OKLAHOMA MONTHLY CLIMATE SUMMARY
APRIL 2008

OKLAHOMA CLIMATOLOGICAL SURVEY

April was a turbulent month that saw an abundance of severe weather accompanied by a similar abundance in precipitation. The northeast had a precipitation surplus of three inches to mark their 11th wettest April since 1895, and Tulsa set a record for rainfall with more than nine inches. This is in contrast to the western portions of the state which were largely left high and dry, especially in the Panhandle. That region continues in drought conditions, and April provided no relief with an average of less than an inch of rainfall. The statewide average rainfall ranked as the 32nd wettest on record with a surplus of about three-quarters of an inch. The month was also fairly cool at more than a degree below normal and ranked as the 32nd coolest on record. Several storm systems pounded the state with high winds, large hail and flooding rainfall. The state's first significant (EF-2 or better on the Enhanced Fujita Scale) tornadoes since May 5, 2007, were reported overnight on April 10 in Adair County with two touchdowns. Microburst winds of 100 mph struck Muldrow the evening of the ninth, damaging homes and businesses. Similar winds of 80 mph damaged school buildings in Hanna earlier that evening. Flood reports were common with each round of storms, especially in eastern Oklahoma.

Precipitation

The largest precipitation surpluses occurred in northeastern Oklahoma, but most of the eastern half of the state had a surplus of at least an inch. Boise City had the lowest April rainfall total, barely topping the one-tenth of an inch mark. Vinita had opposite fortunes with more than nine inches. The January-April period was two inches above normal to rank as the 18th wettest such period on record.

Temperature

Oklahoma's cool April was no doubt a result of the abundant cloudiness and precipitation as well as the numerous cold air intrusions. The northeast had the largest cool anomaly at more than two degrees below normal, the 26th coolest April on record. A late freeze helped keep the Panhandle and west central regions of the state below normal as well. The month's highest temperature of 96 degrees was recorded at both the Altus and Buffalo Mesonet sites on the 24th and 30th, respectively. The lowest temperature, 22 degrees, was recorded by the Goodwell Mesonet site on the first. The January-April statewide average temperature sits dead normal at nearly 47 degrees.

April 2008 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	96ºF	Altus, Buffalo	24, 30
Low Temperature	17ºF	Jay	8
High Precipitation	9.47 in.	Vinita	
Low Precipitation	0.11 in.	Kenton	

April Daily Highlights

April 1-4: The month began with strong northerly winds gusting to near 40 mph behind a cold front. Temperatures fell below freezing behind that front on the first, and then rose into the 50s and 60s that afternoon. An approaching storm system brought rain for the next three days beginning on the second. Storms formed along a dryline on the third. Some of the storms exceeded severe limits with large hail and strong winds. The rain fell mainly on the southeastern half of the state with the extreme southeastern corner recording between 2-4 inches. Temperatures were mainly in the 50s and 60s on the fourth behind a cold front that ushered in cool air.

April 5-6: The fifth and sixth were sunny with temperatures warming into the 60s and 70s after lows in the 40s and 50s. A weak cold front entered northwestern Oklahoma early on the sixth and passed through the remainder of the state later in the day. Winds kicked up late on the sixth due to an approaching upper-level storm system.

April 7-10: This four-day period saw the return of significant tornadoes to the state as strong storms struck each day. A cold front and abundant Gulf moisture started the fireworks off with a bang on the seventh. Storms fired along a dryline late in the day and continued through to early morning on the eighth. Large hail was the main severe threat with these storms to go along with flooding rainfall. More than three inches of rain fell at the Bixby Mesonet site between 3 a.m. and 7 a.m. A more stable air mass followed the frontal passage on the eighth. More storms on the ninth and 10th as another surface low and associated dryline entered the state. A microburst generated winds estimated at 100 mph in Muldrow on the

evening of the ninth, damaging 477 homes. Wind gusts of 80 mph were estimated to have hit Hannah, damaging a gym roof and destroying a mobile home that was not tied down. Baseball size hail was reported near Kinta. Two tornadoes rated EF-2 on the Enhanced Fujita Scale struck in the early morning hours in Adair County. Several mobile homes were destroyed along with many outbuildings from the two tornadoes. Another weak tornado touched down in Sequoyah County early on the 10th, producing mostly tree damage. A flood-induced landslide took out the main highway between Owasso and Claremore, shutting a route taken daily by 10,000 drivers. Rainfall totals from the four days exceeded seven inches in the northeast. The storms moved off to the east which allowed for sunny skies on the 10th. Strong winds gusting to 55 mph blew an old fashioned dust storm over the state later that day from the southwest. The cold front moved through the state that night and replaced the southwesterly winds with northerly winds.

April 11-16: This six-day period saw a whole lot of nothing happen – mainly clear skies, cool mornings and warm afternoons. Strong winds arrived on the 15th and 16th to help increase the fire danger. Lows on the 16th were in the 50s with highs in the 70s and 80s.

April 17-18: A slow moving cold front entered the state from the northwest on the 17th which kicked off a round of thunderstorms later that day in the south and east. A few storms were severe with large hail and heavy rain. The rain continued into the early morning hours of the 18th before moving out of the state. One-to-two inches fell in eastern Oklahoma with no rain being reported in about the western half of the state. Lots of sunshine later that day helped temperatures rise into the 60s and 70s.

April 19-21: An unseasonably warm few days, high temperatures rose into the 90s in some areas of the state each day. A cold front entered the northwest late on the 21st to signal a return to stormy weather.

April 22-24: More rain fell on the state as another cold front moved into the state and stalled. The rains fell from the 22nd through the early morning hours of the 24th. Lots of flooding occurred in the east where already-saturated soils had to absorb another 2-4 inches of precipitation. The storms cleared the state on the 24th and were replaced by a hot and humid afternoon. Highs rose into the 90s and the month's high temperature of 96 degrees was set – and later tied – at Altus.

April 25-27: This three-day period was marked by strong winds which followed a cold front on the 25th. Winds gusted to 40 mph on both the 25th and 27th. Temperatures were seasonable the first two days but dropped to about 10 degrees below normal on the 27th with 50s and 60s for highs.

April 28-30: The month finished with a roller coaster temperature pattern. Temperatures dropped to 27 at Boise City on the 28th and 32 at Goodwell on the 29th. Temperatures rebounded to late-April territory on the month's last day with lows in the 50s and highs in the 80s.

April 2008 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2008)
Month (April)	57.6ºF	-1.5ºF	32nd Coolest
Season-to-Date (Mar-Apr)	53.9ºF	-0.6ºF	54th Coolest
Year-to-Date (Jan-Apr)	46.8ºF	0.0ºF	47th Warmest

Precipitation

	Total	Depart.	Rank (1895-2008)
Month (April)	4.10 in.	0.74 in.	32nd Wettest
Season-to-Date (Mar-Apr)	8.91 in.	2.44 in.	11th Wettest
Year-to-Date (Jan-Apr)	11.68 in.	2.00 in.	18 th Wettest

Depart. = Departure from 30-year normal

Record Event Reports

Description	Day	Location	Record	Previous Record	Year
Coolest Low Temperature (tied)	14	Tulsa	31	31	1957
Coolest Low Temperature	14	McAlester	30	32	1957
Coolest Low Temperature	28	Oklahoma City	35	37	1979
Monthly Precipitation	–	Tulsa	9.33	9.23	1947

April 2008 Severe Weather

Significant Tornadoes (EF2 or greater)

EF-rating	Location	County	Date
2	5.5 NNW - 7 N Bunch	Adair	10
2	5.5 ESE Stillwell - 4 SW Lincoln, AR	Adair	10

Hail (2 inches in diameter or greater)

Size (in.)	Location	County	Day
2.00	Chouteau	Mayes	8
2.00	Moffett	Sequoyah	9
2.75	Kinta	Haskell	9
2.50	Arkoma	LeFlore	9
2.25	3 W Paoli	Garvin	21

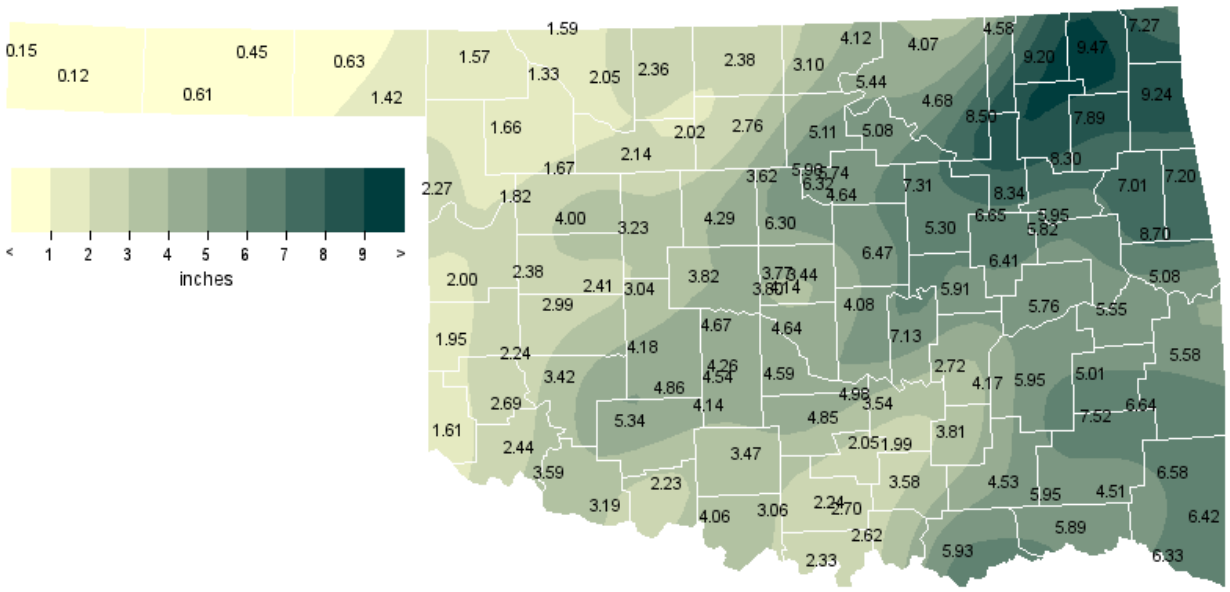
Wind Gusts (70 mph or greater)

Speed (m.p.h)	Location	County	Day
100	Muldrow	Sequoyah	9
80	Hanna	McIntosh	9
71	McAlester	Pittsburg	10
70	5 S Corinne	Choctaw	10

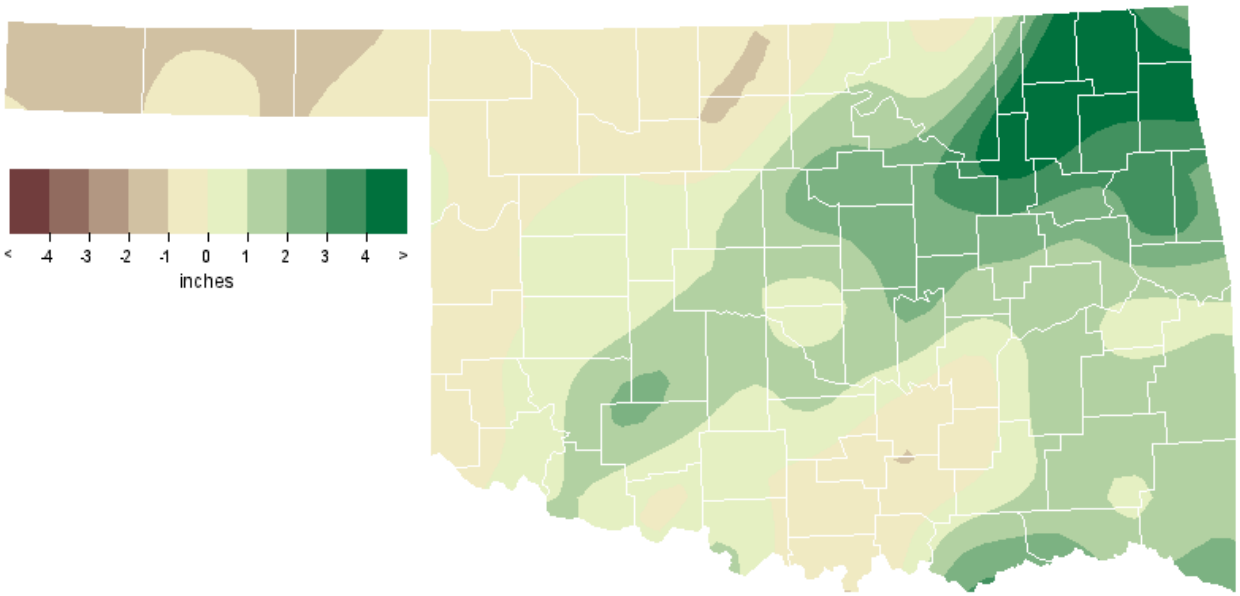
Flooding

Location	County	Day
2 E Skiatook	Tulsa	1
2 W Sperry	Osage	8
Skiatook	Tulsa	8
Tulsa	Tulsa	8
Oneta	Wagoner	8
10 S Bristow	Creek	9
Bixby	Tulsa	9
Porum	Muskogee	9
Stigler	Haskell	10
Red Oak	Latimer	10
Wister	LeFlore	10
Haileyville	Pittsburg	10
Baron	Adair	22
2 E Ketchum	Delaware	23
3 E Stilwell	Adair	23
Stilwell	Adair	23
Talala	Rogers	24
Tulsa	Tulsa	24
Nowata	Nowata	24
Vinita	Craig	24
5 N Idabel	McCurtain	24

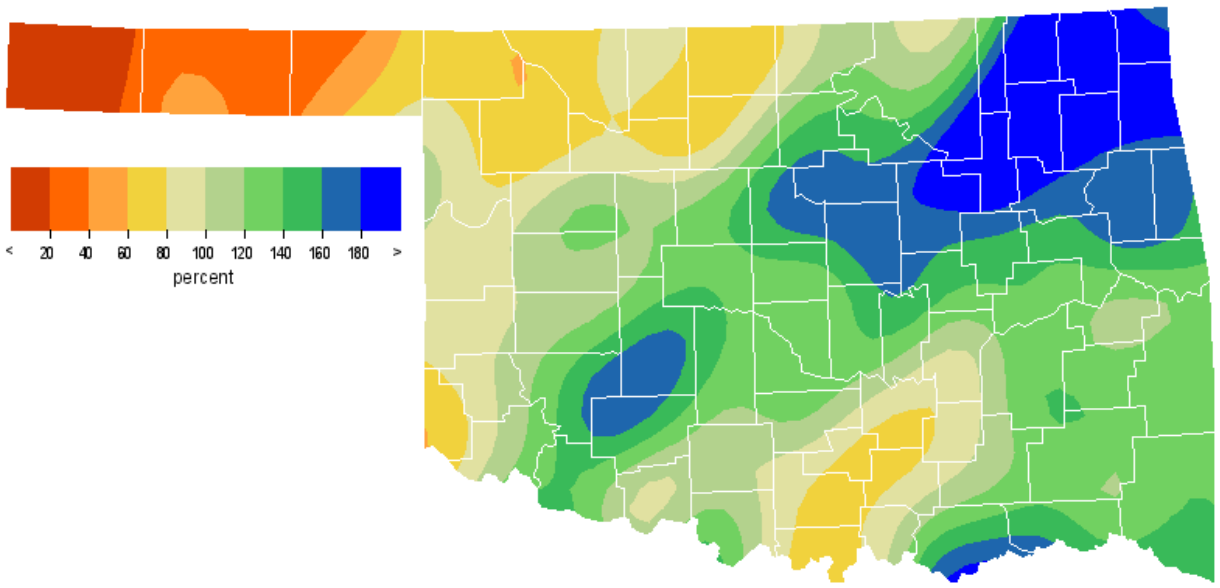
April 2008 Observed Precipitation



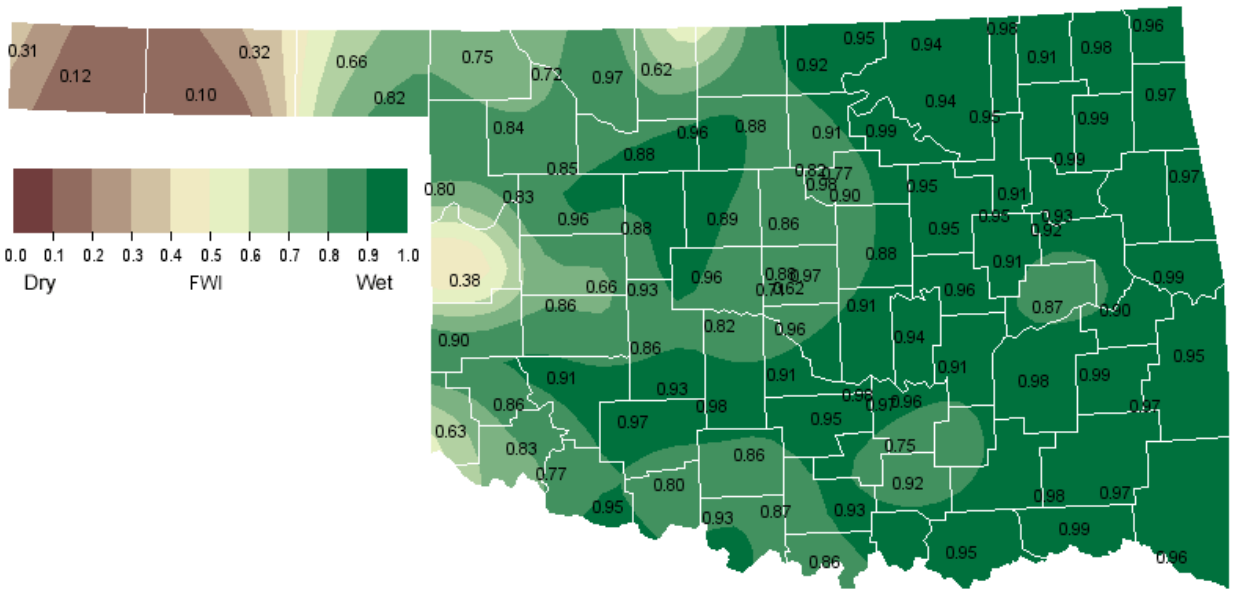
April 2008 Departure from Normal Precipitation



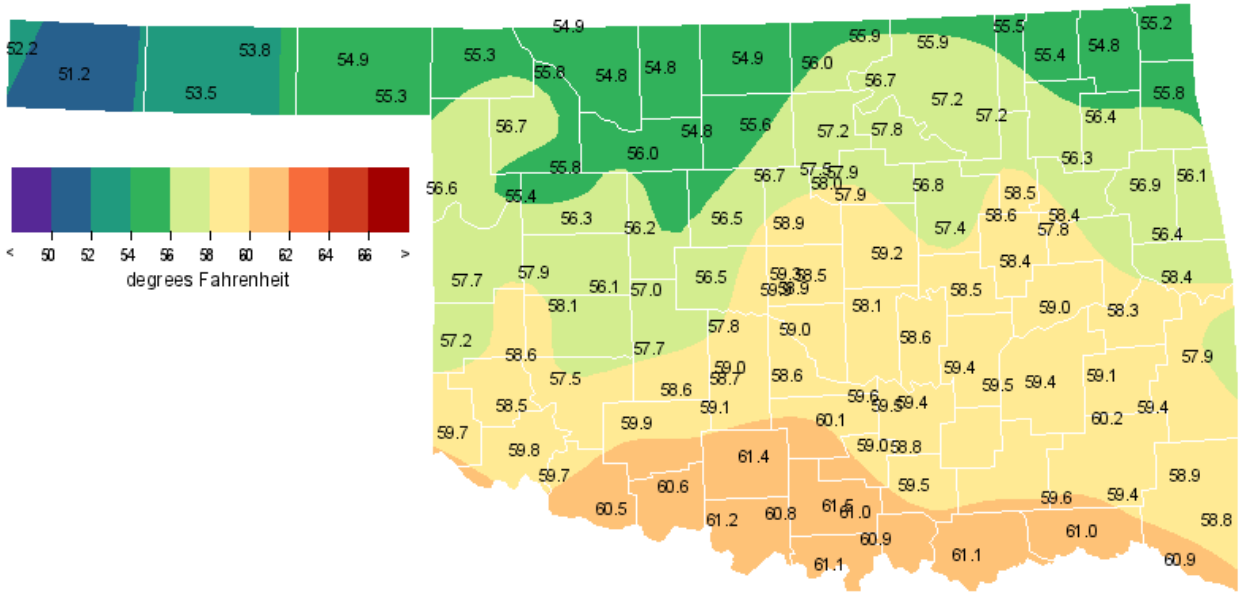
April 2008 Percent of Normal Precipitation



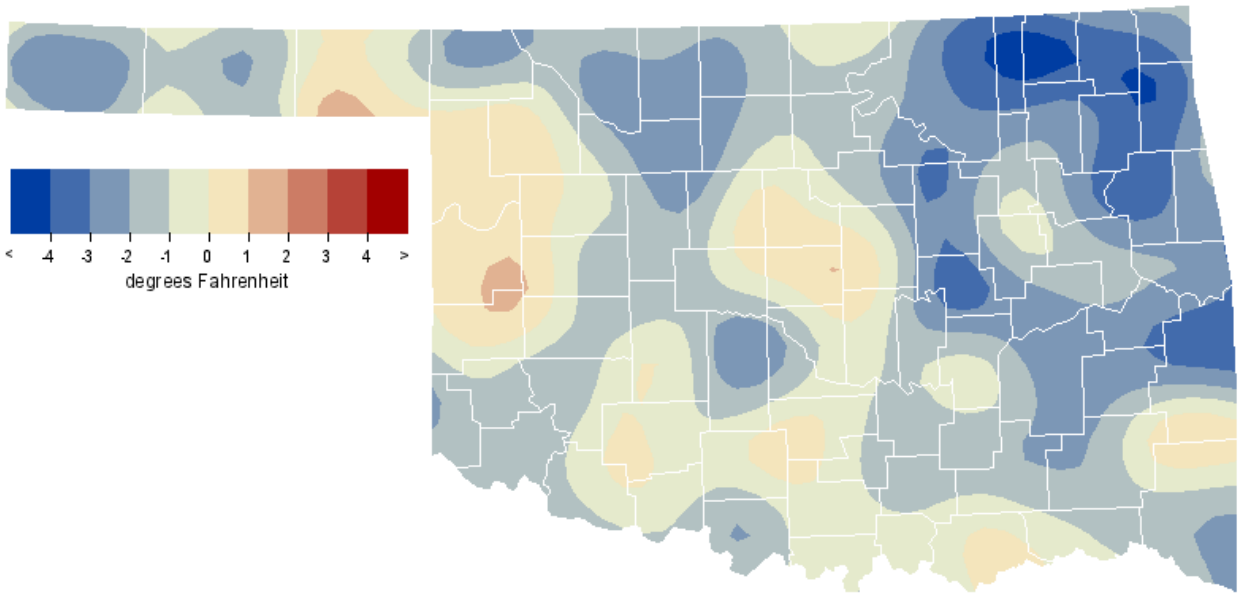
April 2008 Average Soil Moisture at 25cm



April 2008 Average Temperature



April 2008 Departure from Normal Temperature



Mesonet Monthly Summary for April 2008

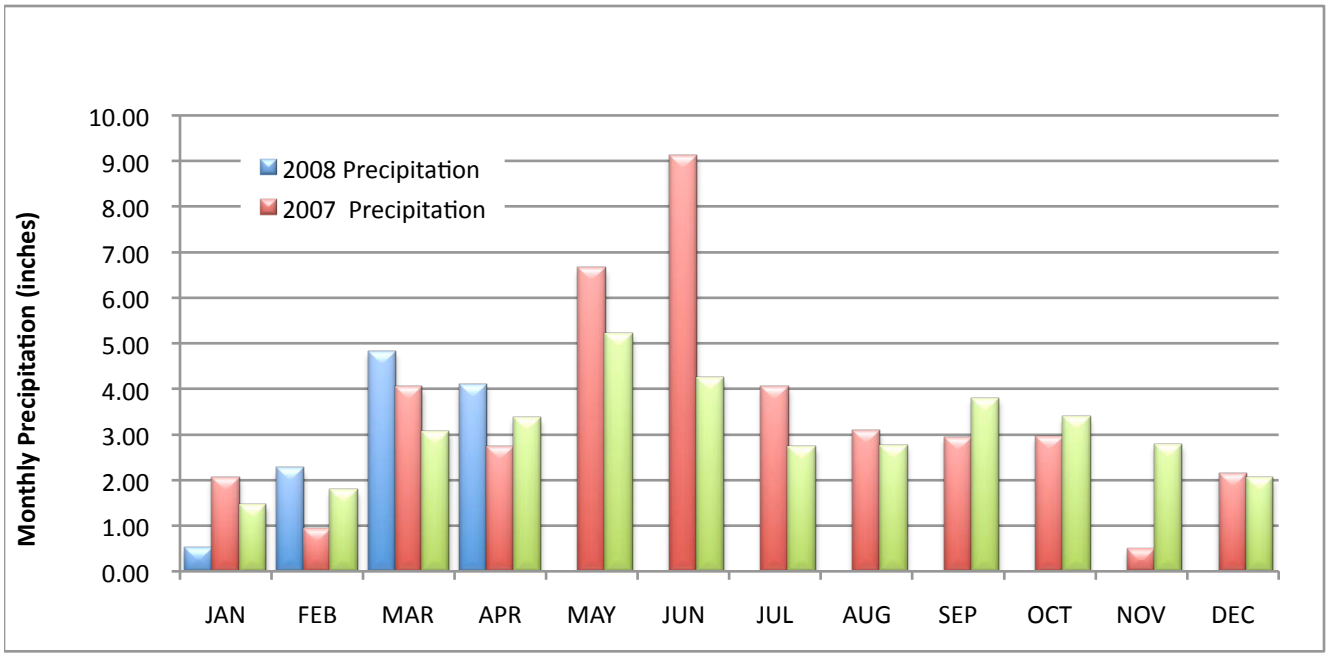
NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	56.6	92	30	29	1	280	29	2.27	1.14	23
Beaver	54.8	96	30	23	1	332	27	.63	.26	9
Boise City	51.2	90	30	24	27	417	4	.12	.10	10
Buffalo	55.3	96	30	26	14	322	32	1.57	.75	9
NORTH CENTRAL										
Alva	54.8	88	24	27	14	325	20	2.05	.68	10
Blackwell	56.1	84	21	27	14	295	26	3.10	1.37	9
Breckinridge	55.5	84	21	27	14	302	19	2.76	1.37	9
Cherokee	54.8	84	24	27	14	323	16	2.36	.68	10
Fairview	56.1	86	24	29	14	285	17	2.14	1.08	9
Freedom	55.8	88	24	28	14	300	23	1.33	.52	9
Lahoma	54.8	84	24	30	14	317	9	2.02	1.25	9
NORTHEAST										
Bixby	58.5	82	23	30	14	228	32	8.34	3.22	8
Burbank	56.7	85	21	27	14	278	29	5.44	2.24	9
Claremore	58.4	83	23	30	14	****	****	2.04	.79	24
Copan	55.5	80	21	28	14	303	19	4.58	1.65	9
Foraker	55.9	83	21	32	13	297	24	4.07	1.94	9
Inola	56.3	82	23	27	14	281	20	8.30	3.01	10
Jay	55.8	84	23	25	14	301	25	9.24	3.01	10
Miami	55.1	83	23	26	14	314	18	7.27	1.71	9
WEST CENTRAL										
Bessie	58.1	92	24	34	18	236	30	2.99	1.69	9
Butler	57.9	93	24	27	14	249	37	2.38	1.45	9
Camargo	55.4	90	24	27	14	304	17	1.82	1.50	9
Cheyenne	57.7	89	24	32	1	250	30	2.00	1.60	9
Erick	57.2	91	24	28	14	261	27	1.95	1.46	9
CENTRAL										
Acme	59.0	89	21	28	14	217	38	4.14	2.21	9
Bowlegs	58.6	84	19	30	14	223	31	7.13	3.19	9
Bristow	57.4	81	21	28	14	252	24	5.30	1.63	9
Chandler	59.2	86	21	31	14	211	36	6.47	1.86	9
Chickasha	59.0	91	21	30	14	218	37	4.26	2.18	9
El Reno	56.5	87	21	26	14	273	17	3.82	2.60	9
Guthrie	58.9	87	21	30	14	221	39	6.30	4.69	9
Kingfisher	56.5	87	21	27	14	279	25	4.29	2.59	9
Marena	58.0	87	21	30	14	243	33	6.32	3.64	9
Minco	57.8	87	21	31	14	240	23	4.67	2.55	9
Marshall	56.7	85	21	28	14	280	31	3.62	1.91	9
Ninnekah	58.7	89	21	29	14	224	34	4.54	2.29	9
EAST CENTRAL										
Calvin	59.3	85	19	31	14	206	34	2.72	.90	9
Cookson	56.4	84	22	25	14	277	20	8.70	2.40	10
Eufaula	59.0	86	22	33	14	211	31	5.76	2.44	9
Haskell	57.8	85	22	31	14	239	24	5.82	1.65	10
Hectorville	58.5	81	23	34	14	226	31	6.65	2.45	10
McAlester	59.4	85	22	29	14	204	36	5.95	2.86	9
Okmulgee	58.5	83	22	29	14	224	29	6.41	2.11	10
SOUTHWEST										
Altus	59.9	96	24	34	14	197	43	2.44	1.73	9
Apache	58.6	87	21	34	5	222	30	4.86	3.83	9
Fort Cobb	57.7	87	21	31	14	243	24	4.18	2.95	9
Grandfield	60.6	93	21	32	14	185	52	3.19	2.42	9
Hinton	56.9	86	24	31	14	263	21	3.04	1.96	9
Hobart	57.5	92	24	30	14	253	27	3.42	2.53	9
SOUTH CENTRAL										
Ada	59.4	85	19	29	14	205	36	*****	*****	***
Ardmore	61.0	85	22	35	14	164	45	2.70	1.51	10
Burneyville	61.2	86	19	29	14	****	****	2.33	.94	10
Byars	59.6	85	19	31	14	200	38	4.98	2.34	9
Centrahoma	59.7	86	19	28	14	****	****	*****	1.47	9
Durant	61.1	85	22	32	14	159	42	5.93	2.18	3
Fittstown	58.8	84	22	31	14	216	30	1.99	1.10	10
Ketchum Ranch	61.3	92	21	32	14	166	55	3.47	1.89	9
Lane	59.6	84	22	31	14	****	****	4.53	1.59	10
SOUTHEAST										
Antlers	59.6	87	22	28	14	200	37	5.95	1.63	17
Broken Bow	58.8	84	22	28	14	211	25	6.42	2.30	3
Clayton	60.2	86	22	28	14	188	44	7.52	2.31	10
Cloudy	59.4	83	22	31	14	197	30	4.51	1.54	3
Hugo	61.0	83	22	33	14	161	42	5.89	1.55	3

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	53.5	92	30	22	1	360	14	.61	.38	23
Hooker	53.8	93	30	22	1	360	22	.45	.26	9
Kenton	52.1	89	30	26	19	390	4	.15	.11	10
Slapout	55.3	94	30	27	1	316	25	1.42	.65	9
May Ranch	54.9	89	24	27	1	324	21	1.59	.64	10
Medford	54.9	83	24	27	14	319	16	2.38	.92	9
Newkirk	56.0	84	21	31	14	295	25	4.12	1.74	23
Red Rock	57.2	87	21	28	14	264	29	5.11	2.78	9
Seiling	55.8	90	24	26	14	302	26	1.67	1.08	9
Woodward	56.7	90	24	29	1	281	33	1.66	.97	9
Nowata	55.4	79	23	25	14	306	19	9.20	3.52	23
Pawnee	57.9	87	21	29	14	249	35	5.08	2.69	9
Porter	58.4	83	22	31	14	230	32	5.95	1.70	10
Pryor	56.3	84	23	26	14	282	22	7.89	2.53	10
Skiatook	57.2	80	21	29	14	259	25	8.50	2.26	9
Vinita	54.7	81	23	26	14	322	14	9.47	2.46	9
Wynona	57.2	84	21	29	14	266	32	4.68	2.29	9
Putnam	56.3	91	24	31	14	283	23	4.00	1.82	9
Retrop	58.6	93	24	31	14	226	34	2.24	1.47	9
Watonga	56.2	86	24	31	14	282	17	3.23	1.97	9
Weatherford	56.1	86	24	32	14	284	18	2.41	1.64	9
Norman	59.0	87	21	32	14	214	35	4.64	2.15	9
Oilton	56.8	83	21	24	14	271	24	7.31	2.19	8
OKC East	58.9	87	21	31	14	220	35	4.14	1.86	9
OKC North	59.2	87	21	36	14	208	35	3.77	2.25	9
OKC West	59.9	89	21	35	14	195	41	3.80	1.98	9
Okemah	58.4	82	22	31	14	230	33	5.91	1.78	10
Perkins	57.9	85	21	29	14	243	32	4.64	2.44	9
Shawnee	58.1	83	21	31	14	233	27	4.08	1.41	9
Spencer	58.6	86	21	30	14	226	35	3.44	1.46	9
Stillwater	57.8	87	21	29	14	249	34	5.74	3.04	9
Washington	58.6	87	21	32	14	219	28	4.59	1.96	9
Sallisaw	58.4	88	22	27	14	229	30	5.08	1.52	10
Stigler	58.3	87	22	28	14	229	28	5.55	2.29	10
Stuart	59.4	85	22	32	14	****	****	4.17	1.59	9
Tahlequah	56.9	83	22	25	14	267	24	7.01	1.71	17
Webbers Falls	*****	***	***	***	***	****	****	*****	*****	***
Westville	56.1	82	23	26	14	285	19	7.20	1.75	10
Hollis	59.7	93	24	34	14	198	38	1.61	1.35	9
Mangum	58.5	94	24	26	14	229	35	2.69	1.72	9
Medicine Park	59.9	89	24	35	14	189	36	5.34	4.08	9
Tipton	59.9	90	21	31	14	****	****	3.59	2.78	9
Walters	60.6	93	21	32	14	182	49	2.23	1.32	9
Madill	60.8	85	22	30	14	169	45	2.62	1.06	10
Newport	61.5	87	21	33	14	158	54	2.24	1.15	10
Pauls Valley	60.1	85	21	32	14	187	41	4.85	2.24	9
Ringling	60.7	89	21	31	14	173	44	3.06	1.20	17
Sulphur	59.0	84	19	27	14	214	35	2.05	1.02	10
Tishomingo	59.6	84	22	31	14	198	35	3.58	1.23	9
Vanoss	59.4	86	19	28	14	207	40	3.54	1.65	9
Waurika	61.2	92	21	32	14	167	53	4.06	1.98	9
Idabel	60.9	83	22	32	14	164	40	6.33	1.44	3
Mt Herman	58.9	83	22	28	14	209	26	6.58	1.97	3
Talihina	59.3	85	22	28	14	****	****	5.77	1.98	9
Wilburton	59.1	86	22	29	14	214	37	5.01	1.61	9
Wister	57.8	88	22	27	14	235	21	5.58	2.55	9

April 2008 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Apr-07
Panhandle	0.90	-0.95	33rd Driest	5.28 (1942)	0.00 (1909)	1.68
North Central	2.48	-0.48	55th Driest	7.43 (1999)	0.55 (1989)	2.86
Northeast	7.00	3.00	11th Wettest	9.67 (1942)	0.17 (1989)	3.12
West Central	2.56	-0.04	50th Wettest	8.73 (1997)	0.15 (1996)	2.76
Central	4.95	1.42	20th Wettest	9.49 (1942)	0.24 (1989)	2.62
East Central	5.92	1.59	28th Wettest	11.82 (1957)	0.75 (1989)	2.95
Southwest	3.33	0.66	27th Wettest	7.30 (1997)	0.14 (1989)	2.00
South Central	3.48	-0.28	53rd Wettest	11.43 (1942)	0.53 (1989)	2.34
Southeast	6.04	1.55	30th Wettest	12.79 (1957)	0.53 (1987)	4.47
Statewide	4.10	0.74	32nd Wettest	8.50 (1942)	0.58 (1989)	2.72

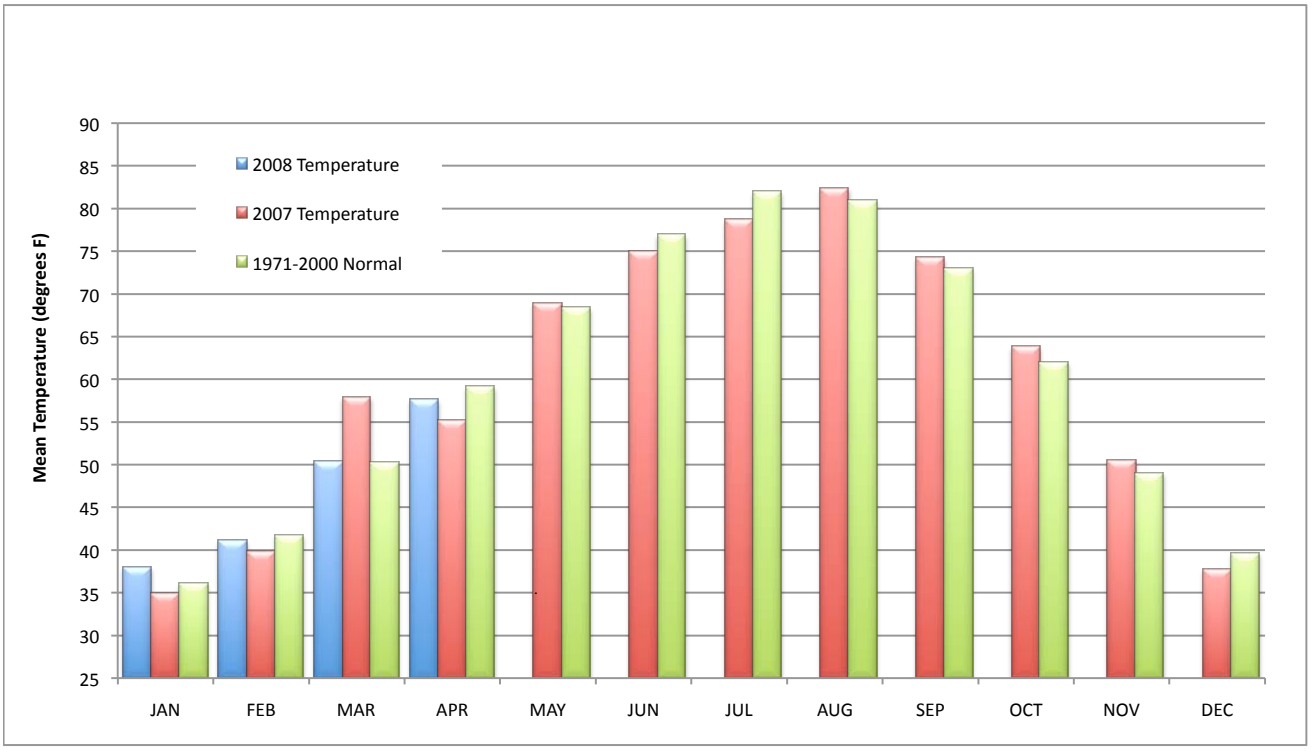
2007 and 2008 Statewide Precipitation Monthly Totals vs. Normal



April 2008 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Apr-07 (F)
Panhandle	54.1	-1.1	49th Coolest	62.2 (1981)	48.2 (1926)	51.3
North Central	55.6	-2.0	34th Coolest	65.0 (1981)	50.8 (1983)	53.8
Northeast	56.5	-2.4	26th Coolest	66.1 (1981)	52.5 (1907)	55.5
West Central	57.1	-0.8	45th Coolest	65.1 (2006)	52.1 (1926)	54.1
Central	58.2	-1.4	39th Coolest	66.5 (2006)	53.6 (1983)	55.7
East Central	58.2	-2.0	25th Coolest	66.7 (1896)	53.9 (1907)	56.0
Southwest	59.0	-1.4	39th Coolest	67.2 (2006)	54.2 (1926)	56.4
South Central	60.3	-1.0	33rd Coolest	68.1 (2006)	55.9 (1983)	57.5
Southeast	59.5	-1.1	29th Coolest	68.1 (2006)	55.4 (1983)	56.9
Statewide	57.6	-1.5	32nd Coolest	65.8 (2006)	53.2 (1983)	55.2

2007 and 2008 Statewide Temperature Monthly Averages vs. Normal



Mesonet Extremes for April 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	96	30th	Buffalo	22	1st	Goodwell	2.27	Arnett	1.14	23rd	Arnett
North Central	90	24th	Woodward	26	14th	Seiling	5.11	Red Rock	2.78	9th	Red Rock
Northeast	87	21st	Pawnee	25	14th	Jay	9.47	Vinita	3.52	23rd	Nowata
West Central	93	24th	Butler	27	14th	Camargo	4.00	Putnam	1.97	9th	Watonga
Central	91	21st	Chickasha	24	14th	Oilton	7.31	Oilton	4.69	9th	Guthrie
East Central	88	22nd	Sallisaw	25	14th	Cookson	8.70	Cookson	2.86	9th	McAlester
Southwest	96	24th	Altus	26	14th	Mangum	5.34	Medicine Park	4.08	9th	Medicine Park
South Central	92	21st	Ketchum Ranch	27	14th	Sulphur	5.93	Durant	2.34	9th	Byars
Southeast	88	22nd	Wister	27	14th	Wister	7.52	Clayton	2.55	9th	Wister
Statewide	96	24th	Altus	22	1st	Goodwell	9.47	Vinita	4.69	9th	Guthrie

May Climatological Outlook

Oklahoma's weather reaches something of a crescendo in May as springtime comes to full flower. May is Oklahoma's wettest (statewide-averaged precipitation of 5.13 inches) and certainly its stormiest month (an average of 19.9 tornadoes, more than one-third of the annual average, occurring on 5.5 days, statewide). Its position in the spring transition season is confirmed by a monthly mean temperature, averaged statewide, of 68.4 degrees that ranks fifth highest among the months. Vestiges of winter are occasionally seen in the far northwestern portions of the state, but mostly May is a time for flowering of most plants, full leafing of deciduous trees, planting of row crops, and the maturing and ripening of the winter wheat that was sowed the previous fall.

Precipitation
Mean: 5.13 inches
Wettest May: 1957, 10.68 inches
Driest May: 1988, 1.30 inches
Wettest location: Smithville, 7.06 inches
Driest location: Regnier, 2.02 inches
Most recorded: 22.38 inches, Hennessey, 1957

May usually is characterized by a pleasant range of temperatures across the state, although there are times most years when it is evident that the hot Oklahoma summer is drawing near. Monthly mean temperatures since 1892 have ranged from 62.3 degrees in 1907 to 75.8 degrees in 1896. Normal daily maximum temperatures across the state vary from 84.6 degrees at Waurika to 76.5 degrees at Arnett. Normal daily minimum temperatures fall between 61.2 degrees at Ardmore and 46.8 degrees at Boise City. Historical extremes of temperature during the month are 114 degrees at Weatherford, reported on May 25, 2000 and 19 degrees at Hooker on May 1, 1909. Temperatures in southwestern Oklahoma, the state's hot spot, reach 100 degrees an average of slightly more than once each May. Freezing temperatures are also rare, occurring less than once per year in the panhandle, rarely elsewhere. Freezes have occurred in the state's most northerly regions as late as the end of the month.

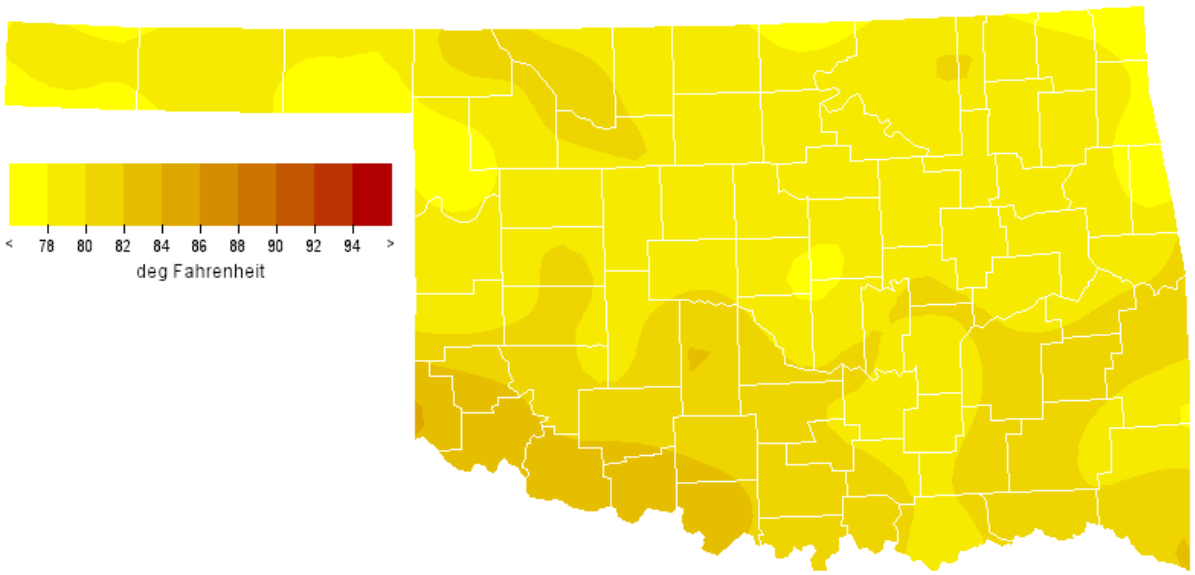
The Oklahoma panhandle's climate differs from the rest of the state in that its primary precipitation season is shifted toward summer, being tied to the patterns of the High Plains, of which it is a part. Elsewhere in the state, May is the month of maximum precipitation and May is, in fact, the panhandle's second wettest month by a small margin. May has produced statewide-averaged monthly precipitation totals ranging from 10.68 inches in 1957 to 1.30 inches in 1988. Extremes of individual station-normal precipitation for the month are 7.06 inches in the southeast at Smithville and 2.29 inches in the western panhandle at Regnier. Miami recorded the greatest May monthly total precipitation, 23.95 inches, in 1943. The record-breaking 1957 statewide-averaged precipitation was amplified by the May total of 22.38 inches of rain recorded at Hennessey, most of which fell during the drought-breaking, flood-producing deluge that hammered much of the state on the 15th and 16th. Purcell apparently holds the single reporting-day precipitation record for May, measuring 13.68 inches of rain on May 11, 1950. Interestingly, the events that produced the Purcell and Hennessey precipitation records (and the widespread flooding that occurred after each) bracket the state's driest ever 7-year period.

Temperature
Mean: 68.4 degrees
Warmest May: 1896, 75.8 degrees
Coolest May: 1907, 62.3 degrees
Hottest recorded: 114 degrees, Weatherford, May 25, 2000
Coldest recorded: 19 degrees, Hooker, May 1, 1909

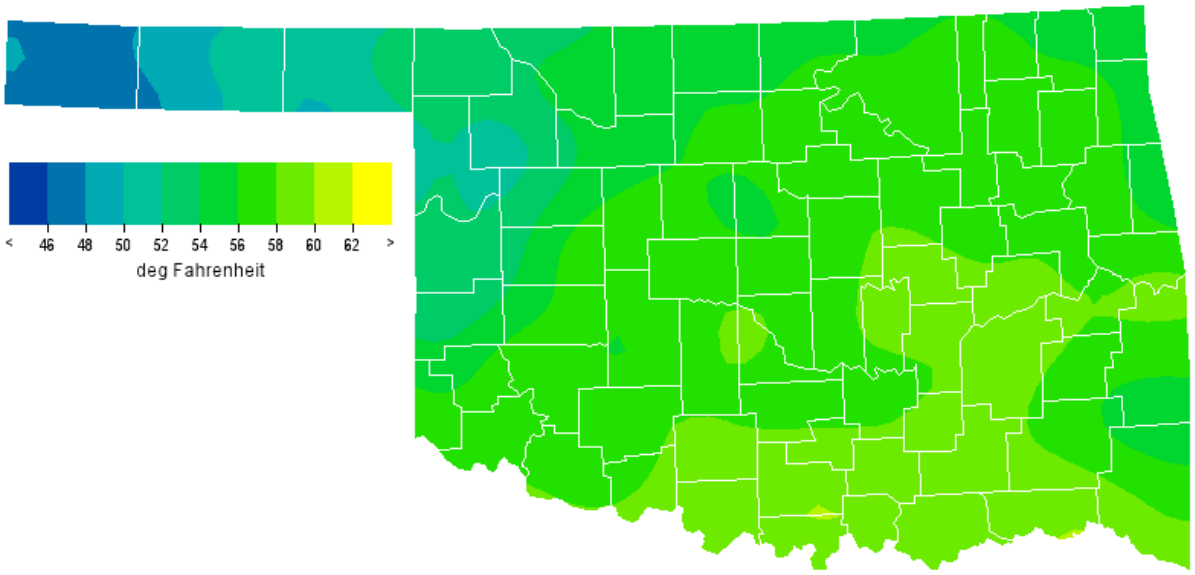
Springtime in Oklahoma is noted for severe thunderstorms and tornadoes. Over the last 52 years (the period of reasonably comprehensive statistics on the subject) Oklahoma has been struck by more tornadoes in May than in any other two months combined (April and June rank second and third, respectively, among the months). May 1999 holds the state record for most tornadoes in a single month with a nearly unbelievable confirmed total of 91. Most of those tornadoes (59) occurred in central and western Oklahoma on the afternoon and evening of May 3. That outbreak caused extensive damage and killed 40 people along a wide path extending generally from Amber to Stroud. Some of the fiercest storms struck in the southern portion of the Oklahoma City metropolitan area. A mobile Doppler radar operated by a University of Oklahoma research team measured winds as great as 318 miles per hour in one of the funnels, the greatest wind speed yet measured on the planet.

Tornadoes
Average May Tornadoes: 19.9
Most: 90 (1999)

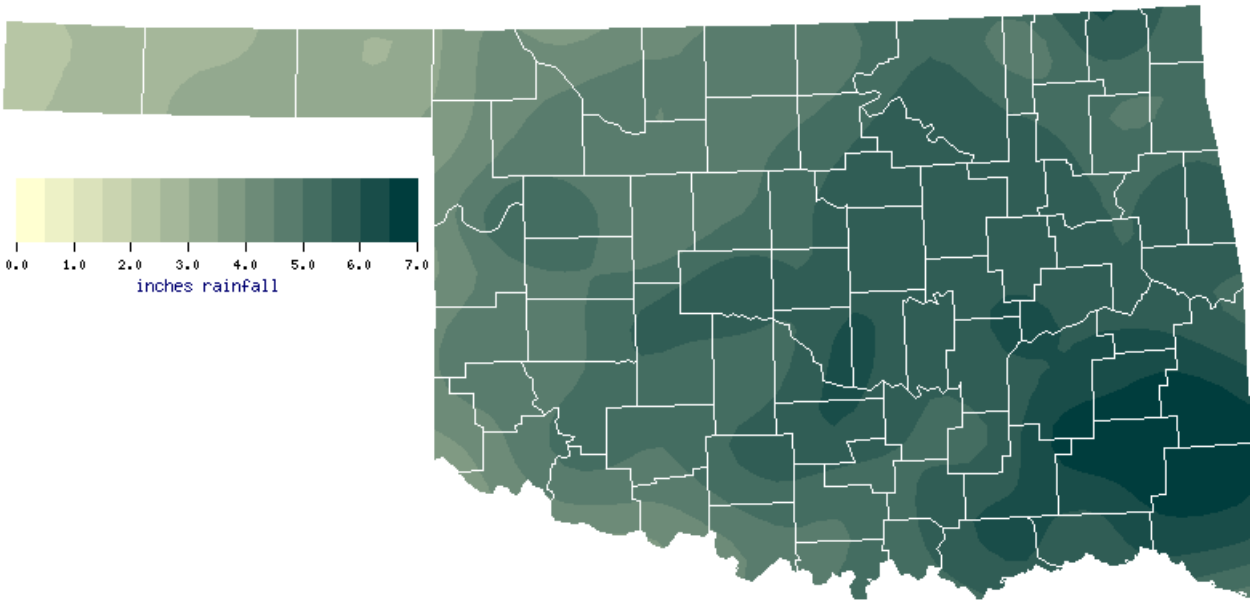
May Normal Daily Maximum Temperature (1971-2000)



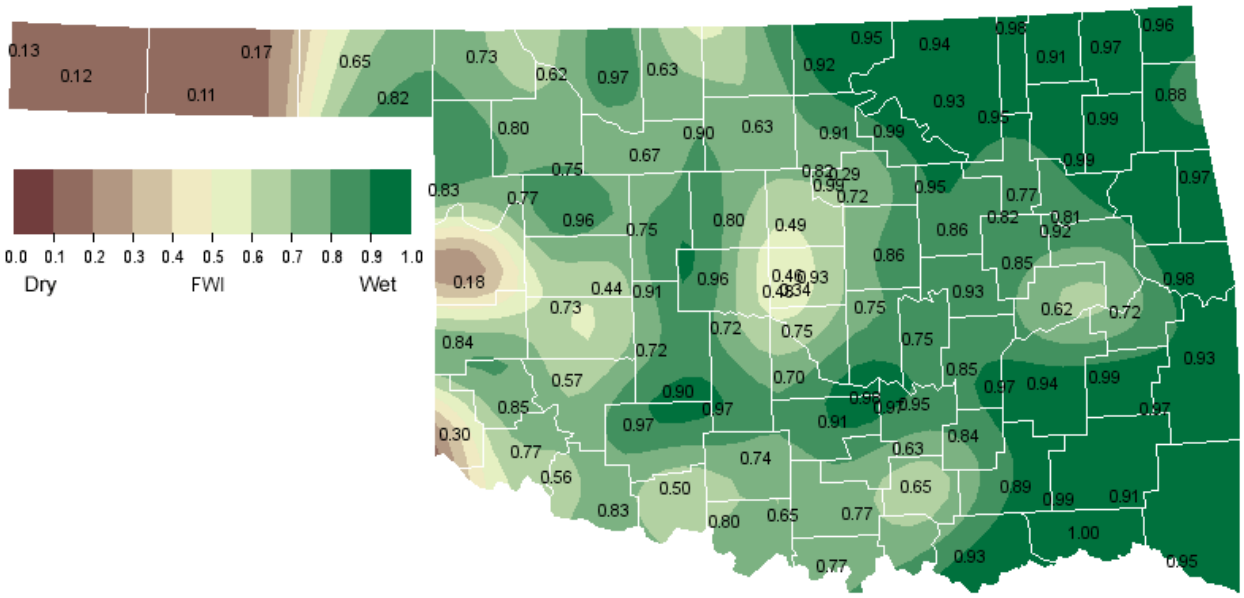
May Normal Daily Minimum Temperature (1971-2000)



May Normal Precipitation (1971-2000)



May 1, 2008 Soil Moisture Conditions at 25cm



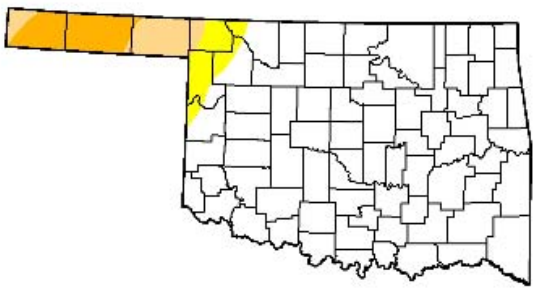
May 2008 Drought Indices

U.S. Drought Monitor
Oklahoma

April 29, 2008
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	87.8	12.2	8.6	4.9	0.0	0.0
Last Week (04/22/2008 map)	87.8	12.2	8.6	0.0	0.0	0.0
3 Months Ago (02/05/2008 map)	48.5	51.5	8.5	0.0	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 (05/01/2007 map)	95.1	4.9	0.0	0.0	0.0	0.0



Intensity:

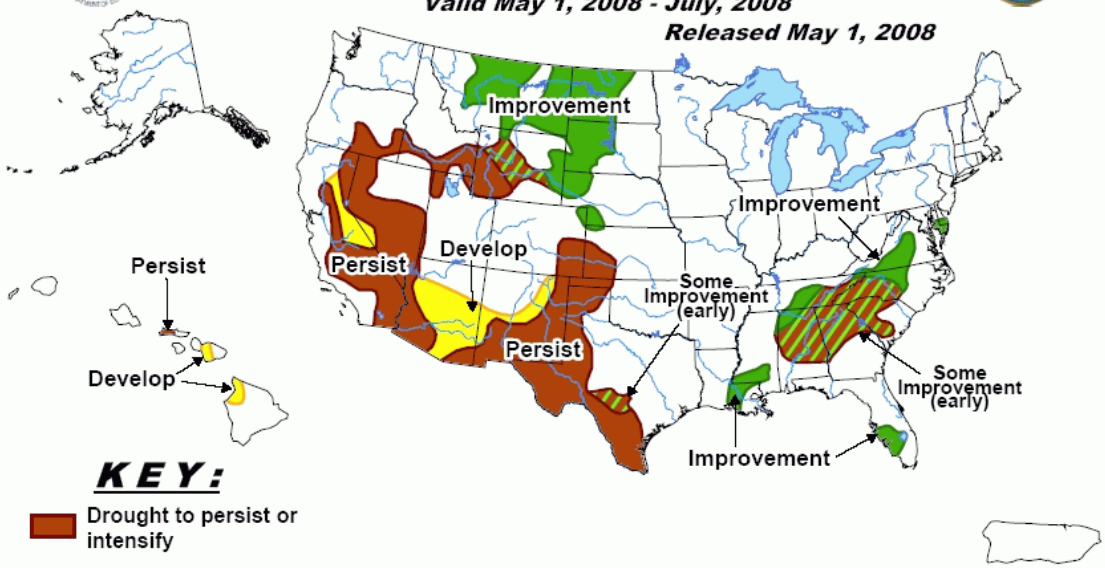
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

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, May 1, 2008
Author: R. Heim/L. Love-Brotak, NOAA/NESDIS/NCDC

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid May 1, 2008 - July, 2008
Released May 1, 2008

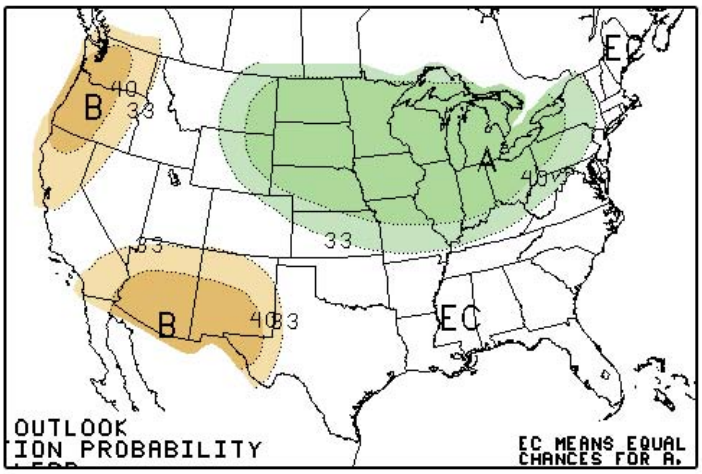


KEY:

- 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.

May 2008 U.S. Precipitation Forecast



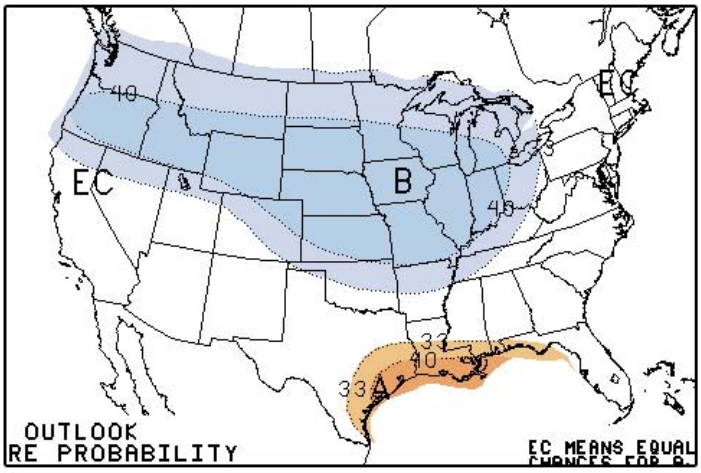
Percent Likelihood of Above or Below Average Precipitation*

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

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

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

May 2008 U.S. Temperature Forecast



Percent Likelihood of Above and Below Average Temperatures*

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

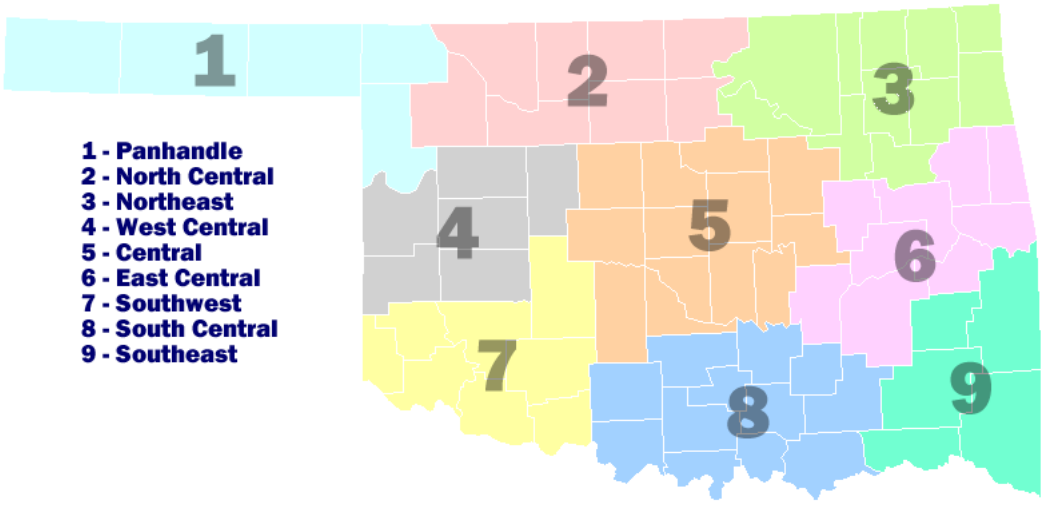
0% - 5%
5% - 10%
B = Below

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

May Climate Normals

Climate Division	Max. Temperature (°F)	Min. Temperature (°F)	Avg. Temperature (°F)	Precipitation (inches)
1	78.8	50.8	64.8	3.30
2	79.1	54.9	67.0	4.68
3	78.9	56.6	67.8	5.40
4	79.5	55.0	67.3	4.64
5	79.6	57.5	68.6	5.45
6	79.2	57.8	68.5	5.77
7	81.8	56.8	69.3	4.80
8	80.8	58.8	69.8	5.52
9	80.5	57.5	69.0	6.31
Statewide	79.8	56.3	68.1	5.21

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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