

Lack of rain and hot weather took its toll during June, allowing drought to make a comeback from central through northeastern Oklahoma. Moisture deficits dating back to late April rose to 4-8 inches across a large swath of northern and eastern Oklahoma. During that period, heavy rains inundated southern Oklahoma at times and prompted numerous flash flood warnings. To highlight the disparity in moisture, the El Reno Mesonet site in central Oklahoma recorded a scant 2.7 inches of rain since May 1 while Mangum totaled a whopping 13.5 inches in the far southwest.

June 2016 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	104°F	Multiple	Multiple
Low Temperature	46°F	Eva	5
High Precipitation	12.57 in.	Acme	--
Low Precipitation	0.36 in.	Oilton	--

June itself ended as the 48th driest on record for the state according to preliminary data from the Oklahoma Mesonet with a statewide average of 3.3 inches, 1.3 inches below normal. The moisture disparity across the state was extreme, however. Northeastern Oklahoma experienced its third driest June on record at 3.8 inches below normal. Southwestern Oklahoma saw its 17th wettest at 1.5 inches above normal. Acme led all Mesonet sites with 12.6 inches of rain during June while Oilton had the lowest total of 0.4 inches. The January-June statewide average fell 1.8 inches below normal at 17.2 inches. Kenton has received 9.3 inches for the lowest 2016 total thus far. Broken Bow leads the state with 37.4 inches.

The early return to summer during June helped intensify the drought and produced miserable conditions for Oklahomans. A large area of high pressure – summer’s typical “heat dome” – camped over the Southern Plains through much of June’s last three weeks and ramped up the temperature. Mesonet sites across northern and southwestern Oklahoma recorded triple digits several times during the month. Kingfisher hit the 100-degree mark seven times to lead the state. Ample moisture flow from the Gulf of Mexico combined with those high temperatures to create oppressive conditions, particularly during a three-day period from June 15-17. Heat index values reached highs of 117 degrees at Bixby, Marena

and Oilton on the 15th, and there were 151 instances of 110 degrees or greater calculated by the Mesonet during that three-day period. The Mesonet recorded 437 heat index values of 105 degrees or higher during the month. The June statewide average temperature of 78.9 degrees was 2.4 degrees above normal, the 27th warmest June on record. Several Mesonet sites reached 104 degrees for the month’s highest temperature while a low of 46 degrees at the Mesonet’s newest station, Eva in Texas County, was the lowest reading. The January-June statewide was 2.1 degrees above normal and the eighth warmest first half of the year on record.

June 2016 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2016)
Month (Jun)	78.8°F	2.3°F	27th Warmest
Year-to-Date (Jan-Jun)	57.8°F	2.1°F	8th Warmest

Precipitation

	Total	Depart.	Rank (1895-2016)
Month (Jun)	3.27 in.	-1.25 in.	48th Driest
Year-to-Date (Jan-Jun)	17.19 in.	-1.84 in.	59th Driest

Depart. = departure from 30-year normal

The month started with just three percent of the state in “Abnormally Dry” conditions, but no drought indicated according to the U.S. Drought Monitor. The Drought Monitor map was completely clear in Oklahoma on June 14, but the heat and lack of rainfall eventually took its toll, prompting the return to drought on June’s last day. That last report had six percent of the state in moderate drought and 17 percent in abnormally dry conditions. On the opposite side of the hazard scale, flooding was an oft-reported problem during June. Lawton suffered widespread flash flooding on both June 2 and June 13 after heavy rains, necessitating water rescues by emergency personnel during both events. Flash flood warnings and water rescues were common during the first half of the month across the southwestern quarter of the state. Scattered storms on the month’s final day brought high winds, large hail and localized heavy rainfall to parts of Oklahoma.

JUNE 2016 DAILY SUMMARIES

JUNE 1-2: Temperatures were mild in the beginning of June as the month started off with a weak cold front. Maximum temperatures ranged between 69 degrees in Kenton and 84 degrees in Inola and Webbers Falls on the 1st and between 71 degrees in Tishomingo and Fittstown and 83 degrees in Hooker on the 2nd. The highest minimum temperatures were in the upper 60s and the lowest minimum temperatures were in the upper 40s and low 50s. As the front moved in and eventually stalled across the state, widespread rain and thunderstorms developed. Rainfall ranged from trace amounts to 2.83 inches in Shawnee where flooding was reported on the 1st and 3.09 inches in Ardmore on the 2nd. Flooding was also reported in Lawton on the 2nd. Daily average wind speeds were less than 10mph, however, peak gusts of 44mph occurred in Boise City on the 1st and in Stillwater on the 2nd.

JUNE 3-4: Showers continued and dense fog formed in western Oklahoma. The maximum 24-hour rainfall amounts were 1.18 inches in Pryor on the 3rd and .79 inches in Broken Bow on the 4th. Temperatures managed to increase just before another cold front entered the state on the 4th. The warmest maximum temperatures climbed into the upper 80s and low 90s in the northwest and southwest and the coolest maximum temperatures were in the mid-upper 70s in the northeast. Daily average wind speeds were less than 9mph on the 3rd and less than 11mph on the 4th. The highest wind gust during these two days was 55mph in Acme on the 4th.

JUNE 5-8: Despite some thunderstorms in the panhandle resulting in an inch of rain in Eva on the 6th and trace amounts on surrounding days, skies were mostly clear. A warming trend ensued and maximum temperatures increased from a range of 80 to 90 degrees on the 5th to a range of 87 to 97 degrees on the 8th. The warmest minimum temperatures increased from 64 degrees in Durant to 70 degrees in Oklahoma City and Seiling and the coolest minimum temperatures increased from 46 degrees in Eva to 58 degrees throughout the northeast. Average wind speeds gradually increased each day with the maximum average wind speed measuring 10mph in Minco on the 5th and 19mph in Beaver on the 8th. The top two wind gusts were 68mph in Eva and 51mph in Hooker on the 6th.

JUNE 9-12: Temperatures were fairly consistent all four days. The warmest reported temperatures in the state measured between 95 and 97 degrees in the panhandle and northwest Oklahoma. The coolest maximum temperatures were between 86 and 88 degrees from the 9th to the 11th. On the 12th, Bowlegs, Holdenville, and Stuart measured a maximum temperature of only 78 degrees. The highest minimum temperatures ranged from 73 to 75 degrees and the lowest minimum temperatures ranged from 58 to 63 degrees. A few isolated light showers occurred in the panhandle on the 9th and 10th before becoming heavy and more widespread the following two days. Showers and strong to severe thunderstorms moved over southern and northwest Oklahoma on the 11th and in southern and central

Oklahoma on the 12th. The top three rainfall amounts on the 11th were 1.39 inches in Medicine Park, .42 inches in Apache, and .40 inches in Ninnekah. The top three rainfall amounts on the 12th were 6.15 inches in Acme, 5.56 inches in Apache, and 5.14 inches in Pauls Valley. Flooding was reported in Garvin, Caddo, Stephens, McClain, Comanche, and Murray County on the 12th. A few peak wind gusts in the 30s and 40s occurred from the 9th through the 11th, but gusts as high as 64mph (Ketchum Ranch) and 57mph (Idabel) occurred on the 12th. Daily average wind speeds were less than 17mph on the 9th, 10th, and 11th, and less than 13mph on the 12th.

JUNE 13-14: Temperatures decreased on the 13th before attempting to rebound on the 14th. Highs were between 81 degrees in Madill and 91 degrees in the southeast and panhandle on the 13th and between 85 degrees in Cheyenne and 95 degrees in Grandfield, Blackwell, and Medford on the 14th. The warmest minimum temperatures were in the low-mid 70s and the coolest minimum temperature decreased from 60 degrees on the 13th to 55 degrees on the 14th. Rain and thunderstorms continued, resulting in more than 2 inches of precipitation in Camargo, Acme, and Beaver on the 13th and over an inch in Hollis, Hooker, Altus, Apache, and Grandfield on the 14th. Comanche and Grady County reported flooding that Monday. A handful of wind gusts measured in the 60s and 50s during this time while average wind speeds were generally less than 13mph.

JUNE 15-17: Despite trace amounts of light rain scattered about the state, skies were mostly clear and temperatures soared. Maximum temperatures ranged from the low 90s in the east to 104 degrees in the northwest. Minimum temperatures primarily ranged from the upper 40s to the upper 70s; however, low temperatures were particularly warm on the 16th with the lowest temperature in the state measuring 59 degrees in Boise City. A wind gust of 64mph was measured by the Hollis Mesonet station on the 15th as it experienced a heat burst. Daily average wind speeds were less than 15mph.

JUNE 18-19: Northern Oklahoma awoke on the 18th with strong to severe thunderstorms. Later that day, storms moved into central and eastern Oklahoma. By the 19th, showers and thunderstorms had moved into southern Oklahoma. Rainfall was heavy and the top three precipitation amounts measured by the Mesonet were 2.72 inches in May Ranch, 2.34 inches in Freedom, and 1.70 inches in Buffalo on the 18th, and 4.43 inches in Mangum, 2.12 inches in Hollis, and .62 inches in Waurika on the 19th. The storms also produced high winds with severe gusts of 81mph and 76mph in Freedom and 70mph in Allen on the 18th. The highest maximum temperature was 96 degrees both days and the lowest maximum temperature was 79 degrees in Watonga on the 18th and 88 degrees in Bowlegs, Ada, Cloudy, and Stuart on the 19th. Minimum temperatures ranged from the upper 50s to the mid-70s. Daily average wind speeds were 3-13mph.

JUNE 20-22: Oklahoma took a brief hiatus from the heavy downpours with the maximum rainfall amount during this period only measuring .33 inches in Boise City on the 22nd. Maximum temperatures slightly increased from a range of 90 to 99 degrees on the 20th to a range of 91 to 102 degrees on the 22nd. Over the three-day stretch, the highest minimum temperatures increased from 75 degrees in Tulsa to 79 degrees in Tulsa and Ada and the lowest minimum temperatures waivered in the low 60s. The highest daily average wind speed in the state increased as well from 14mph in Boise City on the 20th, to 15mph in Goodwell and Boise City on the 21st, to 18mph in Cheyenne on the 22nd.

JUNE 23-26: Some areas had temperatures climb into the triple digits which, when combined with the rain, made for some pretty muggy conditions. Highs ranged from the mid-upper 80s to the low 100s and lows ranged from the low-mid 60s to the upper 70s. The highest temperature recorded from the 23rd through the 26th was 103 degrees in Kingfisher on the 23rd and the lowest temperature was 62 degrees in Eva on the 26th. Strong storms and small hail fell in north-central Oklahoma on the 23rd. Scattered showers and storms continued in the north on the 24th with the heaviest rain falling in north-central OK and moving into west-central OK. The panhandle and far northwest Oklahoma saw isolated showers on the 25th. On the 26th, most of the state saw thunderstorms as a weak frontal boundary passed through. The largest daily amount of rainfall measured by the Mesonet each day was 1.20 inches in Kenton on the 23rd, 1.24 inches in Newkirk on the 24th (where flooding was also reported), 1.68 inches in Eva on the 25th, and 1.84 inches in Vinita on the 26th. According to the National Weather Service, Oklahoma City broke its daily maximum rainfall record with 2.30 inches on the 26th. The highest wind gust was 65mph in Eva on the 25th, followed by 52mph in Blackwell and 50ph in Elk City, Norman, Ninnekah, and Vinita on the 26th. Daily average wind speeds were less than 14mph on the 23rd, less than 16mph on the 24th, less than 17mph on the 25th, and less than 12mph on the 26th.

JUNE 27-30: In spite of a weak frontal boundary stalling over northeast Oklahoma on the 28th, temperatures remained warm for the remainder of the month. Maximum temperatures ranged from the upper 80s to the upper 90s. Minimum temperatures ranged from the upper 50s and low 60s to the low-mid 70s. Showers and thunderstorms made sure to stick around until the last day of June. Slow moving storms moved over the western two-thirds of the state on the 27th, northwest Oklahoma on the 28th, southwest Oklahoma on the 29th, and northern and southwest Oklahoma on the 30th. Some of the storms brought heavy rainfall, small hail, and strong wind gusts. A 71mph wind gust was reported in Burns Flat on the 28th as well as a 70mph wind gust in Weatherford and Carnegie. Collinsville experienced a 70mph wind gust on the 30th. The maximum daily rainfall amount measured each day was .98 inches in Blackwell on the 27th, 2.07 inches in Watonga on the 28th, .69 inches in Beaver on the 29th, and 2.98 inches in Lake Carl Blackwell on the 30th. Daily average

wind speeds were less than 9mph on the 27th, less than 10mph on the 28th and 30th, and less than 12mph on the 29th.

JUNE 2016 SEVERE WEATHER

Flooding

Location	County	Day
2 NNW Shawnee	Pottawatomie	1
2 N Lawton	Comanche	2
5 W Paoli	Garvin	12
Pauls Valley	Garvin	12
Whitebead	Garvin	12
2 W Cyril	Caddo	12
Duncan	Stephens	12
4 S Purcell	McClain	12
4 S Pauls Valley	Garvin	12
Lawton	Comanche	12
4 NE Elmore City	Garvin	12
Apache	Caddo	12
6 E Duncan	Stephens	12
Maysville	Garvin	12
3 S Paoli	Garvin	12
Turner Falls	Murray	12
5 N Sulphur	Murray	12
Wichita Mountains Wildlife	Comanche	13
5 S Rush Springs	Grady	13
3 N Newkirk	Kay	24
1 W Newkirk	Kay	24

Wind Gusts (70 mph or Greater)

Speed (mph)	Location	County	Day
81.00	3 SSW Freedom	Woodward	18
76.00	3 SSW Freedom	Woodward	18
70.00	Allen	Pontotoc	18
71.00	1 WSW Burns Flat	Washita	28
70.00	4 WSW Weatherford	Custer	28
70.00	Carnegie	Caddo	28
70.00	Collinsville	Tulsa	30

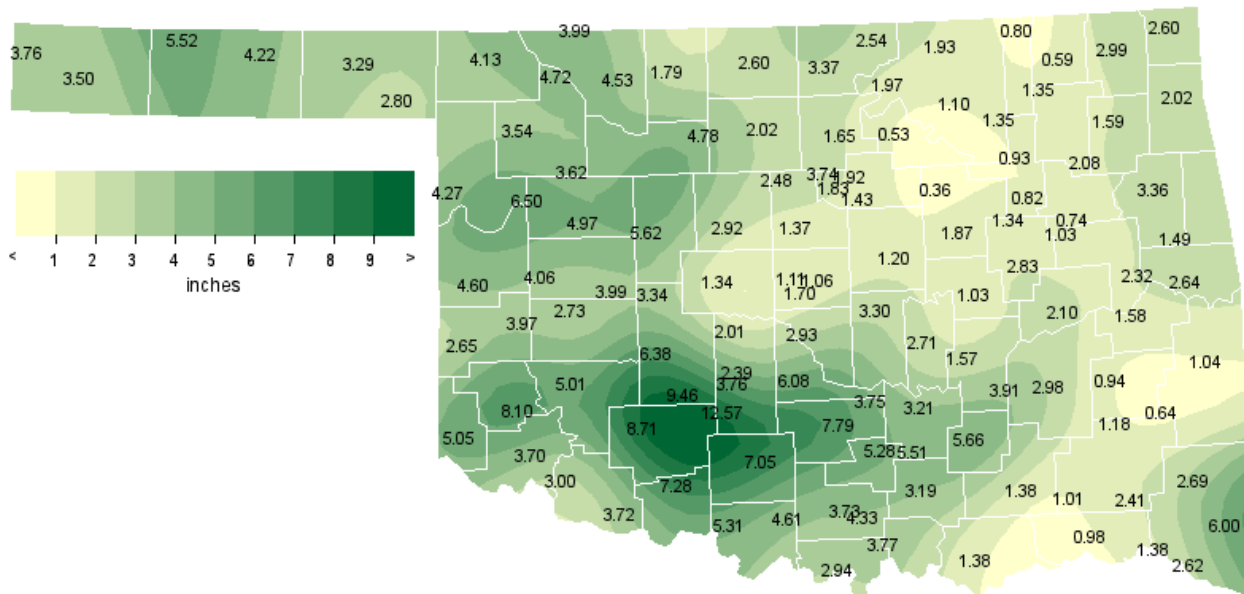
Hail (2 Inches in Diameter or Greater)

Size (in)	Location	County	Day
None			

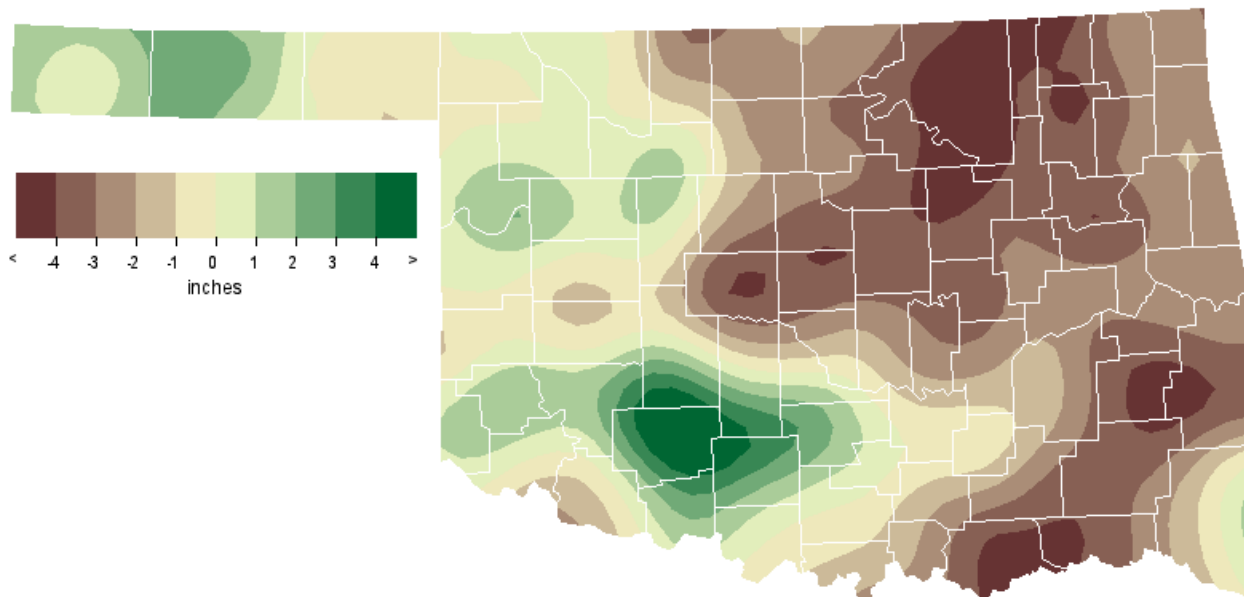
Significant Tornadoes (EF2 or Greater)

EF-Rating	County (Start/End)	Day
None		

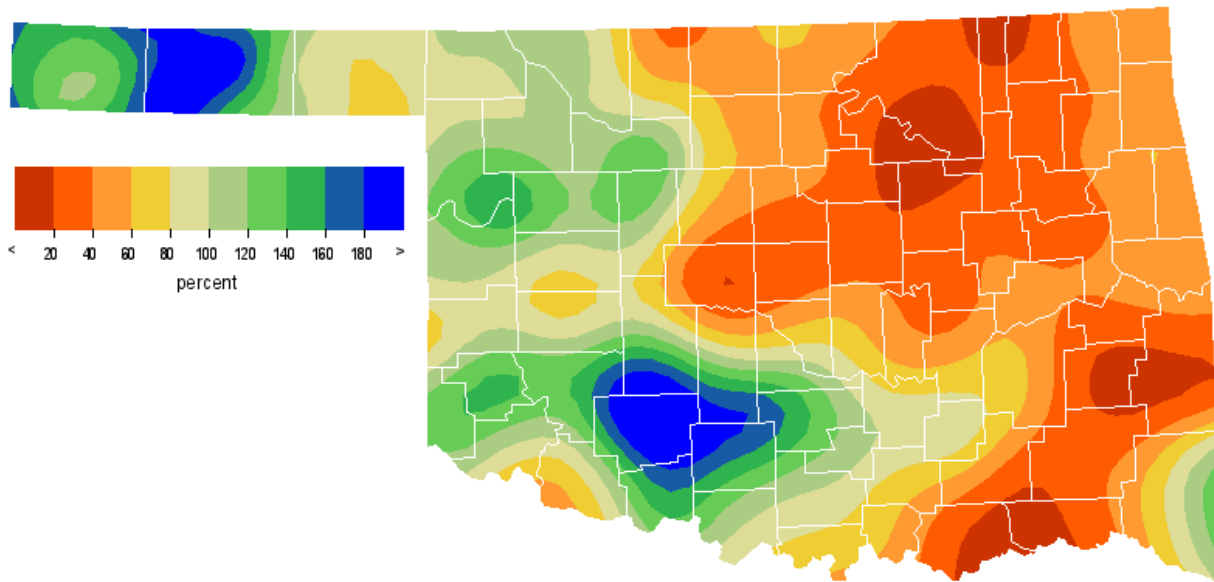
JUNE 2016 OBSERVED PRECIPITATION



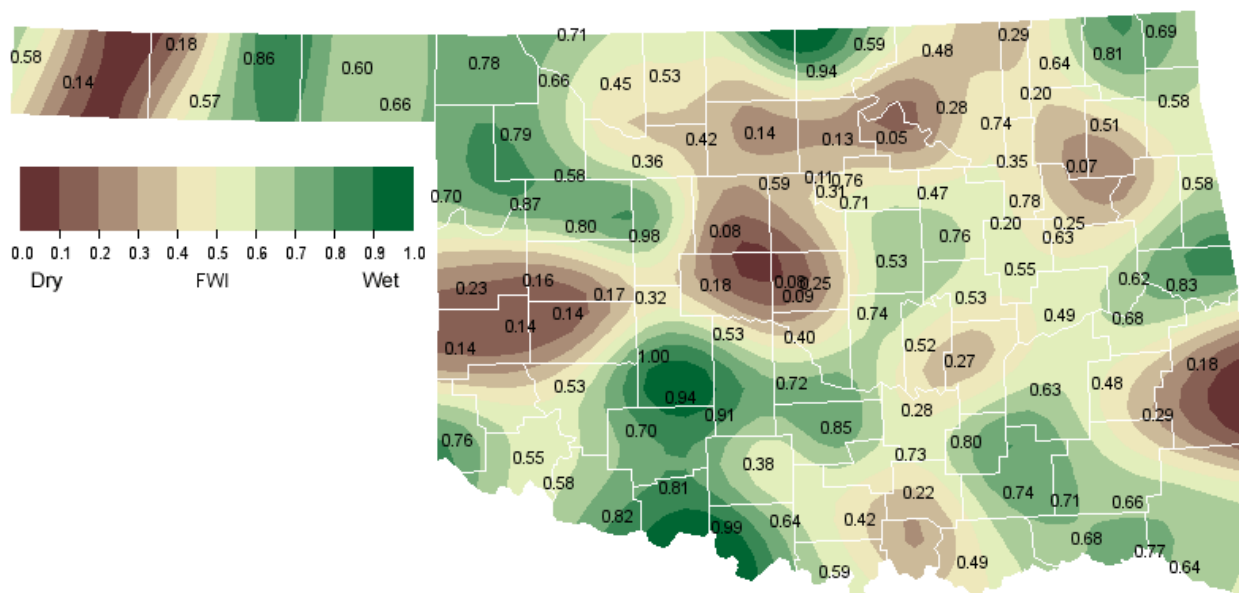
JUNE 2016 DEPARTURE FROM NORMAL PRECIPITATION



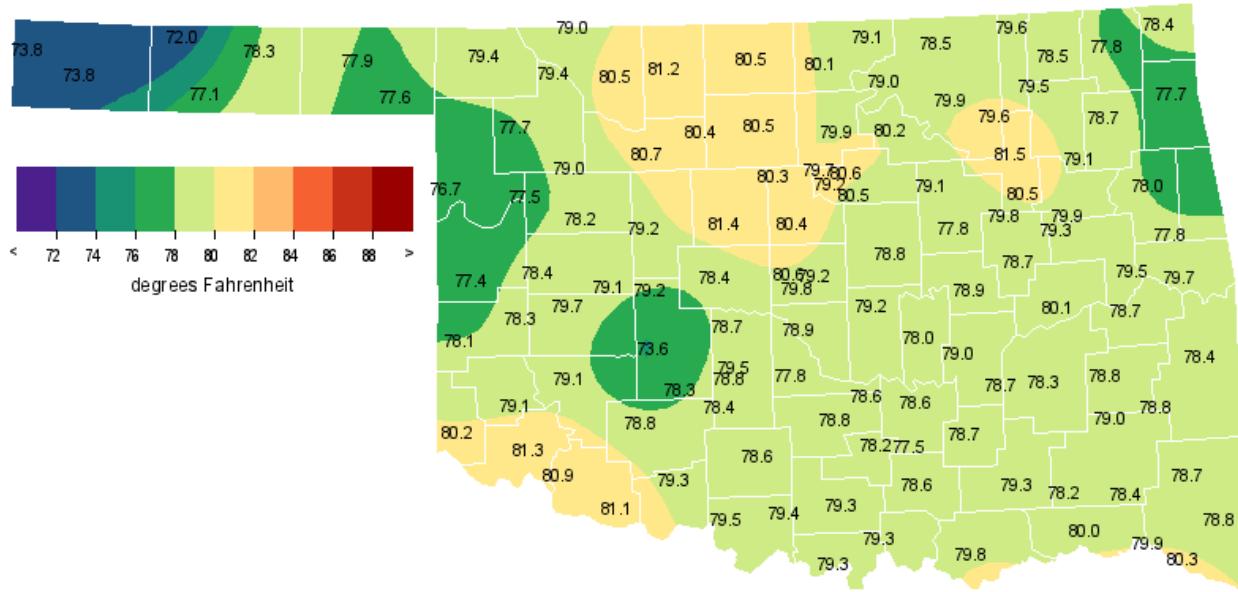
JUNE 2016 PERCENT OF NORMAL PRECIPITATION



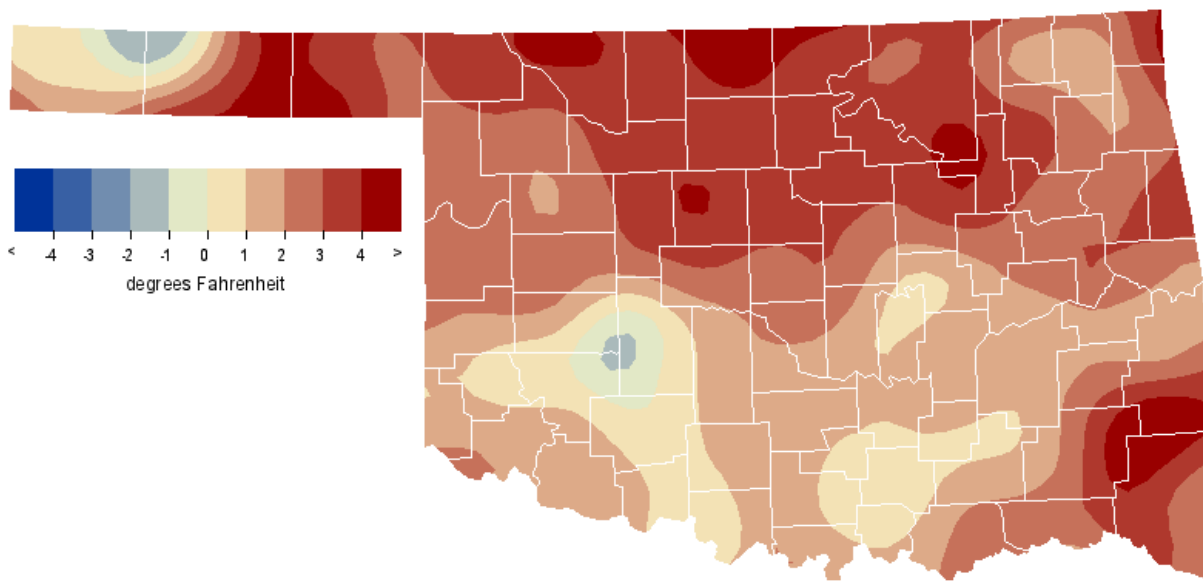
JUNE 2016 AVERAGE SOIL MOISTURE AT 25CM



JUNE 2016 AVERAGE TEMPERATURE



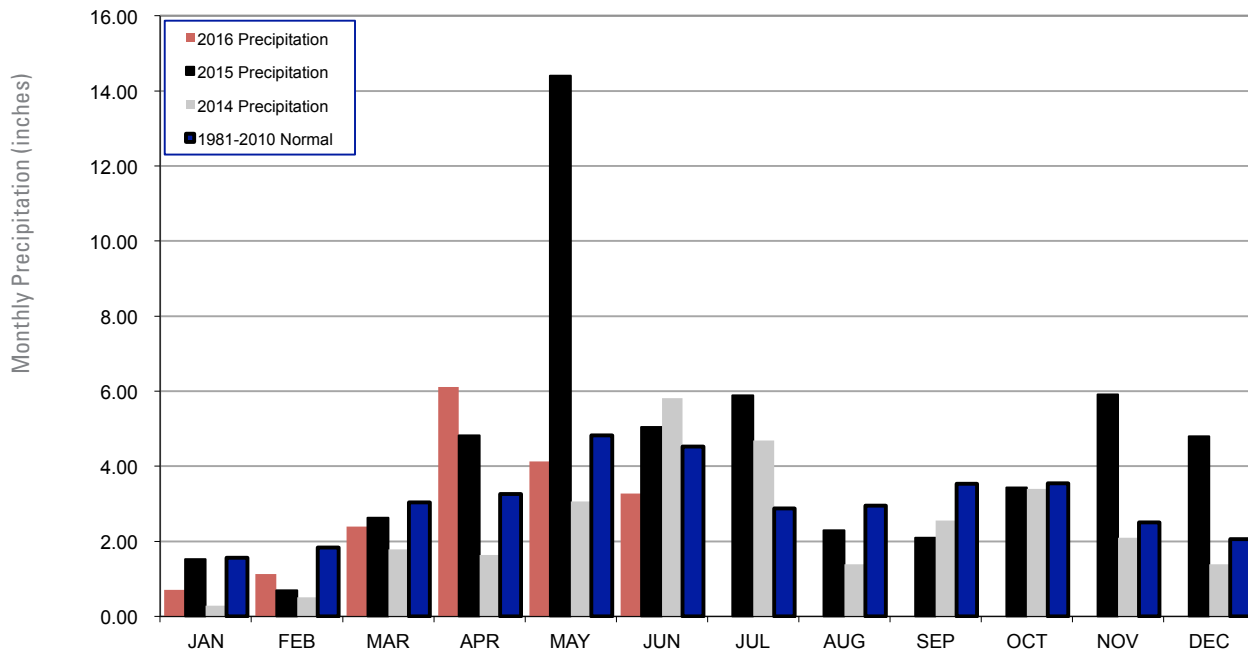
JUNE 2016 DEPARTURE FROM NORMAL TEMPERATURE



MESONET MONTHLY SUMMARY FOR JUNE 2016

NAME	MEAN TEMP	HIGH TEMP	LOW TEMP	DAY	DAY	HDD	CDD	TOT PPT	HIGH 24-HR	DAY	NAME	MEAN TEMP	HIGH TEMP	LOW TEMP	DAY	DAY	HDD	CDD	TOT PPT	HIGH 24-HR	DAY	
PANHANDLE																						
Arnett	76.7	95	22	53	5	0	351	4.27	1.90	13	Goodwell	77.0	101	22	48	5	0	360	*****	*****	***	
Beaver	77.9	101	22	48	5	0	386	3.29	2.03	13	Hooker	78.3	102	22	49	5	0	400	4.22	1.24	14	
Boise City	73.8	99	22	49	2	6	269	3.50	.77	23	Kenton	73.8	99	22	48	17	6	269	3.76	1.44	1	
Buffalo	79.4	101	22	54	5	0	432	4.13	1.70	18	Slapout	77.6	100	22	54	6	0	377	2.80	1.47	13	
Eva	74.5	99	22	46	5	****	****	5.52	1.68	25												
NORTH CENTRAL																						
Alva	80.5	104	17	54	5	0	464	4.53	2.07	30	May Ranch	78.9	100	17	57	6	0	418	3.99	2.72	18	
Blackwell	80.1	101	22	56	6	0	453	3.37	.98	26	Medford	80.5	102	15	55	5	0	466	2.60	1.14	23	
Breckinridge	80.4	101	17	55	6	0	463	2.02	1.14	1	Newkirk	79.1	98	22	56	5	0	423	2.54	1.24	24	
Cherokee	81.2	104	17	55	5	0	486	1.79	.74	18	Red Rock	80.0	100	17	54	5	0	449	1.65	.63	26	
Fairview	80.7	104	17	56	6	0	471	*****	*****	***	Seiling	79.0	99	17	53	5	0	419	3.62	1.53	18	
Freedom	79.4	102	15	52	5	0	433	4.72	2.34	18	Woodward	77.7	95	15	54	5	0	382	3.54	1.33	13	
Lahoma	80.4	102	15	57	5	0	463	4.78	2.61	30												
NORTHEAST																						
Bixby	80.5	97	17	57	5	0	466	.82	.31	18	Pawnee	80.2	99	17	54	6	0	455	.53	.19	26	
Burbank	79.0	98	22	55	6	0	420	1.97	.81	1	Porter	79.9	97	22	58	5	0	447	.74	.39	4	
Copan	79.6	99	22	56	6	0	438	.80	.42	4	Pryor	78.8	96	22	55	6	0	413	1.59	1.18	3	
Foraker	78.4	97	15	59	5	0	403	1.93	1.27	26	Skiatook	79.6	96	15	57	6	0	437	1.35	.41	26	
Inola	79.1	95	22	57	6	0	424	2.08	.95	2	Talala	79.5	97	23	58	6	0	434	1.35	1.03	1	
Jay	77.7	95	17	53	6	0	381	2.02	.77	3	Tulsa	81.5	98	17	60	6	0	497	.93	.23	2	
Miami	78.4	95	17	55	6	0	403	2.60	.92	24	Vinita	77.8	95	23	54	6	0	383	2.99	1.84	26	
Nowata	78.5	97	23	51	6	0	406	.59	.30	12	Wynona	79.8	98	22	56	6	0	443	1.10	.95	26	
WEST CENTRAL																						
Bessie	79.6	98	23	56	5	0	438	2.73	1.21	13	Erick	78.1	99	23	54	5	0	394	2.65	.94	13	
Butler	78.4	97	23	53	5	0	401	4.06	2.13	2	Putnam	78.2	96	17	56	5	0	395	4.97	1.98	13	
Camargo	77.4	96	15	53	6	0	373	6.50	2.64	13	Watonga	79.2	99	17	59	5	0	425	5.62	2.07	28	
Cheyenne	77.4	96	15	53	6	0	373	6.50	2.64	13	Weatherford	79.1	98	23	59	5	0	424	3.99	.92	1	
Elk City	78.3	97	23	59	6	0	400	3.97	1.17	2												
CENTRAL																						
Acme	78.4	94	17	54	5	0	401	12.57	6.15	12	Ninnekah	78.8	95	17	56	6	0	414	3.76	1.51	12	
Bowlegs	78.0	94	17	55	6	0	391	2.71	.96	26	Norman	78.9	95	17	57	6	0	418	2.93	1.11	26	
Bristow	77.8	96	17	53	6	0	383	1.87	.54	3	Oilton	79.0	97	17	52	6	0	419	.36	.18	26	
Lake Carl Blac	79.8	100	17	53	6	0	443	3.74	2.98	30	OKC East	79.7	97	17	56	6	0	442	1.70	.54	2	
Chandler	78.9	96	17	56	5	0	417	1.20	.47	1	OKC North	80.6	98	17	60	6	0	469	1.11	.51	18	
Chickasha	79.5	99	17	55	6	0	434	2.39	.69	12	Okemah	78.8	96	16	56	6	0	416	1.03	.48	12	
El Reno	78.3	98	17	50	6	0	399	1.34	.41	26	Perkins	80.6	100	17	56	6	0	467	1.43	.87	26	
Guthrie	80.4	98	17	56	6	0	463	1.37	.47	26	Shawnee	79.2	96	17	58	6	0	427	3.30	2.83	1	
Kingfisher	81.4	103	23	55	6	0	492	2.92	1.27	1	Spencer	79.2	96	17	56	6	0	427	1.06	.32	18	
Marena	79.2	99	17	57	5	0	427	1.83	.72	26	Stillwater	80.6	101	17	55	6	0	468	1.92	.89	26	
Minco	78.7	95	17	58	5	0	412	2.01	.85	26	Washington	77.7	94	17	57	6	0	382	6.08	3.29	12	
Marshall	80.3	100	23	53	6	0	459	2.48	1.02	26												
EAST CENTRAL																						
Cookson	77.9	95	23	54	6	0	386	1.49	1.00	12	Sallisaw	79.7	96	17	57	6	0	441	2.64	1.09	12	
Eufaula	80.1	97	22	57	5	0	454	2.10	1.21	12	Stigler	78.7	96	17	56	6	0	410	1.58	.84	12	
Haskell	79.4	97	22	56	5	0	431	1.03	.70	4	Stuart	78.7	93	16	60	6	0	410	3.91	1.66	12	
Hectorville	79.8	96	17	60	6	0	445	1.34	.75	1	Tahlequah	78.0	95	17	54	5	0	391	3.36	2.02	12	
Holdenville	79.0	94	17	58	5	0	420	1.57	.76	2	Webbers Falls	79.5	95	17	58	6	0	435	2.32	1.25	2	
McAlester	78.4	94	17	56	6	0	402	2.98	1.41	18	Westville	*****	***	***	***	***	*****	*****	*****	.22	24	
Okmulgee	78.6	96	17	55	5	0	408	2.83	1.37	2												
SOUTHWEST																						
Altus	81.3	101	23	60	5	0	488	3.70	1.20	14	Hollis	80.1	102	17	58	5	0	454	5.05	2.12	19	
Apache	78.4	94	23	56	5	0	401	9.46	5.56	12	Mangum	79.1	98	16	54	6	0	424	8.10	4.43	19	
Fort Cobb	79.0	97	23	56	6	****	****	6.38	2.10	12	Medicine Park	78.7	93	23	61	5	0	412	8.71	2.35	2	
Grandfield	81.1	99	17	59	6	0	483	3.72	1.15	13	Tipton	80.9	99	17	59	5	0	476	3.00	.94	28	
Hinton	79.2	97	23	55	6	0	426	3.34	.79	26	Walters	79.3	95	17	59	5	0	430	7.28	3.95	12	
Hobart	79.0	97	23	56	6	0	420	5.01	1.76	2												
SOUTH CENTRAL																						
Ada	78.6	95	17	56	5	0	409	3.21	1.38	2	Lane	79.3	95	17	58	7	0	428	1.38	.37	12	
Ardmore	*****	***	***	***	***	*****	*****	4.33	3.09	2	Madill	79.3	95	21	58	6	0	428	3.77	2.69	2	
Burneyville	79.3	96	28	56	7	0	429	2.94	1.77	2	Newport	79.3	95	22	59	5	0	430	3.73	2.63	2	
Byars	78.6	94	17	57	6	0	407	3.75	2.19	12	Pauls Valley	78.9	95	17	57	5	0	416	7.79	5.14	12	
Centrahoma	78.7	94	17	56	5	0	412	5.66	4.36	12	Ringling	79.4	96	17	58	6	0	431	4.61	1.07	2	
Durant	79.8	94	21	61	7	0	443	1.38	.84	2	Sulphur	78.2	94	17	54	5	0	396	5.28	3.36	12	
Fittstown	77.5	93	21	57	6	0	375	5.51	3.19	12	Tishomingo	78.7	95	22	59	6	0	411	3.19	1.81	2	
Ketchum Ranch	78.5	94	23	58	6	0	406	7.05	3.99	12	Waurika	79.4	97	17	58	6	0	432	5.31	1.17	1	
SOUTHEAST																						
Antlers	78.1	94	17	56	7	0	394	1.01	.58	2	Mt Herman	78.7	94	16	56	7	0	410	2.69	1.54	2	
Broken Bow	78.7	94	16	58	7	0	411	6.00	2.32	12	Talihina	78.8	98	28	55	6	0	414	.64	.27	2	
Clayton	79.0	97	28	56	7	0	419	1.18	.56	2	Valliant	79.9	95	16	58	7	0	447	1.38	.43	2	
Cloudy	78.4	94	28	59	7	0	403	2.41	1.56	2	Wilburton	78.8	95	28	56	7	0	414	.94	.48	2	
Hugo	80.0	95	28	61	6	0	449	.98	.54	2	Wister	78.5	97	17	55	5	0	404	1.04	.64	2	
Idabel	80.3	95	16	62	7	0	460	2.62	1.26	12												

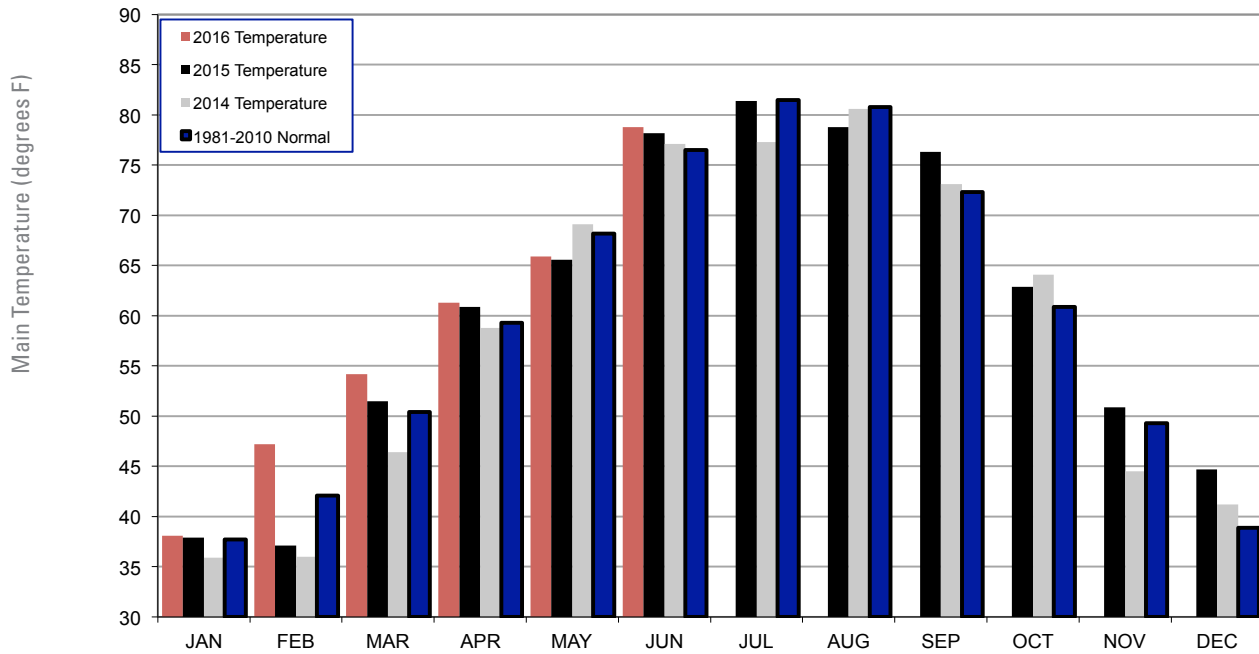
2014, 2015 AND 2016 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



June 2016 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Jun-15 (inches)
Panhandle	3.94	0.77	28th Wettest	7.09 (1962)	0.29 (1911)	3.12
North Central	3.26	-1.27	56th Driest	10.87 (2007)	0.40 (1933)	2.55
Northeast	1.46	-3.77	3rd Driest	12.64 (2007)	0.28 (1933)	4.90
West Central	4.34	0.19	39th Wettest	8.90 (1962)	0.30 (1933)	2.95
Central	2.66	-2.26	36th Driest	12.63 (2007)	0.41 (1933)	5.75
East Central	2.26	-2.54	20th Driest	12.47 (1935)	0.69 (2011)	5.90
Southwest	5.80	1.53	17th Wettest	9.96 (2007)	0.43 (1911)	3.84
South Central	4.31	-0.42	45th Wettest	11.30 (1908)	0.25 (1933)	9.01
Southeast	1.90	-2.75	13th Driest	11.51 (1935)	0.77 (1933)	4.22
Statewide	3.27	-1.25	48th Driest	9.52 (2007)	0.44 (1933)	4.81

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



June 2016 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Jun-15 (F)
Panhandle	76.3	2.1	33rd Warmest	82.9 (1953)	67.0 (1903)	76.5
North Central	79.8	3.2	16th Warmest	85.2 (1953)	69.1 (1903)	78.6
Northeast	79.3	3.5	15th Warmest	84.4 (1911)	70.3 (1903)	78.1
West Central	78.4	1.7	35th Warmest	85.7 (1953)	70.0 (1903)	78.4
Central	79.3	2.5	24th Warmest	85.2 (1911)	71.1 (1903)	78.7
East Central	79.0	2.6	25th Warmest	84.5 (1953)	70.3 (1903)	78.8
Southwest	79.2	0.9	49th Warmest	87.3 (2011)	72.4 (1903)	79.5
South Central	78.9	1.0	51st Warmest	85.7 (1911)	72.1 (1903)	79.1
Southeast	79.0	2.9	16th Warmest	83.5 (1953)	70.6 (1903)	78.0
Statewide	78.8	2.3	27th Warmest	84.8 (1953)	70.3 (1903)	78.4

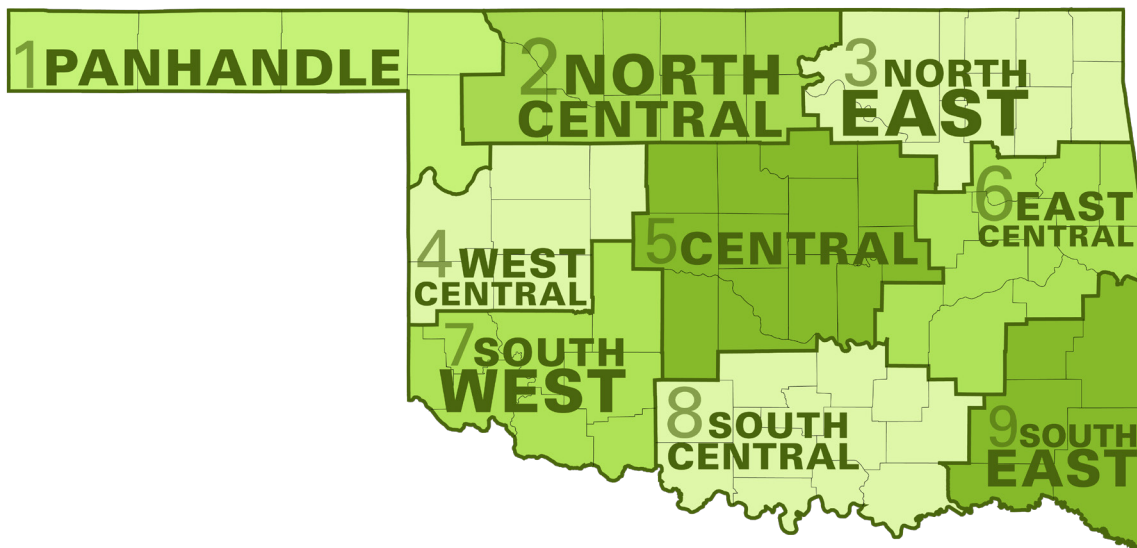
RECORD EVENT REPORTS JUNE 2016

Description	Day	Location	Record	Previous Record	Year
Daily Maximum Rainfall	26	Oklahoma City	2.3	1.7	1985

MESONET EXTREMES FOR JUNE 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	102	22nd	Hooker	46	5th	Eva	5.52	Eva	2.03	13th	Beaver
North Central	104	17th	Alva	52	5th	Freedom	4.78	Lahoma	2.72	18th	May Ranch
Northeast	99	17th	Pawnee	51	6th	Nowata	2.99	Vinita	1.84	26th	Vinita
West Central	99	23rd	Erick	53	5th	Butler	6.50	Camargo	2.64	13th	Camargo
Central	103	23rd	Kingfisher	50	6th	El Reno	12.57	Acme	6.15	12th	Acme
East Central	97	22nd	Eufaula	54	6th	Cookson	3.91	Stuart	2.02	12th	Tahlequah
Southwest	102	17th	Hollis	54	6th	Magnum	9.46	Apache	5.56	12th	Apache
South Central	97	17th	Waurika	54	5th	Sulphur	7.79	Pauls Valley	5.14	12th	Pauls Valley
Southeast	98	28th	Talihina	55	5th	Wister	6.00	Broken Bow	2.32	12th	Broken Bow
Statewide	104	17th	Altus	46	5th	Eva	12.57	Acme	6.15	12th	Acme

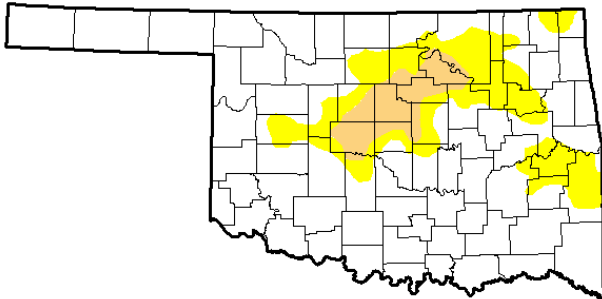
Oklahoma Climate Divisions



JUNE 2016 DROUGHT MONITOR

U.S. Drought Monitor Oklahoma

June 28, 2016
(Released Thursday, Jun. 30, 2016)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	77.65	22.35	5.86	0.00	0.00	0.00
Last Week 6/21/2016	83.30	16.70	0.00	0.00	0.00	0.00
3 Months Ago 3/29/2016	41.06	58.94	19.88	0.00	0.00	0.00
Start of Calendar Year 1/22/2015	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 6/30/2015	98.28	1.72	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:
Eric Luebehusen
U.S. Department of Agriculture



<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/wwwcgi.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/>



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