Oklahoma Monthly Climate Summary

MAY 2016

OKLAHOMA CLIMATOLOGICAL SURVEY

Known as the state's most active severe weather month, May tried to live up to that moniker with several extended periods of threatening weather. Although it didn't quite match some of the more ferocious Mays since the beginning of the decade, it was still quite lively nonetheless. At least one instance of severe weather was reported somewhere in the state on 16 of the 24 days between May 8 and May 31. The National Weather Service published a preliminary count of 19 tornadoes during May, four short of average for the month. That total could rise with further investigation, however, including the possibility of several weak tornadoes on the month's final day in central Oklahoma.

May 2016 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	99°F	Altus	10
Low Temperature	31°F	Boise City	2
High Precipitation	12.39 in.	Cookson	--
Low Precipitation	0.81 in.	Hooker	--

The preliminary count for the year thus far stands at 49. May 9 was the most violent day with at least 12 tornadoes being reported. That total included several significant tornadoes across south central Oklahoma that left two dead and several others injured. The two fatalities, both 76 year old males, occurred near Katie in an EF-4 monster that churned through Garvin County and near Connerville in an EF-3 tornado. The Sulphur Mesonet site recorded a wind gust of 88 mph associated with those storms, and softball size hail fell near Wapanucka in Coal County.

Despite the active weather, May ended drier than normal across much of the state. Data from the Oklahoma Mesonet estimate a statewide average of 4.12 inches, 0.70 inches below normal and the 51st driest May since records began in 1895. As is customary for convective precipitation, however, the fortunes of differing areas of the state varied dramatically. Far southern Oklahoma received 5-8 inches while west central Oklahoma totaled 1-2 inches. In fact, much of the state saw rainfall totals drop from 1-4 inches below normal. May rainfall totals from the Mesonet ranged from 12.39 inches at Cookson to less than an inch at two Panhandle locations. Despite the disappointing rainfall totals, the climatological spring season (March-May) ended as the 31st wettest since 1895 with a statewide average of 12.34 inches, about an inch above normal. Again, some areas fared better than others over the season with south central Oklahoma seeing its 11th wettest spring while west central sections experienced their 55th driest. Those same variations were exhibited in the year to date rainfall statistics as well with the 24th wettest January-May on record for south central Oklahoma and the 35th driest for west central sections. Overall, the first five months of the year were about an inch below normal at 13.88 inches.

May 2016 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2016)
Month (May)	65.9°F	-2.3°F	21st Coolest
Season-to-Date (Mar-May)	60.7°F	1.4°F	26th Warmest
Year-to-Date (Jan-May)	55.2°F	1.7°F	13th Warmest

Precipitation

	Total	Depart.	Rank (1895-2016)
Month (May)	4.13 in.	-0.69 in.	51st Driest
Season-to-Date (Mar-May)	12.72 in.	1.60 in.	27th Wettest
Year-to-Date (Jan-May)	24.44 in.	2.82 in.	28th Wettest

Depart. = departure from 30-year normal

May was unusual not only for its lack of rainfall, but also for its lack of warmth. According to preliminary data from the Oklahoma Mesonet, the statewide average temperature for the month was 65.9 degrees, 2.3 degrees below normal to rank as the 21st coolest May since records began. None of the 120 Mesonet stations observed a triple-digit high temperature during May. The month's last freeze – and lowest temperature of the month – was recorded at Boise City with 31 degrees on May 2. The highest temperature was 99 degrees at Altus on May 10. Despite the cool May, the spring season was the 25th warmest on record with a statewide average of 60.7 degrees, 1.4 degrees above normal. The first five months of the year exceeded normal by 2 degrees, the tenth warmest January-May on record.

MAY 2016 DAILY SUMMARIES

MAY 1-3: Showers and thunderstorms started in northwestern Oklahoma and moved east. As rain fell, temperatures cooled. The warmest temperature recorded decreased from 79 degrees in Broken Bow on the 1st to 71 degrees in Hollis on the 2nd and 74 degrees in western parts of the state on the 3rd. Conversely, the coolest maximum temperatures increased from 41 degrees in Kenton on the 1st to 67 degrees in Boise City and Kenton by the 3rd. The highest minimum temperatures decreased from 54 degrees to 47 degrees and the lowest minimum temperatures remained in the low to mid-30s during this three-day period. The maximum 24-hour rainfall each day was .31 inches in Walters on the 1st, .40 inches in Idabel on the 2nd, and .13 inches in Putnam on the 3rd. Most areas received less than a tenth of an inch. Daily average wind speeds were less than 19mph on the 1st and less than 12mph on the 2nd. The highest average wind speed was 14mph in Boise City on the 3rd; however, most of the state had light winds below 8mph that day.

MAY 4-7: As a ridge of high pressure moved over the region, temperatures warmed. A few brief and scattered showers and thunderstorms occurred on the 7th, but there were only trace amounts of rainfall as skies were mainly clear. The highest maximum temperatures were in the mid-upper 80s and the lowest maximum temperatures were in the 70s. The highest minimum temperatures increased from 54 degrees (Idabel) to 62 degrees (Oklahoma City) and the lowest minimum temperatures increased from 37 degrees (Beaver) to 44 degrees (Wister) over four days. Winds were fairly calm on the 4th and 5th, averaging less than 12mph. Average wind speeds were less than 18mph and 20mph on the 6th and 7th, respectively.

MAY 8-10: An upper level trough moved over the state and a period of severe weather, showers, and thunderstorms ensued. Storms passed through most regions of the state on the 8th, primarily through southern and eastern Oklahoma on the 9th, and through southern Oklahoma again on the 10th. There were numerous reports of hail, tornadoes, flooding, and high winds as some of the storms became strong to severe. While a handful of weak tornadoes were reported on the 8th and 9th, preliminary reports detailed five significant tornadoes on the 9th as well. Included in the reports from the 9th were an EF-4 in Garvin County, one EF-3 that passed through Murray and Pontotoc County, one EF-3 in Johnston and Coal County, one EF-3 in Bryan and Choctaw County, and one EF-2 in Noble and Payne County. Hail greater than two inches in diameter was reported in Kiowa and Dewey County on the 8th and in Bryan and Coal County on the 9th. The largest hail report was 4.0 inches in Wapanucka on that Monday. There were additional reports of flooding in Lawton on the 8th and an 88mph wind gust in Sulphur on the 9th.

The highest rainfall amounts each day were .94 inches in Durant on the 8th, 1.64 inches in Idabel on the 9th, and .73 inches in Madill on the 10th. Temperatures during this period increased with the warmest maximum temperatures climbing from 91 degrees in Hollis on the 8th to 99 degrees in Altus on the 10th and the coolest minimum temperatures climbing from 70 degrees in the east to 82 degrees in Boise City. On the 10th, McAlester tied its daily high temperature record of 90 degrees that was previously set in 1963. Minimum temperatures ranged from the upper 30s to the mid-upper 60s. Daily average wind speeds were less than 19mph on the 8th and 9th and less than 12mph on the 10th. Apart from the 88mph wind gust reported at the Sulphur Mesonet site on the 9th, the top wind gusts each consecutive day were 56mph in Tipton, 64mph in Minco, and 47mph in Hooker.

MAY 11-12: Due to a passing cold front, temperatures dipped and severe weather continued. Highs were between 69 degrees in Boise City and 88 degrees in Grandfield on the 11th, and between 69 degrees in Boise City and 82 degrees in Hollis on the 12th. Lows ranged from 46 degrees to 70 degrees on the 11th and from 42 degrees to 61 degrees the following day. Heavy rain fell both days with the highest amount measuring 2.76 inches in Cookson on Wednesday and a hefty 5.55 inches in Cookson again on Thursday. As some storms became severe, 2.0-3.0 inch diameter hail fell in Stephens County on the 11th and in Greer, Kiowa, and Comanche County on the 12th. A 75mph wind gust also occurred in Walters on the 12th as well as flooding in Cherokee and Adair County. Daily average wind speeds were 5-16mph on the 11th and 4-12mph on the 12th.

MAY 13-15: A cold front entered the state and the highest maximum temperature recorded dropped from 90 degrees in Hollis on the 13th to 71 degrees in Wister, Burneyville, and Wilburton on the 15th. The lowest maximum temperatures also decreased from 77 degrees in Westville to 55 degrees in Goodwell and Hollis two days later. The highest minimum temperatures hovered in the upper 50s and the lowest minimum temperatures were in the low to mid-40s. Rain and thunderstorms continued with the hardest hit areas being southwest up through central Oklahoma on the 13th, northwest and southern Oklahoma on the 14th, and western and central Oklahoma on the 15th. The highest rainfall amounts recorded each of those days were 1.85 inches in Watonga, .62 inches in Waurika, and .62 inches in Hollis, respectively. 2.75 inch hail fell in Hollis on the 13th as a passing storm became severe. Daily average wind speeds were less than 18mph and the peak wind gusts each day were 60mph in Blackwell on the 13th, 46mph in Waurika on the 14th, and 41mph in Boise City on the 15th.

MAY 16-19: As a warm front receded southward, cooler temperatures were left in its wake. High temperatures decreased, ranging from 59-83 degrees on the 16th, 51-81 degrees on the 17th, 58-70 degrees on the 18th, and 57-68 degrees on the 19th. The warmest minimum temperatures

were in the upper 50s and low 60s and the coolest minimum temperatures were in the low to mid-40s. With the cool temperatures, Oklahoma City tied its daily coolest high temperature record on the 17th and 19th with 61 degrees. Showers and thunderstorms produced up to 2.42 inches of rainfall in Vinita on the 16th, 2.31 inches in Grandfield on the 17th, .15 inches in Madill on the 18th, and .50 inches in Medicine Park on the 19th. Daily average wind speeds were less than 17mph on the 16th and 17th, less than 11mph on the 18th, and less than 13mph on the 19th. Severe wind gusts of 72mph and 70mph were reported on the 16th in Weatherford and Goodwell, respectively.

MAY 20-21: An upper-level low exited the region, leaving behind a few scattered showers in the northeast on the 20th. The maximum rainfall amount that day was .30 inches in Jay. On the 21st, scattered showers left .12 inches of precipitation in Kenton and trace amounts elsewhere. High temperatures were between 65 degrees in Westville and 82 degrees in Kenton on the 20th and between 76 degrees in the northeast and 89 degrees in Hooker on the 21st. The highest minimum temperature increased from 59 degrees on Friday to 65 degrees on Saturday and the lowest minimum temperatures were in the mid- upper 40s. Daily average wind speeds were primarily less than 10mph on the 20th except for in the panhandle where winds averaged 10-14mph. On the 21st, Kenton measured a wind gust of 51mph while daily average wind speeds were less than 19mph.

MAY 22-25: Showers and severe thunderstorms were once again the name of the game. Heavy rain fell all four days, hitting the southeastern two-thirds of the state the hardest. The top daily rainfall amounts were 3.92 inches in Hollis on the 22nd, 2.34 inches in Grandfield on the 23rd, 4.06 inches in Chandler on the 24th, and 4.22 inches in Okmulgee on the 25th. Storms became severe and formed weak tornadoes in Woodward and Harper County on the 23rd, Creek County on the 24th, and Okmulgee and Garfield County on the 25th. Associated with the passing storms were severe wind gusts over 80mph in Tillman and Cotton County on the 23rd. That day, a wind gust of 100mph was reported in Temple. 2.0-3.0 inch hail fell in Woodward County on the 23rd and in Noble, Payne, and Creek County on the 24th. Over this four-day stretch, flooding was reported in Harmon, Tillman, Lincoln, Coal, Okmulgee, Mayes, Tulsa, and McCurtain County.

Maximum temperatures increased each day which created warm and muggy conditions. The warmest maximum temperature in the state increased from 88 degrees in Hooker on the 22nd to 96 degrees in Mangum, Buffalo, and Hollis. The coolest maximum temperatures were 78 degrees in Woodward on the 22nd, a cooler 70 degrees in the northeast on the 23rd, 81 degrees in portions of eastern Oklahoma on the 24th, and 80 degrees in Westville on the 25th. The warmest minimum temperatures increased from the upper 60s to the mid-70s. The coolest minimum temperatures decreased from the mid-50s to the upper 40s. On May 25th, Oklahoma City tied its daily warmest minimum temperature record from 2008 at 74 degrees. Daily average wind speeds were less than 22mph from the 22nd through the 24th and less than 19mph on the 25th.

MAY 26-27: Showers and thunderstorms passed through much of the state yet again. Heavy rain and lightning accompanied the severe storms with flooding reported in Comanche, Roger Mills, and Murray County on the 26th. The top three rainfall amounts each day were 1.93 inches in Camargo, 1.10 inches in Seiling, and 1.06 inches in Buffalo on the 26th, and 1.00 inch in Sulphur, .86 inches in Foraker, and .76 inches in Burneyville on the 27th. Additional severe weather reports included 81mph wind gusts in Fort Cobb on the 26th and 2.00-2.25 inch hail in Grant, Stephens, and Canadian County on the 27th. Maximum temperatures varied between 78 degrees (Mt. Herman) and 94 degrees (Kingfisher) on the 26th and between 68 degrees (Boise City and Kenton) and 91 degrees (Grandfield) on the 27th. The highest minimum temperature decreased from 73 degrees in Guthrie and Tulsa on Thursday to 68 degrees in Okmulgee the following day. The lowest minimum temperatures were in the low-40s. Average wind speeds were less than 21mph on the 26th and less than 18mph on the 27th.

MAY 28: Although a cold front was situated over the state, rainfall was negligible. Highs were between 77 degrees in Boise City and 89 degrees in Altus. Lows were between 39 degrees in Kenton and 67 degrees in Hugo. Daily average wind speeds were fairly calm, measuring less than 9mph.

MAY 29-31: May ended with one last bout of severe weather. Rainfall intensity increased with the highest rainfall amounts in the state measuring 1.36 inches in Ardmore on the 29th, 2.86 inches in Durant on the 30th, and 4.33 inches in Copan on the 31st. With the slow moving, heavy rainfall, flooding was reported in Woodward and Wagoner County on the 29th and in Grady and Caddo County on the 31st. A severe report of 2.75 inch hail was also called in from Stilwell on the 29th. The warmest temperatures were in the upper 80s and low 90s and occurred in southern Oklahoma. The coolest maximum temperature in the state was 72 degrees each day. The warmest minimum temperatures were primarily in the upper 60s and the coolest minimum temperatures were in the panhandle, measuring 48 degrees on the 29th, 44 degrees on the 30th and 53 degrees on the 31st. The highest daily average wind speeds decreased slightly each day from 14mph on the 29th to 12mph on the 30th and 10mph on the 31st.

MAY 2016 SEVERE WEATHER

Flooding

Location	County	Day
Lawton	Comanche	8
Cookson	Cherokee	12
1 NW Bunch	Adair	12
Hollis	Harmon	22
Grandfield	Tillman	23
Stroud	Lincoln	25
Lehigh	Coal	25
1 S Lehigh	Coal	25
S Lehigh	Coal	25
2 S Lehigh	Coal	25
3 SSE Lehigh	Coal	25
Beggs	Okmulgee	25
4 NW Salina	Mayes	25
3 NNE Owasso	Tulsa	25
Battiest	McCurtain	25
Lawton	Comanche	26
5 N Roll	Roger Mills	26
1 S Davis	Murray	26
1 S Tangier	Woodward	29
5 NE Broken Arrow	Wagoner	29
7 NNE Oneta	Wagoner	29
2 SW Tuttle	Grady	31
1 W Apache	Caddo	31

Hail (2 Inches in Diameter or Greater)

Size (in)	Location	County	Day
2.00	Mountain View	Kiowa	8
2.75	5 E Seiling	Dewey	8
2.50	Blue	Bryan	9
3.00	2 WSW Bokchito	Bryan	9
2.75	4 SW Lehigh	Coal	9
4.00	4 N Wapanucka	Coal	9
2.00	2 S Lehigh	Coal	9
2.00	4 E Comanche	Stephens	11
2.50	2 S Granite	Greer	12
2.00	Tom Steed Reservoir	Kiowa	12
2.75	Geronimo	Comanche	12
2.75	3 WSW Hollis	Harmon	13
2.75	10 N Woodward	Woodward	23
3.00	9 Woodward	Woodward	23
2.00	4 WSW Morrison	Noble	24
2.75	Cushing	Payne	24
2.00	5 NE Bristow	Creek	24
2.00	Medford	Grant	27
2.00	Bray	Stephens	27
2.25	2 SE Yukon	Canadian	27
2.00	2 E Yukon	Canadian	27
2.75	6 NE Stilwell	Adair	29

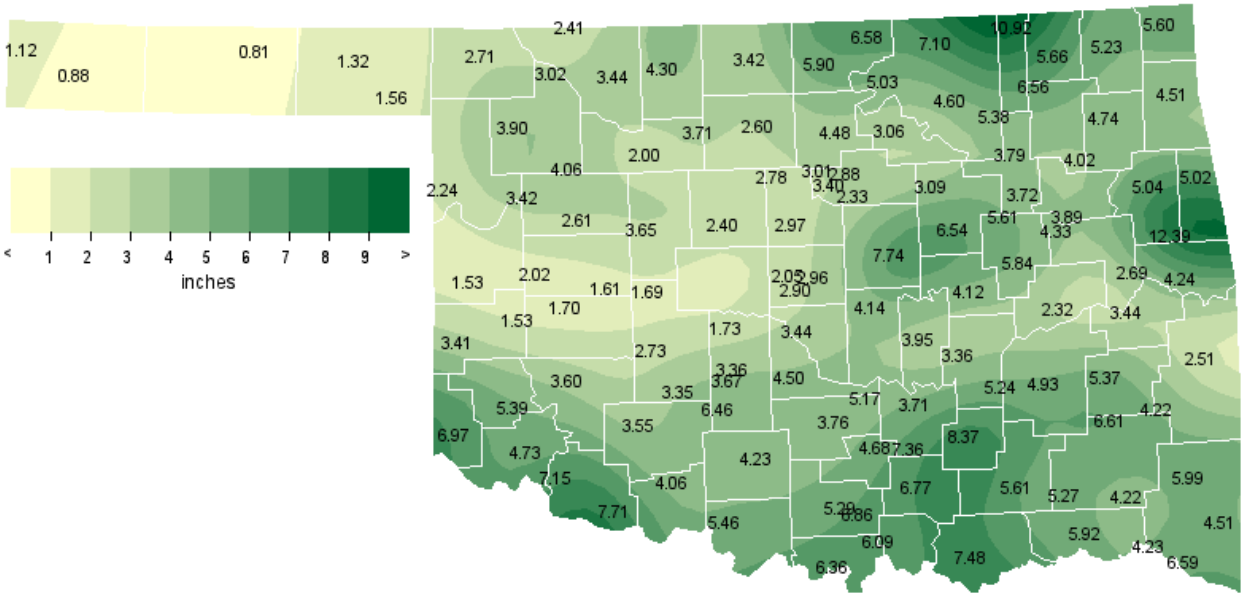
Wind Gusts (70 mph or Greater)

Speed (mph)	Location	County	Day
88.00	4 NNE Sulphur	Murray	9
75.00	4 NW Walters	Cotton	12
72.00	4 WSW Weatherford	Custer	16
70.00	Goodwell	Texas	16
83.00	SW Manitou	Tillman	23
100.00	Temple	Cotton	23
81.00	Fort Cobb	Caddo	26
81.00	4 NNW Fort Cobb	Caddo	26

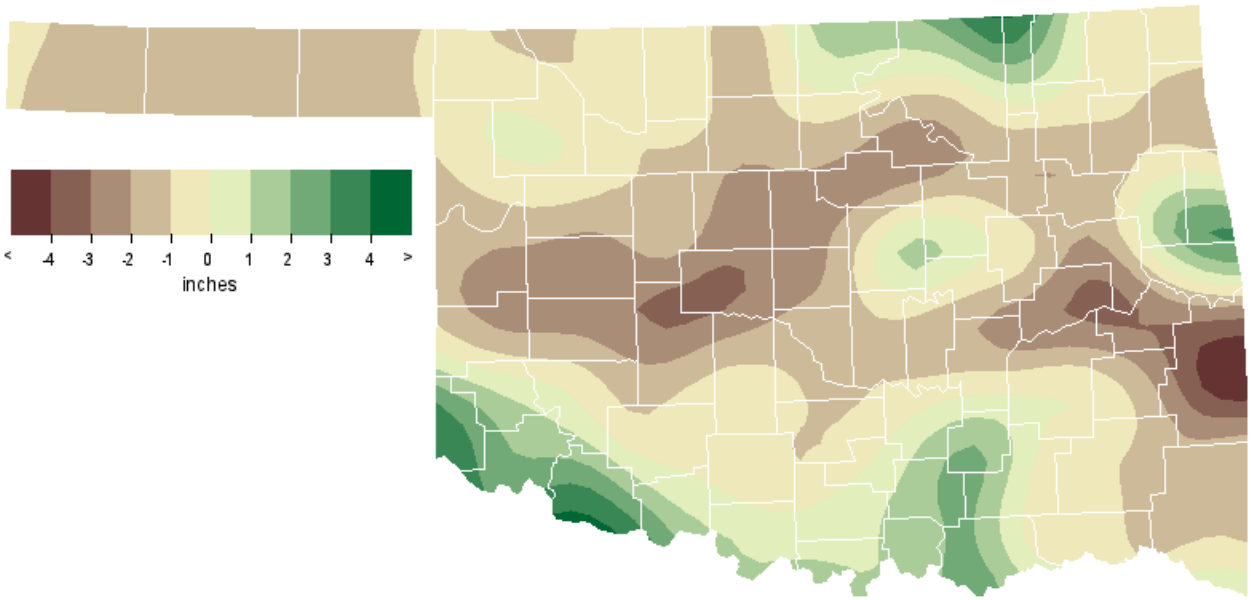
Significant Tornadoes (EF2 or Greater)

EF-Rating	County (Start/End)	Day
EF4	Garvin	9
EF3	Murray/Pontotoc	9
EF3	Johnston/Coal	9
EF2	Noble/Payne	9
EF3	Bryan/Choctaw	9

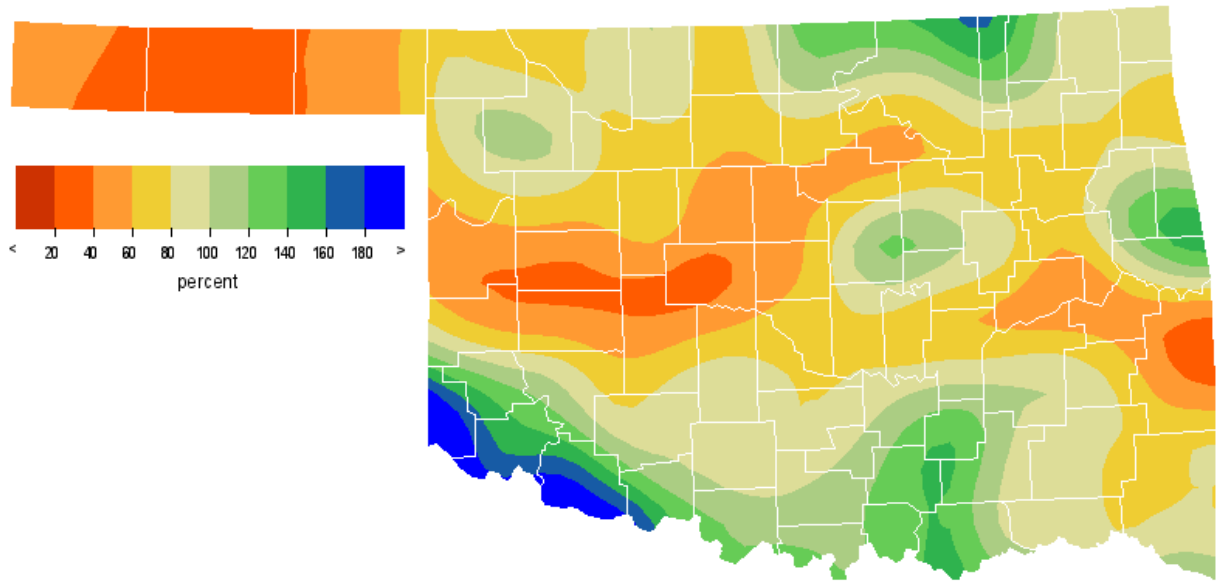
MAY 2016 OBSERVED PRECIPITATION



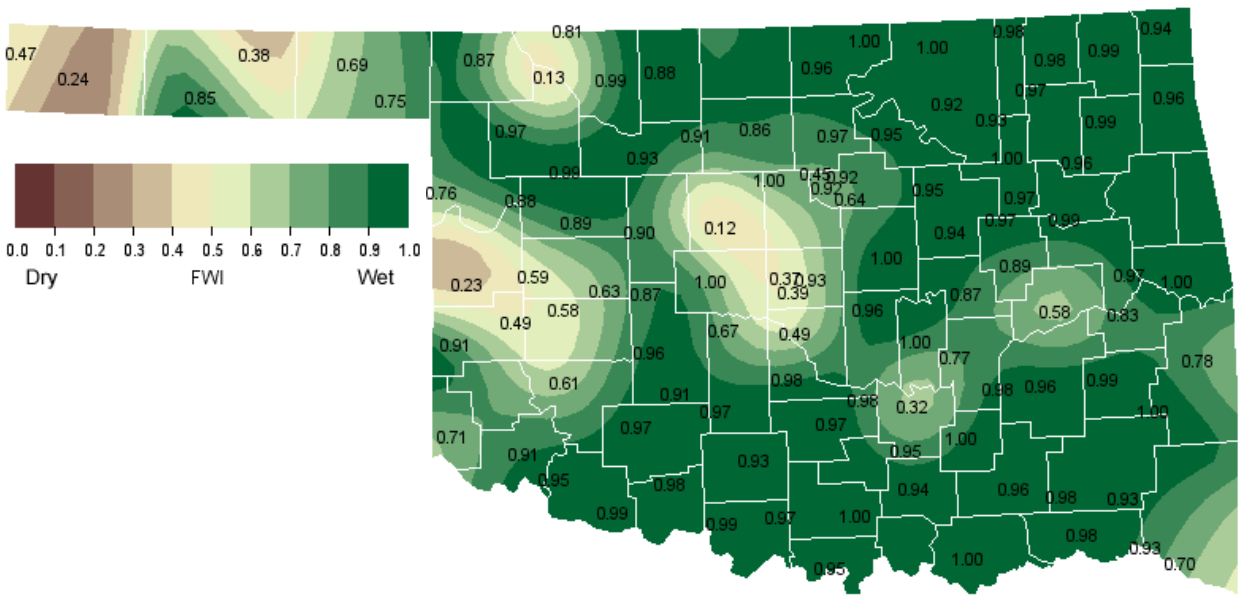
MAY 2016 DEPARTURE FROM NORMAL PRECIPITATION



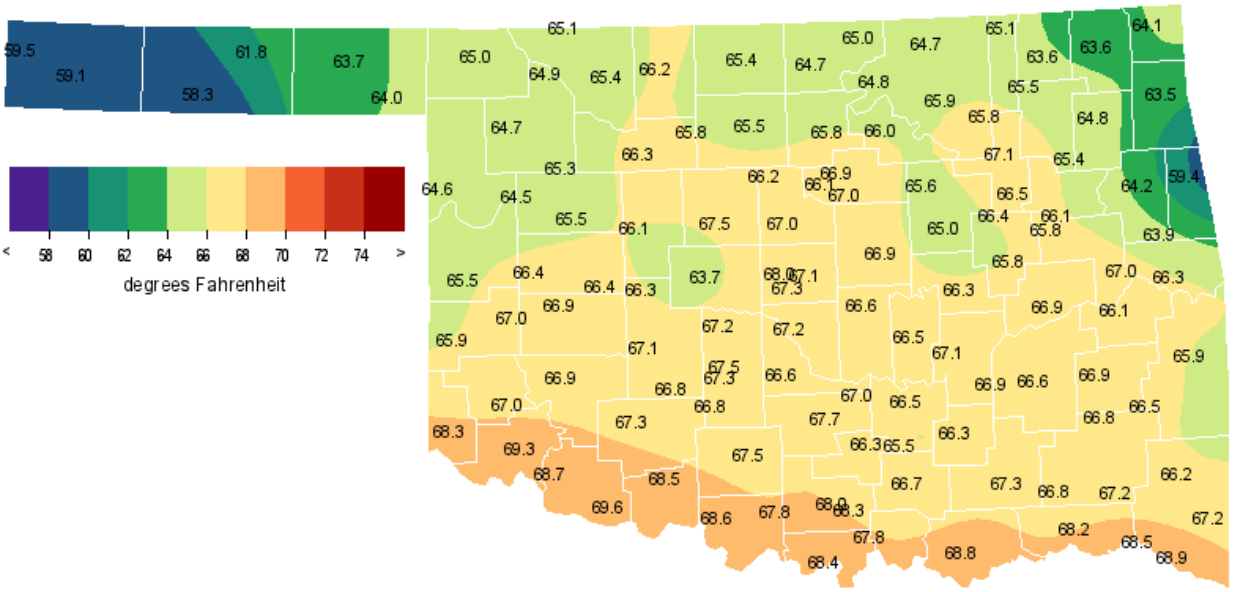
MAY 2016 PERCENT OF NORMAL PRECIPITATION



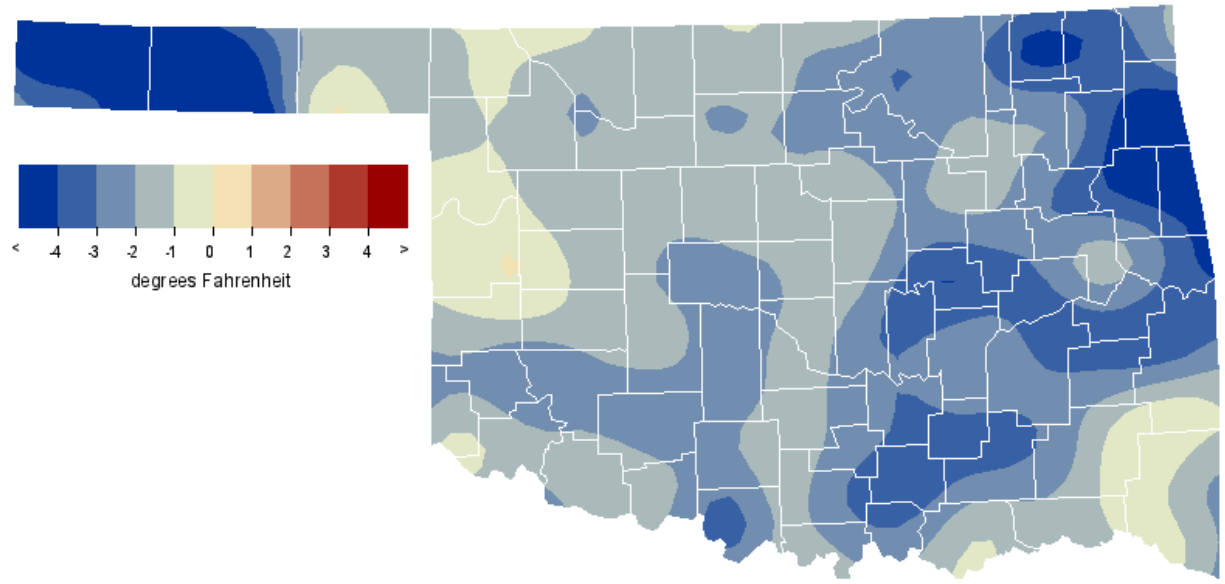
MAY 2016 AVERAGE SOIL MOISTURE AT 25CM



MAY 2016 AVERAGE TEMPERATURE



MAY 2016 DEPARTURE FROM NORMAL TEMPERATURE

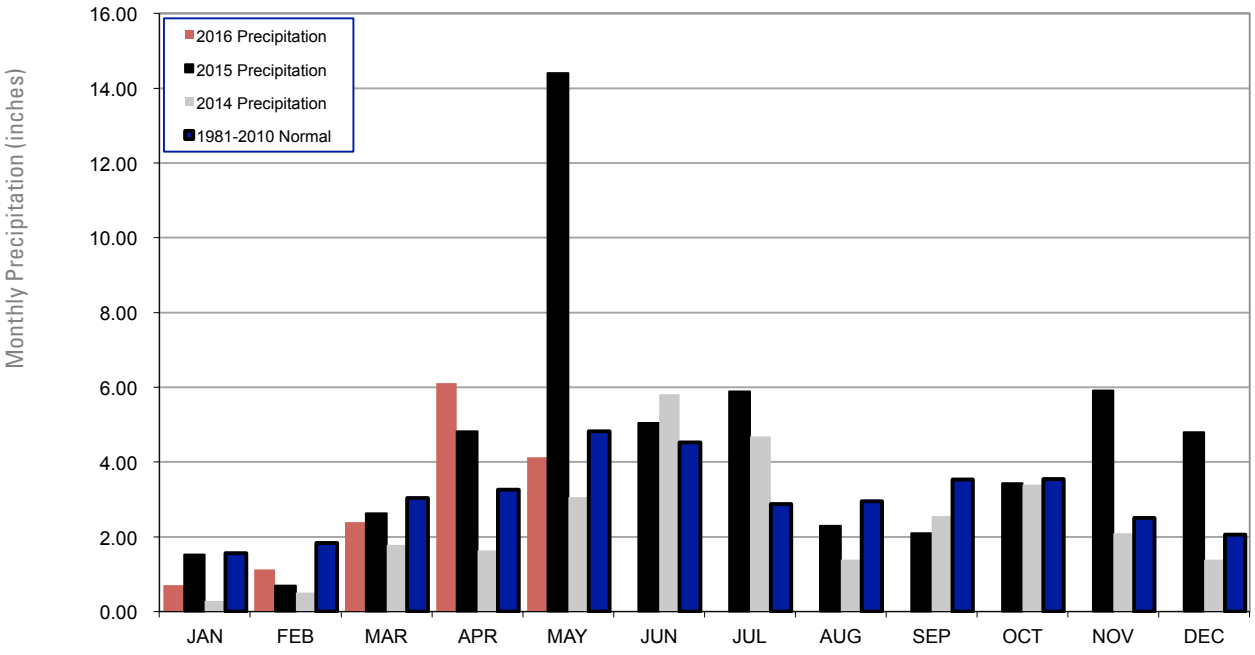


MESONET MONTHLY SUMMARY FOR MAY 2016

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	64.6	92	10	39	2	107	93	2.24	1.63	16
Beaver	63.8	93	24	35	2	124	86	1.32	.71	16
Boise City	59.1	86	24	31	2	202	19	.88	.47	16
Buffalo	65.0	96	25	37	3	110	111	2.71	1.06	26
Eva	*****	***	***	***	***	****	****	*****	*****	***
NORTH CENTRAL										
Alva	65.5	95	25	40	3	101	115	3.44	2.10	16
Blackwell	64.7	89	25	38	3	109	100	5.90	1.88	31
Breckinridge	65.5	92	25	40	3	104	118	2.60	.81	17
Cherokee	66.2	95	25	42	1	95	131	4.30	1.82	31
Fairview	66.3	94	25	43	3	90	130	2.00	.99	16
Freedom	64.9	94	25	39	2	108	105	3.02	1.47	16
Lahoma	65.8	94	25	40	3	97	121	3.71	1.33	16
NORTHEAST										
Bixby	66.6	88	29	42	3	68	117	3.72	1.51	25
Burbank	64.7	87	25	39	3	101	93	5.03	1.60	17
Copan	65.1	86	25	40	3	97	99	10.92	4.33	31
Foraker	64.6	87	25	42	1	95	84	7.10	2.45	25
Inola	65.4	86	29	40	3	87	99	4.02	2.68	25
Jay	63.4	85	29	38	3	131	82	4.51	1.73	25
Miami	64.1	86	29	41	3	113	86	5.60	2.24	16
Nowata	63.6	87	29	38	3	121	78	5.66	1.69	16
WEST CENTRAL										
Bessie	66.9	92	25	43	3	77	136	1.70	.61	16
Butler	66.4	93	25	38	3	81	124	2.02	1.00	16
Camargo	64.5	92	25	34	3	107	91	3.42	1.93	26
Cheyenne	65.5	91	10	40	2	99	114	1.53	1.03	16
Elk City	67.0	93	25	43	2	79	141	1.53	.69	16
CENTRAL										
Acme	66.9	91	10	39	3	76	135	6.46	1.67	23
Bowlegs	66.4	89	10	40	3	72	116	3.95	1.03	30
Bristow	65.0	88	29	37	3	98	98	6.54	3.73	24
Lake Carl Blac	*****	***	***	***	***	****	****	3.01	.69	24
Chandler	66.9	89	10	41	3	68	126	7.74	4.06	24
Chickasha	67.5	94	10	37	3	75	151	3.36	1.09	31
El Reno	65.8	90	26	38	3	****	****	1.33	.46	17
Guthrie	66.9	89	24	40	3	81	141	2.97	.80	13
Kingfisher	67.5	94	26	37	3	81	159	2.40	.87	31
Marena	66.1	88	25	41	3	81	115	3.40	.66	16
Minco	67.2	90	10	43	1	76	144	1.73	.52	17
Marshall	66.2	91	25	36	3	94	132	2.78	.89	16
EAST CENTRAL										
Cookson	64.0	84	29	37	3	111	79	12.39	5.55	12
Eufaula	66.9	87	10	43	3	63	122	2.32	.99	9
Haskell	65.8	87	29	41	3	75	100	4.33	1.98	25
Hectorville	66.5	87	29	44	3	69	115	5.61	2.28	25
Holdenville	67.0	89	10	44	3	62	126	3.36	.69	9
McAlester	66.6	88	10	40	3	68	116	4.93	1.53	31
Okmulgee	65.7	87	10	39	3	83	105	5.84	4.22	25
SOUTHWEST										
Altus	69.2	99	10	44	3	62	193	4.73	1.34	22
Apache	66.8	91	10	43	2	72	127	3.35	1.10	31
Fort Cobb	67.2	93	10	40	3	75	141	2.73	.64	16
Grandfield	69.5	97	10	44	3	50	191	7.71	2.34	23
Hinton	66.3	90	25	40	3	87	129	1.69	.56	16
Hobart	66.9	93	10	41	3	82	142	3.60	.96	22
SOUTH CENTRAL										
Ada	66.5	90	10	41	3	68	116	3.71	.99	12
Ardmore	68.3	91	10	44	3	42	146	6.86	1.50	23
Burneyville	68.4	92	10	40	3	47	153	6.36	1.15	23
Byars	67.1	89	10	43	3	64	129	5.17	1.65	12
Centrahoma	66.4	87	10	39	3	69	112	8.37	2.44	12
Durant	68.8	89	10	44	3	41	158	7.48	2.86	30
Fittstown	65.5	88	10	40	3	76	92	7.36	2.99	31
Ketchum Ranch	67.5	91	10	43	3	57	134	4.23	1.33	17
SOUTHEAST										
Antlers	66.9	88	10	39	3	52	112	5.27	1.37	9
Broken Bow	67.2	88	29	41	5	48	116	4.51	.86	31
Clayton	66.8	88	10	41	3	60	116	6.61	2.12	25
Cloudy	67.2	87	10	44	3	44	111	4.22	1.36	9
Hugo	68.2	88	10	45	3	35	134	5.92	1.57	31
Idabel	68.8	89	29	46	3	31	147	6.59	2.84	31

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	62.3	91	24	34	2	****	****	1.40	.78	16
Hooker	61.8	93	24	34	2	154	55	.81	.41	16
Kenton	59.5	87	21	33	2	190	20	1.12	.36	16
Slapout	63.9	92	25	37	2	117	83	1.56	.99	16
May Ranch	65.1	94	25	40	2	107	109	2.41	.89	16
Medford	65.4	94	25	39	3	101	112	3.42	1.00	16
Newkirk	65.0	87	25	42	1	97	97	6.58	1.81	25
Red Rock	65.8	88	10	39	3	89	114	4.48	2.04	24
Seiling	65.4	93	25	39	3	97	108	4.06	1.69	16
Woodward	64.7	92	25	40	2	105	97	3.90	1.21	16
Pawnee	66.0	88	10	40	5	86	118	3.06	1.21	16
Porter	66.2	87	29	41	3	70	107	3.89	2.10	25
Pryor	64.8	86	10	38	3	97	92	4.74	2.74	25
Skiatook	65.8	87	10	43	3	84	110	5.38	1.76	25
Talala	65.5	87	29	42	3	85	102	6.56	2.00	16
Tulsa	67.2	88	10	42	3	66	133	3.79	1.18	25
Vinita	63.7	86	29	39	3	117	76	5.23	2.42	16
Wynona	65.9	88	10	40	3	84	110	4.60	1.27	17
Erick	65.9	94	10	37	3	95	122	3.41	1.07	16
Putnam	65.5	91	25	40	3	98	114	2.61	1.38	16
Watonga	66.1	92	25	44	3	92	126	3.65	1.85	13
Weatherford	66.4	91	25	43	4	89	131	1.61	.49	19
Ninnekah	67.3	92	10	39	3	71	141	3.67	.99	17
Norman	67.3	89	10	40	3	68	139	3.44	1.06	26
Oilton	65.6	89	29	37	3	95	114	3.09	.97	24
OKC East	67.3	90	10	41	3	71	141	2.90	1.06	17
OKC North	67.9	90	10	45	3	66	157	2.05	.71	17
Okemah	66.2	88	10	40	3	77	115	4.12	1.52	31
Perkins	67.1	90	10	40	3	74	138	2.33	.66	24
Shawnee	66.6	88	10	41	3	73	124	4.14	.99	23
Spencer	67.1	89	10	43	3	74	140	2.96	1.17	17
Stillwater	66.9	90	10	39	3	76	134	2.88	1.01	24
Washington	66.6	89	10	44	3	67	116	4.50	1.18	11
Sallisaw	66.2	87	10	41	3	66	103	4.24	2.41	12
Stigler	66.1	87	10	40	3	70	104	3.44	1.91	12
Stuart	66.8	88	10	44	3	61	118	5.24	1.27	31
Tahlequah	64.2	85	29	38	3	106	81	5.04	3.05	25
Webbers Falls	67.0	88	10	44	3	59	120	2.69	1.35	25
Westville	63.5	84	29	38	3	****	****	5.02	2.37	25
Hollis	68.3	97	10	40	2	74	175	6.97	3.92	22
Mangum	67.0	96	25	37	3	79	140	5.39	2.28	22
Medicine Park	67.3	90	10	45	1	66	138	3.55	.64	17
Tipton	68.8	95	10	42	3	57	176	7.15	1.69	23
Walters	68.5	94	10	44	3	54	162	4.06	1.19	23
Lane	67.4	88	10	41	3	52	125	5.61	1.25	9
Madill	67.7	89	10	41	3	55	140	6.09	1.08	23
Newport	68.1	90	10	44	3	46	141	5.29	1.16	23
Pauls Valley	67.5	90	10	42	3	55	133	3.76	1.22	17
Ringling	67.8	90	10	42	3	49	135	4.86	.93	23
Sulphur	66.3	89	10	39	3	72	113	4.68	1.47	17
Tishomingo	66.7	88	10	41	3	60	112	6.77	1.82	30
Waurika	68.6	94	10	42	3	46	158	5.46	1.55	23
Mt Herman	66.3	86	29	41	3	60	99	5.99	2.22	31
Talihina	66.5	87	29	40	3	67	114	4.22	.97	9
Valliant	68.4	88	10	42	3	38	144	4.23	1.51	31
Wilburton	66.9	88	10	40	3	66	124	5.37	2.05	31
Wister	65.8	87	10	40	3	68	94	2.51	1.04	9

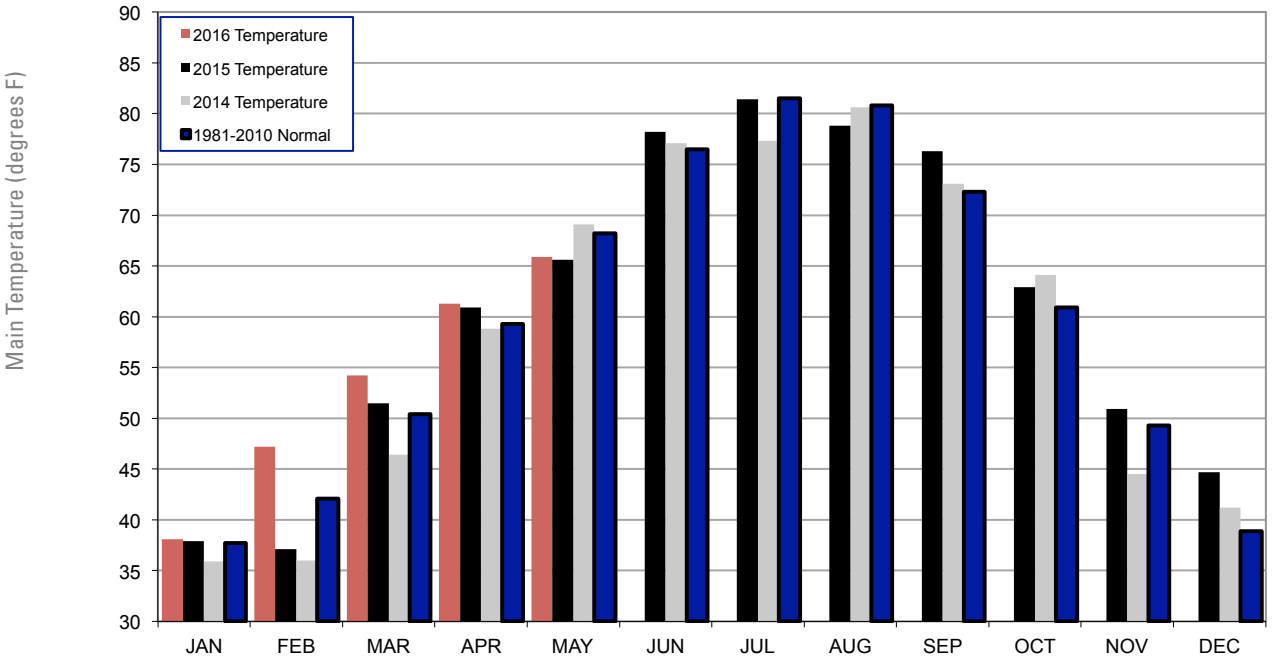
2014, 2015 AND 2016 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



May 2016 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	May-15 (inches)
Panhandle	1.52	-1.18	28th Driest	7.12 (2015)	0.19 (2004)	7.12
North Central	3.83	-0.53	60th Wettest	11.11 (1957)	0.63 (1970)	10.49
Northeast	5.24	-0.45	57th Wettest	17.98 (1943)	1.45 (1911)	11.51
West Central	2.39	-1.68	30th Driest	12.10 (1982)	0.42 (1966)	11.10
Central	3.66	-1.36	41st Driest	15.50 (2015)	0.92 (1988)	15.50
East Central	4.96	-0.87	56th Driest	17.48 (2015)	1.56 (1921)	17.48
Southwest	4.63	0.42	49th Wettest	16.40 (2015)	0.44 (1966)	16.40
South Central	5.81	0.49	53rd Wettest	20.69 (2015)	0.58 (1988)	20.69
Southeast	5.04	-1.11	51st Driest	20.03 (2015)	1.21 (1988)	20.03
Statewide	4.13	-0.69	51st Driest	14.42 (2015)	1.23 (1988)	14.42

2014, 2015 AND 2016 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



May 2016 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	May-15 (F)
Panhandle	62.0	-3.1	19th Coolest	71.1 (1896)	58.0 (1907)	61.7
North Central	65.4	-2.0	33rd Coolest	74.5 (1962)	60.6 (1907)	64.6
Northeast	65.2	-2.3	17th Coolest	74.4 (1962)	61.7 (1917)	66.1
West Central	66.0	-1.9	33rd Coolest	75.0 (1896)	60.9 (1907)	64.5
Central	66.6	-2.0	25th Coolest	74.6 (1962)	62.0 (1907)	66.6
East Central	65.6	-2.9	8th Coolest	74.3 (1962)	63.2 (1917)	68.0
Southwest	67.8	-2.2	29th Coolest	76.4 (1996)	63.5 (1907)	66.9
South Central	67.4	-2.7	12th Coolest	75.1 (1996)	63.5 (1907)	68.5
Southeast	67.2	-1.4	31st Coolest	73.1 (1899)	62.8 (1917)	68.4
Statewide	65.9	-2.3	21st Coolest	74.0 (1962)	61.9 (1907)	66.1

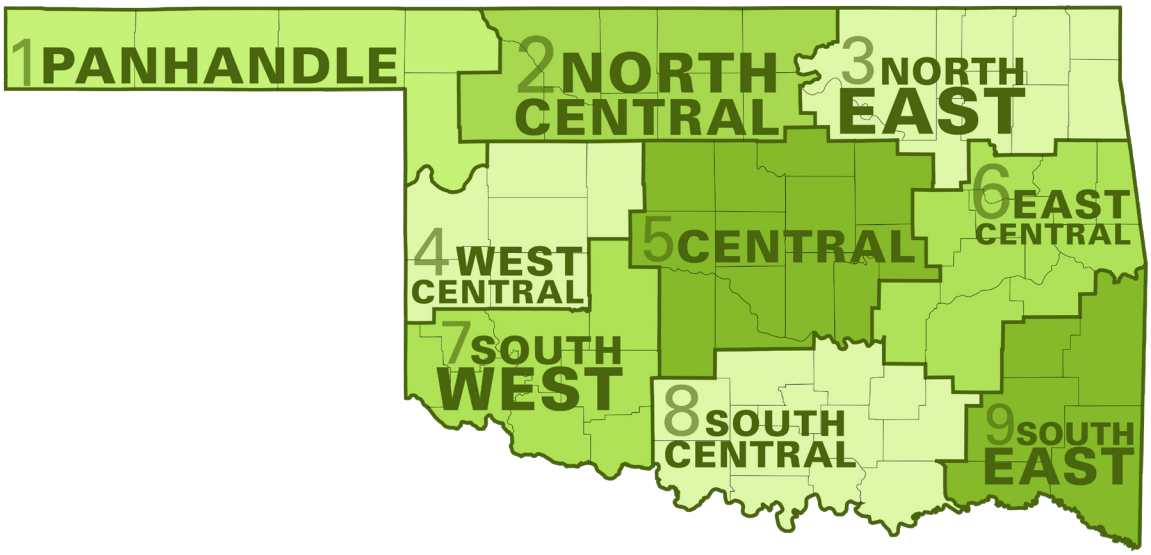
RECORD EVENT REPORTS MAY 2016

Description	Day	Location	Record	Previous Record	Year
Daily High Temperature	10	McAlester	90	90	1963
Daily Coolest High Temperature	17	Oklahoma City	61	61	1986
Daily Coolest High Temperature	19	Oklahoma City	61	61	1943
Daily Warnest Low Temperature	25	Oklahoma City	74	74	2008

MESONET EXTREMES FOR MAY 2016

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	96	25th	Buffalo	31	2nd	Boise City	2.71	Buffalo	1.63	16th	Arnett
North Central	95	25th	Alva	38	3rd	Blackwell	6.58	Newkirk	2.10	16th	Alva
Northeast	88	29th	Bixby	38	3rd	Nowata	10.92	Copan	4.33	31st	Copan
West Central	94	10th	Erick	34	3rd	Camargo	3.65	Watonga	1.93	26th	Camargo
Central	94	26th	Kingfisher	36	3rd	Marshall	7.74	Chandler	4.06	24th	Chandler
East Central	89	10th	Holdenville	37	3rd	Cookson	12.39	Cookson	5.55	12th	Cookson
Southwest	99	10th	Altus	37	3rd	Magnum	7.71	Grandfield	3.92	22nd	Hollis
South Central	94	10th	Waurika	39	3rd	Sulphur	8.37	Centrahoma	2.99	31st	Fittstown
Southeast	89	29th	Idabel	39	3rd	Antlers	6.61	Clayton	2.84	31st	Idabel
Statewide	99	10th	Altus	31	2nd	Boise City	12.39	Cookson	5.55	12th	Cookson

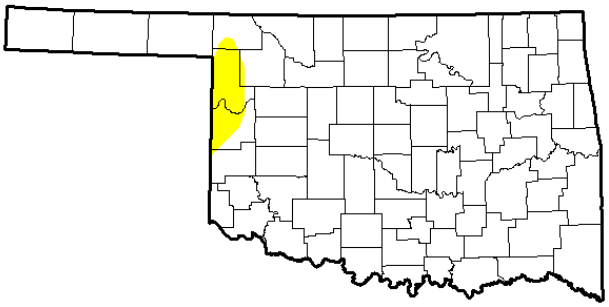
Oklahoma Climate Divisions



MAY 2016 DROUGHT MONITOR

U.S. Drought Monitor

Oklahoma



May 31, 2016

(Released Thursday, Jun. 2, 2016)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	97.18	2.82	0.00	0.00	0.00	0.00
Last Week 5/24/2016	97.16	2.84	0.00	0.00	0.00	0.00
3 Months Ago 3/1/2016	78.72	21.28	0.00	0.00	0.00	0.00
Start of Calendar Year 12/29/2015	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 9/29/2015	52.60	47.40	16.79	6.37	0.97	0.00
One Year Ago 6/2/2015	88.91	11.09	0.00	0.00	0.00	0.00

Intensity:

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

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

Author:
Mark Svoboda
National Drought Mitigation Center

http://droughtmonitor.unl.edu/

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 November 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 November 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

Dr. Kevin Kloesel Director
Dr. Chris Fiebrich Associate Director

EDITOR
Gary D. McManus State Climatologist

CONTRIBUTORS
Gary D. McManus State Climatologist
Dr. Mark A. Shafer Associate State Climatologist
Monica Deming Assistant State Climatologist

DESIGN
Ada Shih Creative Director
Jay Price Graphic Design Student Intern

For more information, contact:
Oklahoma Climatological Survey
The University of Oklahoma
120 David L. Boren Blvd., Suite 2900
Norman, OK 73072-7305

TEL: 405-325-2541
FAX: 405-325-7282
E-MAIL: ocs@ou.edu
WEBSITE: http://climate.ok.gov