OKLAHOMA MONTHLY CLIMATE SUMMARY
MARCH 2007

OKLAHOMA CLIMATOLOGICAL SURVEY

As the saying goes, if March comes in like a lamb it goes out like a lion. That is exactly the case during 2007 as a rather dull first half of March gave way to a positively feral second half. Deadly tornadoes, drought-busting rainfall and widespread flooding were all on the menu. Prolific rains in the northwestern two-thirds of the state helped erase drought conditions which had been in place for nearly two years and propelled the month to the 16th wettest March on record. The strong southerly flow that supplied the abundance of moisture also brought near-record warmth. The month finished as the 2nd warmest March on record, nearly eight degrees above normal. A return of deadly tornadoes to the state ended a much more desirable drought. A tornado entered Beaver County from the Texas Panhandle and killed two residents of Elmwood in their home, the first tornado fatalities in the state since April 2001. That nearly six-year span was the longest duration without a tornado fatality the state had seen since accurate statistics began in 1950. Preliminary reports indicate that four more tornadoes struck the state as well, the most notable of which plowed its way through northwest Oklahoma City, causing millions of dollars in damage and injuring four.

Precipitation

The separation between precipitation surpluses and deficits was rather remarkable during March. Areas west of I35 generally had rainfall amounts greater than 180 percent of normal, while areas to the east fell to less than 20 percent of normal. Additionally, areas to the west finished within the top-10 wettest Marches on record for each particular region while east central and southeastern sections were the 26th driest and 12th driest on record, respectively. The state as a whole finished with a surplus of nearly an inch at just over four inches. The first three months of the year were about a half of an inch above normal, the 28th wettest January-March period on record.

Temperature

Oklahoma was significantly warm during March with all areas of the state finishing in the top three warmest on record, between 6-9 degrees above normal. Northeast, central and east central areas had record-warm Marches. Averaged across the state, the temperature was nearly eight degrees above normal. The January-March period was the 27th warmest on record.

March 2007 Statewide Extremes

Description	Extreme	Station	Date
High Temperature	90ºF	Slapout, Woodward	March 18th, 21st
Low Temperature	11ºF	Oilton	March 4th
High Precipitation	8.55 in.	Foraker	
Low Precipitation	0.26 in.	Clayton	

March Daily Highlights

March 1-3: The month's beginnings found the state clear and cool following a cold front on the previous day. Lows were mainly in the 30s with a few 40s. A cold dry air mass in the afternoon produced brisk northerly winds and high temperatures in the 50s and 60s. The next two days were similar with gusty northerly winds and seasonal temperatures. Highs on the 3rd were a bit cooler, remaining in the 40s.

March 4-8: A nice warm up over the next five days meant for very pleasant weather. Lows were cool on the 4th, dropping into the teens and 20s, but the rest of the period found high temperatures in the 70s and lows generally in the 30s and 40s. A weak cold front on the 7th did little to cool temperatures as highs were in the 60s in the front's wake.

March 9-13: The first rainy period of the month, an upper-level disturbance moved across Oklahoma on the 9th bringing thunderstorms with light rain to southeastern Oklahoma. A few of those storms produced quarter-sized hail. A cold front slowly edged southeast through the state with little change in temperatures. Clear skies and light winds followed the front on the morning of the 10th with temperatures in the 30s and 40s. Another approaching upper-level storm brought cloudiness and southeasterly winds of 10-15 mph which helped to warm temperatures into the 70s. Storms erupted in the west that evening and moved east. The Oklahoma Mesonet site at Walters recorded over two inches of rain overnight. Winds of more than 70 mph struck near Altus with other scattered reports of small hail. A few localized areas in central Oklahoma had between 1-2 inches of rain. Areas with rain struggled to reach high temperatures in the 60s, while other areas were in the 70s. The next two days found mostly cloudy skies and highs in the 60s and 70s to go along with a few scattered storms. Dense fog on the 13th dropped visibilities down to about one-quarter of a mile. High temperatures remained in the 60s and 70s.

March 14-18: Quiet conditions returned on the 14th with low temperatures in the 50s to go along with light winds. Dense fog developed in south central Oklahoma before burning off later in the day. A cold front entered the northwest later that afternoon. Highs reached the 80s ahead of the front but remained in the 60s behind the boundary. The front was still making its way through the state on the 15th which resulted in another temperature difference across the dividing line. Temperatures rose into the 50s and 60s behind the front but reached the 70s to the south. Very light rain fell on the morning of the 16th in southern Oklahoma, which gave way to clear skies and chilly north winds. Lows were in the 30s and 40s and rose into the 50s and 60s in the afternoon. The surface high pressure system that followed behind the front moved east on the 17th, allowing a return of southerly winds which gusted to over 25 mph. Highs reached into the 70s and 80s on the strength of those winds. The southerly winds continued on the 18th, pumping moisture northward into the state from the Gulf of Mexico. A cold front entered northern Oklahoma and stalled, setting the stage for stormy weather. High temperatures were in the 70s and 80s across the state. Slapout reached 90 degrees, tying for the state's highest temperature of the month.

March 19-21: The moisture interacting with the stalled cold front in northern Oklahoma meant rain for that part of the state. The 19th was merely a prelude with light showers in the area to go along with strong southerly winds and highs in the 60s. South of the front, the high temperatures in the humid air mass rose into the 70s and 80s. The 20th was the breakout day for the precipitation. Storms fired along the cold front and continued to move east over the same area. The Oklahoma Mesonet site at Foraker recorded over five inches of rain, with an unofficial report of nearly seven inches by a spotter in Newkirk. Flash flooding was widespread in Kay County. Other amounts from 1-2 inches were reported across the northern one-third of the state. The warm southerly flow continued on the 21st. Winds gusted to 45 mph in the west associated with a dryline. Clouds decreased in the afternoon and high temperatures rose into the 80s. Woodward reached 90 degrees to tie Slapout for the state's highest temperature for the month.

March 22-25: Another round of showers and storms moved over the state from the southwest, fueled by the continuing moist flow from the south. The storms dumped between 1-3 inches from west central through northeast Oklahoma. The showers and storms continued into the 23rd with over an inch of rain falling in the western Panhandle. Highs were in the 70s and 80s during this period with low temperatures remaining well above normal in the 60s. More storms formed across the northwest in the pre-dawn hours of the 24th. The Oklahoma Mesonet site at Woodward recorded a wind gust of 82 mph to go along with reports of power line and roof damage. The 25th brought a lull in the precipitation. Lows were in the 50s and 60s throughout this period and high temperatures were in the 70s and 80s as the warm and moist air flow from the south continued unabated.

March 26-27: An upper-level storm moved over the state during the 26th and 27th, bringing more showers and thunderstorms. Most amounts were less than an inch with very little severe weather reported. The strong southerly winds continued with temperatures rising from the 50s and 60s in the morning to the 60s and 70s during the day.

March 28-31: One of the wettest and stormiest periods in quite some time saw the return of deadly tornadoes to Oklahoma to go along with significant drought-busting rainfall. A powerful upper-level storm approached the state from the Four Corners area, setting up a classic springtime system. The storms struck the west on the 28th. A supercell moving north out of the Texas Panhandle slammed into the Oklahoma Panhandle, producing two EF2 (Enhanced Fujita) tornadoes in Beaver County. One of those tornadoes struck a home near Elmwood, killing both residents inside. The Slapout Mesonet site recorded nearly three inches of rainfall associated with the same storms which created river flooding along the Beaver River in Harper County. The line of storms moved to the east overnight, gradually weakening. Storms popped up in southwestern Oklahoma on the 29th, moving northeast over central Oklahoma. A thunderstorm dropped an EF2 tornado along the Canadian/Oklahoma County line, doing extensive damage to areas of west and northwest Oklahoma City. There were no fatalities and four injuries reported with this storm. The total intermittent damage path was approximately six miles, which ended north of NW 122nd in Oklahoma County. Two more tornadoes were reported on the 29th. An EF1 tornado touched down in Blaine County near Okeene while a weak EF0 twister struck in Garfield and Grant counties. The storms on the 30th into the early morning hours of the 31st dropped more heavy rain in Oklahoma creating extensive river- and flash-flooding. Rainfall amounts from the 29th and 30th were between 2-5 inches in central and southern Oklahoma. Flooding was reported in nearly all the state save the eastern one-third. A cold front swept through the state on the 31st as the upper-level storm exited the area. Lows on the month's final day were in the 40s and 50s, and highs were in the 60s.

March 2007 Statewide Statistics

Temperature

	Average	Depart.	Rank (1892-2007)
Month (March)	57.9ºF	7.7ºF	2nd Warmest
Year-to-Date (Jan-Mar)	44.3ºF	1.6ºF	27th Warmest

Precipitation

	Total	Depart.	Rank (1892-2007)
Month (March)	4.03 in.	0.92 in.	16th Wettest
Year-to-Date (Jan-Mar)	6.98 in.	0.66 in.	28th Wettest

Depart. = Departure from 30-year normal

March 2007 Severe Weather

Significant Tornadoes (WF2 or greater)

EF-rating	Location	County	Date
2	Between Booker and Darouzett TX (6 S of state line) - 16 N of state line	Beaver	28
2	9 miles east of Beaver	Beaver	28
2	NW OKC (near NW 39th/Sara - N of Memorial Road / Morgan Road)	Canadian	29

Hail (2 inches in diameter or greater)

No significant hail reported in the state.

Wind Gusts (70 mph or greater)

Speed (m.p.h)	Location	County	Date
72	Altus	Jackson	11
70	Altus	Jackson	11
82	Freedom Mesonet site	Woodward	24

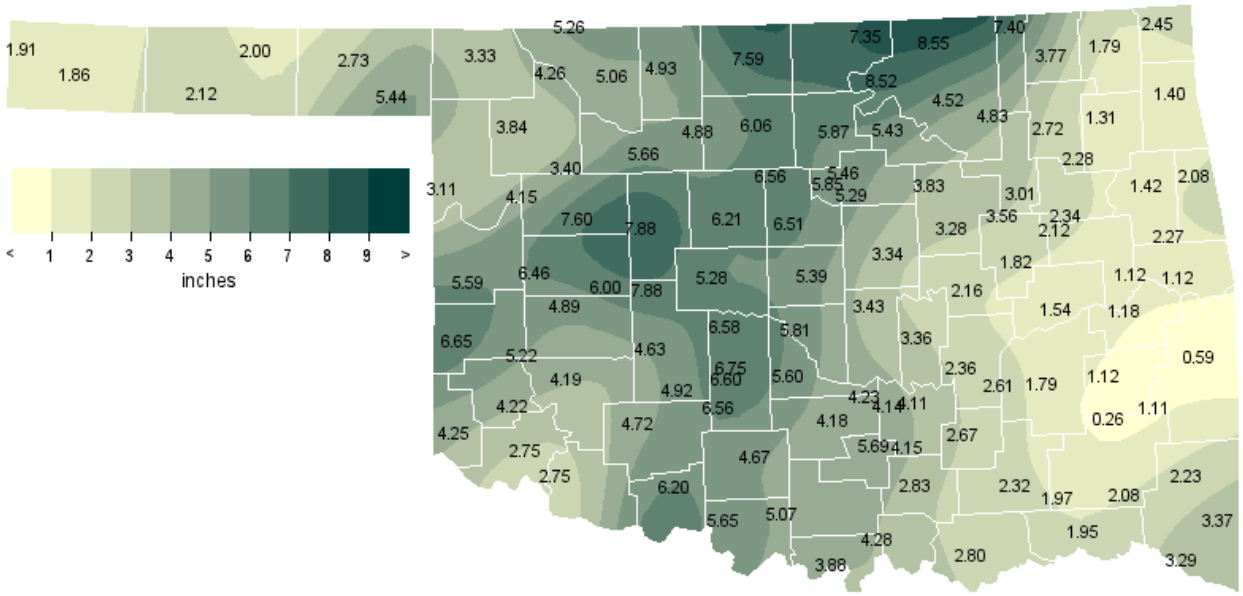
Flooding

Location	County	Day
4 miles west of Kildare	Kay	20
2 miles east of Newkirk	Kay	20
Blackwell	Kay	20
Ponca City	Kay	20
4 miles northeast of Ponca City	Kay	20
Chilocco	Kay	20
1 mile west of Red Rock	Noble	20
15 miles southeast of Beaver	Beaver	29
Lawton	Comanche	29
Ardmore	Carter	30
Walters	Cotton	30
4 miles west of Randlett	Cotton	30
1 mile north of Walters	Cotton	30
7 miles north of Walters	Cotton	30
3 miles north of Randlett	Cotton	30
Waurika	Jefferson	30
2 miles north of Ryan	Jefferson	30
4 miles southeast of Davis	Murray	30
Sulphur	Murray	30
Duncan	Stephens	30
Comanche	Stephens	30

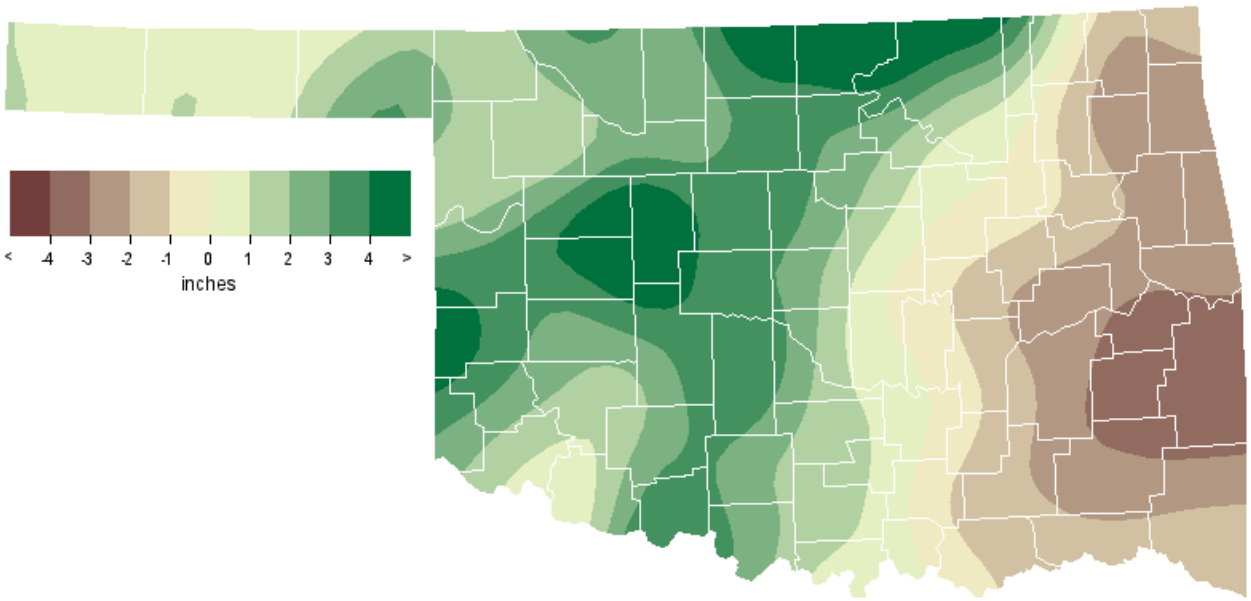
Record Event Reports

Description	Day	Location	Record	Previous Record	Year
Daily Rainfall	29	Oklahoma City	1.42	0.99	1897
Daily Rainfall	30	Oklahoma City	3.50	1.82	1963
March Single-Day Rainfall		Oklahoma City	3.50	2.84	1988
March Rainfall		Oklahoma City	8.01	7.85	1988

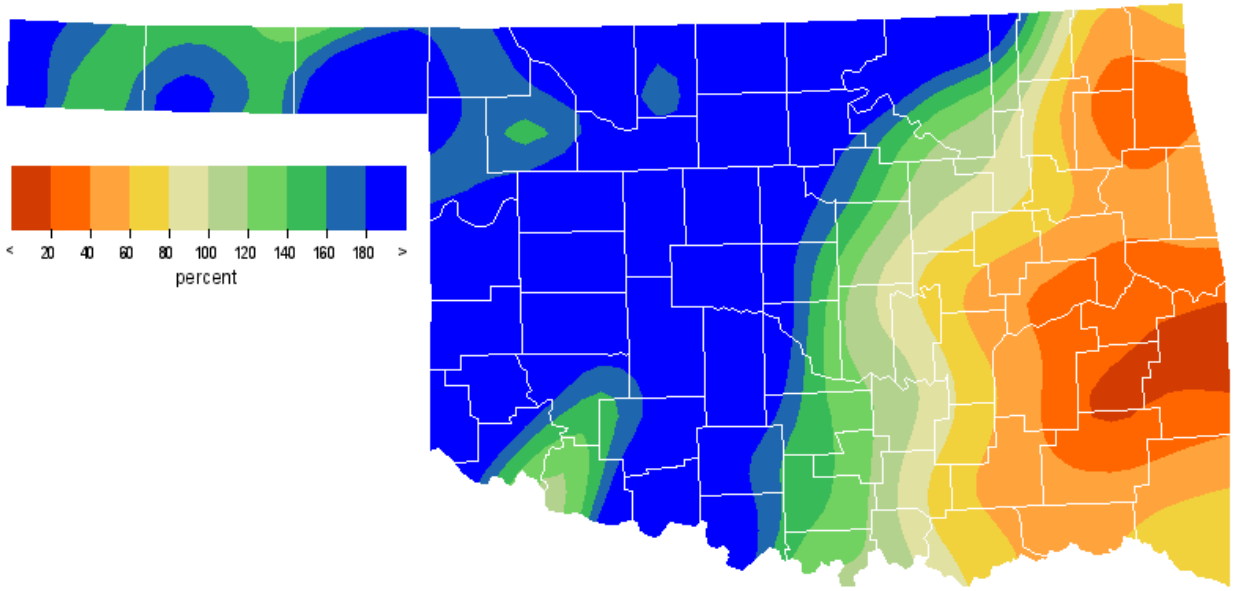
March 2007 Observed Precipitation



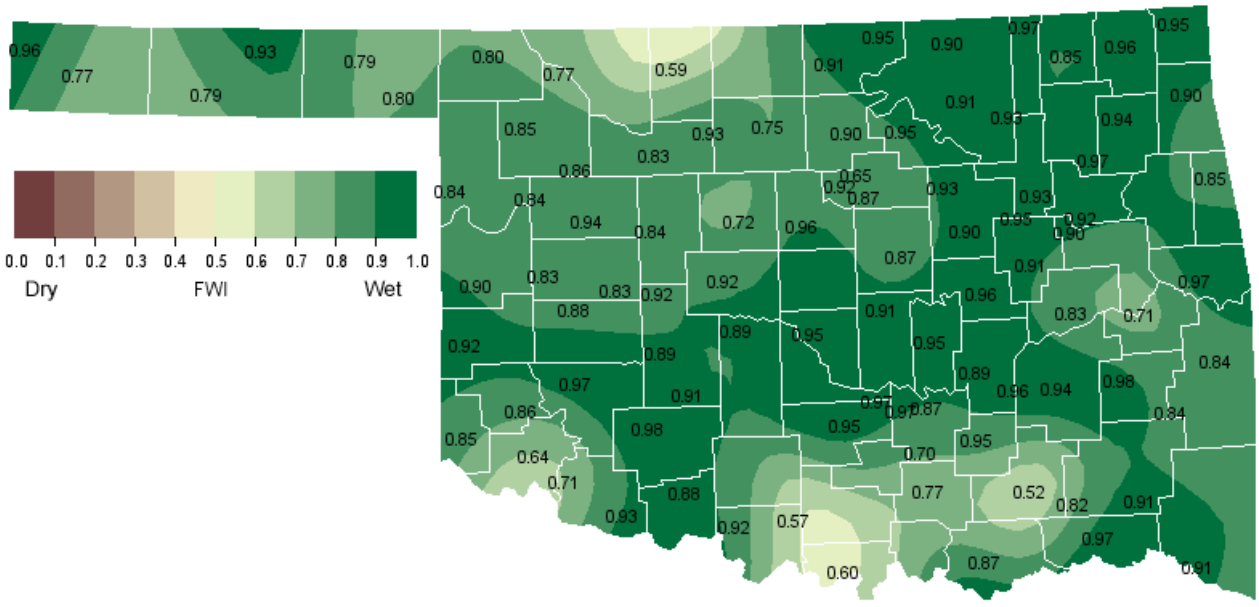
March 2007 Departure from Normal Precipitation



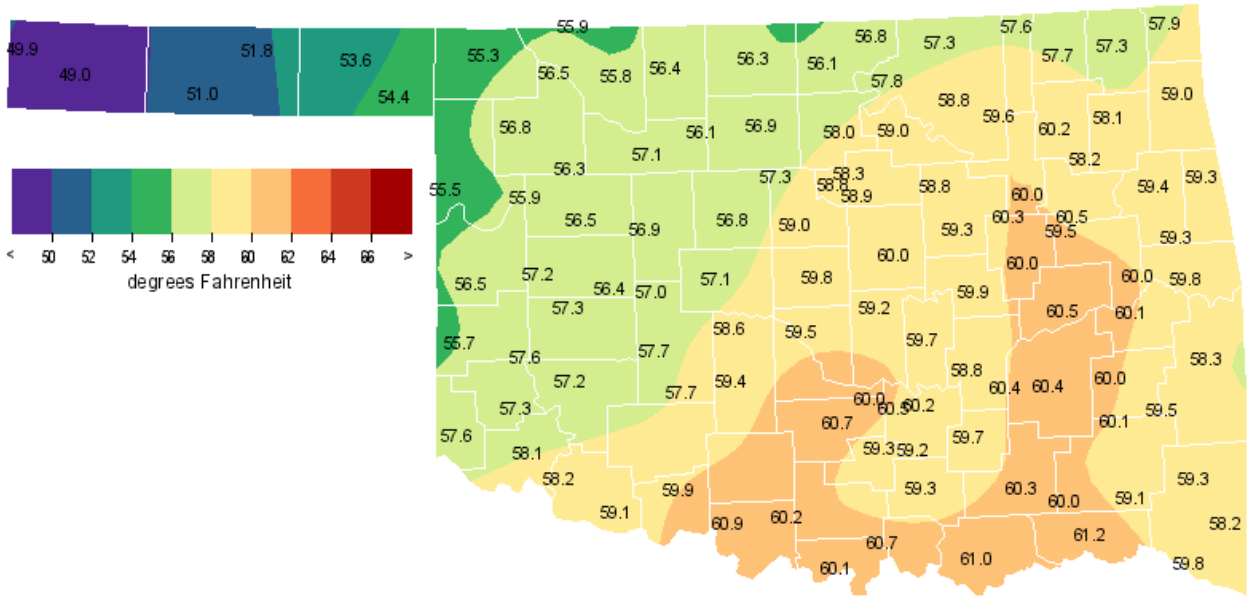
March 2007 Percent of Normal Precipitation



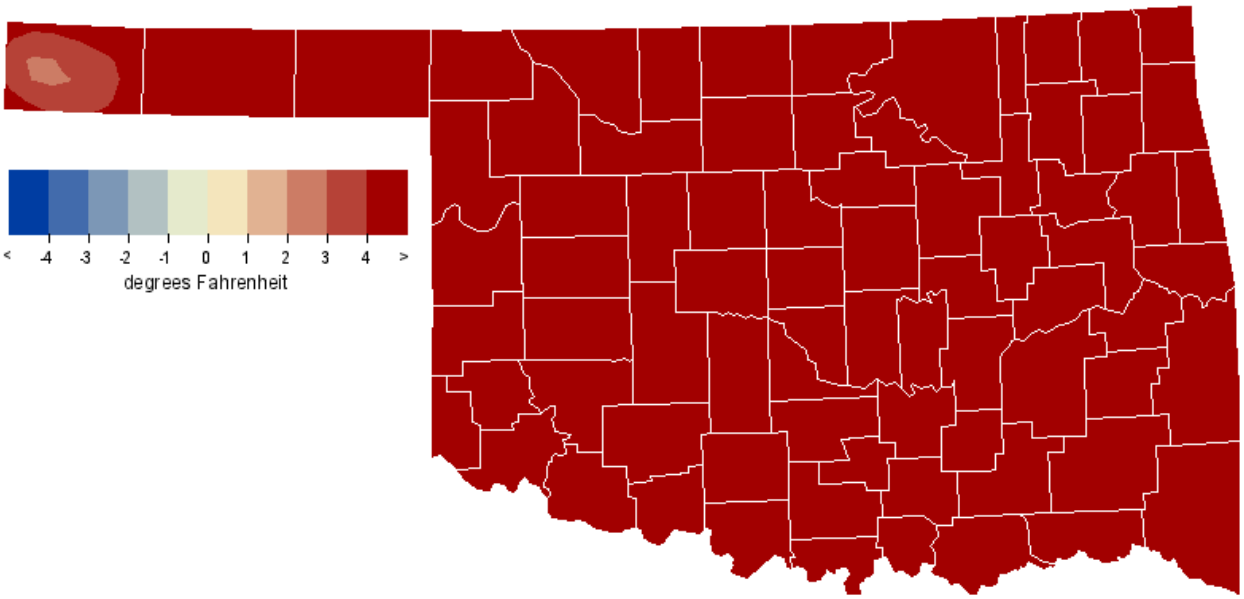
March 2007 Average Soil Moisture at 25cm



March 2007 Average Temperature



March 2007 Departure from Normal Temperature



Mesonet Monthly Summary for March 2007

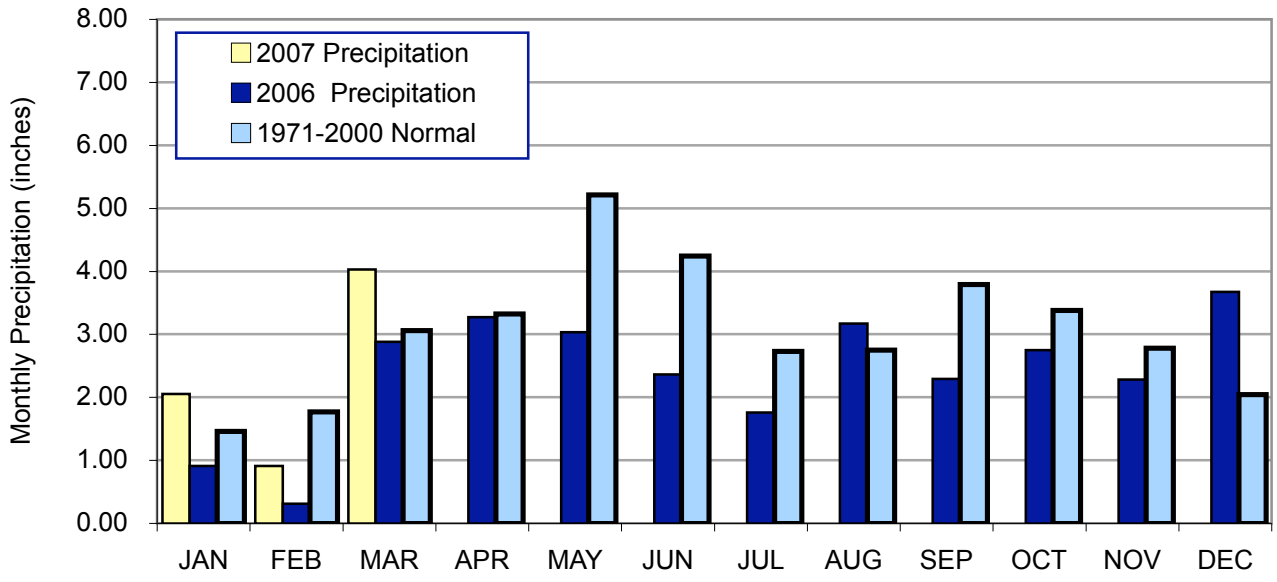
NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	55.5	88	21	23	4	304	11	3.11	.99	29
Beaver	53.6	89	21	14	4	362	10	2.73	.93	24
Boise City	49.1	83	18	13	2	493	0	1.86	1.41	23
Buffalo	55.3	88	21	16	4	314	13	3.33	.94	29
NORTH CENTRAL										
Alva	55.8	82	21	19	4	298	13	5.06	1.89	30
Blackwell	56.1	79	18	16	4	290	15	*****	*****	***
Breckinridge	56.8	79	28	18	4	271	18	6.06	1.58	30
Cherokee	56.4	80	18	21	4	280	12	4.93	1.85	29
Fairview	57.1	79	21	23	4	259	15	5.66	1.52	29
Freedom	56.5	88	21	19	4	278	16	4.26	1.04	30
Lahoma	56.1	77	21	19	4	286	11	4.88	1.37	29
NORTHEAST										
Bixby	60.0	78	29	23	4	202	47	3.01	.98	23
Burbank	57.8	80	21	15	4	254	30	8.52	3.35	20
Claremore	60.2	79	28	19	4	196	48	2.72	.88	29
Copan	57.7	77	28	17	4	250	23	7.40	2.78	20
Foraker	57.4	78	21	17	4	264	27	8.55	5.14	20
Inola	58.2	79	29	18	4	242	31	2.28	.53	11
Jay	59.0	81	29	16	4	233	46	1.40	.62	23
Miami	57.9	78	28	19	4	254	33	2.45	.60	23
WEST CENTRAL										
Bessie	57.3	80	21	22	4	254	17	4.89	1.30	30
Butler	57.2	82	21	19	4	265	22	6.46	2.08	22
Camargo	55.9	84	21	18	4	296	14	4.15	1.11	29
Cheyenne	56.5	83	21	26	3	271	7	5.59	1.96	22
Erick	55.7	81	21	21	4	296	9	6.65	2.76	22
CENTRAL										
Acme	59.7	80	21	16	4	****	****	6.56	2.63	30
Bowlegs	59.8	77	9	19	4	196	35	3.36	1.52	30
Bristow	59.3	78	13	15	4	220	42	3.28	1.00	23
Chandler	59.9	79	28	18	4	196	39	3.34	1.44	30
Chickasha	58.2	78	21	15	4	****	****	6.75	3.53	30
El Reno	57.1	79	21	17	4	266	21	5.28	1.47	30
Guthrie	59.1	81	21	16	4	217	34	6.51	2.35	30
Kingfisher	56.8	78	21	17	4	277	22	6.21	1.76	29
Marena	58.8	81	21	18	4	224	32	5.85	1.69	29
Minco	58.6	78	28	24	4	222	23	6.58	2.78	30
Marshall	57.3	80	21	15	4	269	29	6.56	1.84	29
EAST CENTRAL										
Calvin	58.9	78	9	22	4	220	29	2.36	1.31	30
Cookson	59.4	79	12	19	4	215	40	2.27	.91	30
Eufaula	60.5	77	29	25	4	178	38	1.54	.73	30
Haskell	59.5	78	29	21	4	211	39	2.12	1.12	11
Hectorville	60.3	77	9	23	4	186	42	3.56	.98	23
McAlester	60.4	78	24	22	4	187	44	1.79	.96	30
Okmulgee	60.0	78	9	20	4	203	48	1.82	.55	27
SOUTHWEST										
Altus	58.0	83	19	18	4	249	33	2.75	.91	11
Apache	57.7	78	21	21	4	244	17	4.92	1.88	29
Fort Cobb	57.7	79	21	20	4	246	20	4.63	1.47	29
Grandfield	59.1	82	21	21	4	218	37	*****	*****	***
Hinton	57.0	79	21	20	4	263	15	7.88	2.87	29
Hobart	57.2	79	21	20	4	261	19	4.19	.99	11
SOUTH CENTRAL										
Ada	60.1	79	9	18	4	182	31	4.11	1.56	30
Ardmore	61.0	79	10	25	4	****	****	1.76	.95	29
Burneyville	60.1	79	10	18	4	191	39	3.88	2.16	30
Byars	60.0	77	10	24	4	****	****	4.23	2.28	30
Centrahoma	59.6	80	9	20	4	205	38	2.67	1.57	30
Durant	61.0	78	24	26	4	163	40	2.80	1.24	30
Fittstown	59.3	77	9	22	4	198	20	4.15	1.61	30
Ketchum Ranch	61.1	81	21	23	4	****	****	4.67	2.36	30
Lane	60.3	80	24	24	4	190	44	2.32	1.32	30
SOUTHEAST										
Antlers	60.0	81	24	20	4	203	47	1.97	1.26	30
Broken Bow	58.2	81	15	19	4	228	16	3.37	1.55	27
Clayton	60.1	79	10	23	5	198	46	.26	.16	30
Cloudy	59.1	79	15	23	5	207	24	2.08	.68	30
Hugo	61.2	80	15	26	4	158	40	1.95	.88	30

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	51.0	85	18	17	2	435	0	2.12	.86	24
Hooker	51.9	85	21	19	4	408	2	2.00	.84	24
Kenton	49.9	84	18	15	4	468	0	1.91	1.49	23
Slapout	54.3	90	18	21	4	340	9	5.44	2.98	28
May Ranch	55.8	88	21	21	4	301	16	5.26	1.29	30
Medford	56.3	78	18	17	4	287	16	7.59	2.77	20
Newkirk	56.8	80	21	17	4	276	22	7.35	4.19	20
Red Rock	58.0	82	21	17	4	246	30	5.87	2.14	22
Seiling	56.3	82	21	19	4	285	14	3.40	.94	30
Woodward	56.8	90	21	20	4	273	19	3.84	1.00	29
Nowata	57.7	77	28	16	4	258	33	3.77	1.34	29
Pawnee	58.9	82	21	15	4	225	37	5.43	2.38	29
Porter	60.4	79	29	21	4	189	47	2.34	.78	11
Pryor	58.1	80	28	14	4	255	40	1.31	.66	23
Skiatook	59.5	78	28	20	4	205	36	4.83	2.25	29
Vinita	57.3	78	28	15	4	265	26	1.79	.75	23
Wynona	58.8	79	13	17	4	228	37	4.52	1.33	29
Putnam	56.5	80	21	20	4	275	11	7.60	3.70	22
Retrop	57.6	81	21	23	4	251	22	5.22	2.23	22
Watonga	56.9	77	21	23	4	261	10	7.88	2.93	29
Weatherford	56.4	76	21	20	4	275	9	6.00	1.66	22
Ninnekah	59.4	80	21	20	4	209	35	6.60	3.05	30
Norman	59.5	80	21	20	4	203	33	5.81	2.41	30
Oilton	58.7	80	13	11	4	234	39	3.83	1.23	29
Oklahoma City	60.8	80	21	24	4	****	****	7.17	3.39	30
Okemah	59.9	77	9	19	4	202	44	2.16	.88	30
Perkins	58.9	80	21	18	4	217	28	5.29	1.77	29
Shawnee	59.2	76	21	21	4	208	29	3.43	1.68	30
Spencer	59.8	80	21	17	4	195	35	5.39	1.75	30
Stillwater	58.3	82	21	14	4	248	39	5.46	1.89	29
Washington	60.2	79	21	21	4	****	****	5.60	3.02	30
Sallisaw	59.8	81	29	21	4	209	49	1.12	.40	30
Stigler	60.1	79	29	24	4	198	46	1.18	.92	30
Stuart	60.4	78	24	23	4	178	36	2.61	1.30	30
Tahlequah	59.4	79	12	16	4	215	41	1.42	.41	30
Webbers Falls	60.0	80	24	20	4	205	50	1.12	.76	30
Westville	59.3	79	30	18	4	214	38	2.08	.68	30
Hollis	57.5	84	21	20	4	255	23	4.25	1.24	11
Mangum	57.3	81	21	20	4	264	25	4.22	1.13	11
Medicine Park	*****	***	***	***	***	****	****	4.72	1.88	29
Tipton	58.2	80	21	17	4	239	29	2.75	1.33	11
Walters	59.9	82	19	20	4	197	39	6.20	2.27	11
Madill	60.7	79	9	24	4	173	39	4.28	2.63	30
Newport	61.0	80	9	24	4	****	****	2.94	1.81	29
Pauls Valley	60.7	79	13	22	4	175	41	4.18	2.32	30
Ringling	60.2	80	9	22	4	183	36	5.07	2.53	30
Sulphur	59.3	79	10	16	4	204	26	5.69	2.28	30
Tishomingo	59.3	79	9	23	4	204	29	2.83	1.63	30
Vanoss	60.5	79	9	23	4	178	39	4.14	1.69	30
Waurika	60.9	82	19	22	4	174	47	5.65	3.88	30
Idabel	59.8	80	24	23	4	193	32	3.29	1.08	30
Mt Herman	59.2	79	15	25	5	208	29	2.23	.74	9
Talihina	59.4	79	29	21	4	223	50	1.11	.68	9
Wilburton	60.0	80	29	21	4	207	51	1.12	.90	30
Wister	58.3	80	30	21	4	242	34	.59	.23	31

March 2007 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Mar-06
Panhandle	2.81	1.18	7th Wettest	5.84 (1973)	0.00 (1895)	1.02
North Central	5.35	2.67	3rd Wettest	8.18 (1973)	0.00 (1936)	2.02
Northeast	4.02	0.35	28th Wettest	9.79 (1973)	0.00 (1900)	2.30
West Central	6.05	3.65	3rd Wettest	7.24 (1973)	0.00 (1895)	1.91
Central	5.19	1.95	6th Wettest	7.88 (1990)	0.00 (1900)	2.22
East Central	1.92	-2.17	26th Driest	10.63 (1945)	0.46 (1911)	3.83
Southwest	4.65	2.39	4th Wettest	5.52 (1973)	0.00 (1940)	2.09
South Central	4.04	0.49	27th Wettest	8.46 (1945)	0.20 (1950)	4.60
Southeast	1.80	-2.68	12th Driest	12.38 (1945)	1.01 (1954)	6.56
Statewide	4.03	0.92	16th Wettest	7.46 (1973)	0.38 (1971)	2.88

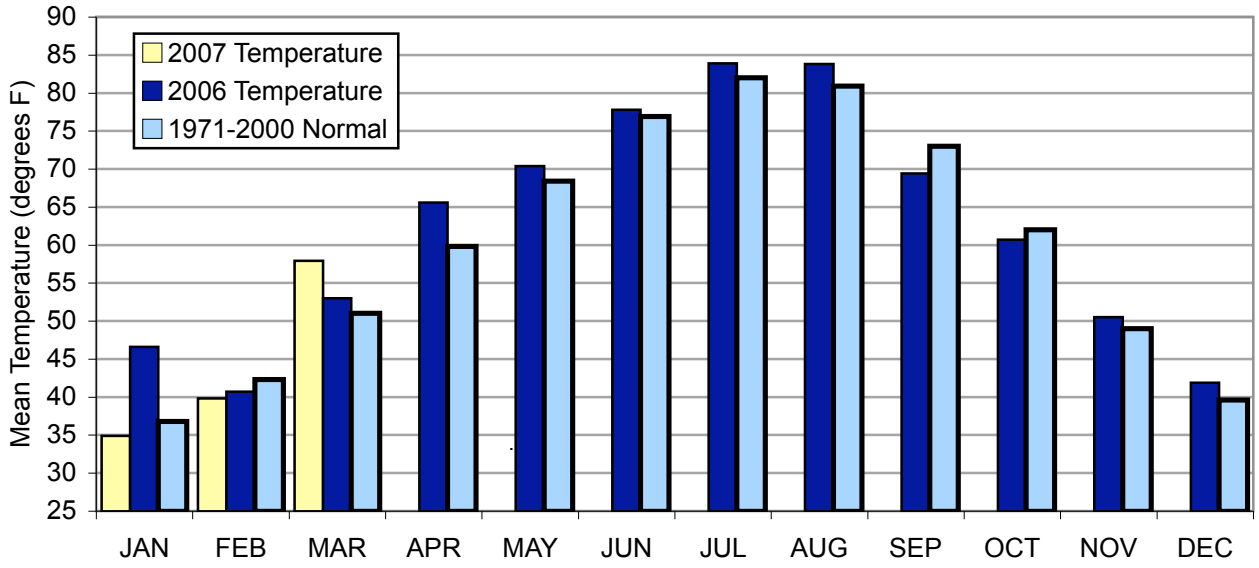
2006 and 2007 Statewide Precipitation Monthly Totals vs. Normal



March 2007 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Mar-06 (F)
Panhandle	52.6	6.3	3rd Warmest	54.3 (1910)	32.9 (1915)	47.1
North Central	56.5	8.3	2nd Warmest	57.6 (1910)	35.3 (1915)	50.2
Northeast	58.6	9.0	1st Warmest	57.7 (1910)	37.3 (1960)	52.2
West Central	56.7	7.8	2nd Warmest	56.8 (1910)	35.8 (1915)	52.4
Central	58.8	8.3	1st Warmest	58.4 (1910)	37.7 (1915)	54.1
East Central	59.8	8.3	1st Warmest	59.5 (1907)	39.2 (1915)	54.4
Southwest	58.0	6.5	2nd Warmest	58.7 (1907)	38.2 (1915)	55.1
South Central	60.2	7.2	2nd Warmest	61.1 (1907)	40.4 (1915)	56.9
Southeast	59.6	6.8	3rd Warmest	61.5 (1907)	42.0 (1915)	55.5
Statewide	57.9	7.7	2nd Warmest	57.9 (1907)	37.6 (1915)	53.1

2006 and 2007 Statewide Temperature Monthly Averages vs. Normal



Mesonet Extremes for March 2007

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	90	18th	Slapout	13	2nd	Boise City	5.44	Slapout	2.98	28th	Slapout
North Central	90	21st	Woodward	16	4th	Blackwell	7.59	Medford	4.19	20th	Newkirk
Northeast	82	21st	Pawnee	14	4th	Pryor	8.55	Foraker	5.14	20th	Foraker
West Central	84	21st	Camargo	18	4th	Camargo	7.88	Watonga	3.70	22nd	Putnam
Central	82	21st	Stillwater	11	4th	Oilton	6.75	Chickasha	3.53	30th	Chickasha
East Central	81	29th	Sallisaw	16	4th	Tahlequah	3.56	Hectorville	1.31	30th	Calvin
Southwest	84	21st	Hollis	17	4th	Tipton	7.88	Hinton	2.87	29th	Hinton
South Central	82	19th	Waurika	16	4th	Sulphur	5.69	Sulphur	3.88	30th	Waurika
Southeast	81	24th	Antlers	19	4th	Broken Bow	3.37	Broken Bow	1.55	27th	Broken Bow
Statewide	90	18th	Slapout	11	4th	Oilton	8.55	Foraker	5.14	20th	Foraker

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.

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

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 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.

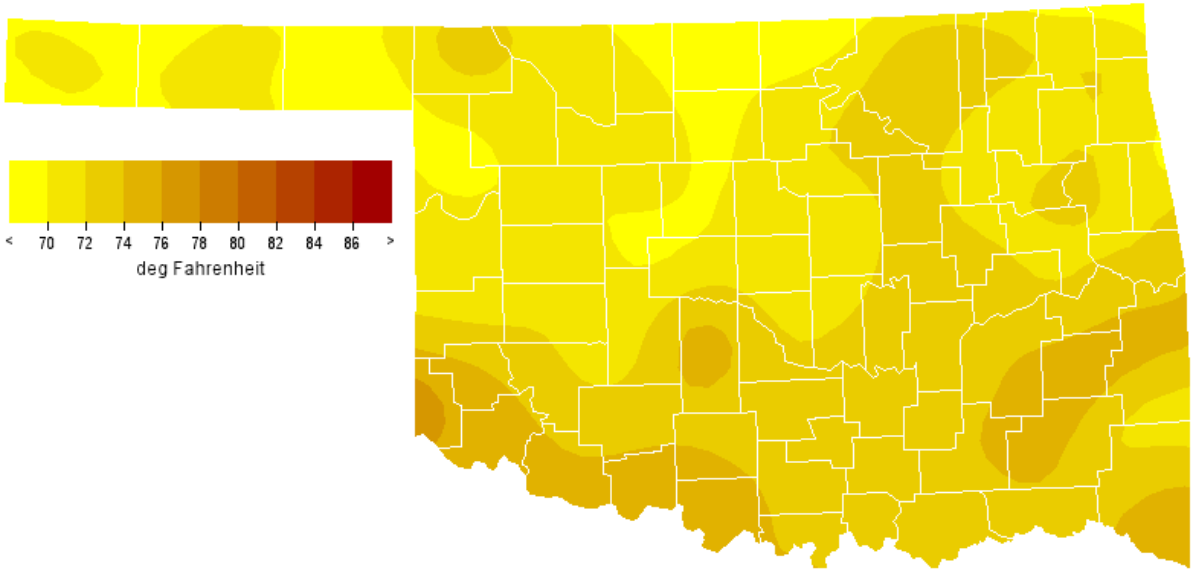
Temperature
Mean: 59.8 degrees
Warmest Location: 63.9 degrees, Waurika
Coolest Location: 54.0 degrees, Boise City
Warmest April: 1954, 65.4 degrees
Coolest April: 1983, 54.0 degrees
Hottest recorded: 106 degrees, Mangum, April 12, 1972
Coldest recorded: 7 degrees, Hooker, April 4, 1979

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.

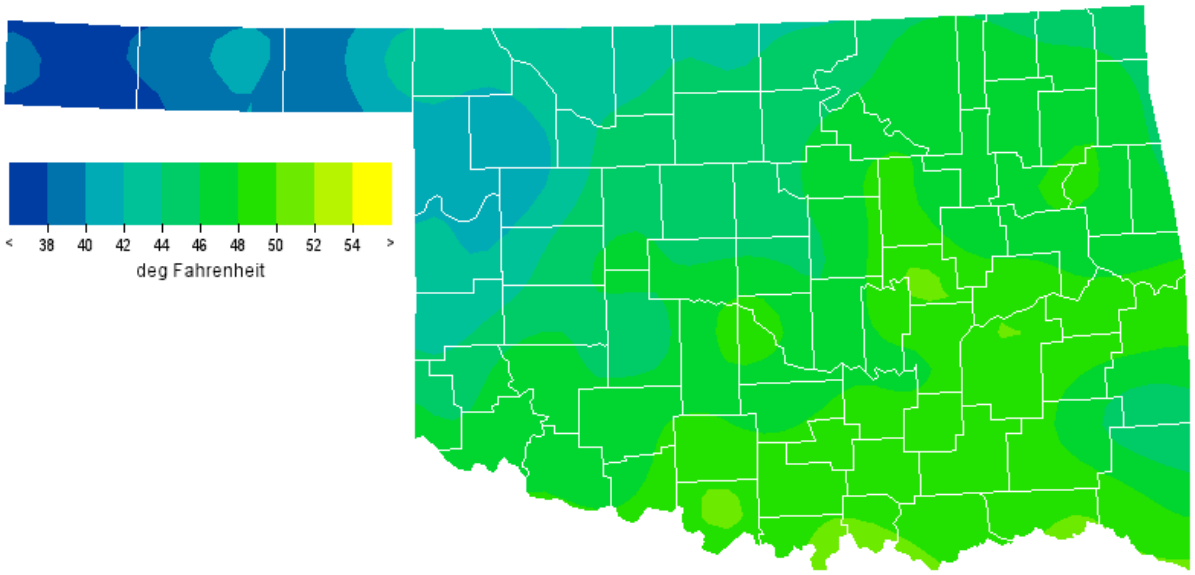
Comprehensive records of tornado occurrence are available from 1950 to the present. A total of 579 tornadoes are listed as having struck within Oklahoma during April from 1950 through 2003. Forty of those tornadoes were reported in 1957, easily the most of any April during the period.

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

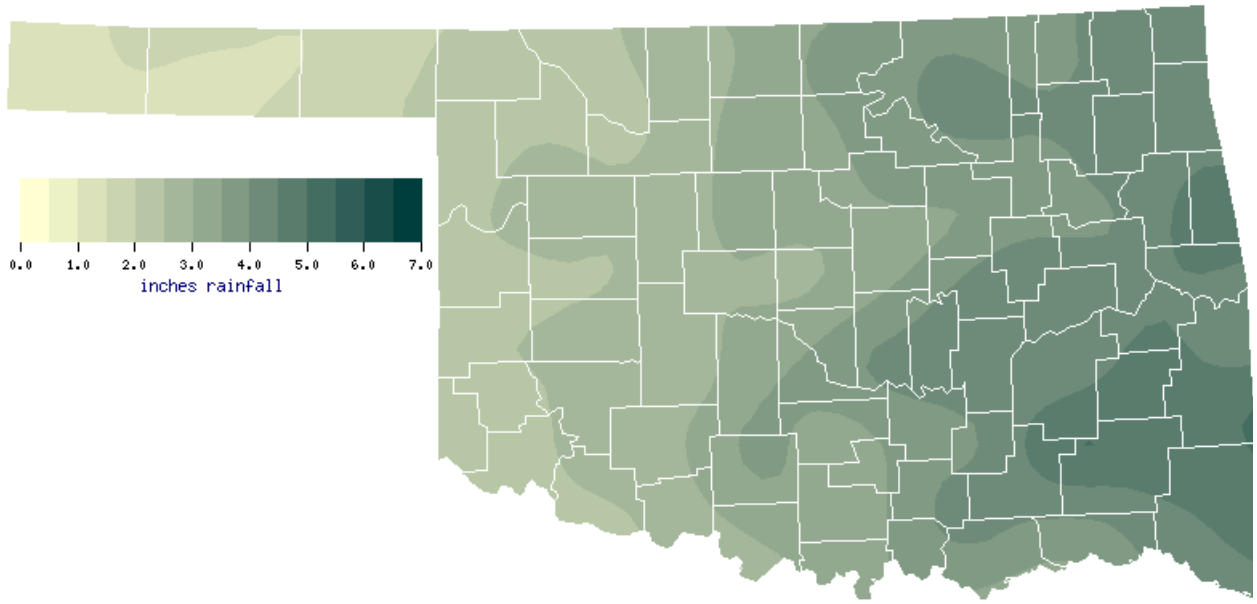
April Normal Daily Maximum Temperature (1971-2000)



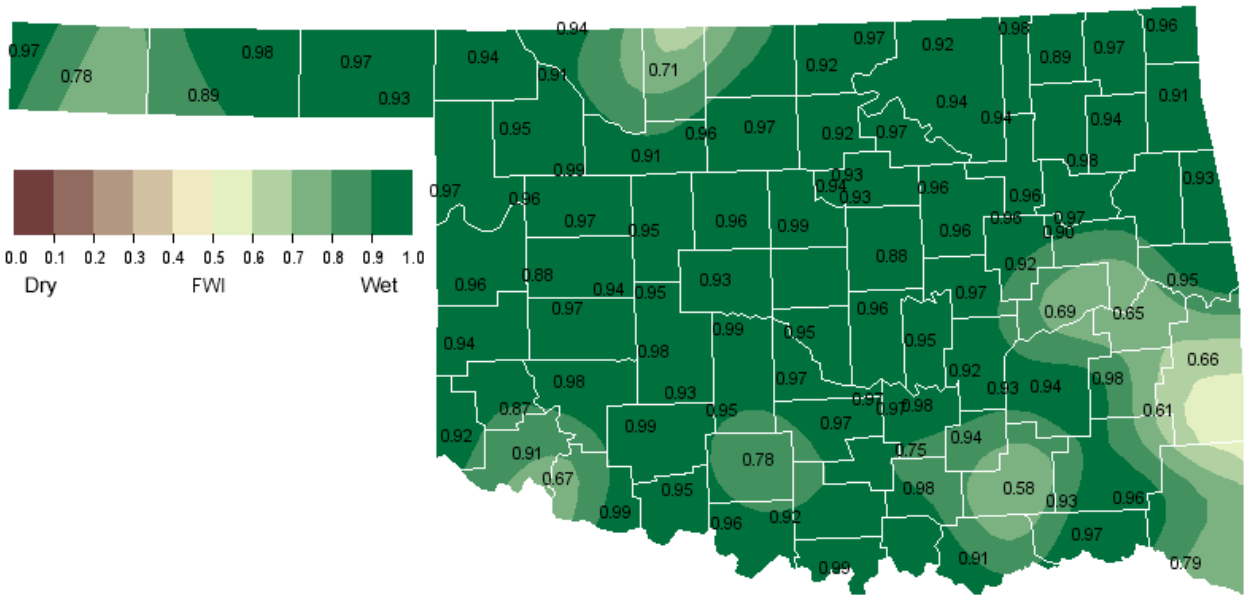
April Normal Daily Minimum Temperature (1971-2000)



April Normal Precipitation (1971-2000)



April 1, 2007 Soil Moisture Conditions at 25cm



April 2007 Drought Indices

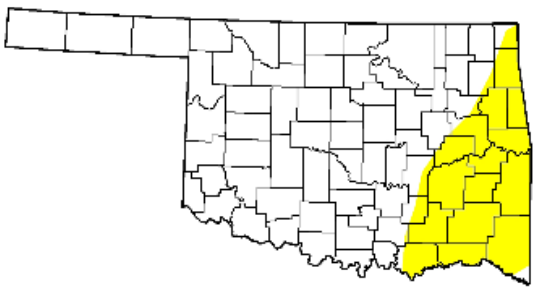
U.S. Drought Monitor

Oklahoma

April 3, 2007
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	77.8	22.2	0.0	0.0	0.0	0.0
Last Week (03/27/2007 map)	27.6	72.4	14.1	0.0	0.0	0.0
3 Months Ago (01/09/2007 map)	32.4	67.6	39.0	24.5	18.2	0.0
Start of Calendar Year (01/02/2007 map)	31.3	68.7	39.8	24.5	18.2	0.0
Start of Water Year (10/03/2006 map)	2.7	97.3	92.7	46.2	16.6	0.0
One Year Ago (04/04/2006 map)	0.0	100.0	100.0	80.9	9.2	0.0



Intensity:

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

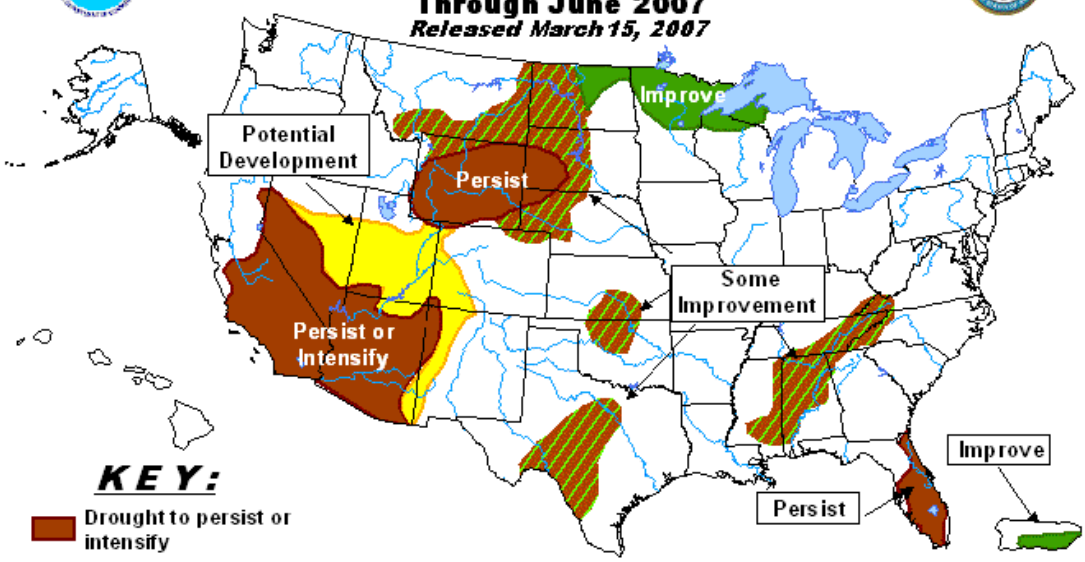
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements

http://drought.unl.edu/dm

Released Thursday, April 5, 2007
Author: Thomas Heddinghaus, CPC/NOAA

U.S. Seasonal Drought Outlook

Through June 2007
Released March 15, 2007

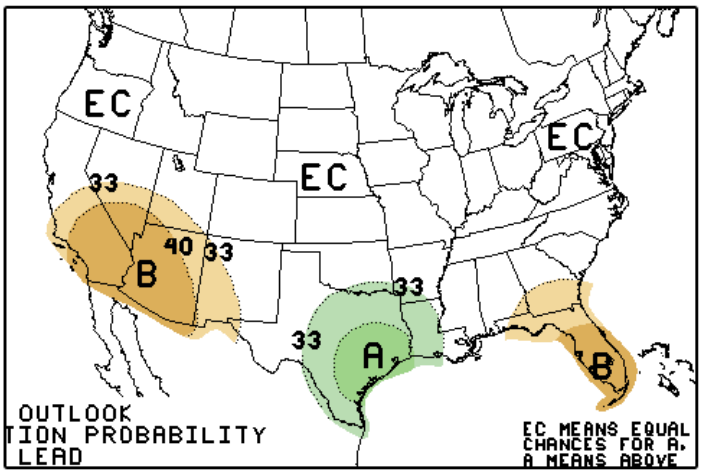


KEY:

- Drought to persist or intensify
- Drought ongoing, some improvement
- Drought likely to improve, impacts ease
- Drought development likely

Depicts general, large-scale trends based on subjectively derived probabilities guided by numerous indicators, including short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more that a few days in advance, so use caution if using this outlook for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4). For weekly drought updates, see the latest Drought Monitor map and text. 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 2007 U.S. Precipitation Forecast



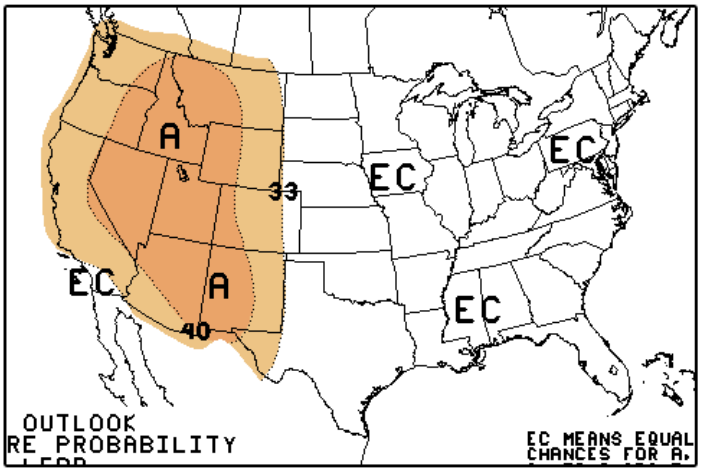
Percent Likelihood of Above or Below Average Precipitation*

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

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

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

April 2007 U.S. Temperature Forecast



Percent Likelihood of Above and Below Average Temperatures*

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

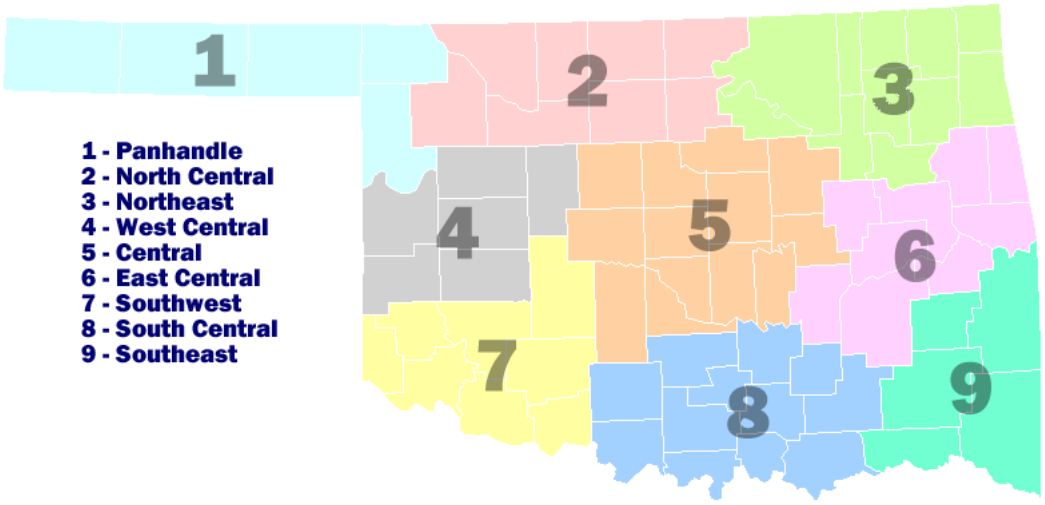
0% - 5%
5% - 10%
B = Below

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

OKLAHOMA CLIMATOLOGICAL SURVEY

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