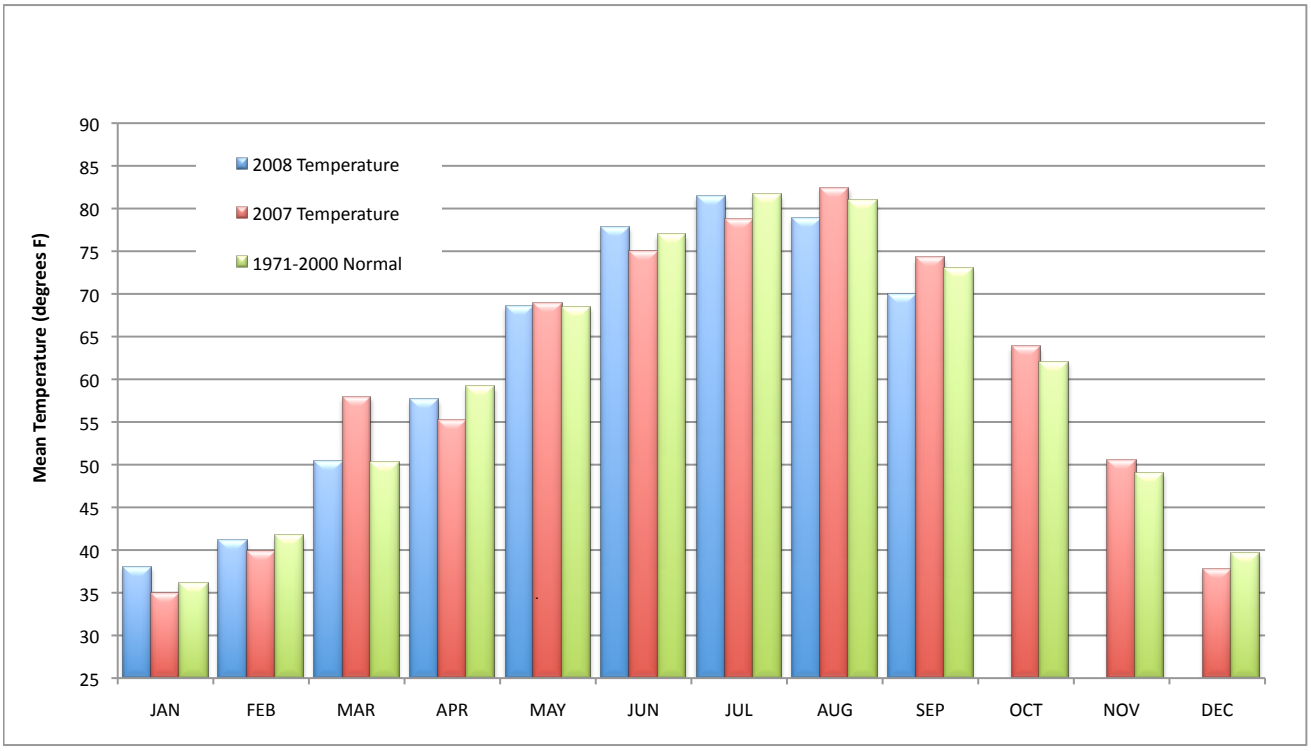
2007 and 2008 Statewide Precipitation Monthly Totals vs. Normal



September 2008 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Sep-07 (F)
Panhandle	67.3	-2.1	17th Coolest	76.2 (1931)	62.4 (1974)	72.0
North Central	69.4	-2.7	19th Coolest	80.8 (1931)	64.0 (1974)	73.7
Northeast	69.1	-2.6	17th Coolest	79.1 (1931)	63.4 (1974)	73.2
West Central	69.7	-2.2	25th Coolest	80.4 (1931)	64.4 (1974)	73.8
Central	70.2	-2.6	20th Coolest	81.3 (1931)	65.0 (1974)	74.4
East Central	70.3	-2.4	13th Coolest	80.5 (1939)	65.1 (1974)	74.1
Southwest	71.4	-2.3	18th Coolest	81.2 (1931)	66.4 (1974)	75.6
South Central	71.4	-2.7	14th Coolest	81.3 (1998)	66.3 (1974)	76.1
Southeast	70.8	-2.3	16th Coolest	81.2 (1939)	65.9 (1974)	74.6
Statewide	69.9	-2.5	15th Coolest	79.8 (1931)	64.7 (1974)	74.2

2007 and 2008 Statewide Temperature Monthly Averages vs. Normal



Mesonet Extremes for September 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	92	1st	Buffalo	38	30th	Beaver	3.20	Buffalo	1.98	12th	Buffalo
North Central	94	1st	Fairview	41	30th	Woodward	11.96	Fairview	9.13	12th	Fairview
Northeast	92	2nd	Pawnee	43	16th	Jay	8.30	Jay	3.29	13th	Vinita
West Central	92	7th	Weatherford	45	30th	Butler	7.91	Putnam	6.71	11th	Putnam
Central	94	2nd	Marshall	40	30th	Oilton	4.08	Okemah	2.14	13th	Okemah
East Central	93	12th	Webbers Falls	43	16th	Cookson	8.45	Cookson	3.51	3rd	Cookson
Southwest	98	7th	Tipton	45	16th	Fort Cobb	4.57	Hollis	4.01	11th	Hollis
South Central	94	7th	Newport	43	16th	Vanoss	3.36	Ada	2.47	13th	Ada
Southeast	93	1st	Antlers	44	16th	Antlers	10.57	Wister	3.31	9th	Wister
Statewide	98	7th	Tipton	38	30th	Beaver	11.96	Fairview	9.13	12th	Fairview

October Climatological Outlook

October typically brings Oklahoma some of its most pleasant weather. Days are usually pleasantly warm and nights typically are refreshingly cool. On the occasions that the weather does turn nasty, however, the result too often is flood, as October seems to be a favored time for extreme precipitation events. The year's tenth month is Oklahoma's 6th warmest and 4th wettest, according to the most recently compiled statewide normals. From 1971 through 2000, the period from which current normals of temperature and precipitation were calculated, Oklahoma's October average temperature was 62.0 degrees Fahrenheit and the average reporting station received a monthly precipitation of 3.38 inches.

Temperature
Mean: 62.0 degrees
Warmest October: 1963, 70.7 degrees
Coolest October: 1925, 55.3 degrees
Warmest location: Waurika, 66.3 degrees
Coolest location: Turpin, 56.6 degrees
Hottest recorded: 110 degrees, Waukomis, October 2, 1898
Coldest recorded: 6 degrees, Kenton, October 30, 1993

October is given to wide extremes of precipitation. The larger monthly figures are usually impacted by one or two very large events. Remnants of tropical storms or hurricanes, usually from the Gulf of Mexico, but occasionally originating in the Pacific Ocean, occasionally bring widespread heavy rains to the state during October. At other times, mid-latitude storm systems have stalled over the state and, taking advantage of moisture borne from the Gulf by the prevailing southerly winds, produced prodigious amounts of rain. In many other years, October is virtually without rain. Monthly precipitation totals include a statewide-averaged high of 11.32 inches in 1941, the largest total ever recorded for Oklahoma (any month), and a low of 0.14 inch, attained in 1952. The remnants of Hurricane Norma provided enough rain over a three-day period in October 1981 to give Madill the greatest monthly precipitation total (25.80 inches) ever recorded at a recognized reporting station in Oklahoma (all months). A thoroughly extra-tropical thunderstorm system inundated Enid with 15.68 inches of rain in about 12 hours (12 inches in just 3 hours) on October 11, 1973. That total, reported the following morning, is the state's greatest 24-hour precipitation in any month, as measured at an official reporting station.

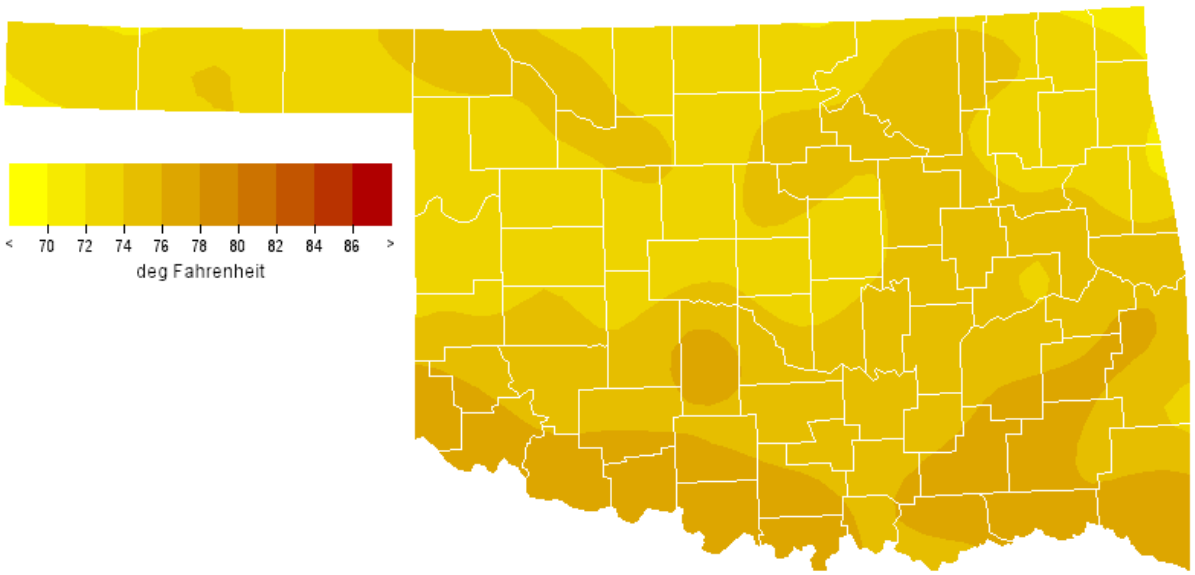
Precipitation
Mean: 3.38 inches
Wettest year: 1941, 11.32 inches
Driest year: 1917 and 1952, 0.14 inches
Wettest location: Smithville, 6.22 inches
Driest location: Kenton, 0.99 inches
Most recorded: 25.80 inches, Madill, 1981

The normal precipitation pattern across Oklahoma in October returns to its familiar configuration with eastern stations receiving substantially more rainfall than those in the west. Normal monthly precipitation across the state during October ranges from 6.22 inches at Smithville to 0.99 inches at Kenton. Snowfall is not common during October, but Regnier, Kenton, and Boise City each average receiving about one inch of snow during the month. Those averages were inflated by a freak snowstorm on October 25 and 26, 1997 that dropped 15 inches of snow on Kenton. As many as 15,000 head of cattle across the panhandle died during that snowstorm.

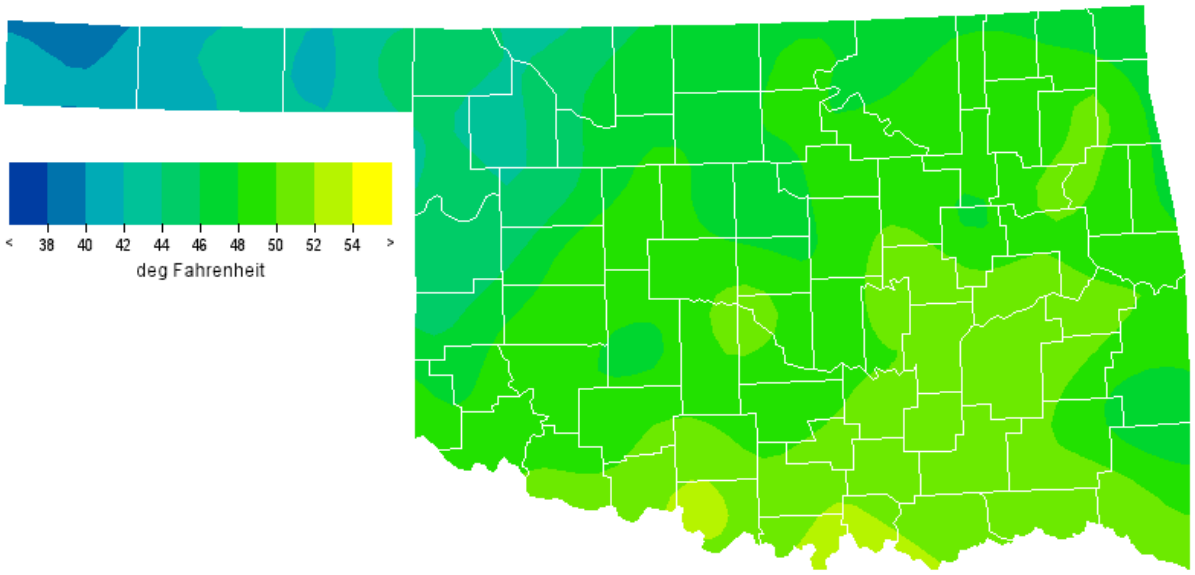
Severe thunderstorms, apart from the floods, historically have been little more than footnotes in October for most of the state's history. However, recent occurrences have altered that notion somewhat. Reasonably comprehensive and well-documented tornado records in the state date from 1950. During those 54 years, 123 October tornadoes have been identified in Oklahoma, an average of 2.3 per year. There were no October tornadoes reported during 23 of those years. However, 25 tornadoes were reported in the state on October 4, 1998 and 19 more were reported on October 9, 2001. Those two days account for over one-third of the tornadoes reported (and confirmed) within the state in October during that 54-year period. The state's monthly total of 27 tornadoes during October 1998 represents the most tornadoes ever reported within any state during an October.

Tornadoes
Average October Tornadoes: 2
Most: 27 (1998)

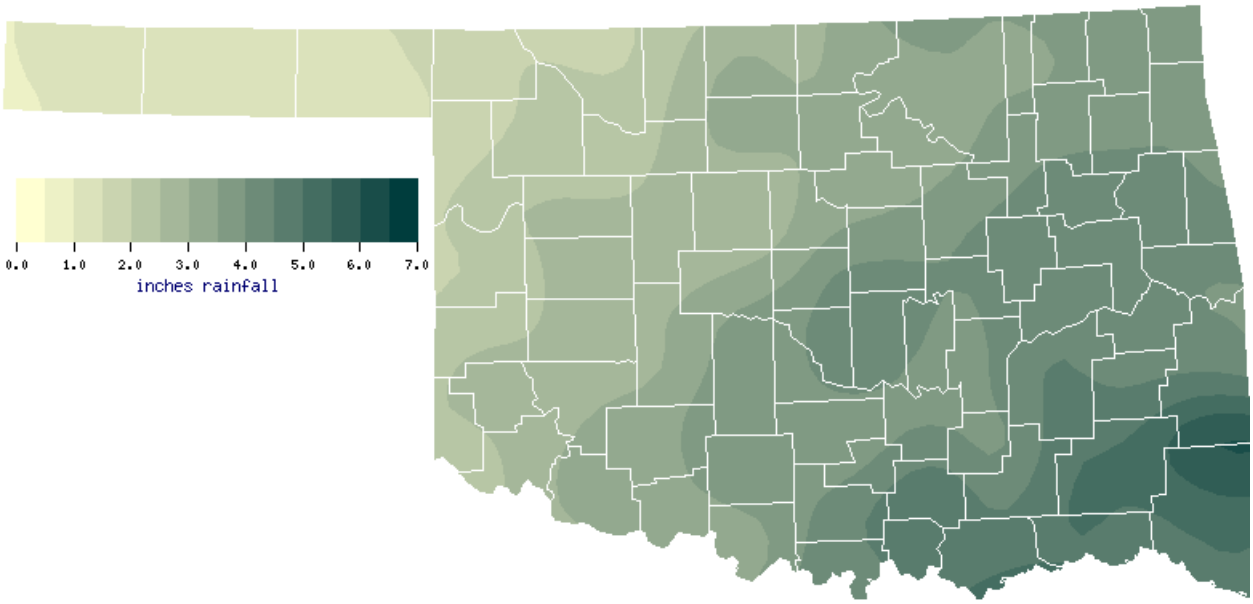
October Normal Daily Maximum Temperature (1971-2000)



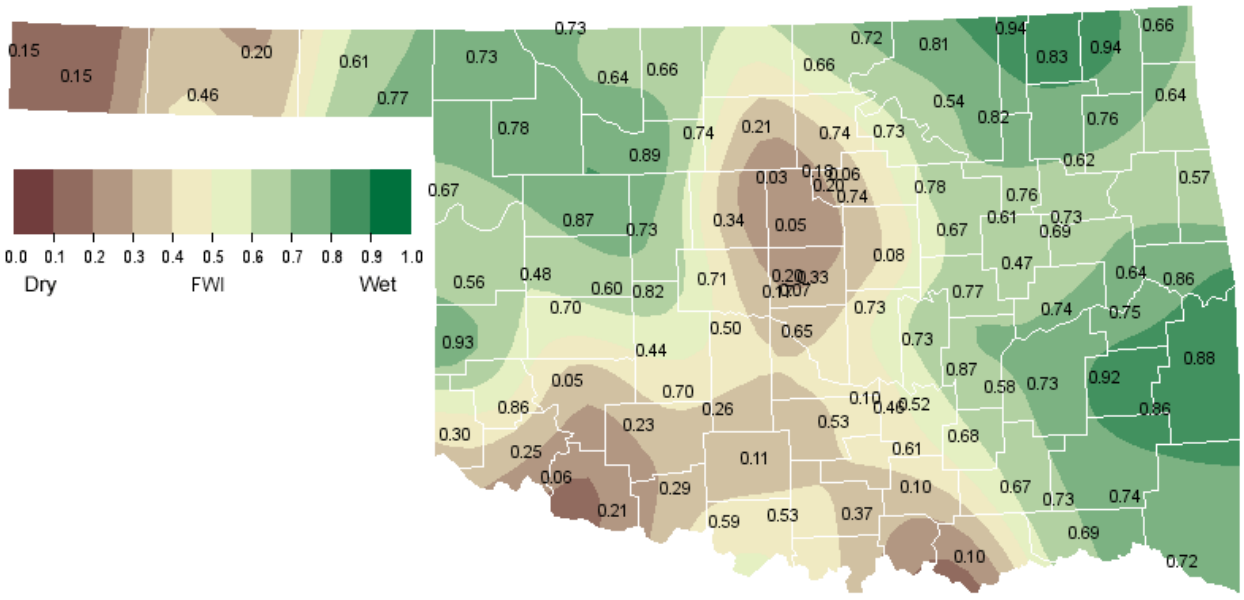
October Normal Daily Minimum Temperature (1971-2000)



October Normal Precipitation (1971-2000)



October 1, 2008 Soil Moisture Conditions at 25cm



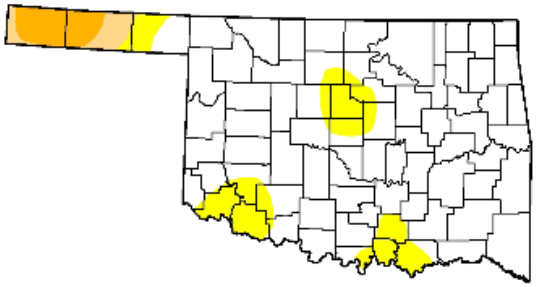
October 2008 Drought Indices

U.S. Drought Monitor
Oklahoma

September 30, 2008
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	83.3	16.7	5.4	3.5	0.0	0.0
Last Week (09/23/2008 map)	93.3	6.7	5.4	3.5	0.0	0.0
3 Months Ago (07/08/2008 map)	75.5	24.5	18.0	8.6	6.8	5.4
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 (10/02/2007 map)	95.6	4.4	0.0	0.0	0.0	0.0



Intensity:

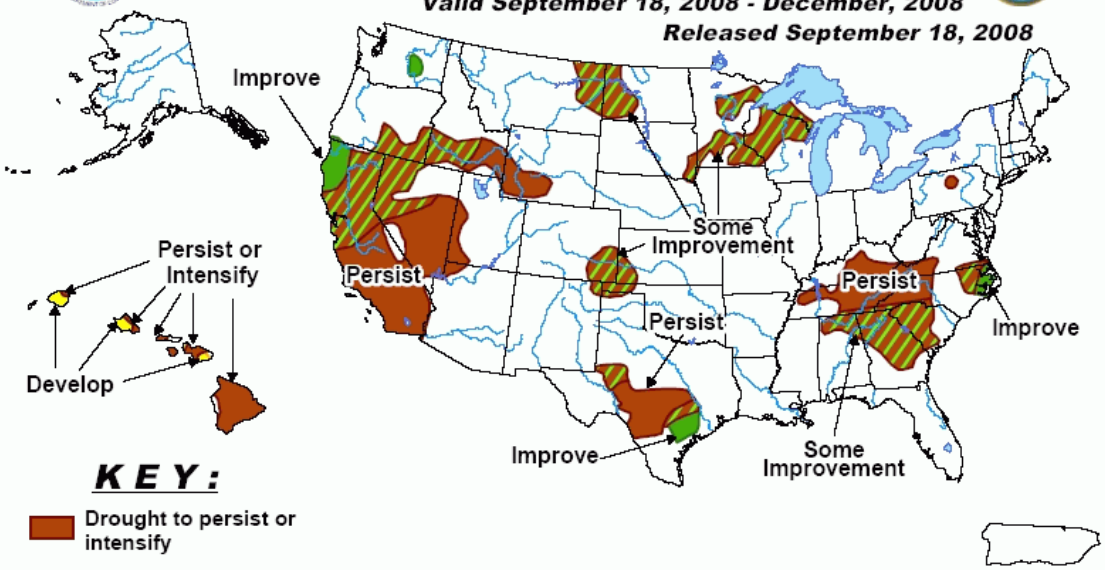
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

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, October 2, 2008
Author: R. Heim/L. Love-Brotak, NOAA/NESDIS/NCDC

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid September 18, 2008 - December, 2008
Released September 18, 2008

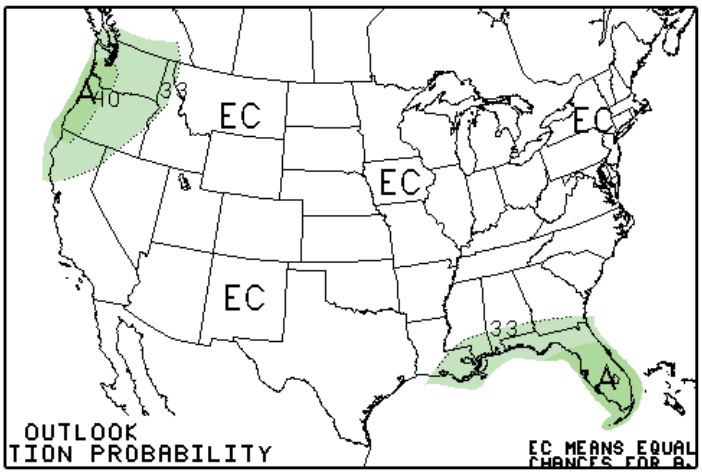


KEY:

- 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.

October 2008 U.S. Precipitation Forecast



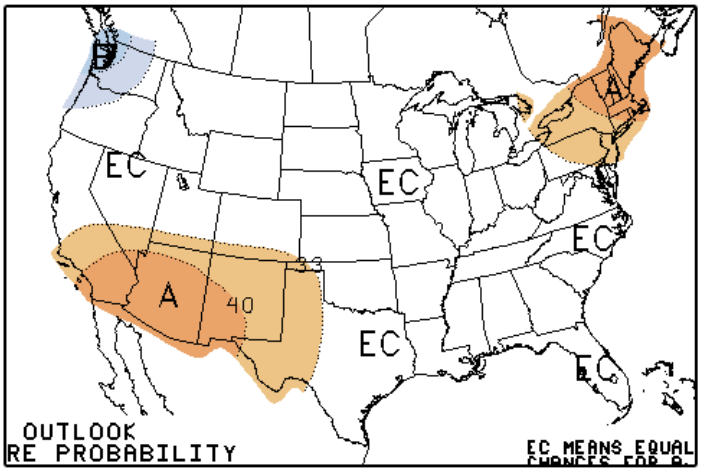
Percent Likelihood
of Above or Below
Average Precipitation*

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

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

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

October 2008 U.S. Temperature Forecast



Percent Likelihood
of Above and Below
Average Temperatures*

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

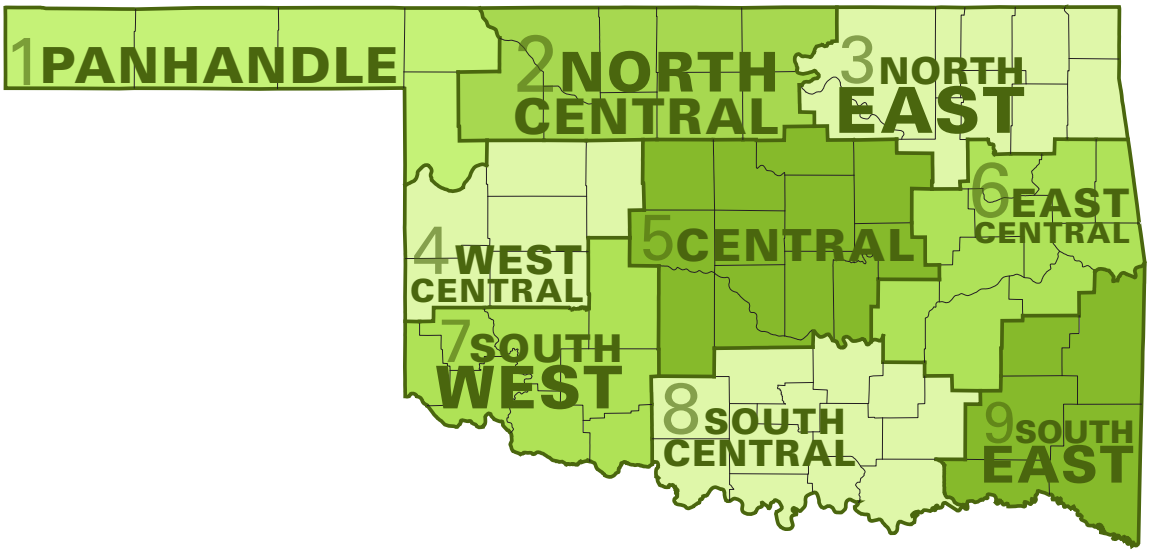
0% - 5%
5% - 10%
B = Below

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

October Climate Normals

Climate Division	Max. Temperature (°F)	Min. Temperature (°F)	Avg. Temperature (°F)	Precipitation (inches)
1	73.70	42.90	58.30	1.49
2	73.50	46.50	60.00	2.66
3	73.80	48.70	61.30	3.62
4	73.70	47.20	60.50	2.47
5	74.40	49.30	61.80	3.64
6	74.50	50.00	62.30	4.19
7	75.80	48.90	62.30	2.99
8	76.10	50.80	63.50	4.17
9	76.10	49.50	62.80	4.98
Statewide	74.60	48.30	61.50	3.48

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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