Oklahoma Monthly Climate Summary

APRIL 2017

OKLAHOMA CLIMATOLOGICAL SURVEY

April took its penchant for widely varying weather to near satirical extremes across Oklahoma. Floods, tornadoes, drought and blizzards – Mother Nature pulled out all the stops to give Oklahoma nearly the entire gamut of weather hazards. As many as six separate storm systems traversed the state during April, but the worst was saved for last. A powerful upper-level storm impacted state from the 28th through the 30th. Widespread rainfall amounts of 3-6 inches produced flooding from southwestern through northeastern Oklahoma. Portions of eastern Oklahoma received more than 8 inches over the two-day period. Numerous water rescues were necessary across the state. Severe storms produced large hail, damaging winds and a few tornadoes throughout the event. The historic arch at the State Fairgrounds in Oklahoma City was toppled by winds gusting to over 80 mph. Downed trees and power lines led to 40,000 electric utility customers losing power at the height of the storm. Several tornadoes were also reported with the storms across eastern Oklahoma. While it was flooding across the main body of the state, the Panhandle was experiencing an old fashioned High Plains blizzard. More than a foot of snow was reported in the far western Panhandle, while 4-8 inches fell farther to the east. The Cimarron County sheriff's department reported 15 inches of snow and drifts of 5 feet. The snow was whipped by winds gusting up to 70 mph on Sunday to create white-out conditions, closing roads and stranding travelers. Blizzard warnings were issued for Cimarron and Texas counties. Due to the scope of the storm system across the state, Governor Mary Fallin declared a state of emergency for all 77 counties.

Each succeeding system during the month added moisture to an already saturated Oklahoma. According to preliminary data from the Oklahoma Mesonet, the statewide average precipitation total was 6.82 inches, 3.56 inches above normal and the third wettest April since records began in 1895. Totals ranged from 1.82 inches at Erick in far western Oklahoma to 15.56 inches at Tahlequah in the east. Eighty-seven of the 121 Mesonet sites recorded at least 5 inches of rain, and 25 of those stations recorded more than 10 inches. All but seven Mesonet sites recorded at least 3 inches. Northeast Oklahoma saw its wettest April on record with an average of 11.3 inches, shattering the previous record of 9.27 inches set back in 1942. Tulsa broke its record for April rainfall with 10.44 inches, eclipsing the 9.33 inches from 2008. In addition to the snow received at the end of the month, the Panhandle recorded another 4-8 inches on April 2, exceeding their totals for the five previous months combined. The robust April precipitation totals propelled the January-April statewide average to the sixth wettest on record at 14.02 inches.

Despite the momentary bouts with winter, April's statewide average temperature still managed to finish 1.1 degrees above normal at 60.4 degrees, the 44th warmest April on record. The highest temperature recorded was 94 degrees at Beaver on the 19th. The lowest temperature, 28 degrees, was recorded at Kenton on April 2 and again at Eva on the 23rd. The January-April statewide average temperature was 51.9 degrees, 4.5 degrees above normal and the third warmest such period on record.

April 2017 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	94°F	Beaver	19
Low Temperature	26°F	Eva	30
High Precipitation	15.56 in.	Tahlequah	--
Low Precipitation	1.82 in.	Erick	--

April 2017 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2017)
Month (April)	60.4°F	1.1°F	44th Warmest
Season-to-Date (Mar-Apr)	58.2°F	3.5°F	8th Warmest
Year-to-Date (Jan-Apr)	51.9°F	4.5°F	3rd Warmest

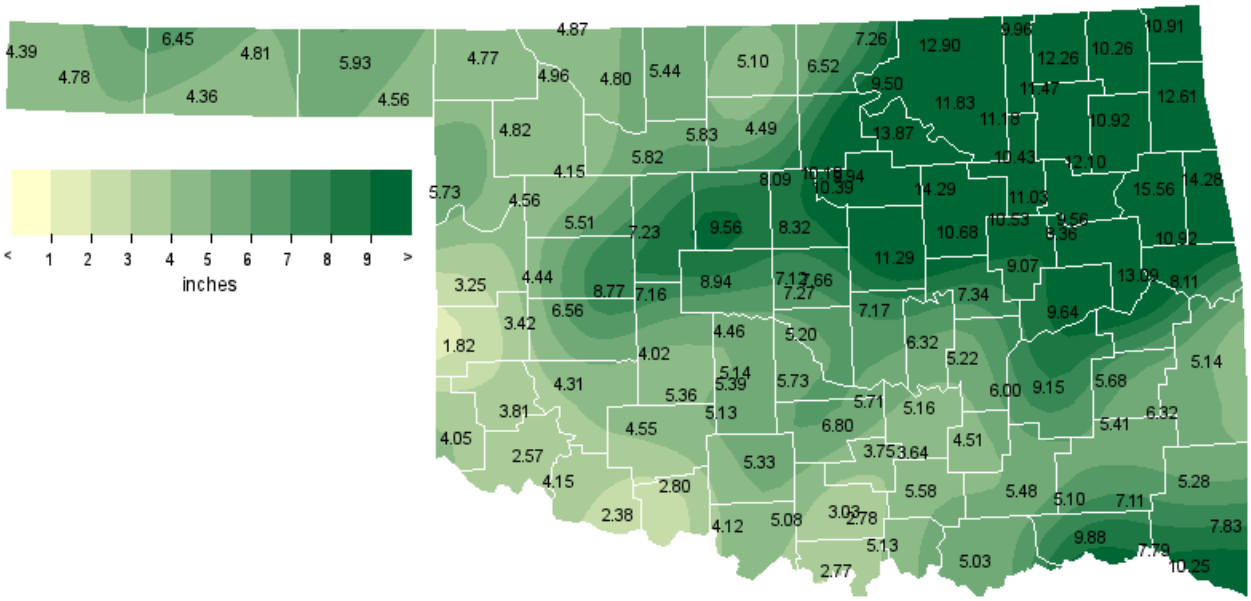
Precipitation

	Total	Depart.	Rank (1895-2017)
Month (April)	6.82 in.	3.56 in.	3rd Wettest
Season-to-Date (Mar-Apr)	9.37 in.	3.07 in.	42nd Wettest
Year-to-Date (Jan-Apr)	14.02 in.	4.33 in.	6th Wettest

Depart. = departure from 30-year normal

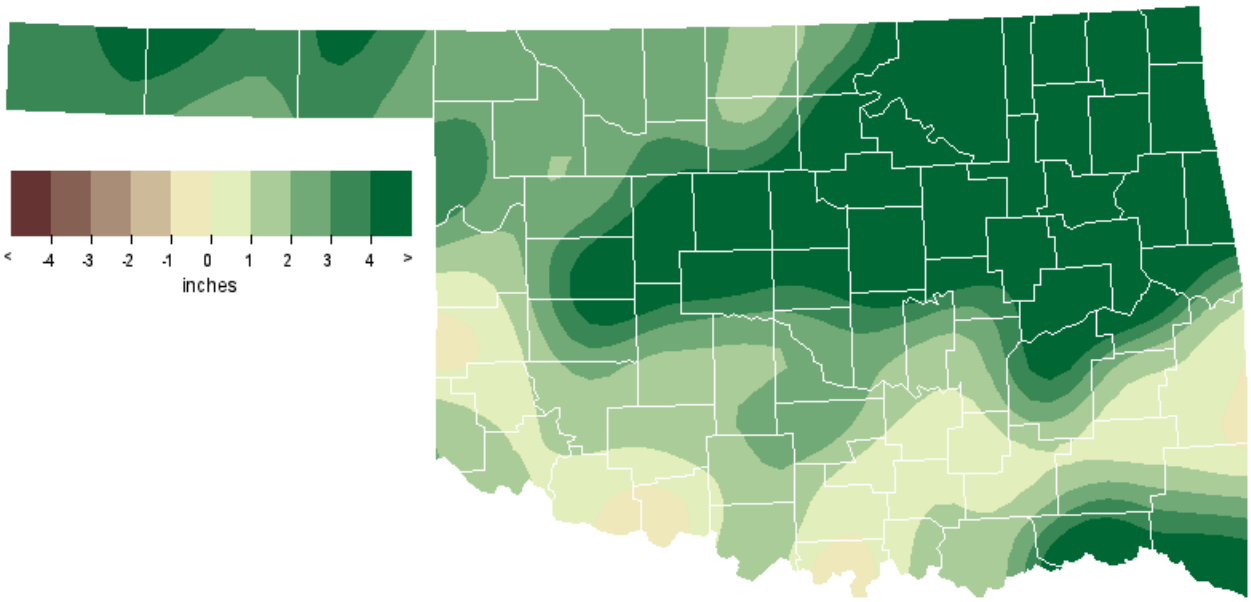
Drought took a major hit during April. The final U.S. Drought Monitor map of the month depicted a mere 17% of the state experiencing drought, a drop from 78% on March's final map. That is the smallest percentage of the state in drought since Oct. 11, 2016. A portion of the drought that remained received significant rainfall during the month's final days, so more drought removal is likely.

APRIL 2017 OBSERVED PRECIPITATION



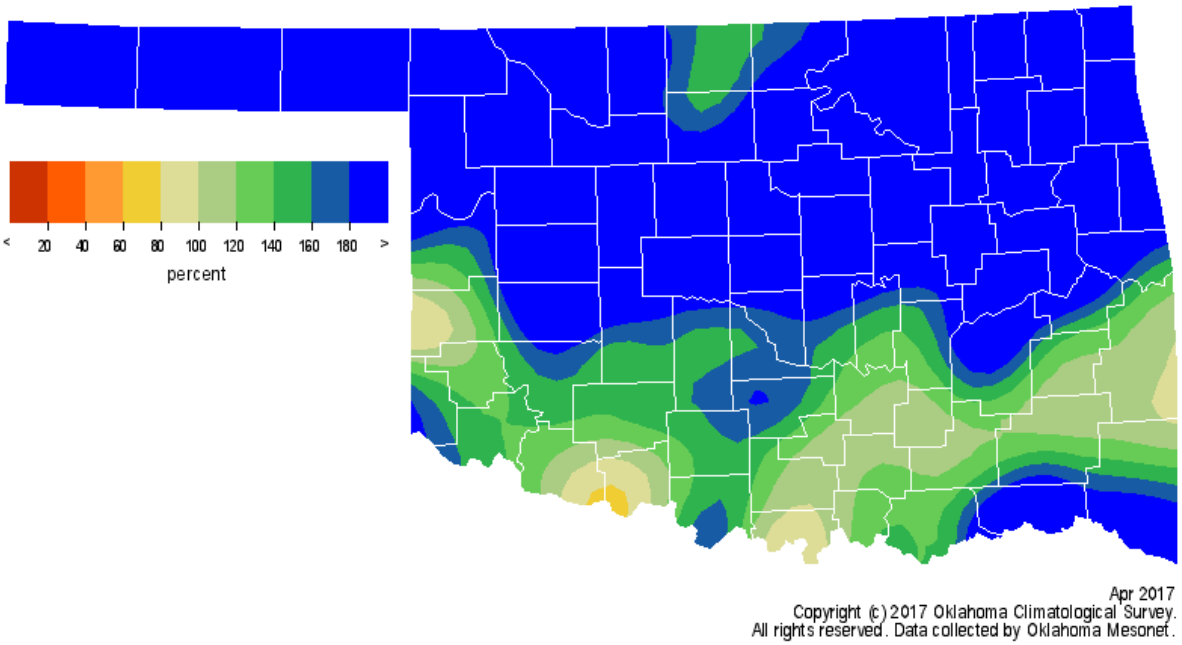
Apr 2017

APRIL 2017 DEPARTURE FROM NORMAL PRECIPITATION

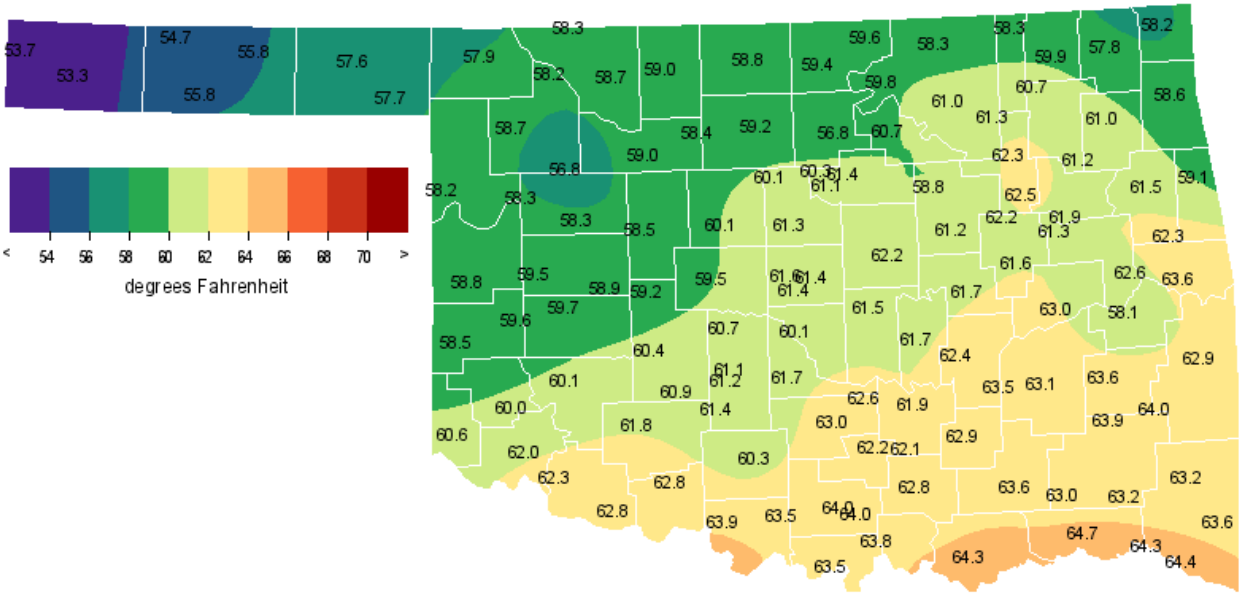


Apr 2017

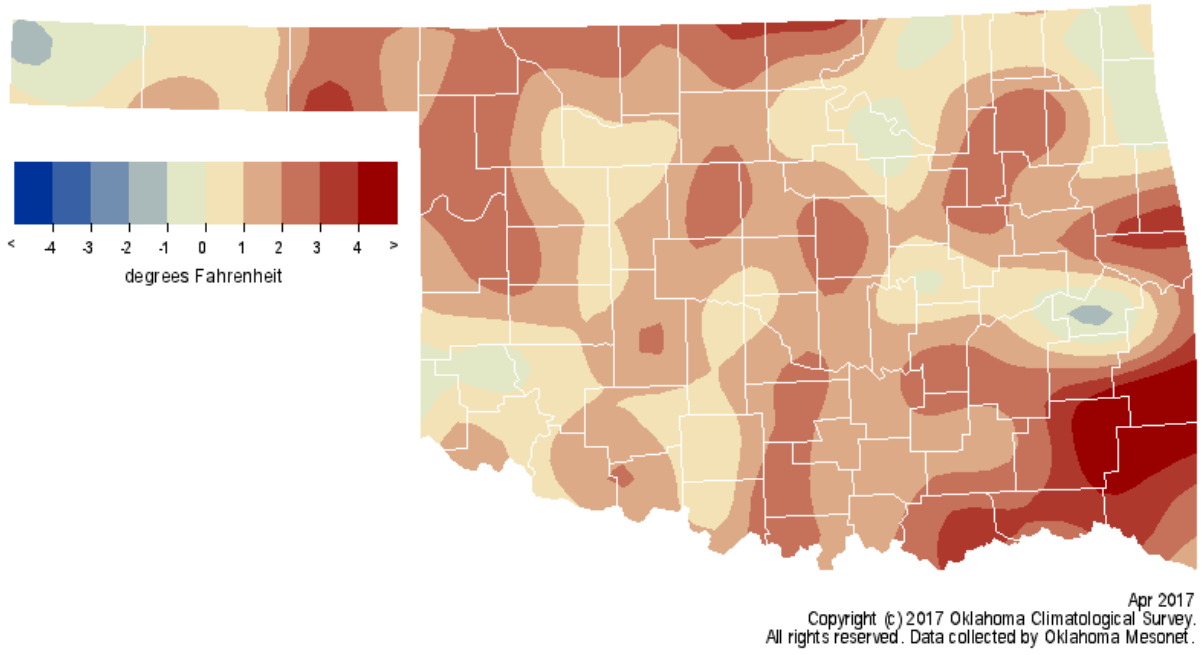
APRIL 2017 PERCENT OF NORMAL PRECIPITATION



APRIL 2017 AVERAGE TEMPERATURE



APRIL 2017 DEPARTURE FROM NORMAL TEMPERATURE

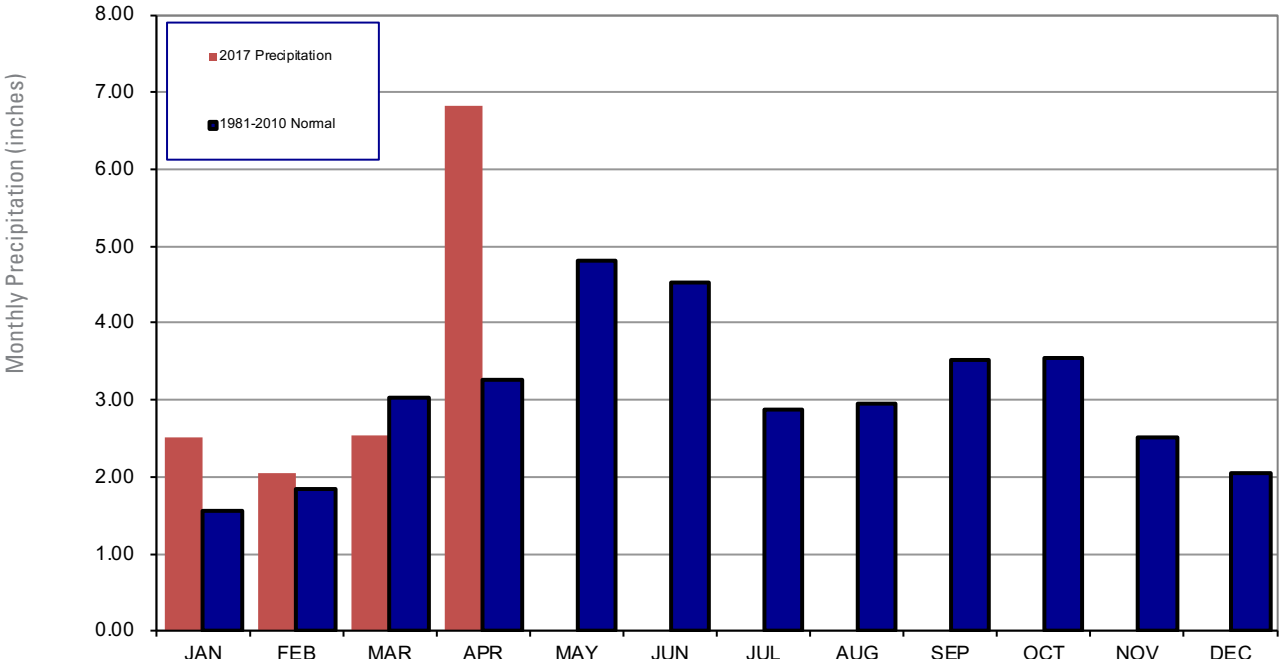


MESONET MONTHLY SUMMARY FOR APRIL 2017

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	58.3	93	8	32	6	242	40	5.73	1.80	29
Beaver	57.6	94	19	30	6	275	53	5.93	1.20	4
Boise City	53.3	85	19	29	23	360	10	4.78	1.27	28
Buffalo	57.9	90	19	31	6	260	46	4.77	1.82	29
Eva	54.7	90	19	26	30	333	24	6.45	1.46	28
NORTH CENTRAL										
Alva	58.7	89	9	34	6	233	43	4.80	2.13	29
Blackwell	59.4	82	8	33	27	204	37	6.52	1.39	29
Breckinridge	59.3	82	8	34	27	212	40	4.49	1.29	29
Cherokee	59.0	84	9	34	6	214	34	5.44	2.04	21
Fairview	59.0	83	9	36	6	217	35	5.82	1.71	29
Freedom	58.2	89	8	33	6	244	40	4.96	1.97	29
Lahoma	58.4	81	8	35	6	226	29	5.83	1.29	29
NORTHEAST										
Bixby	62.5	85	14	36	7	130	56	11.03	4.28	21
Burbank	59.8	83	8	34	27	197	40	9.50	3.13	21
Copan	60.4	82	8	35	7	****	****	9.93	3.00	29
Foraker	60.3	83	8	37	6	****	****	12.88	3.78	29
Inola	61.2	83	13	31	7	149	36	12.10	4.56	21
Jay	60.6	81	13	31	7	****	****	12.61	4.09	29
Miami	60.2	81	15	33	7	****	****	10.91	3.52	29
Nowata	60.0	82	8	31	7	186	34	12.26	3.58	29
WEST CENTRAL										
Bessie	59.7	85	25	36	6	204	44	6.56	3.44	29
Butler	59.6	91	9	32	6	214	51	4.44	1.22	21
Camargo	58.3	90	9	32	6	243	42	4.56	1.19	29
Cheyenne	58.8	90	8	35	30	221	35	3.25	1.35	29
Elk City	59.6	91	9	37	6	202	40	3.42	1.73	29
CENTRAL										
Acme	61.4	86	25	36	6	152	44	5.13	2.12	13
Bowlegs	61.7	81	8	36	24	139	40	6.32	1.89	25
Bristow	61.2	82	8	33	6	160	46	10.68	4.86	21
Lake Carl Blac	60.2	86	25	33	6	192	50	10.18	4.72	29
Chandler	62.2	84	8	38	6	136	52	11.29	4.95	21
Chickasha	61.1	87	25	34	6	165	47	5.14	2.06	13
El Reno	59.5	88	25	34	6	207	41	8.94	3.99	29
Guthrie	61.3	86	25	36	6	162	50	8.32	3.14	29
Kingfisher	60.1	85	25	35	6	190	42	9.56	3.86	29
Marena	61.1	86	25	36	6	167	50	10.39	4.94	29
Minco	60.7	87	25	40	30	167	39	4.46	1.68	29
Marshall	60.2	85	25	34	6	190	45	8.09	3.04	29
EAST CENTRAL										
Cookson	62.2	82	4	35	6	128	45	10.92	3.60	29
Eufaula	63.1	83	4	37	7	113	55	9.64	2.74	29
Haskell	61.3	82	14	35	7	146	34	8.36	2.58	29
Hectorville	62.1	82	8	41	27	132	45	10.53	4.49	21
Holdenville	62.4	81	25	40	7	124	46	5.22	1.34	17
McAlester	63.1	83	4	33	6	115	58	9.15	2.53	29
Okmulgee	61.7	82	8	34	7	145	46	9.07	2.97	29
SOUTHWEST										
Altus	62.0	92	25	37	6	150	60	2.57	1.01	29
Apache	60.9	89	25	38	23	167	44	5.36	3.28	13
Fort Cobb	60.4	89	25	36	6	179	42	4.02	2.14	29
Grandfield	62.8	90	25	39	6	128	60	2.38	.95	13
Hinton	59.1	84	25	36	6	207	32	7.16	3.43	29
Hobart	60.1	86	25	35	6	190	43	4.31	2.02	29
SOUTH CENTRAL										
Ada	61.9	82	9	36	6	132	40	5.16	1.24	21
Ardmore	64.0	83	25	40	6	90	60	2.78	1.57	2
Burneyville	63.5	86	25	35	6	108	63	2.77	1.42	2
Byars	62.6	83	25	39	6	116	45	5.71	2.07	13
Centrahoma	62.9	82	4	34	6	117	54	4.51	1.71	21
Durant	64.4	86	29	39	6	88	71	5.03	2.80	17
Fittstown	62.0	81	25	38	24	126	37	3.64	.90	29
Ketchum Ranch	62.3	85	25	39	6	****	****	5.33	1.69	1
SOUTHEAST										
Antlers	63.0	85	29	35	7	107	46	5.10	2.59	17
Broken Bow	63.7	85	4	36	7	89	49	7.83	1.96	10
Clayton	63.9	83	4	37	6	101	67	5.41	1.43	26
Cloudy	63.2	82	4	37	7	100	46	7.11	2.53	17
Hugo	64.7	84	29	42	7	79	69	9.88	2.30	10
Idabel	64.4	84	4	39	6	83	64	10.25	3.41	17

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	55.9	90	19	30	30	307	32	4.36	.98	29
Hooker	55.8	91	19	30	30	308	33	4.81	1.35	4
Kenton	53.6	86	19	28	2	354	13	4.39	.88	25
Slapout	57.7	91	19	32	30	267	49	4.56	1.29	29
May Ranch	58.3	90	9	36	30	242	42	4.87	2.08	29
Medford	58.8	81	8	34	6	218	32	5.10	1.60	21
Newkirk	59.6	83	15	38	6	199	38	7.26	1.69	16
Red Rock	60.9	84	25	34	27	****	****	4.78	1.48	21
Seiling	58.7	89	9	32	6	****	****	4.15	1.27	29
Woodward	58.8	92	8	34	30	236	49	4.82	1.97	29
Pawnee	60.6	84	25	36	6	176	45	13.87	4.94	29
Porter	61.8	82	13	35	7	136	42	9.56	2.61	21
Pryor	60.9	83	15	31	7	159	36	10.92	3.36	21
Skiatook	61.3	82	8	38	27	151	40	11.18	2.50	29
Talala	60.7	83	8	35	7	165	37	11.47	3.74	29
Tulsa	62.3	83	8	39	7	135	53	10.43	3.02	21
Vinita	59.8	81	15	31	7	****	****	10.26	2.97	29
Wynona	60.9	85	8	36	7	169	47	11.83	3.06	29
Erick	58.5	91	8	33	6	231	37	1.82	.96	29
Putnam	58.3	84	9	36	30	234	33	5.51	1.46	21
Watonga	58.6	82	25	37	30	224	31	7.23	2.37	29
Weatherford	58.9	83	25	37	30	213	30	8.77	3.62	29
Ninnekah	61.2	87	25	36	6	158	45	5.39	2.43	13
Norman	62.2	83	25	38	6	****	****	5.20	1.22	29
Oilton	60.7	84	8	35	6	****	****	13.95	3.76	29
OKC East	61.5	84	25	36	6	152	46	7.27	2.65	29
OKC North	61.7	85	25	39	27	147	48	7.12	3.13	29
Okemah	61.7	82	8	34	6	141	43	7.34	2.14	21
Perkins	*****	***	***	***	***	****	****	*****	*****	***
Shawnee	61.6	81	9	39	27	145	41	7.17	2.21	21
Spencer	61.4	84	25	39	23	152	45	7.66	2.52	29
Stillwater	61.4	86	25	37	6	165	56	9.94	4.68	29
Washington	61.7	84	25	38	27	139	40	5.73	1.81	13
Sallisaw	63.7	85	4	35	7	100	60	8.11	2.91	26
Stigler	62.3	84	4	34	7	****	****	12.37	6.16	29
Stuart	63.5	83	1	39	24	108	63	6.00	1.64	26
Tahlequah	61.5	82	13	33	7	143	39	15.56	5.54	29
Webbers Falls	62.6	83	15	34	7	120	49	13.09	7.62	29
Westville	25.9	80	15	***	10	146	33	14.28	4.38	29
Hollis	60.6	93	8	36	6	177	46	4.05	1.77	29
Mangum	60.1	88	8	32	6	192	43	3.81	2.17	29
Medicine Park	61.8	88	25	40	30	139	45	4.55	2.94	13
Tipton	62.3	91	25	37	23	142	60	4.15	2.39	13
Walters	62.7	89	25	39	6	122	54	2.80	1.88	13
Lane	63.6	86	29	36	6	100	57	5.48	1.76	17
Madill	63.7	83	4	34	6	93	55	5.13	2.74	17
Newport	64.0	85	25	41	27	91	60	3.03	1.24	1
Pauls Valley	63.0	85	25	38	6	111	51	6.80	3.02	13
Ringling	63.5	85	25	37	6	101	56	5.08	1.60	16
Sulphur	62.2	82	25	34	6	127	42	3.75	1.25	17
Tishomingo	62.8	81	25	38	24	110	42	5.58	1.37	21
Waurika	63.9	90	25	37	6	101	69	4.12	.99	1
Mt Herman	63.2	81	4	37	7	105	50	5.28	1.22	21
Talihina	64.0	83	4	35	6	99	68	6.32	1.69	26
Valliant	64.3	85	4	37	7	88	66	7.79	2.22	17
Wilburton	63.7	83	4	35	6	106	67	5.68	1.22	21
Wister	62.9	85	4	33	7	107	45	5.14	1.28	21

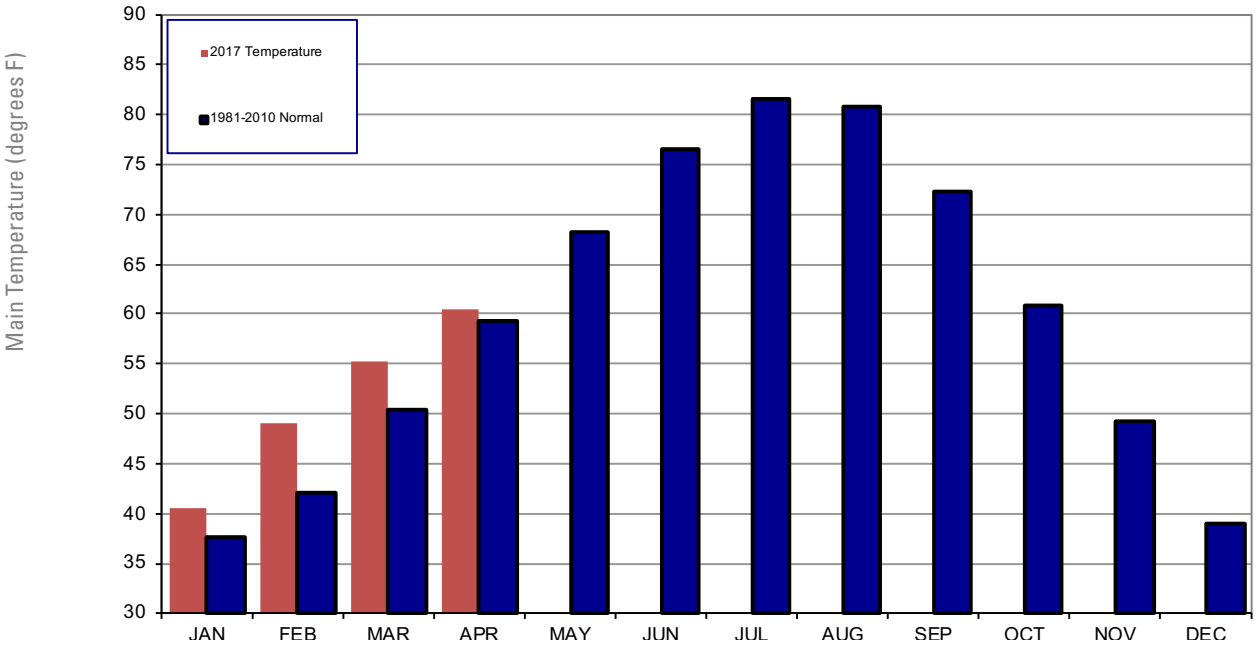
2017 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



April 2017 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Apr-16 (inches)
Panhandle	5.20	3.54	2nd Wettest	5.31 (1900)	0.02 (1935)	4.10
North Central	5.34	2.52	10th Wettest	7.14 (1999)	0.47 (2014)	4.64
Northeast	11.30	7.23	1st Wettest	9.06 (1942)	0.22 (1989)	5.47
West Central	5.06	2.65	9th Wettest	8.43 (1997)	0.16 (1996)	3.78
Central	7.98	4.63	3rd Wettest	9.37 (1942)	0.28 (1989)	6.47
East Central	9.99	5.76	3rd Wettest	11.32 (1957)	0.74 (1989)	7.14
Southwest	4.11	1.48	21st Wettest	7.53 (1997)	0.14 (1989)	6.36
South Central	4.62	1.00	35th Wettest	11.33 (1942)	0.40 (1903)	7.88
Southeast	6.89	2.41	26th Wettest	12.81 (1957)	0.80 (1987)	9.29
Statewide	6.82	3.56	3rd Wettest	8.32 (1942)	0.55 (1989)	6.12

2017 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



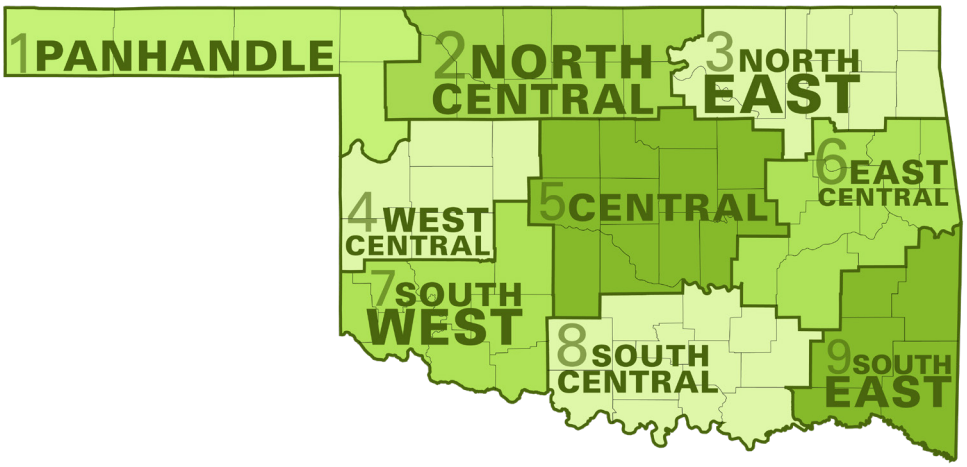
April 2017 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Apr-16 (F)
Panhandle	55.3	0.0	62nd Coolest	62.1 (1946)	48.8 (1997)	56.6
North Central	58.5	0.8	47th Warmest	64.4 (1981)	50.4 (1983)	60.3
Northeast	60.2	1.2	45th Warmest	65.7 (1954)	52.5 (1983)	61.0
West Central	58.9	0.5	53rd Warmest	65.1 (2006)	52.2 (1983)	60.5
Central	61.0	1.1	46th Warmest	66.9 (2006)	53.6 (1983)	62.0
East Central	61.9	1.5	43rd Warmest	67.8 (1896)	54.5 (1907)	62.5
Southwest	61.2	0.6	52nd Warmest	67.6 (2006)	54.9 (1997)	61.9
South Central	63.0	1.3	42nd Warmest	68.8 (1925)	56.6 (1983)	63.4
Southeast	63.7	3.1	19th Warmest	66.7 (2006)	55.3 (1983)	62.7
Statewide	60.4	1.1	44th Warmest	65.8 (2006)	53.2 (1983)	61.2

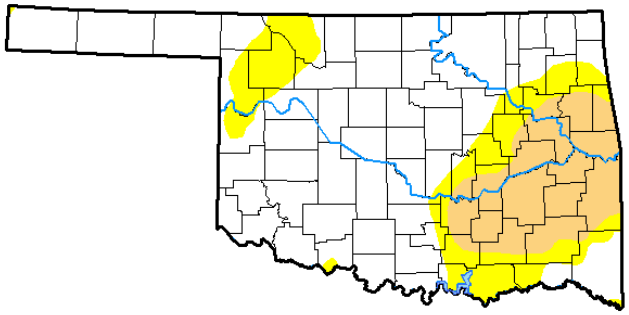
MESONET EXTREMES FOR APRIL 2017

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	94	19th	Beaver	28	2nd	Kenton	5.93	Beaver	1.82	29th	Buffalo
North Central	92	8th	Woodward	32	6th	Seiling	7.26	Newkirk	2.13	29th	Alva
Northeast	85	8th	Wynona	31	7th	Vinita	13.87	Pawnee	4.94	29th	Pawnee
West Central	91	9th	Butler	32	6th	Camargo	8.77	Weatherford	3.62	29th	Weatherford
Central	88	25th	El Reno	33	6th	Bristow	14.29	Oilton	4.95	21st	Chandler
East Central	85	4th	Sallisaw	33	7th	Tahlequah	15.56	Tahlequah	7.62	29th	Webbers Falls
Southwest	93	8th	Hollis	32	6th	Mangum	7.16	Hinton	3.43	29th	Hinton
South Central	90	25th	Waurika	34	6th	Centrahoma	6.80	Pauls Valley	3.02	13th	Pauls Valley
Southeast	85	4th	Broken Bow	33	7th	Wister	10.25	Idabel	3.41	17th	Idabel
Statewide	94	19th	Beaver	28	2nd	Kenton	15.56	Tahlequah	7.62	29th	Webbers Falls

Oklahoma Climate Divisions



U.S. Drought Monitor
Oklahoma



April 25, 2017
(Released Thursday, Apr. 27, 2017)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	66.53	33.47	16.81	0.00	0.00	0.00
Last Week 04-18-2017	41.55	58.45	32.32	10.07	0.00	0.00
3 Months Ago 01-24-2017	4.49	95.51	79.90	30.95	3.90	0.00
Start of Calendar Year 01-03-2017	5.61	94.39	83.21	55.75	5.55	0.00
Start of Water Year 09-27-2016	57.82	42.18	19.04	3.05	0.00	0.00
One Year Ago 04-26-2016	56.23	43.77	10.30	1.65	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.

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 Centers for Environmental Information:
https://www.ncdc.noaa.gov/stormevents/

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

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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