OKLAHOMA MONTHLY CLIMATE SUMMARY
MARCH 2008

OKLAHOMA CLIMATOLOGICAL SURVEY

Remarkable rainfall totals from the eastern half of the state propelled March to the sixth wettest since 1895. The southeastern corner averaged more than 12 inches of rain for the month to eclipse the established normal by more than eight inches, ranking as the wettest March on record for that part of the state. Rainfall tapered off towards the Panhandle, leaving that region in a cloud of dust where less than a quarter of an inch of rain fell on average. As for temperature, the month ended in the middle of the pack and ranked as the 43rd warmest on record. Three major storm systems provided most of the rain and a fair amount of severe weather as well. Officially, four tornadoes touched down during the month in addition to four others that were not yet confirmed. The worst of the tornadoes was an EF1 that struck Edmond and did significant residential property damage. Buffalo received hail the size of softballs early in the month, and extensive flooding occurred in eastern Oklahoma with each storm system. A significant snowstorm struck southeastern Oklahoma early in the month, dropping more than a foot of snow in LeFlore County. An even earlier snowstorm dropped nearly a half of a foot in the same general area.

Precipitation

The rainfall patterns were fairly simple for March – the farther west you went, the drier you got. There were a few exceptions, of course, depending on whether a wayward thunderstorm popped up in an area. A small portion of west central Oklahoma had more than four inches of precipitation even though that region of a whole averaged around two inches. The Panhandle continued its dry pattern with a deficit of more than an inch, which ranked as the 23rd driest on record. North central Oklahoma also fell below normal on average by about a half of an inch. The Oklahoma Mesonet site at Slapout recorded no precipitation for the entire month with similar results at surrounding stations. The first three months of the year were the 17th wettest on record statewide with a surplus of more than an inch. To demonstrate the contrast between east and west, the southeast has averaged close to 18 inches over that period while the Panhandle has yet to eclipse an inch.

March 2008 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	91ºF	Waurika Grandfield	27
Low Temperature	7ºF	Seiling	8
High Precipitation	15.54 in.	Mt. Herman	
Low Precipitation	0.00 in.	Slapout	

Temperature

One would expect a cool month with all the rain and associated cloudiness, yet March still managed to finish a couple of tenths of a degree above normal. The northern third of the state was largely below normal by about a half of a degree. The southern half of the state led the way despite a couple of snow storms and significant amounts of rainfall. The January-March period was the 42nd warmest on record. The warmest reading of the month of 91 degrees came from Waurika and Grandfield on the 27th. Seiling came in with the coldest reading of seven degrees on March 8.

March Daily Highlights

March 1-3: A warm start to the month was in store with high temperatures rising into the 70s and 80s on the first, 15-25 degrees above normal. The second saw increasing humidity due to an approaching storm system. That increased moisture kept morning lows in the 50s over much of the state and also fueled powerful thunderstorms during the next two days. Those storms had everything typical of springtime storms in Oklahoma, including large hail, tornadoes, and high winds. Buffalo was the unlucky recipient of softball size hail on the second as storms rolled through, and a weak tornado touched down in Blaine County. Winds of up to 70 m.p.h. were reported near Canton and Fort Cobb. The storms moved to the east overnight and into the third and turned into proficient rain producers. Flooding reports were prevalent in east central Oklahoma near the Arkansas border. The cold front that the storms developed along eventually moved through and dropped temperatures into the 30s where they stayed throughout the day. The rains then became snow in the southeastern half of the state. Amounts varied between a half of an inch and six inches.

Several locales reported snowfalls of five inches and Octavia and Morris measured six inches.

March 4-7: The storm system, along with the rain and snow, moved to the east on the fourth and skies cleared overnight. A trough of low pressure developed in the Texas Panhandle, kicking up strong southerly winds. Temperatures rose into the 40s and 50s for highs along with a few 60s. Another front moved through on the fifth and switched winds around to the north gusting to over 25 m.p.h. at times. Temperatures dropped below freezing for the sixth just in time for a major winter storm to impact the southeast. A strip in the southeast received 4-8 inches of snow with localized amounts near the Arkansas border receiving more than a foot of snow. Hodgen in LeFlore County had an estimated 14 inches of snow from the storm. Amounts tapered off to the northwest. No snow fell northwest of the I-44 corridor. Drier and colder air moved in on the seventh behind yet another arctic front. High temperatures managed to reach into the 40s and 50s before falling once again into the 30s. Some light snow fell as the front passed with little or no accumulation.

March 8-12: The frigid weather held for another morning. Lows on the eighth were from the single digits to the 20s. Temperatures rebounded into the 50s that afternoon. Southerly flow produced a big warm up on the ninth. Highs reached the 60s and 70s. The southerly flow also brought more moisture and rain developed that night in far southern Oklahoma. Amounts were generally less than an inch. The next several days were warm and windy. The dry weather and strong winds produced dangerous wildfire conditions. Another front approached the northwest late on the 12th.

March 13-16: The next four days were typically March. A couple of frontal passages produced sporadic thunderstorms with very little widespread rainfall. Temperatures were pleasant for the most part in the 60s and 70s, including a few flirtations with 50s and 80s. Winds were strong throughout, creating high fire danger.

March 17-19: A strong low pressure center approached the state on the 17th and generated three days of heavy rains. By the end of the period, the southeastern half of the state had rainfall totals between 4-8 inches. Flash flooding reports were numerous from the area. Amounts tapered off to the northwest once again. Central Oklahoma had between 1-2 inches, with less than an inch to very little towards the Panhandle. Due to the clouds and rain, high temperatures remained in the 40s and 50s for the most part. By the 19th, highs reached into the 60s and 70s.

March 20-26: The easiest way to describe this seven-day period would be "dry". There were of course ups and downs in the temperature as wayward fronts found their way across the state. Winds were often quite strong with gusts over 40 m.p.h. on several days.

March 27-28: Low-level moisture increased on the 27th as southerly winds kicked up in advance of a storm system. A strong cold front came through that afternoon, dropping temperatures 10-20 degrees in its wake. Strong to severe storms fired along the front with the biggest threat being large hail. A weak tornado touched down in Muskogee County but did little damage. The 28th was cool and gray with strong northerly winds.

March 29-31: March's last three days were tumultuous with more tornadoes and many more severe weather reports. The 29th was quiet compared to the 30th and 31st. Temperatures were in the 60s and 70s and the moisture continued to surge northward, adding plenty of fuel for storms. Two very large supercells formed in west central Oklahoma and marched to the east. One of those storms dropped an EF1 tornado in Edmond right after midnight. Storms fired once again the morning of the 31st and paraded across the state in the span of the final day. Four more possible tornadoes were spotted on the 31st. Lots of hail greater larger than golf balls was reported along with many flood reports, mostly from eastern Oklahoma. The month ended with another cold front traveling through the state.

March 2008 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2008)
Month (March)	50.4ºF	0.2ºF	43rd Warmest
Year-to-Date (Jan-Mar)	43.2ºF	0.5ºF	42nd Warmest

Precipitation

	Total	Depart.	Rank (1895-2008)
Month (March)	4.81 in.	1.70 in.	6th Wettest
Year-to-Date (Jan-Mar)	7.58 in.	1.26 in.	17th Wettest

Depart. = Departure from 30-year normal

Record Event Reports

Description	Day	Location	Record	Previous Record	Year
Daily Rainfall	18	Oklahoma City	1.61 inches	1.72 inches	2006

March 2008 Severe Weather

Significant Tornadoes (EF2 or greater)

No significant tornadoes were reported in the state.

Hail (2 inches in diameter or greater)

Size (in.)	Location	County	Day
4.25	Buffalo	Harper	2
2.75	Taloga	Dewey	2
2.00	3 S Rocky	Kiowa	30
2.50	Bethany	Oklahoma	31
2.00	7 WNW Perkins	Payne	31
2.50	Sulphur	Murray	31
2.75	3 N Silo	Bryan	31
2.50	2 NW Armstrong	Bryan	31
2.50	11 W Atoka	Atoka	31
2.50	Lane	Atoka	31
2.00	1 W Kenefic	Bryan	31
2.50	Kenefic	Bryan	31
2.50	2 S Pawnee	Pawnee	31
2.75	Wynona	Osage	31
2.50	1 E Pawnee	Pawnee	31

Wind Gusts (70 mph or greater)

Speed (m.p.h)	Location	County	Day
70	Canton	Blaine	2
71	Ft. Cobb Mesonet	Caddo	2
70	9 E Wagoner	Cherokee	14
70	2 W Tahlequah	Cherokee	14
70	4 N Binger	Caddo	30

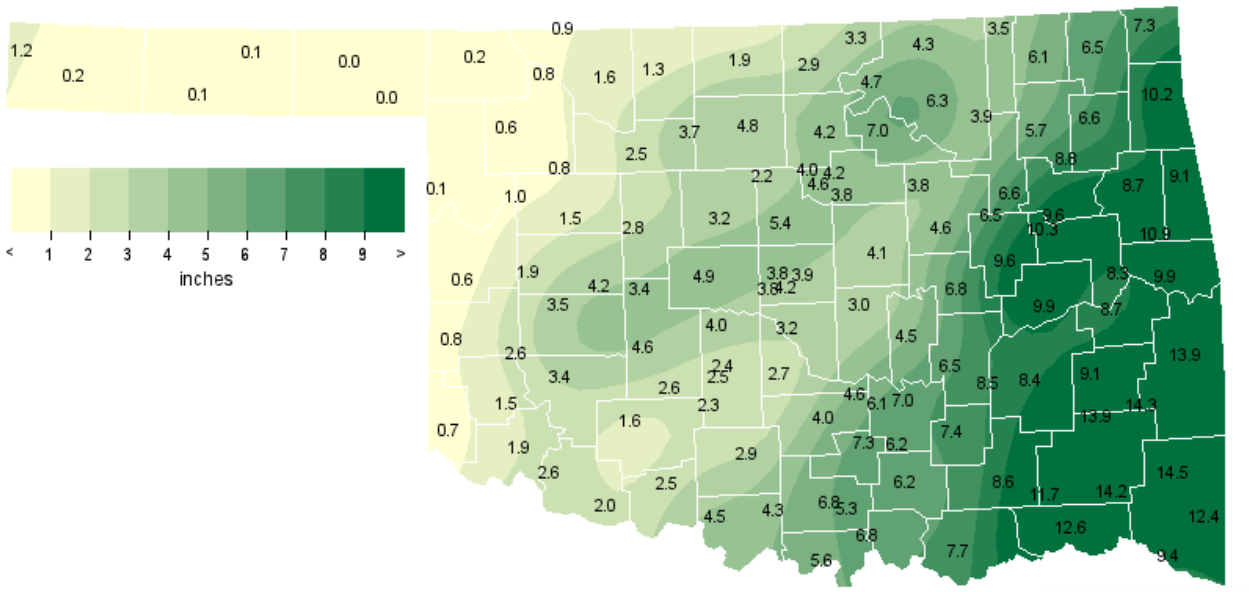
Flooding

Location	County	Day
8 S Stilwell	Adair	3
McCurtain	Haskell	3
Lequire	Haskell	3
Wilburton	Latimer	3
Red Oak	Latimer	3
2 N Albion	Latimer	3
Panama	LeFlore	3
Poteau	LeFlore	3
Crowder	Pittsburg	3
Muldrow	Sequoyah	3

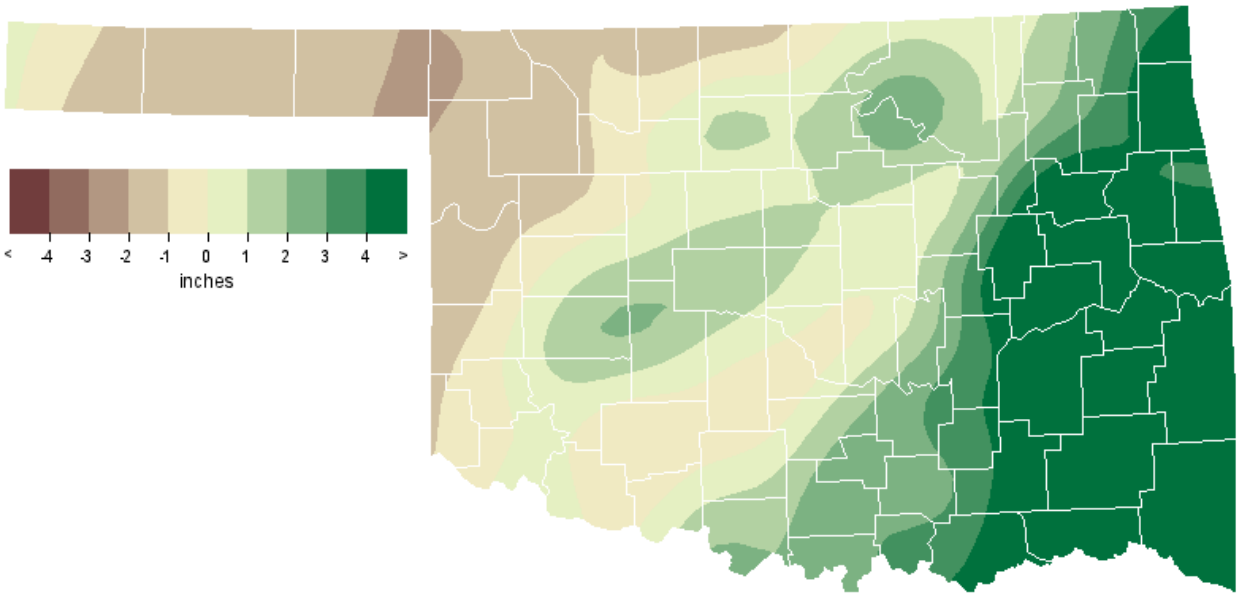
Flooding

Location	County	Day
4 N Muldrow	Sequoyah	3
Stilwell	Adair	18
1 S Peggs	Cherokee	18
Fort Towson	Choctaw	18
Grant	Choctaw	18
Oilton	Creek	18
4 S Jay	Delaware	18
6 N Leach	Delaware	18
Keota	Haskell	18
Wilburton	Latimer	18
2 N Poteau	LeFlore	18
Locust Grove	Mayes	18
Valliant	McCurtain	18
1 WNW Ringold	McCurtain	18
Stidham	McIntosh	18
2 N Boynton	Muskogee	18
Henryetta	Okmulgee	18
Haywook	Pittsburg	18
4 N Rattan	Pushmataha	18
Chelsae	Rogers	18
Sallisaw	Sequoyah	18
Tulsa	Tulsa	18
4 SE Wagoner	Wagoner	18
Poteau	LeFlore	30
2 W Honobia	Pushmataha	30
Peggs	Cherokee	31
W Siloam Springs	Delaware	31
Choteau	Mayes	31
Okfuskee	Okfuskee	31
Beggs	Okmulgee	31
3 S Wynona	Osage	31
Hominy	Osage	31
Pawnee	Pawnee	31
Inola	Rogers	31
Leonard	Tulsa	31
Stonebluff	Wagoner	31
Coweta	Wagoner	31
5 N Wagoner	Wagoner	31

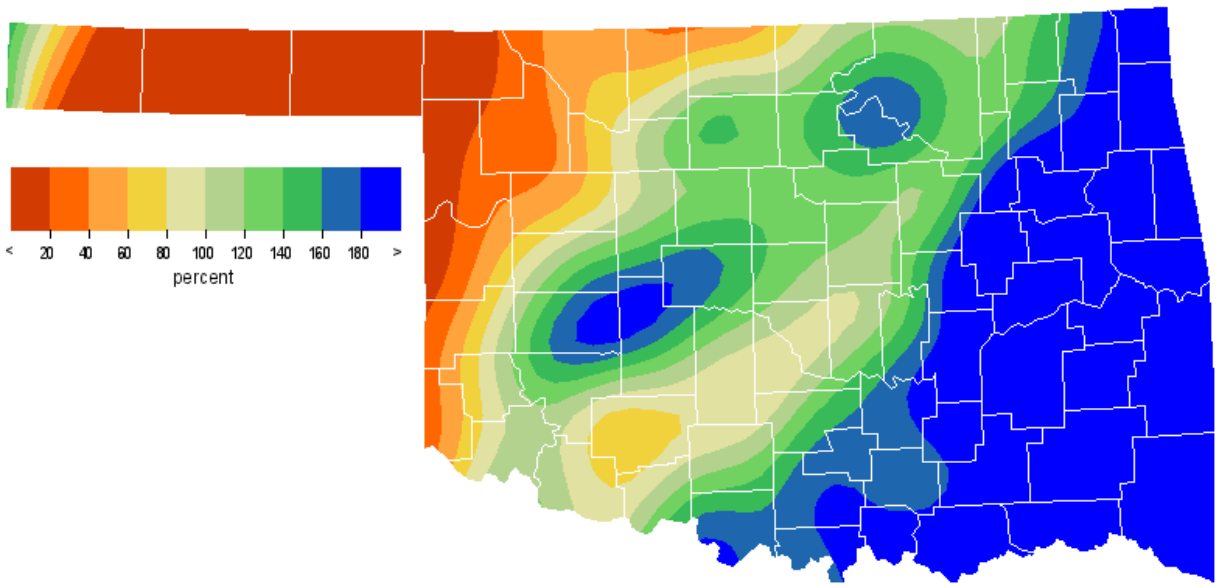
March 2008 Observed Precipitation



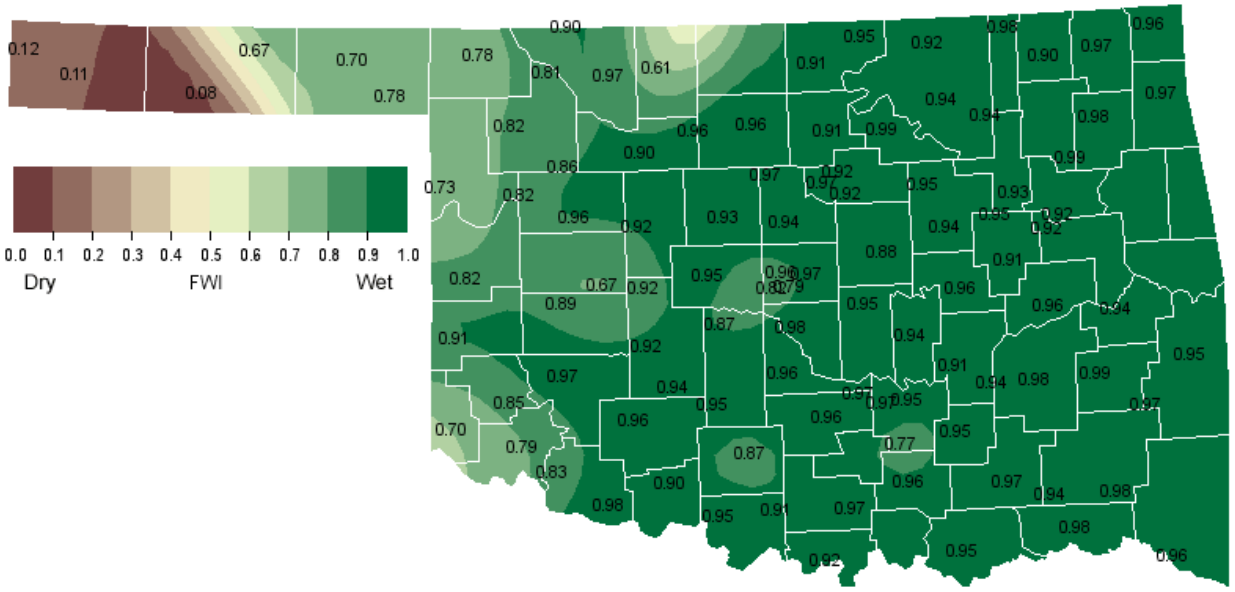
March 2008 Departure from Normal Precipitation



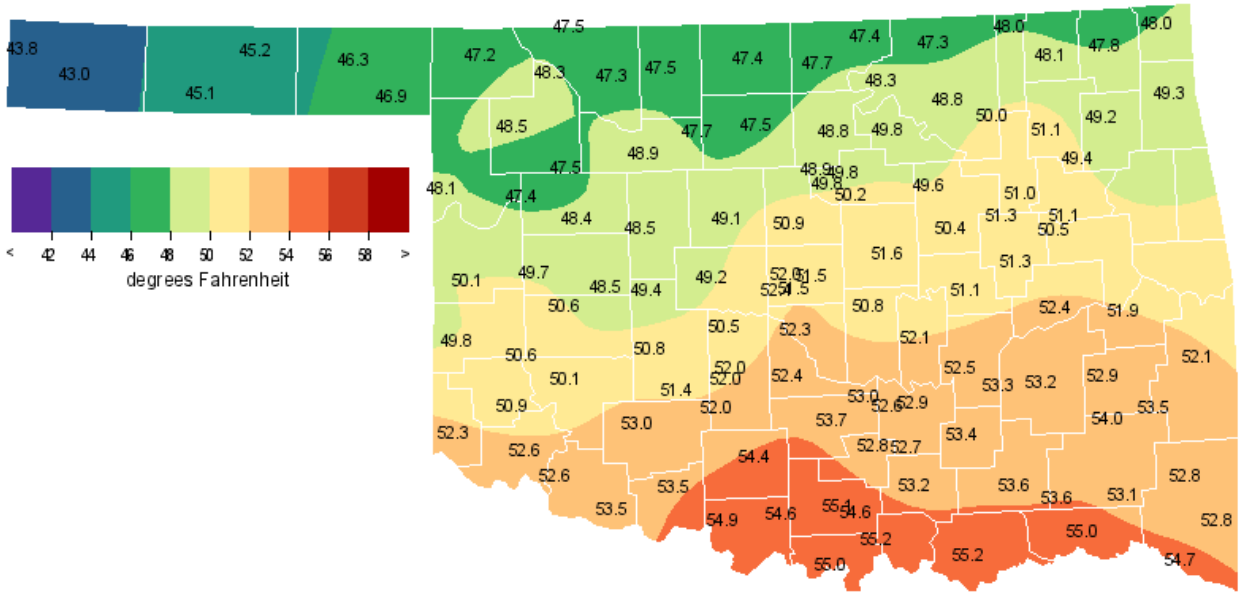
March 2008 Percent of Normal Precipitation



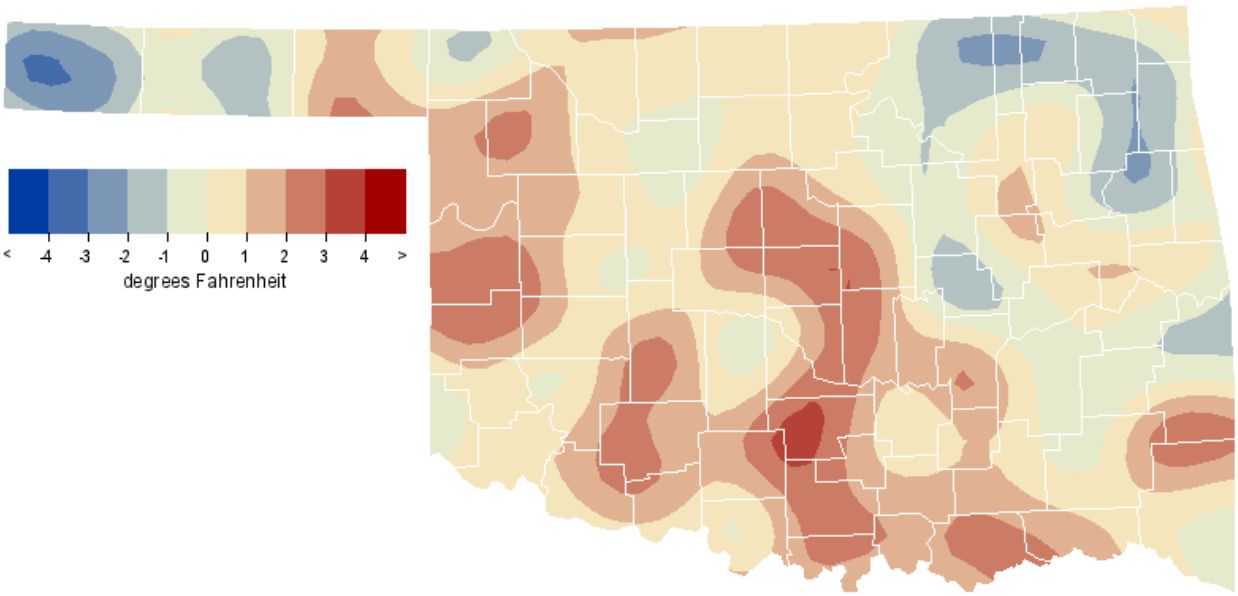
March 2008 Average Soil Moisture at 25cm



March 2008 Average Temperature



March 2008 Departure from Normal Temperature



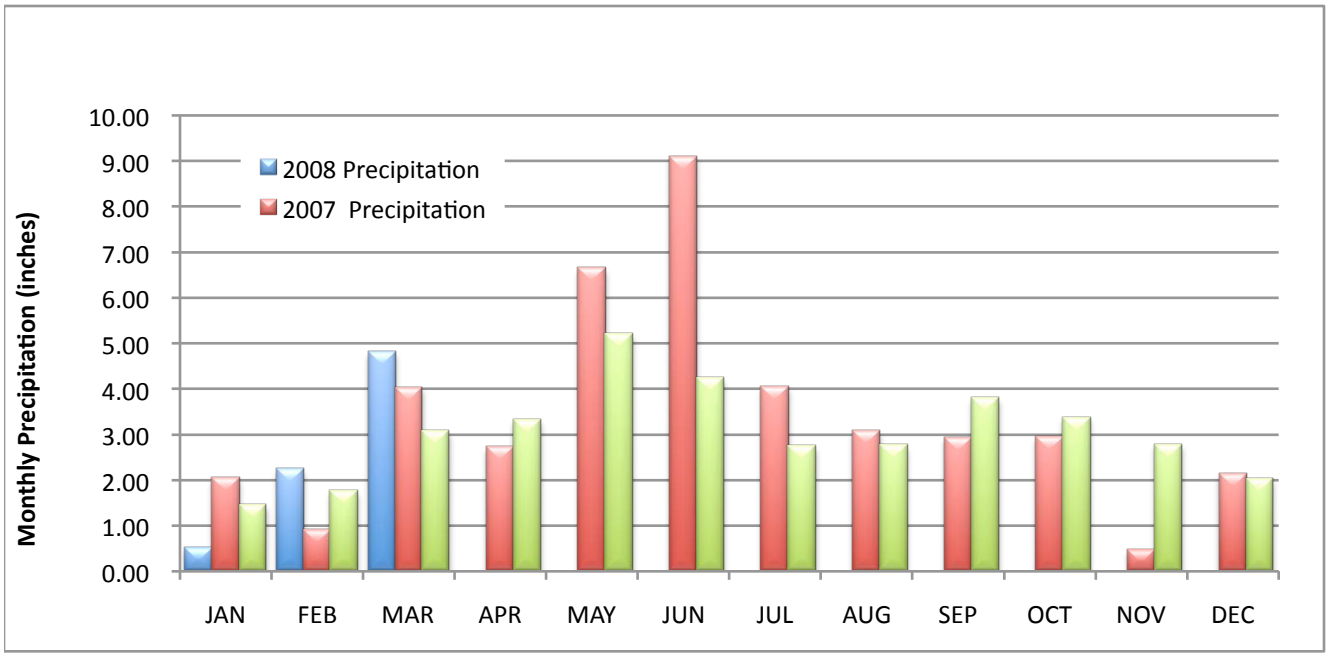
Mesonet Monthly Summary for March 2008

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	48.2	79	12	9	8	521	0	.14	.14	17
Beaver	46.3	83	20	11	8	581	0	.01	.01	31
Boise City	43.1	79	1	17	4	679	0	.16	.06	17
Buffalo	47.1	81	20	12	8	553	0	.21	.21	2
Goodwell	45.1	80	20	14	8	615	0	.09	.06	17
Hooker	45.1	81	20	13	4	616	0	.10	.06	17
Kenton	43.8	81	1	18	4	657	0	1.18	.84	17
Slapout	46.9	82	20	10	8	562	0	.00	.00	1
NORTH CENTRAL										
Alva	47.3	81	12	9	8	548	0	1.64	1.09	17
Blackwell	47.7	78	12	13	8	536	0	2.90	1.12	17
Breckinridge	47.5	77	12	12	8	543	0	4.80	2.64	31
Cherokee	47.5	81	12	13	8	541	0	1.34	.86	17
Fairview	48.9	85	30	14	8	504	5	2.53	1.27	17
Freedom	48.3	80	30	12	8	520	2	.76	.41	2
Lahoma	47.7	77	12	14	8	536	0	3.73	1.53	31
May Ranch	47.5	79	20	11	8	544	0	.87	.67	2
Medford	47.4	78	12	14	8	546	0	1.93	1.08	17
Newkirk	47.3	78	12	11	8	548	0	3.28	1.17	17
Red Rock	48.9	79	12	12	8	500	0	4.22	1.51	31
Seiling	47.5	82	30	7	8	546	3	.84	.78	17
Woodward	48.5	80	12	10	8	512	0	.57	.32	17
NORTHEAST										
Bixby	51.0	87	27	21	8	439	4	6.55	3.46	18
Burbank	48.2	78	12	10	8	520	0	4.72	2.12	31
Claremore	50.9	88	27	20	8	439	3	5.67	3.18	18
Copan	48.0	79	12	13	8	528	0	3.54	1.35	18
Foraker	47.3	79	12	11	8	547	0	4.26	1.34	31
Inola	49.3	83	27	19	4	487	0	8.83	4.84	18
Jay	49.3	79	27	22	4	486	0	10.17	5.02	18
Miami	48.0	81	27	21	8	527	0	7.34	3.30	18
Nowata	48.1	84	27	16	8	525	0	6.06	2.37	31
Pawnee	49.7	80	12	13	8	473	0	7.02	3.89	31
Porter	51.1	83	27	21	8	432	2	9.65	5.93	18
Pryor	49.2	84	27	20	8	491	0	6.64	3.78	18
Skiatook	50.0	84	27	15	8	465	0	3.92	2.01	18
Vinita	47.8	85	27	17	8	533	0	6.48	2.28	18
Wynona	48.9	81	27	14	8	500	0	6.28	2.92	31
WEST CENTRAL										
Bessie	50.5	84	30	13	8	453	5	3.47	3.03	17
Butler	49.8	86	30	9	8	477	5	1.91	1.88	17
Camargo	47.3	80	12	8	8	550	2	.99	.99	17
Cheyenne	50.1	82	25	14	8	463	1	.62	.62	17
Erick	49.8	86	25	11	8	476	4	.81	.81	17
Putnam	48.3	84	30	10	8	521	4	1.50	1.42	17
Retrop	50.7	86	31	11	8	449	7	2.65	2.08	17
Watonga	48.5	80	30	13	8	513	2	2.77	1.74	17
Weatherford	48.5	79	30	13	8	514	2	4.24	1.81	17
CENTRAL										
Acme	52.0	88	27	12	8	421	16	2.35	1.52	18
Bowlegs	52.0	86	27	15	8	409	8	4.54	3.20	18
Bristow	50.4	85	27	16	8	457	4	4.62	1.99	18
Chandler	51.6	87	27	14	8	421	6	4.10	2.12	18
Chickasha	52.0	88	27	16	8	415	13	2.39	1.51	18
El Reno	49.3	82	30	10	8	492	6	4.88	1.41	30
Guthrie	50.9	80	27	14	8	441	5	5.45	2.21	31
Kingfisher	49.1	80	30	13	8	498	4	3.25	1.64	17
Marena	49.8	79	27	10	8	472	2	4.59	1.69	31
Minco	50.5	84	27	14	8	455	4	3.98	1.70	2
Marshall	*****	***	***	***	***	****	****	2.25	.86	17
Ninnekah	52.0	88	27	14	8	417	14	2.48	1.55	18
Norman	52.2	87	27	16	8	405	9	3.16	1.45	18
Oilton	49.6	85	27	14	8	480	3	3.84	2.29	18
OKCE	51.6	84	27	15	8	423	6	4.16	1.92	2
OKCN	51.9	82	27	15	8	410	6	3.78	1.91	18
OKCW	52.4	83	27	17	8	398	7	3.83	1.69	18
Okemah	51.1	83	27	18	8	434	3	6.84	4.16	18
Perkins	50.2	79	26	15	8	461	3	3.82	1.65	18
Shawnee	50.8	84	27	15	8	443	3	2.96	1.84	18
Spencer	51.5	83	27	13	8	423	4	3.87	1.71	2
Stillwater	49.8	78	26	15	8	474	2	4.15	1.38	2
Washington	52.4	87	27	12	8	402	10	2.71	1.58	18
EAST CENTRAL										
Calvin	52.5	82	27	17	8	395	6	6.46	4.26	18
Cookson	50.2	79	27	22	8	****	****	10.01	4.82	18
Eufaula	52.4	79	27	23	8	391	2	9.89	4.66	18
Haskell	50.6	83	27	22	8	449	2	10.26	6.47	18
Hectorville	51.4	84	27	19	8	425	2	6.50	2.84	18
McAlester	53.1	81	27	24	8	374	5	8.43	3.51	18
Okmulgee	51.3	84	27	20	8	428	4	9.62	4.03	18
Sallisaw	51.6	81	27	23	8	****	****	9.09	4.03	18
Stigler	51.9	80	27	23	8	408	4	8.72	3.91	18
Stuart	53.3	81	27	19	8	368	5	8.49	4.55	18
Tahlequah	50.5	80	27	22	8	****	****	7.59	4.20	18
Webbers Falls	51.7	80	27	24	8	****	****	7.39	3.80	18
Westville	50.1	78	27	23	8	****	****	8.15	4.72	18
SOUTHWEST										
Altus	52.6	89	27	17	8	400	15	1.88	.87	17
Apache	51.4	86	27	14	8	433	10	2.57	1.16	18
Fort Cobb	50.7	83	30	16	8	446	4	4.59	1.99	17
Grandfield	53.5	91	27	17	8	381	23	2.03	1.33	18
Hinton	49.5	82	30	14	8	485	4	3.42	1.10	30
Hobart	50.2	83	30	13	8	462	4	3.37	2.28	17
Hollis	52.2	90	30	14	8	409	12	.69	.62	17
Mangum	50.8	89	30	10	8	450	11	1.48	1.15	17
Medicine Park	53.0	87	27	14	8	384	13	1.58	.97	18
Tipton	52.6	89	27	18	8	398	15	2.62	1.09	17
Walters	53.5	90	27	14	8	379	24	2.45	1.59	18
SOUTH CENTRAL										
Ada	52.8	85	27	16	8	390	12	7.00	5.00	18
Ardmore	54.6	89	31	19	8	348	26	5.28	3.09	18
Burneyville	55.1	90	31	15	8	346	38	5.58	2.80	18
Byars	53.0	87	27	14	8	385	13	4.62	2.89	18
Centrahoma	53.4	82	27	17	8	374	13	7.37	3.26	18
Durant	55.1	81	31	19	8	329	24	7.74	3.74	18
Fittstown	52.7	83	27	15	8	393	11	6.19	3.26	18
Ketchum Ranch	54.3	91	27	14	8	359	28	2.93	1.82	18
Lane	53.6	82	31	20	8	368	15	8.56	3.83	18
Madill	55.2	85	27	17	8	331	28	6.78	3.36	18
Newport	55.1	91	31	16	8	340	33	6.76	4.64	18
Pauls Valley	53.7	89	27	15	8	371	20	4.05	2.80	18
Ringling	54.6	89	31	14	8	352	31	4.35	3.06	18
Sulphur	52.7	85	27	14	8	394	13	7.31	5.06	18
Tishomingo	53.3	83	31	17	8	380	16	6.20	3.15	18
Vanoss	52.5	86	27	14	8	400	13	6.12	4.37	18
Waurika	54.9	91	27	16	8	346	31	4.53	2.56	18
SOUTHEAST										
Antlers	53.6	82	27	23	8	369	16	11.72	4.12	18
Broken Bow	52.8	81	27	26	24	389	12	12.39	3.33	18
Clayton	54.0	81	27	26	8	350	10	13.90	4.40	18
Cloudy	53.1	82	22	26	24	381	11	14.15	4.19	18
Hugo	54.9	80	27	22	8	328	15	12.61	5.20	18
Idabel	54.6	82	27	27	8	338	17	9.38	2.52	18
Mt Herman	52.8	79	27	23	8	384	6	14.54	4.94	18
Talihina	53.6	80	27	25	24	363	9	14.28	3.82	18
Wilburton	52.9	80	27	25	8	379	4	9.06	4.10	18
Wister	52.1	80	27	24	11	404	6	13.89	3.74	18

March 2008 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Mar-07
Panhandle	0.24	-1.39	23rd Driest	5.84 (1973)	0.00 (1895)	2.81
North Central	2.26	-0.42	39th Wettest	8.18 (1973)	0.00 (1936)	5.35
Northeast	6.48	2.81	6th Wettest	9.79 (1973)	0.00 (1900)	4.02
West Central	2.11	-0.29	35th Wettest	7.24 (1973)	0.00 (1895)	6.05
Central	3.83	0.59	22nd Wettest	7.88 (1990)	0.00 (1900)	5.19
East Central	8.51	4.42	3rd Wettest	10.63 (1945)	0.46 (1911)	1.92
Southwest	2.43	0.17	28th Wettest	5.52 (1973)	0.00 (1940)	4.65
South Central	5.96	2.41	6th Wettest	8.46 (1945)	0.20 (1950)	4.04
Southeast	12.59	8.11	1st Wettest	12.38 (1945)	1.01 (1954)	1.80
Statewide	4.81	1.70	6th Wettest	7.46 (1973)	0.38 (1971)	4.03

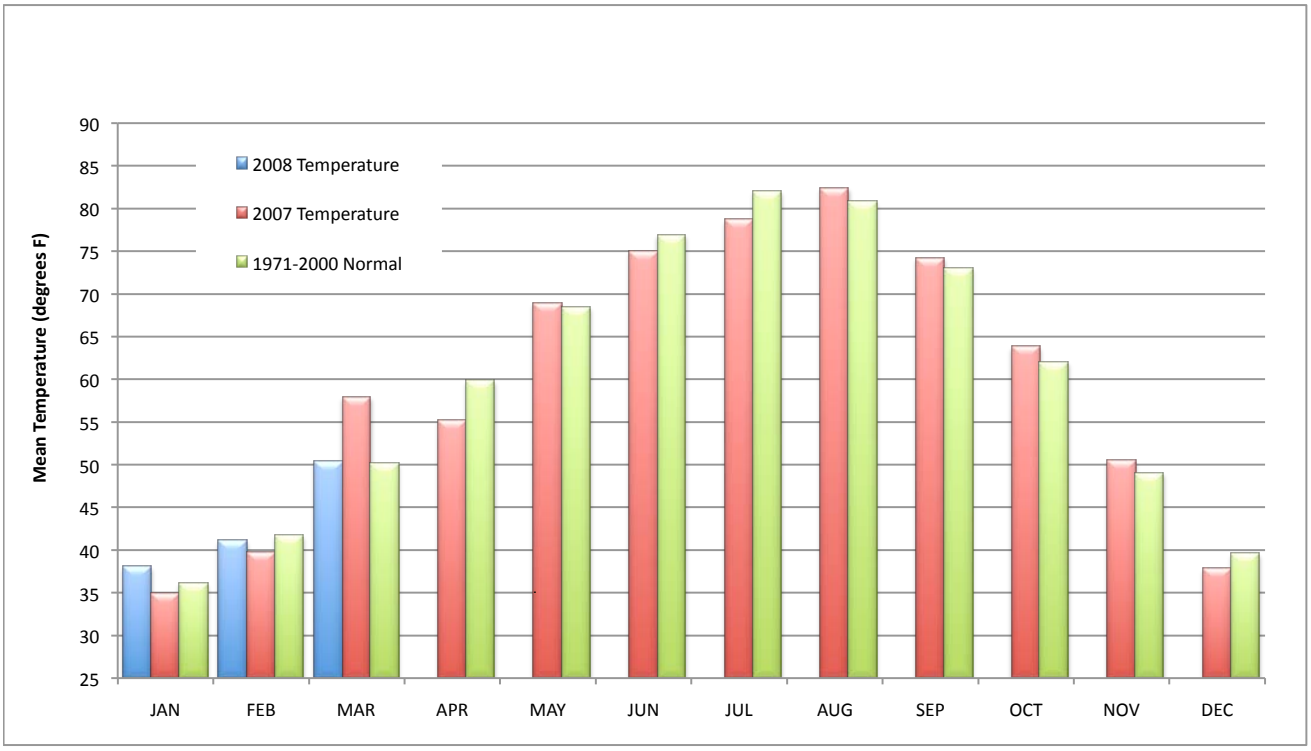
2007 and 2008 Statewide Precipitation Monthly Totals vs. Normal



March 2008 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Mar-07 (F)
Panhandle	45.7	-0.6	52nd Warmest	54.3 (1910)	32.9 (1915)	52.6
North Central	47.8	-0.4	54th Warmest	57.6 (1910)	35.3 (1915)	56.5
Northeast	49.1	-0.5	46th Warmest	58.6 (2007)	37.3 (1960)	58.6
West Central	49.3	0.4	46th Warmest	56.8 (1910)	35.8 (1915)	56.7
Central	51.1	0.6	43rd Warmest	58.8 (2007)	37.7 (1915)	58.8
East Central	52.0	0.5	41st Warmest	59.8 (2007)	39.2 (1915)	59.8
Southwest	51.8	0.3	42nd Warmest	58.7 (1907)	38.2 (1915)	58.0
South Central	53.9	0.9	39th Warmest	61.1 (1907)	40.4 (1915)	60.2
Southeast	53.5	0.7	40th Warmest	61.5 (1907)	42.0 (1915)	59.6
Statewide	50.4	0.2	43rd Warmest	57.9 (1907)	37.6 (1915)	57.9

2007 and 2008 Statewide Temperature Monthly Averages vs. Normal



Mesonet Extremes for March 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	83	20th	Beaver	9	8th	Arnett	1.18	Kenton	0.84	17th	Kenton
North Central	85	30th	Fairview	7	8th	Seiling	4.80	Breckinridge	2.64	31st	Breckinridge
Northeast	88	27th	Claremore	10	8th	Burbank	10.17	Jay	5.93	18th	Porter
West Central	86	25th	Erick	8	8th	Camargo	4.24	Weatherford	3.03	17th	Bessie
Central	88	27th	Acme	10	8th	El Reno	6.84	Okemah	4.16	18th	Okemah
East Central	84	27th	Hectorville	17	8th	Calvin	10.26	Haskell	6.47	18th	Haskell
Southwest	91	27th	Grandfield	10	8th	Mangum	4.59	Fort Cobb	2.28	17th	Hobart
South Central	91	27th	Waurika	14	8th	Sulphur	8.56	Lane	5.06	18th	Sulphur
Southeast	82	22nd	Cloudy	22	8th	Hugo	14.54	Mt Herman	5.20	18th	Hugo
Statewide	91	27th	Waurika	7	8th	Seiling	14.54	Mt Herman	6.47	18th	Haskell

April Climatological Outlook

April is the first full month of spring- the season of newly green trees and grass, redbud trees in bloom, and wildflowers aplenty. Baseball, romance, and pollen permeate the air, creating the dizzying mixture of joy and misery that marks the season. Most of April features exceedingly pleasant weather, much like that on April 22, 1889. According to the weather report submitted by the observer at Fort Reno, the day of the first great land run featured a high temperature of 80 degrees Fahrenheit, sandwiched between overnight lows of 46 and 54 degrees. Winds were northeasterly and light. Clouds were few.

April is the state's 5th wettest and 7th warmest month, establishing it clearly as part of the spring transition season. The statewide-averaged normal precipitation, based on the 30-year record compiled from 1971 through 2000, is 3.32 inches. The average monthly temperature, compiled from observations over the same period, is 59.8 degrees.

Precipitation
Mean: 3.32 inches
Wettest April: 1942, 8.50 inches
Driest April: 1989, 0.58 inches
Wettest location: Daisy, 5.19 inches
Driest location: Regnier, 1.36 inches
Most recorded: 17.78 inches, Okemah, 1945

Precipitation generally increases from southeast to northwest. Monthly normal precipitation for individual stations ranges from 1.36 inches at Oklahoma's driest observing station, Regnier (in the northwestern panhandle), to 5.19 inches at Daisy, on the western edge of southeastern Oklahoma's Ouachita Mountains. A statewide–averaged precipitation of 8.50 inches rates 1942 as the wettest April in the state's annals. The driest April, statewide, was in 1989 when the state's reporting stations received an average of just 0.58 inch for the month. The greatest April precipitation at any reporting station was 17.78 inches recorded at Okemah in 1945. Snowfall is rare in April, except in the panhandle. Boise City averages 2.5 inches of snow during April. Goodwell reported 17 inches of snow during April 1988, and Fargo received 14 inches during that month in 1973.

Normal monthly temperatures decrease from south to north. Waurika is the state's warmest location during April with a normal temperature of 63.9 degrees. Boise City ranks as the coolest site with a monthly average temperature of 54 degrees. Normal daily maximum temperatures range from 77 degrees at Waurika to 67.8 degrees at Newkirk. Normal daily minimum temperatures range from Waurika's 50.7 degrees to Boise City's 37.3. Temperatures drop below the freezing mark an average of nearly 8 times during April at Kenton, but freezes are uncommon across most of the main body of the state. Except in the panhandle, any sub-freezing temperatures after mid-April would constitute a late freeze and would be harmful to plants, especially fruit or pecan trees. Southwestern Oklahoma experiences temperatures in the 90s an average of three times each April. Hot and cold do manage to creep in, however. On April 12, 1972, Mangum recorded a high temperature of 106 degrees, the highest of the 15 temperature reports of 102 degrees or more across the state that day. Conversely, Hooker's daily minimum temperature on April 4, 1979 was 7 degrees, thereby establishing the other extreme temperature for the month.

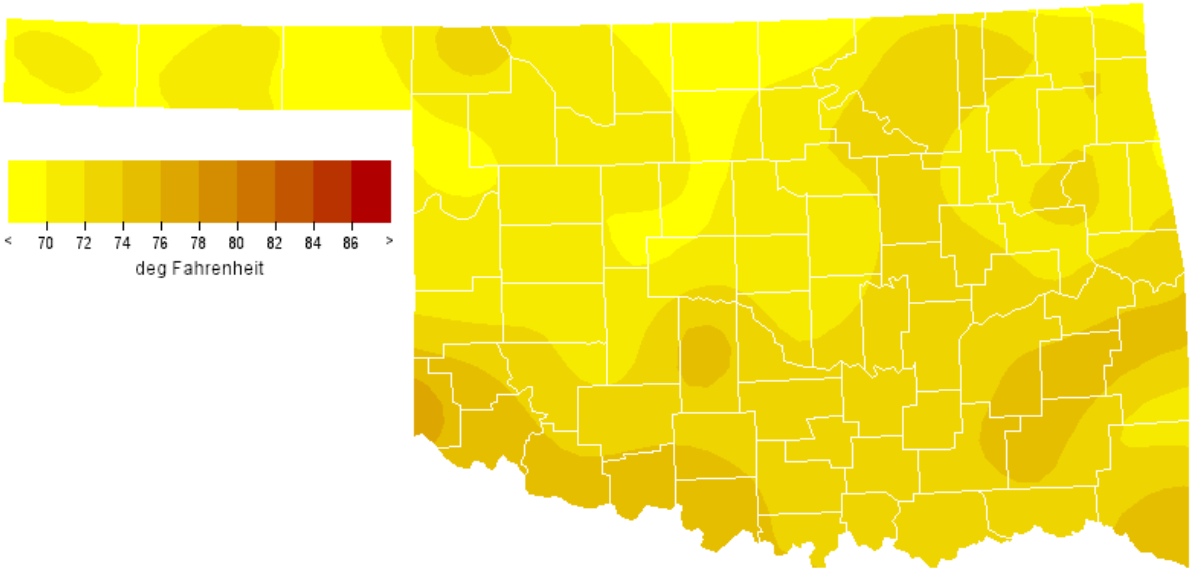
Temperature
Mean: 59.8 degrees
Warmest Location: 63.9 degrees, Waurika
Coolest Location: 54.0 degrees, Boise City
Warmest March: 1954, 65.4 degrees
Coolest March: 1983, 54.0 degrees
Hottest recorded: 106 degrees, Mangum, April 12, 1972
Coldest recorded: 7 degrees, Hooker, April 4, 1979

Spring brings with it Oklahoma's noted severe weather season. April is Oklahoma's windiest month and ranks second among the 12 months in the number of tornadoes observed across the state. The state has averaged 10.7 tornadoes each April since 1950, a monthly average exceeded only by May. Eight years of wind observations from the statewide Oklahoma Mesonet have revealed an average April wind speed, statewide, of 10.6 miles per hour, which barely edges March for windiest month honors. South winds prevail in most areas, although passing cold fronts are still capable of turning winds to northerly for a day or so at a time.

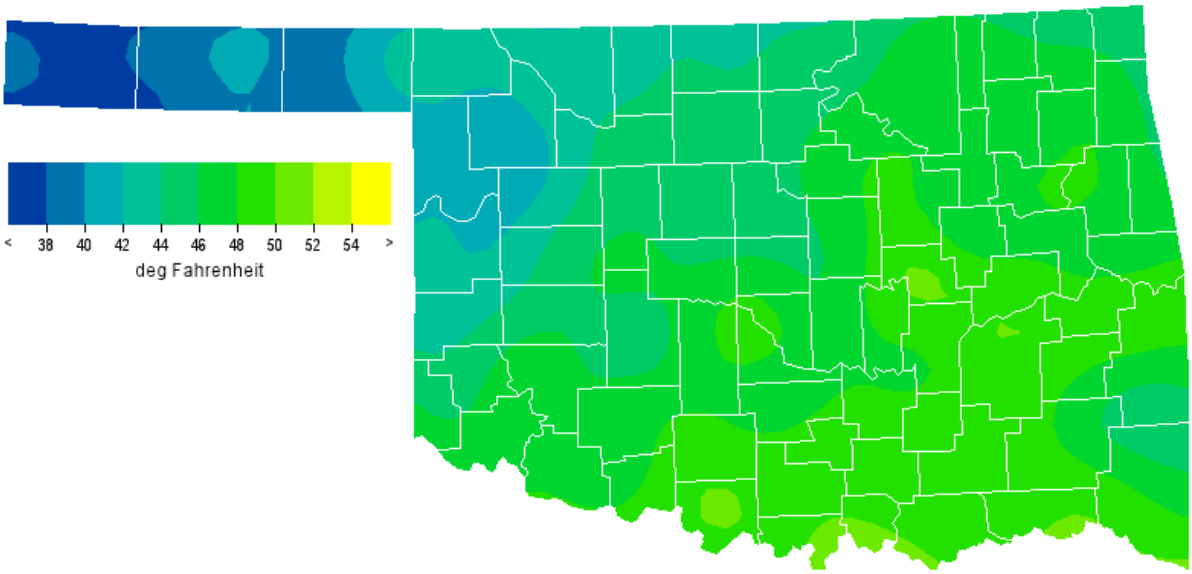
Comprehensive records of tornado occurrence are available from 1950 to the present. A total of 579 tornadoes are listed as having struck within Oklahoma during April from 1950 through 2003. Forty of those tornadoes were reported in 1957, easily the most of any April during the period.

Tornadoes
Average April Tornadoes: 10.7
Most: 40 (1957)

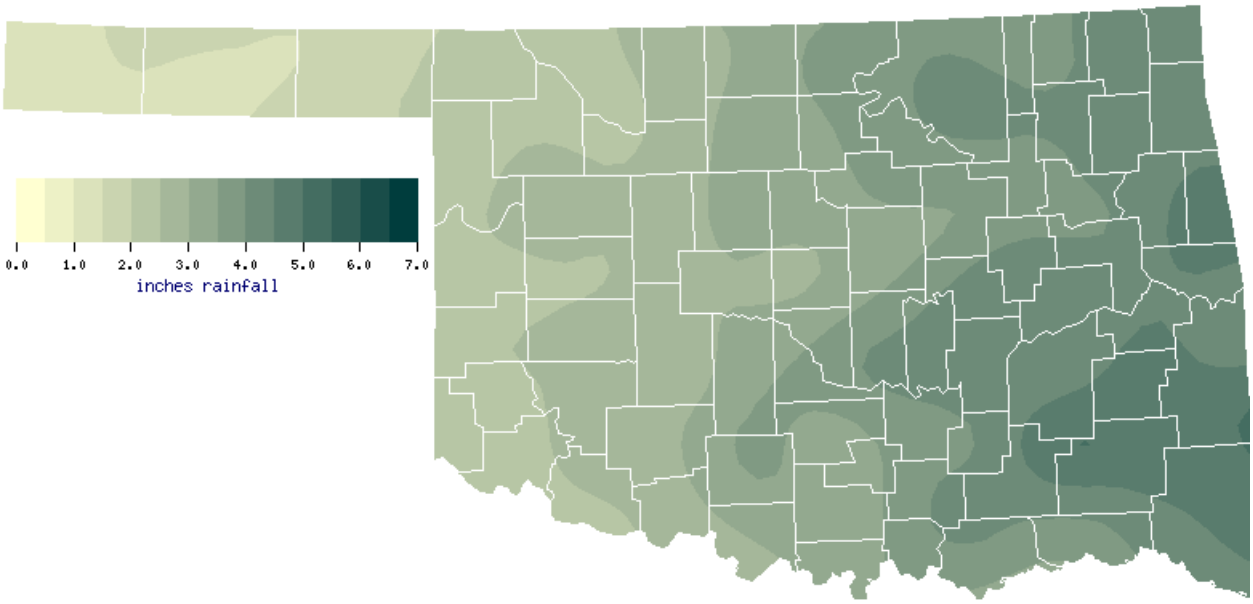
April Normal Daily Maximum Temperature (1971-2000)



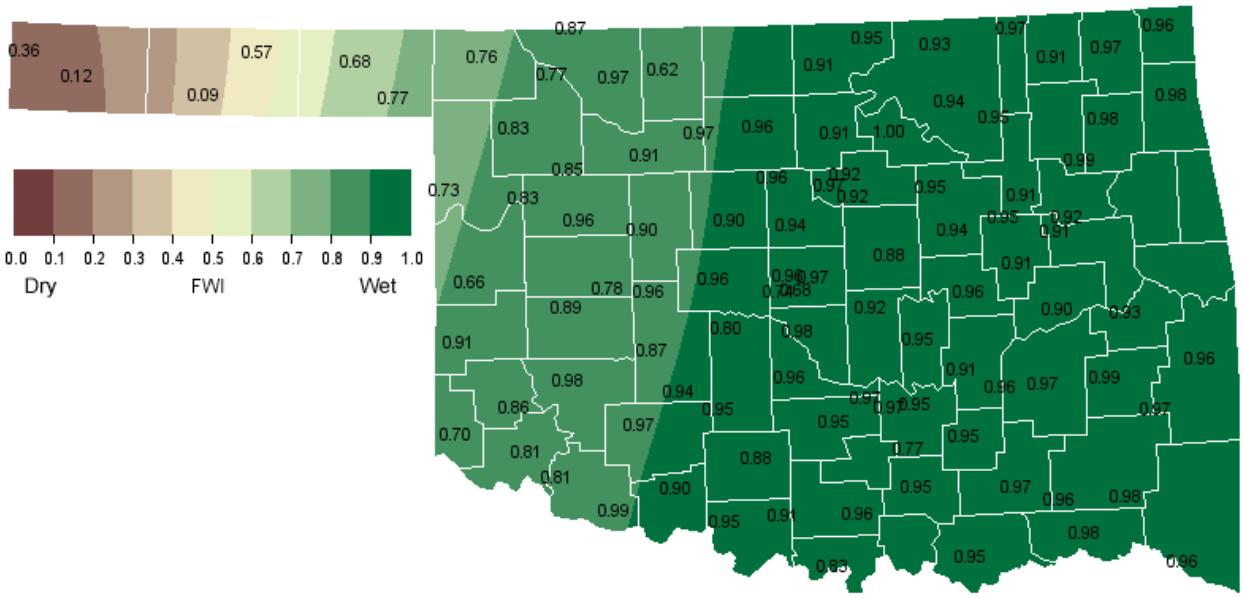
April Normal Daily Minimum Temperature (1971-2000)



April Normal Precipitation (1971-2000)



April 1, 2007 Soil Moisture Conditions at 25cm



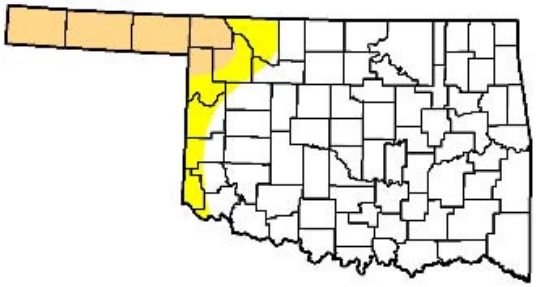
April 2008 Drought Indices

U.S. Drought Monitor
Oklahoma

March 25, 2008
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	81.7	18.3	10.9	0.0	0.0	0.0
Last Week (03/18/2008 map)	84.3	15.7	10.8	0.0	0.0	0.0
3 Months Ago (01/01/2008 map)	83.4	16.6	7.1	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 (03/27/2007 map)	27.6	72.4	14.1	0.0	0.0	0.0



Intensity:

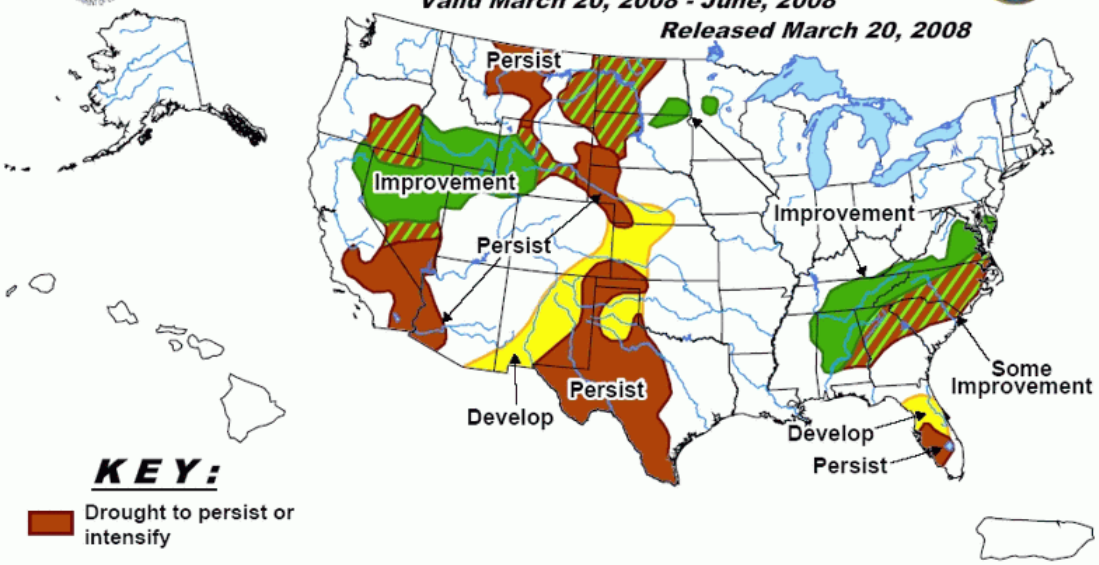
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

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, March 27, 2008
Author: Mark Svoboda, National Drought Mitigation Center

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid March 20, 2008 - June, 2008
Released March 20, 2008

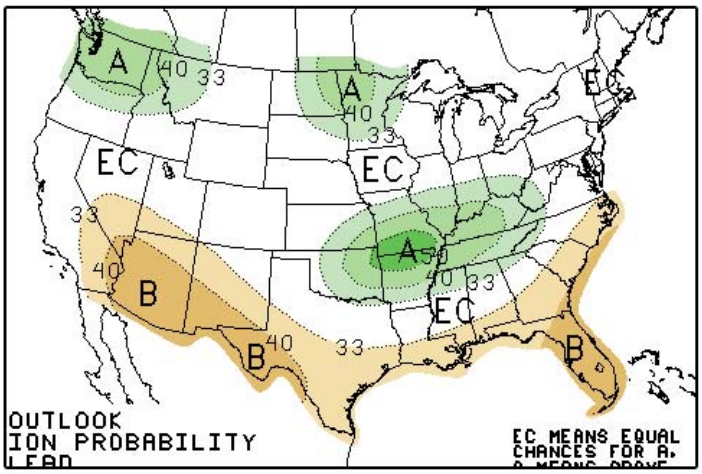


KEY:

- 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.

April 2008 U.S. Precipitation Forecast



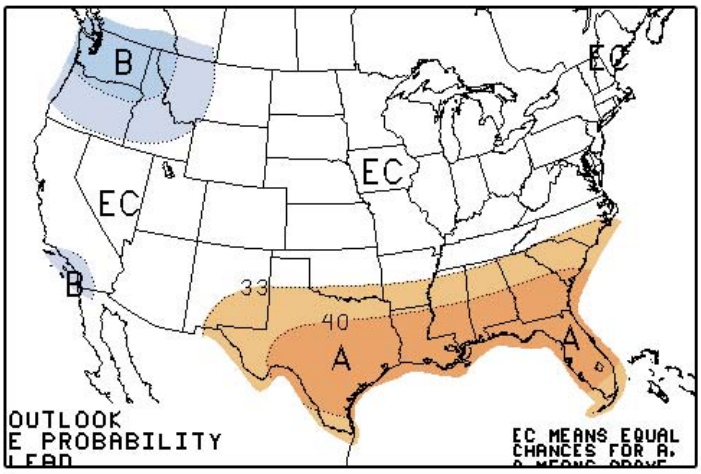
Percent Likelihood of Above or Below Average Precipitation*

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

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

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

April 2008 U.S. Temperature Forecast



Percent Likelihood of Above and Below Average Temperatures*

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

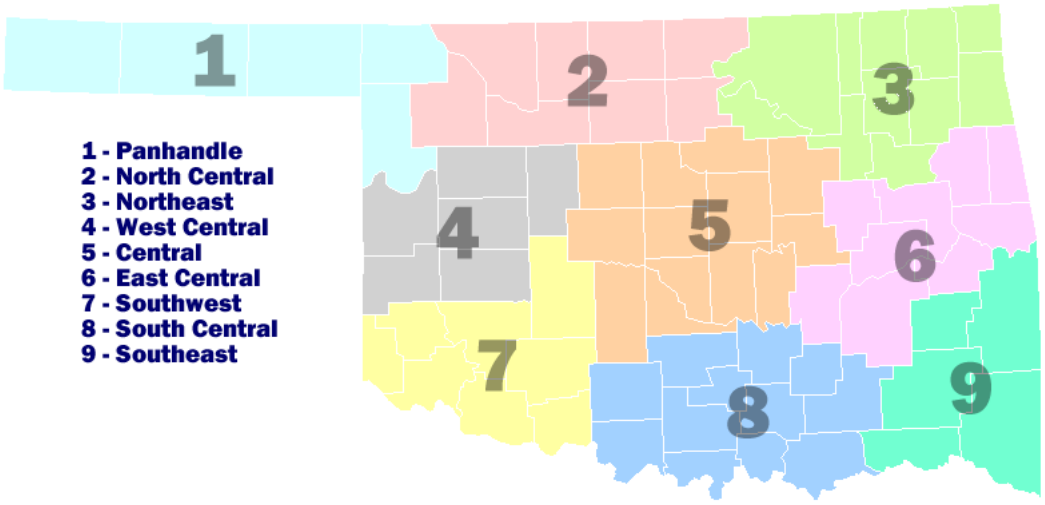
0% - 5%
5% - 10%
B = Below

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

April Climate Normals

Climate Division	Max. Temperature (°F)	Min. Temperature (°F)	Avg. Temperature (°F)	Precipitation (inches)
1	70.7	40.5	55.6	1.81
2	70.2	43.6	56.9	2.95
3	72.1	47.1	59.6	3.92
4	71.0	44.3	57.7	2.48
5	71.9	47.2	59.6	3.47
6	72.3	48.3	60.3	4.24
7	73.6	46.4	60.0	2.66
8	73.5	48.9	61.2	3.74
9	73.7	47.8	60.8	4.46
Statewide	72.1	46.2	59.2	3.41

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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