Oklahoma Monthly Climate Summary

MARCH 2011

OKLAHOMA CLIMATOLOGICAL SURVEY

Warm and dry weather grabbed the headlines as the record-setting extremes of February gave way to a downright dull March. Data from the Oklahoma Mesonet ranked the month as the eighth driest and 31st warmest March since records began in 1895. Severe weather was scarce, although a few reports of large hail and high winds accompanied the few thunderstorms that did occur. Elevated fire risk was common during the month, a result of the dry and windy conditions. The Governor's office declared a state of emergency on March 11 for all 77 Oklahoma counties with the report of 30 wildfires burning simultaneously across the state.

PRECIPITATION

Very little rain fell during the month, allowing severe drought conditions already in place to spread and intensify. The statewide average rainfall total was a paltry 0.7 inches, 2.41 inches below normal. It was the driest March on record for southeastern and south central Oklahoma, and the second driest in the southwest. The only significant rains fell in northeastern Oklahoma where several Mesonet stations totaled more than 3 inches. Miami led the state with 3.36 inches. The rest of Oklahoma went largely without rain, however. Of the 120 Mesonet sites, 32 had totals of less than a tenth of an inch. Fort Cobb went without a drop of rain for the entire month. The first three months of the year were the fourth driest on record with a statewide average rainfall total of 2.3 inches, more than 4 inches below normal.

March 2011 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	95°F	Altus, Hollis	17
Low Temperature	15°F	Kenton	14
High Precipitation	3.36 in.	Miami	
Low Precipitation	0.00 in.	Fort Cobb	--

TEMPERATURE

The lack of rainfall also meant plenty of sunshine and warm weather. The statewide average temperature was nearly 2 degrees above normal at 52.1 degrees. The average high temperature across the state was 64.6 degrees and the average low was 39.8 degrees. Altus and Hollis won the prize for highest temperature with their 95-degree readings on the 17th. The weather still got significantly cold at times, however, evidenced by the 15 degrees recorded at Kenton on the 14th. Waurika was the warmest location in the state with an average temperature of 57.4 degrees while Boise City brought up the rear at 45.5 degrees. March's warmth could not overcome the cool weather of January and February. The statewide average temperature for the first three months of the year was 42.3 degrees, about half of a degree below normal.

March 2011 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2011)
Month (March)	52.1°F	1.9°F	31st Warmest
Year-to-Date (Jan-Mar)	42.3°F	-0.4°F	58th Warmest

Precipitation

	Average	Depart.	Rank (1895-2011)
Month (March)	0.70 in.	-2.41 in.	8th Driest
Year-to-Date (Jan-Mar)	2.30 in.	-4.02 in.	4th driest

Depart. = departure from 30-year normal

MARCH DAILY HIGHLIGHTS

MARCH 1-4: A wayward cold front separated the mild weather from the warm weather. Highs tended to be in the 70s ahead of the front and in the 60s behind the front. Morning lows were much colder behind the front, however, in the 20s and 30s. Lows only dropped into the 40s and even a few 50s south of the front. The cold air finally made a push and cleared the state on the fourth. A few showers popped up in eastern Oklahoma along the boundary but amounts were generally less than a half of an inch.

MARCH 5-8: The weather turned downright cold following the cold front on the fourth. Lows dropped into the 20s and 30s and the strong northerly winds meant even lower wind chills. The weather warmed over the next couple of days with the approach of an upper-level storm system from the west. Southerly winds and some moisture returned on the seventh. A cold front on the eighth kicked off a round of showers and storms that gave a patch from west central through north central Oklahoma a good soaking. More than an inch fell in

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some areas. Totals diminished quite rapidly farther away from that one-inch swath, however. The cold front moved through the state by the evening of the eighth.

MARCH 9-13: Things were chilly once again after the cold front of the previous day. Lows fell into the 30s over most of the state on the ninth with low wind chills once again due to the strong northerly winds. A cold front moved into the state on the 11th and became stationary. Strong southerly winds and low relative humidities set up perfect wildfire conditions and fires began to spread later that afternoon. The Governor's office declared a state of emergency for all 77 counties with more than two dozen fires reported burning across the state. The state dealt with the stationary front for the next two days. A few showers were able to build along the front on the 13th. Rainfall amounts with the showers were generally less than a half of an inch, but a few locations received a bit more than that.

MARCH 14-17: This four-day period felt a little bit like summer. It started out gray and drizzly with a touch of winter on the 14th. Lows were in the 30s and highs only rose into the 40s and 50s. Strong southerly winds brought warm moist air up from the south and by the 17th, temperatures had risen into the mid-90s. Altus and Hollis reached 95 degrees on the 17th, the month's highest reading. A cold front into the northwest late on the 17th ushered in a bit of cool air into that part of the state.

MARCH 18-22: A cold front moved south through the state on the 18th before stalling out. Lows were in the 60s ahead of the front but 40s and 50s behind the front. Highs were similarly split by the front with 80s ahead and 60s behind. Severe weather finally struck on the 19th as the cold front began retreating to the north as a warm front. Hail reports were not widespread, but a few 2-inch hailstones were reported near Blocker in Pittsburg County. The weather stayed warm for a few days following that action and rose into the 80s by the 22nd. Fire danger was elevated throughout the period with strong southerly winds and low relative humidities. A weak cold front entered the northwest late on the 22nd.

MARCH 23-31: A couple of cold fronts finally brought enough cold air into the region for a return to winter-like temperatures. The first front came through on the 23rd and 24th but very little cool-down occurred with its passage. Another cold front on the 26th finally cleared the state. A few showers and storms formed on the front in the southern parts of the state, but amounts were fairly light. The next few days were cold and gray with drizzle and light showers. Highs were sometimes confined to the 30s and 40s, although a few 50s were thrown in for good measure. Finally, by the 31st, winds returned from the south and gave most of the state a lovely spring day with seasonable temperatures in the 70s.

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MARCH 2011 SEVERE WEATHER

Hail (2 inches in diameter or greater)

Size (in.)	Location	County	Day
2	Blocker	Pittsburg	26

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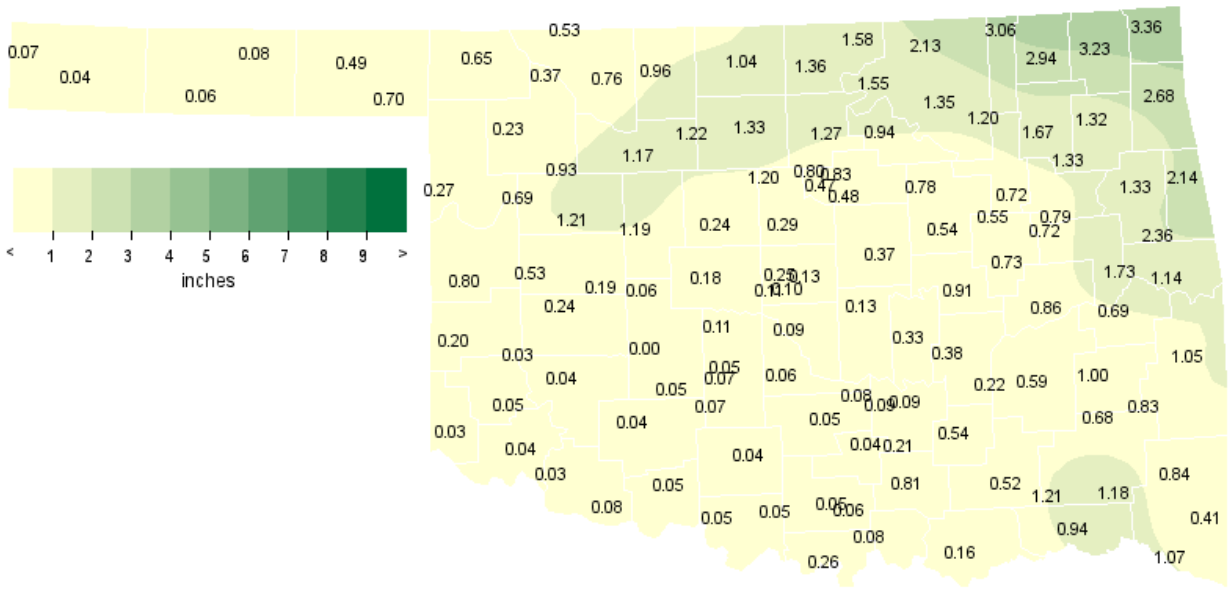
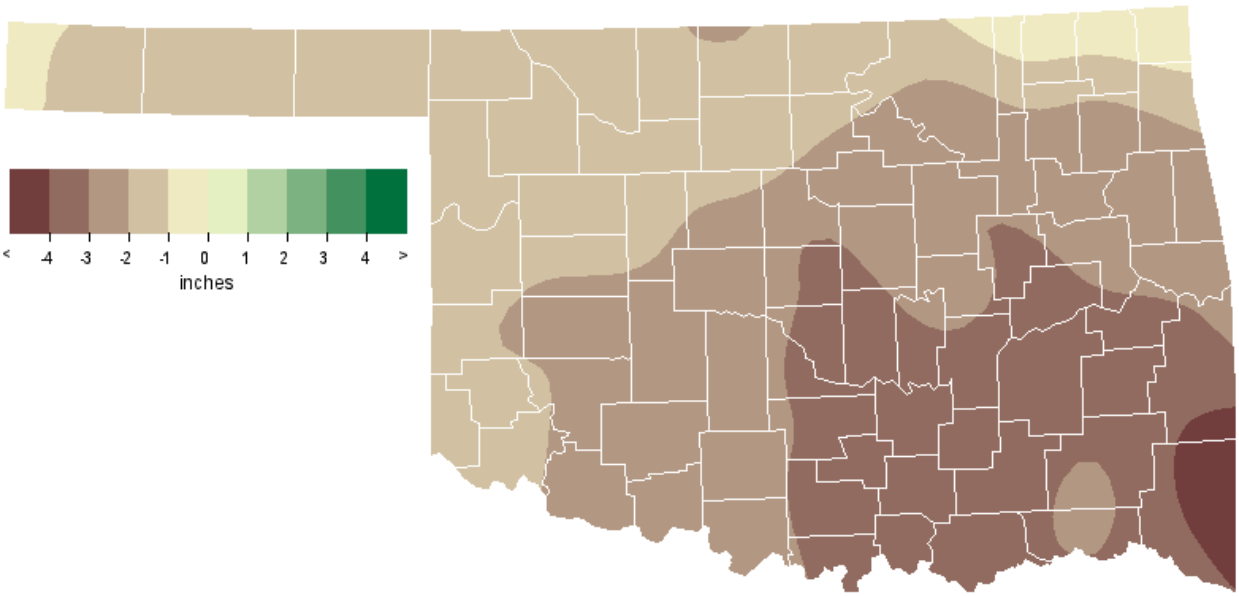
MARCH 2011 OBSERVED PRECIPITATION



MARCH 2011 DEPARTURE FROM NORMAL PRECIPITATION



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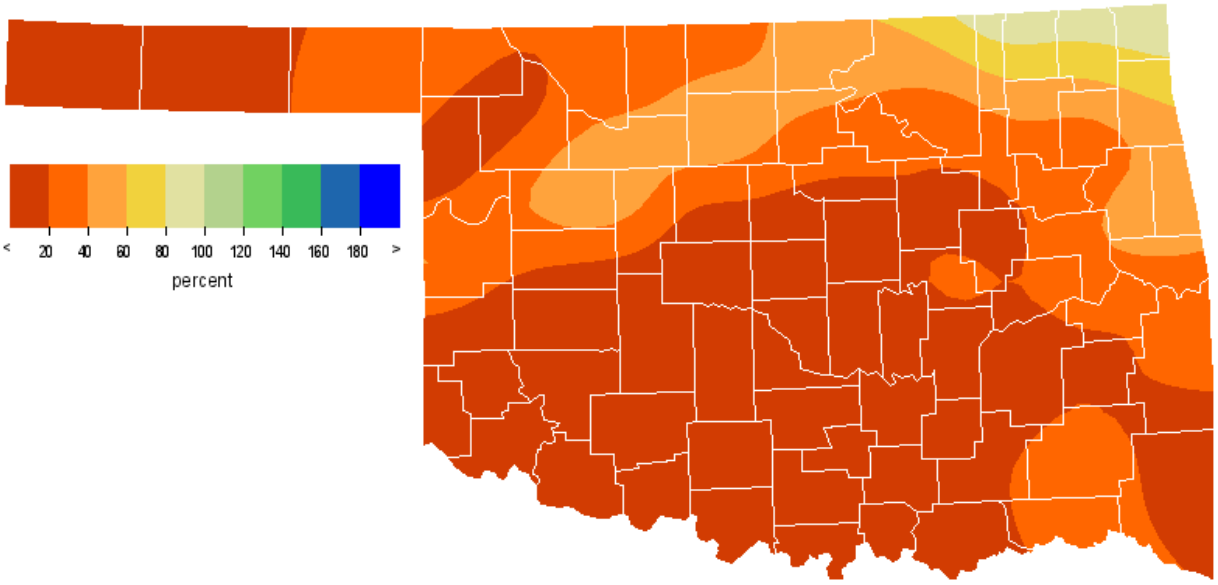
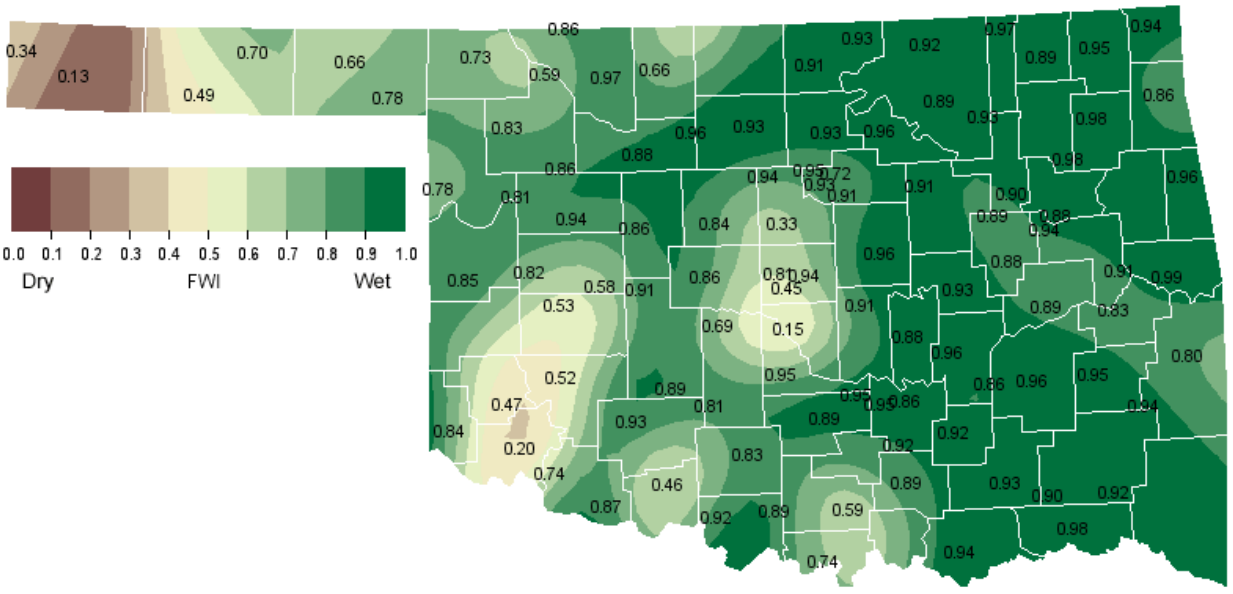
MARCH 2011 PERCENT OF NORMAL PRECIPITATION



MARCH 2011 AVERAGE SOIL MOISTURE AT 25CM



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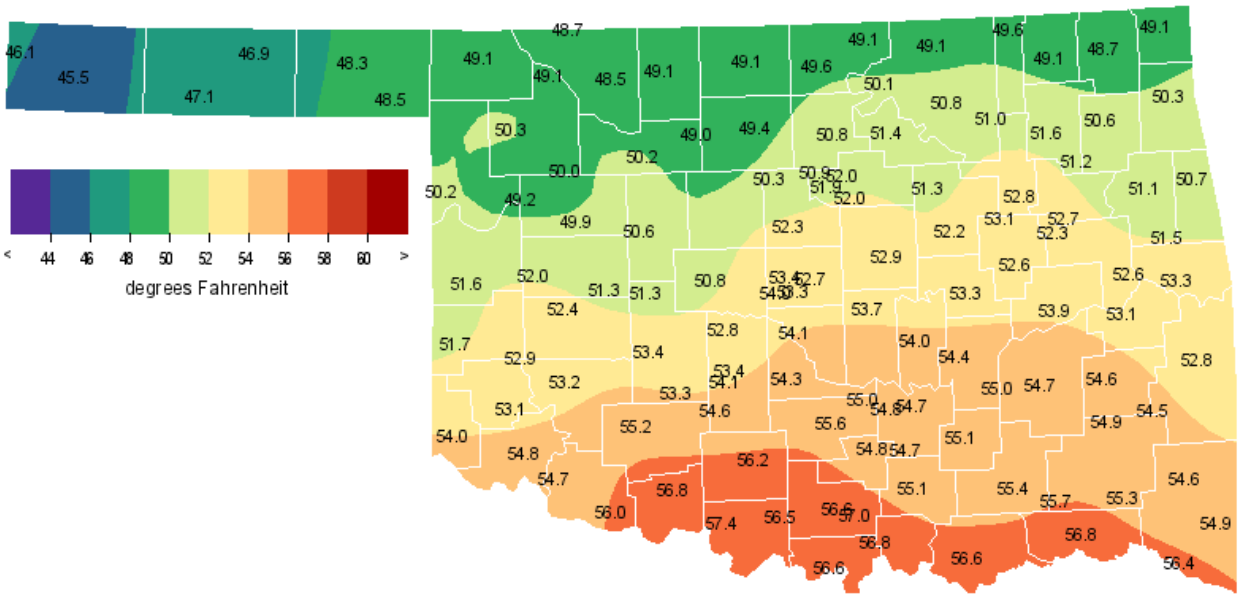
MARCH 2011 AVERAGE TEMPERATURE



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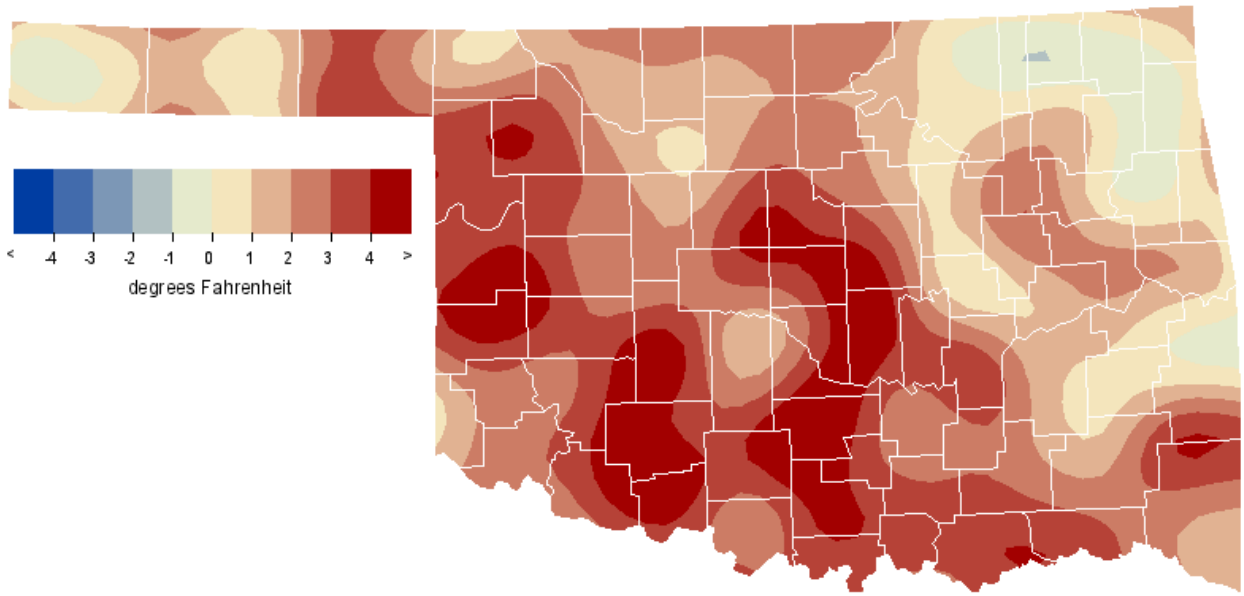

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MESONET MONTHLY SUMMARY FOR MARCH 2011

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	50.2	86	20	24	5	470	12	.27	.23	8
Beaver	48.3	87	20	18	5	530	11	.49	.20	8
Boise City	45.5	82	21	16	5	606	0	.04	.02	28
Buffalo	49.0	88	20	21	5	503	8	.65	.32	8
NORTH CENTRAL										
Alva	48.5	84	22	22	5	516	4	.76	.47	8
Blackwell	49.5	86	22	21	6	496	17	1.36	1.22	8
Breckinridge	49.4	85	22	22	6	497	15	1.33	1.23	8
Cherokee	49.1	85	22	23	5	499	6	.96	.81	8
Fairview	50.2	86	17	24	5	474	15	1.17	1.11	8
Freedom	49.2	85	20	22	5	499	9	.37	.20	19
Lahoma	48.9	84	17	22	6	507	8	1.22	1.15	8
NORTHEAST										
Bixby	52.7	84	20	25	6	407	26	.72	.45	13
Burbank	50.1	86	17	20	6	482	20	1.55	1.07	8
Claremore	51.6	83	20	24	6	439	24	1.67	.78	13
Copan	49.6	85	17	22	6	500	22	3.06	1.32	19
Foraker	49.1	87	17	22	5	510	18	2.13	1.20	8
Inola	51.2	83	20	23	6	448	20	1.33	.71	13
Jay	50.3	79	20	21	6	474	19	2.68	.99	26
Miami	49.1	79	20	23	6	511	18	3.36	1.02	8
WEST CENTRAL										
Bessie	52.4	91	17	28	5	416	25	.24	.16	7
Butler	52.0	91	17	27	6	426	23	.53	.31	8
Camargo	49.3	85	17	23	6	495	8	.69	.54	8
Cheyenne	51.6	89	17	27	5	434	17	.80	.67	8
Erick	51.7	93	17	25	30	427	17	.20	.13	7
CENTRAL										
Acme	54.6	89	22	25	15	350	27	.07	.06	29
Bowlegs	54.0	83	17	23	6	367	27	.33	.21	13
Bristow	52.2	85	17	19	6	425	29	.54	.46	13
Lake Carl Blac	50.8	87	17	18	6	468	30	.80	.71	8
Chandler	52.9	86	17	21	6	404	29	.37	.22	13
Chickasha	53.4	88	22	21	6	384	25	.05	.03	29
El Reno	50.7	88	17	22	6	465	23	.18	.12	8
Guthrie	52.3	88	17	25	5	422	29	.29	.24	8
Kingfisher	51.0	89	17	22	6	****	****	.24	.21	8
Marena	51.8	88	17	22	6	439	32	.47	.37	8
Minco	52.8	88	22	25	5	403	25	.11	.04	13
Marshall	50.2	87	17	22	6	479	22	1.20	.93	8
EAST CENTRAL										
Cookson	51.5	78	20	23	6	430	11	2.36	.65	14
Eufaula	53.9	82	20	27	6	367	23	.86	.52	13
Haskell	52.3	83	20	23	6	413	19	.72	.35	13
Hectorville	53.1	83	20	26	6	396	26	.55	.35	13
Holdenville	54.3	81	19	25	6	357	26	.38	.33	13
McAlester	54.7	81	20	22	6	347	28	.59	.24	13
Okmulgee	52.5	82	20	22	6	412	26	.73	.43	13
SOUTHWEST										
Altus	54.8	95	17	26	6	341	25	.04	.04	29
Apache	53.3	88	22	24	6	386	22	.05	.05	29
Fort Cobb	53.3	90	17	27	6	386	24	.00	.00	1
Grandfield	56.0	91	22	24	6	309	29	.08	.07	29
Hinton	51.3	87	17	26	5	445	21	.06	.03	8
Hobart	53.1	91	17	25	10	390	22	.04	.04	29
SOUTH CENTRAL										
Ada	54.7	83	17	22	6	348	30	.09	.04	13
Ardmore	57.0	85	25	28	6	290	42	.06	.06	29
Burneyville	56.7	85	17	22	6	302	44	.26	.15	29
Byars	55.1	84	17	24	6	337	29	.08	.04	29
Centrahoma	55.1	81	18	23	6	336	30	.54	.32	13
Durant	56.6	82	25	28	6	293	33	.16	.13	29
Fittstown	54.7	83	25	25	6	345	27	.21	.16	13
Ketchum Ranch	56.2	87	17	25	6	309	35	.04	.04	29
Lane	55.5	81	19	26	1	322	27	.52	.20	13
SOUTHEAST										
Antlers	55.7	83	18	25	6	323	35	1.21	.64	13
Broken Bow	54.8	85	26	24	6	327	12	.41	.22	29
Clayton	54.8	81	20	23	6	340	25	.68	.46	13
Cloudy	55.3	81	26	26	6	320	20	1.18	.81	14
Hugo	56.8	82	26	29	6	288	33	.94	.43	13

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	47.0	85	21	19	5	558	2	.06	.03	28
Hooker	46.8	85	20	18	3	567	3	.08	.06	9
Kenton	46.1	83	16	15	14	586	0	.07	.04	8
Slapout	48.5	87	20	21	5	519	8	.70	.35	19
May Ranch	48.7	87	20	21	5	514	7	.53	.25	8
Medford	49.1	86	22	21	6	505	13	1.04	.90	8
Newkirk	49.1	85	17	20	6	511	17	1.58	1.25	8
Red Rock	50.8	87	17	20	6	466	26	1.27	1.23	8
Seiling	49.9	85	17	25	6	481	13	.93	.69	8
Woodward	50.2	86	20	24	5	468	11	.23	.13	8
Nowata	49.1	82	17	19	6	512	18	2.94	1.09	19
Pawnee	51.4	88	17	20	6	449	27	.94	.87	8
Porter	52.6	83	20	26	6	404	21	.79	.26	13
Pryor	50.6	81	20	21	6	468	22	1.32	.36	13
Skiatook	51.0	84	17	24	5	460	25	1.20	.70	8
Vinita	48.7	79	17	21	6	521	16	3.23	.86	19
Wynona	50.8	87	17	21	6	465	24	1.35	1.07	8
Putnam	49.9	85	17	25	5	481	12	1.21	1.07	8
Retrop	53.0	92	17	26	9	395	22	.03	.02	29
Watonga	50.5	87	17	25	5	470	21	1.19	1.08	8
Weatherford	51.3	88	17	26	5	445	19	.19	.09	7
Ninnekah	54.1	90	22	22	6	370	30	.07	.04	29
Norman	54.0	87	17	25	6	369	27	.09	.07	13
Oilton	51.3	87	17	16	6	453	27	.78	.24	8
OKC East	53.3	87	17	25	6	393	30	.10	.05	13
OKC North	53.5	87	17	26	5	388	30	.25	.12	13
OKC South	54.0	87	17	26	5	372	30	.11	.04	8
Okemah	53.3	80	20	22	6	387	24	.91	.70	13
Perkins	52.0	88	17	22	6	432	29	.48	.33	8
Shawnee	53.7	85	17	25	6	377	28	.13	.07	13
Spencer	52.7	86	17	25	6	409	28	.13	.05	8
Stillwater	52.0	88	17	21	6	438	34	.83	.53	8
Washington	54.3	87	17	25	6	357	27	.06	.03	8
Sallisaw	53.3	81	20	24	6	382	20	1.14	.58	14
Stigler	53.1	80	20	26	6	389	20	.69	.23	13
Stuart	55.0	81	19	27	6	335	25	.22	.10	13
Tahlequah	51.1	79	20	23	6	444	13	1.33	.33	13
Webbers Falls	52.7	81	20	27	1	398	16	1.73	.50	13
Westville	50.7	77	20	25	6	455	11	2.14	.63	13
Hollis	54.0	95	17	25	9	358	17	.03	.03	29
Mangum	53.1	94	17	23	9	392	22	.05	.05	29
Medicine Park	55.3	89	17	29	5	328	26	.04	.04	29
Tipton	54.8	92	17	25	10	339	22	.03	.03	29
Walters	56.8	92	22	24	6	293	39	.05	.05	29
Madill	56.9	85	25	26	6	293	41	.08	.07	29
Newport	56.6	85	17	29	15	299	38	.05	.04	29
Pauls Valley	55.6	86	17	26	6	324	33	.05	.03	29
Ringling	56.5	87	17	27	6	300	37	.05	.05	29
Sulphur	54.8	82	25	24	6	346	29	.04	.02	8
Tishomingo	55.1	82	25	25	1	335	28	.81	.62	13
Vanoss	54.8	83	17	22	6	348	32	.09	.05	29
Waurika	57.4	90	22	24	6	279	44	.05	.05	29
Idabel	56.4	86	26	25	6	296	29	1.07	.63	8
Mt Herman	54.6	81	26	27	6	339	17	.84	.39	14
Talihina	54.5	79	20	25	1	347	23	.83	.28	14
Wilburton	54.6	81	19	23	6	350	28	1.00	.85	13
Wister	52.7	81	20	21	6	396	16	1.05	.62	13

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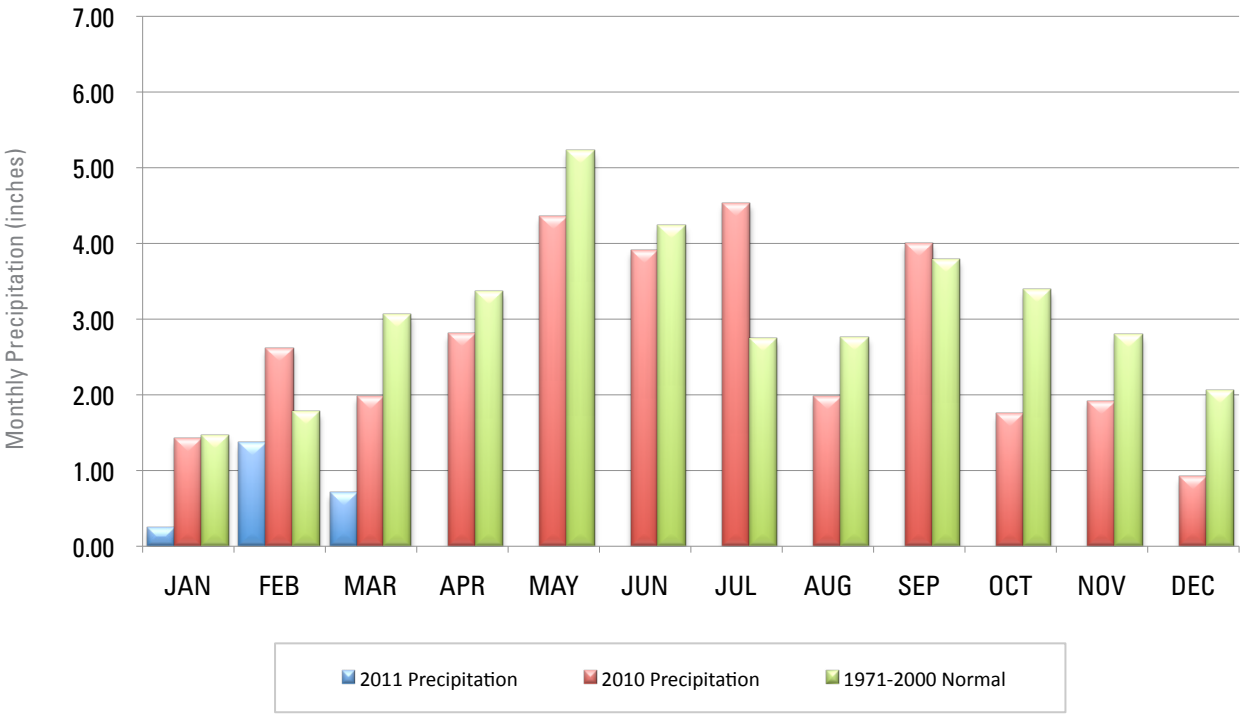
2010 AND 2011 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



March 2011 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Mar-10
Panhandle	0.29	-1.33	27th Driest	5.84 (1973)	0.00 (1895)	1.43
North Central	0.98	-1.70	33rd Driest	8.18 (1973)	0.00 (1936)	1.54
Northeast	1.88	-1.79	37th Driest	9.79 (1973)	0.00 (1900)	2.97
West Central	0.56	-1.84	24th Driest	7.24 (1973)	0.00 (1895)	0.98
Central	0.36	-2.88	7th Driest	7.88 (1990)	0.00 (1900)	1.46
East Central	1.03	-3.06	10th Driest	10.63 (1945)	0.46 (1911)	2.03
Southwest	0.04	-2.22	2nd Driest	5.52 (1973)	0.00 (1940)	0.80
South Central	0.19	-3.36	1st Driest	8.46 (1945)	0.20 (1950)	2.31
Southeast	0.92	-3.56	1st Driest	12.38 (1945)	1.01 (1954)	3.08
Statewide	0.70	-2.41	8th Driest	7.46 (1973)	0.38 (1971)	1.85

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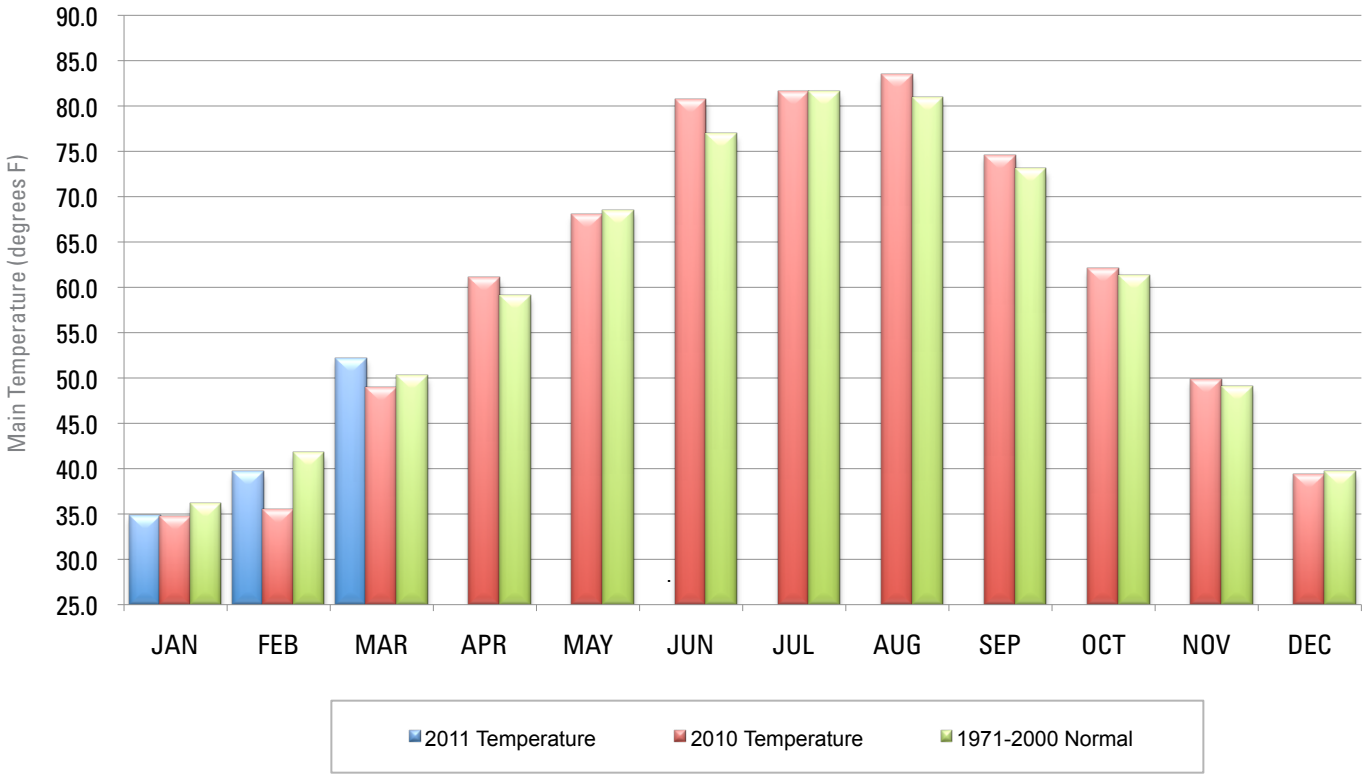
2010 AND 2011 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



March 2011 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Mar-10 (F)
Panhandle	47.7	1.4	35th Warmest	54.3 (1910)	32.9 (1915)	45.0
North Central	49.5	1.3	38th Warmest	57.6 (1910)	35.3 (1915)	47.3
Northeast	50.5	0.9	42nd Warmest	58.6 (2007)	37.3 (1960)	46.9
West Central	51.3	2.4	31st Warmest	57.3 (2007)	35.8 (1915)	47.6
Central	52.8	2.3	31st Warmest	59.1 (2007)	37.7 (1915)	48.8
East Central	52.9	1.4	35th Warmest	60.2 (2007)	39.2 (1915)	51.5
Southwest	54.2	2.7	23rd Warmest	58.8 (2007)	38.2 (1915)	49.3
South Central	55.8	2.8	25th Warmest	61.1 (1907)	40.4 (1915)	50.6
Southeast	55.0	2.2	27th Warmest	61.5 (1907)	42.0 (1915)	48.6
Statewide	52.1	1.9	31st Warmest	58.3 (2007)	37.6 (1915)	48.4

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MESONET EXTREMES FOR MARCH 2011

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	88	20th	Buffalo	15	14th	Kenton	0.70	Slapout	0.35	19th	Slapout
North Central	87	20th	May Ranch	20	6th	Red Rock	1.58	Newkirk	1.25	8th	Newkirk
Northeast	88	17th	Pawnee	19	6th	Nowata	3.36	Miami	1.32	19th	Copan
West Central	93	17th	Erick	23	6th	Camargo	1.21	Putnam	1.08	8th	Watonga
Central	90	22nd	Ninnekah	16	6th	Oilton	1.20	Marshall	0.93	8th	Marshall
East Central	83	20th	Hectorville	22	6th	Okmulgee	2.36	Cookson	0.65	14th	Cookson
Southwest	95	17th	Altus	23	9th	Mangum	0.08	Grandfield	0.07	29th	Grandfield
South Central	90	22nd	Waurika	22	6th	Vanoss	0.81	Tishomingo	0.62	13th	Tishomingo
Southeast	86	26th	Idabel	21	6th	Wister	1.21	Antlers	0.85	13th	Wilburton
Statewide	95	17th	Altus	15	14th	Kenton	3.36	Miami	1.32	19th	Copan

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APRIL 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.

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

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.

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

Tornadoes

Average April Tornadoes	10.4
Most	40 (1957)

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.

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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.

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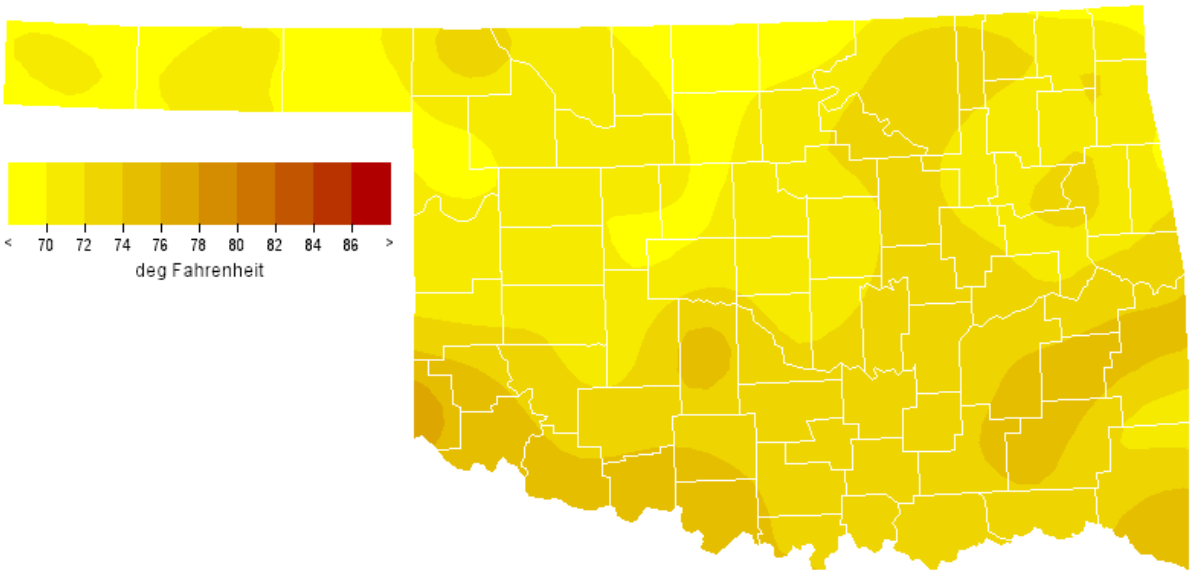
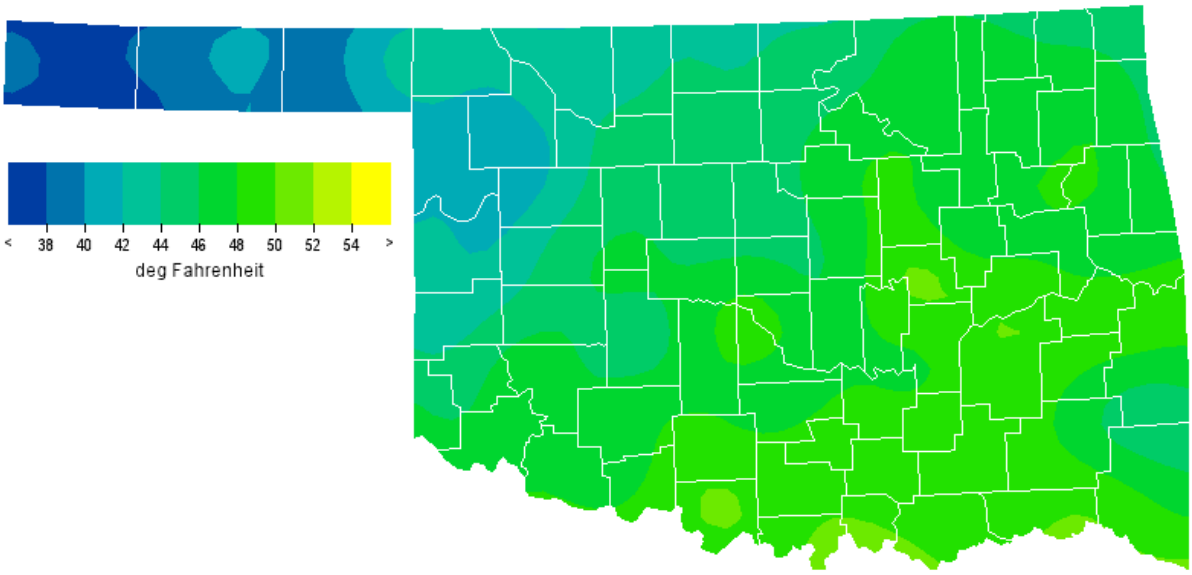
APRIL NORMAL DAILY MAXIMUM TEMPERATURE (1971-2000)



APRIL NORMAL DAILY MINIMUM TEMPERATURE (1971-2000)



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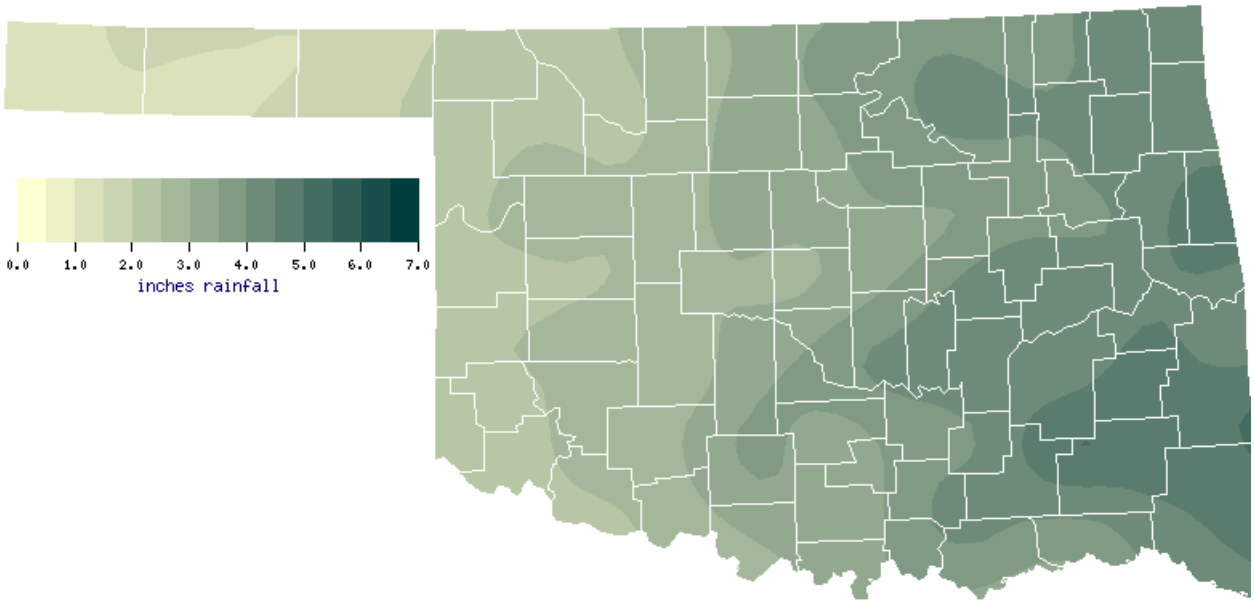
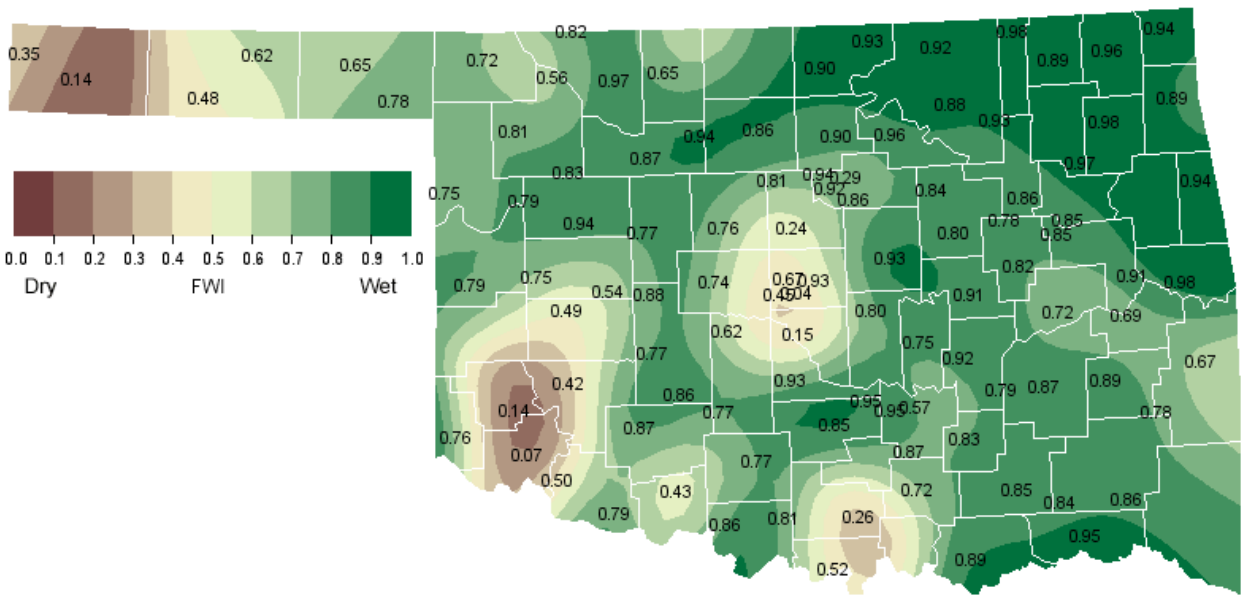
APRIL NORMAL PRECIPITATION (1971-2000)



APRIL 1, 2011 SOIL MOISTURE CONDITIONS AT 25CM



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APRIL 2011 DROUGHT INDICES

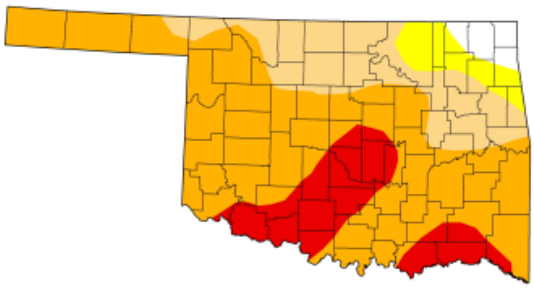
U.S. Drought Monitor

March 29, 2011
Valid 7 a.m. EST

Oklahoma

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	2.83	97.17	92.03	71.84	15.82	0.00
Last Week (03/22/2011 map)	4.38	95.62	83.58	54.46	8.78	0.00
3 Months Ago (12/28/2010 map)	13.82	86.18	47.90	1.50	0.00	0.00
Start of Calendar Year (12/28/2010 map)	13.82	86.18	47.90	1.50	0.00	0.00
Start of Water Year (09/28/2010 map)	66.28	33.72	4.21	0.00	0.00	0.00
One Year Ago (03/23/2010 map)	100.00	0.00	0.00	0.00	0.00	0.00



Intensity:

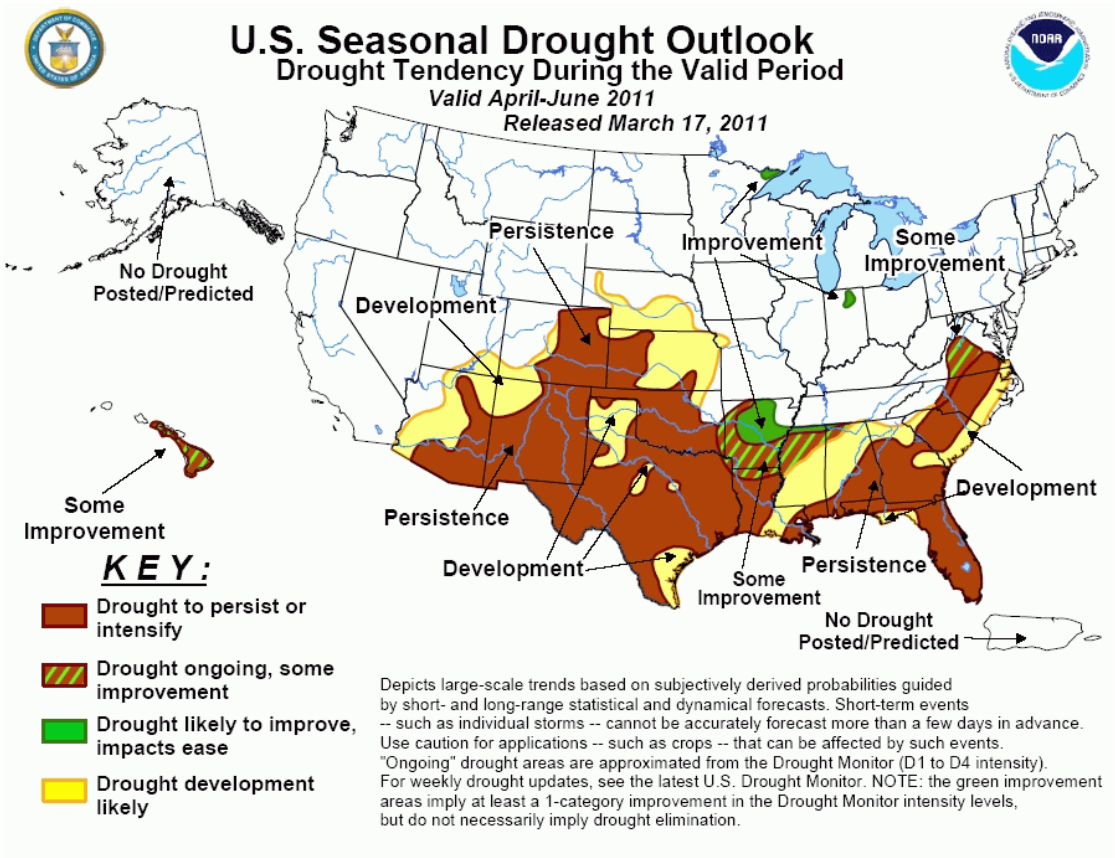
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

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

http://drought.unl.edu/dm

USDA National Drought Mitigation Center

Released Thursday, March 31, 2011
Eric Luebehusen, United States Department of Agriculture



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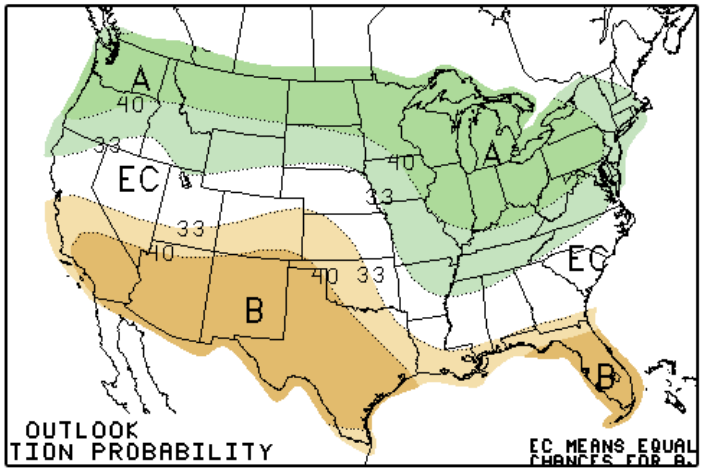
APRIL 2011 U.S. PRECIPITATION FORECAST



Percent Likelihood of Above or Below Average Precipitation*

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

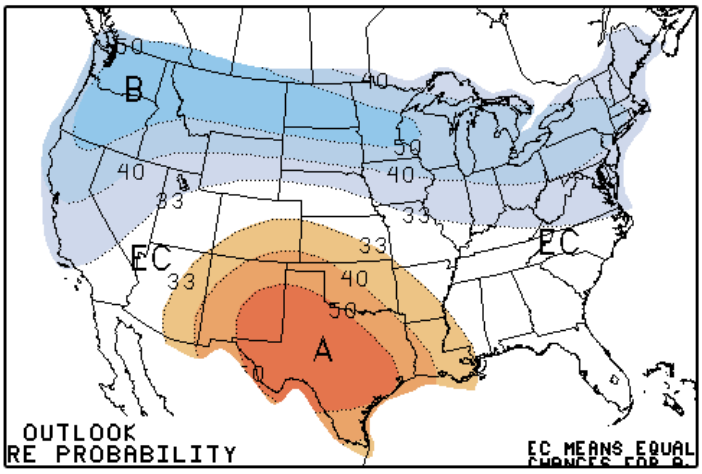
A = Above

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

B = Below

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

APRIL 2011 U.S. TEMPERATURE FORECAST



Percent Likelihood of Above or Below Average Temperatures*

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

A = Above

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

B = Below

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

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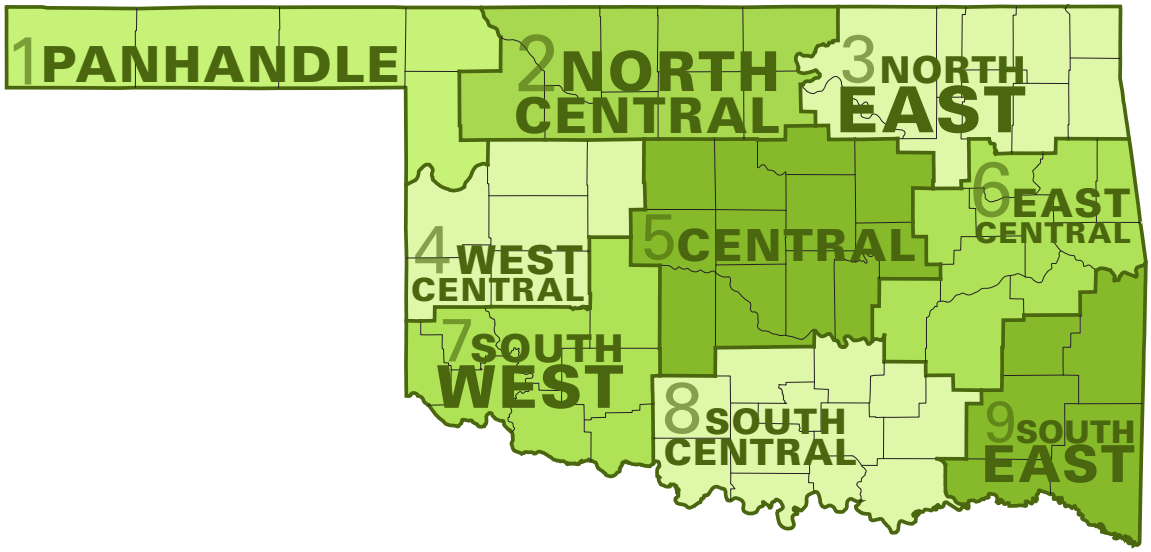
APRIL CLIMATE NORMALS

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



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INTERPRETATION INFORMATION

MEAN DAILY TEMPERATURE: Calculated from an average of the daily maximum and minimum temperatures. Daily averages are summed for each day, and then divided by the number of valid data points – typically the number of days in the month. Although this may differ from the "true" daily average, it is consistent with historical methods of observation and comparable to the normals and extremes for stations and regions of the state.

DEGREE DAYS: Degree Days are calculated each day of the month for which there is a temperature report and the mean temperature for the day is less than (Heating Degree Days) or greater than (Cooling Degree Days) 65 degrees. Daily values are summed to arrive at a monthly total. HDD/CDD are qualitative measures of how much heating/cooling was required to maintain a comfortable indoor temperature. Missing observations may result in an artificially high or low value.

SEVERE WEATHER REPORTS: Only the most significant events are listed. Tornadoes of F2 or greater strength (on the 0-5 Fujita scale), hail of two inches diameter or greater, and wind speeds of 70 miles per hour or above are listed. National Weather Service defines storms as severe when they produce a tornado, hail of three-quarters inch or greater, or wind speeds above 57 miles per hour (50 knots). For additional reports, contact the Oklahoma Climatological Survey, Storm Prediction Center, or your local National Weather Service forecast office.

SOIL MOISTURE: The soil moisture variable displayed is the Fractional Water Index (FWI), measured at a depth of 25 cm. This unitless value ranges from very dry soil having a value of 0, to saturated soils having a value of 1.

ADDITIONAL RESOURCES

SUNRISE / SUNSET TABLES
U.S. Naval Observatory: http://aa.usno.navy.mil/data

SEVERE STORM REPORTS
Storm Prediction Center: http://spc.noaa.gov/climo/

National Climatic Data Center (more than about 4-5 months old):
http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storms

SEASONAL OUTLOOKS
Climate Prediction Center:
http://www.cpc.ncep.noaa.gov/products/OUTLOOKS_index.html

CLIMATE CALENDARS AND OTHER LOCAL WEATHER AND CLIMATE INFORMATION
Oklahoma Climatological Survey:
http://climate.mesonet.org or http://climate.ok.gov/

OKLAHOMA CLIMATOLOGICAL SURVEY

Oklahoma Climatological Survey is the State Climate Office for Oklahoma

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