

If glimpses of winter were sporadic in December and January, they were downright scarce during February. Temperatures often soared into the 70s and 80s, culminating with a maximum of 99 degrees at the Mangum Mesonet site on February 11. That tied the mark for highest temperature ever recorded in Oklahoma during not only February, but winter as well. That record was set previously at Arapaho on Feb. 24, 1918. According to preliminary Mesonet data, the statewide average for February was 49.8 degrees, 7.7 degrees above normal to rank as the fourth warmest February since records began in 1895. February also marks the end of the three-month climatological winter. The December-February statewide average ended at 42.9 degrees, the ninth warmest winter on record, 3.4 degrees above normal. The lowest winter temperature recorded by the Mesonet was minus 19 degrees at Kenton on January 7. The first two months of 2017 also broke the record for the warmest January-February

central Oklahoma saw their 12th- and 15th-wettest Februaries on record, respectively. El Reno led the state's monthly total at 4.48 inches. Seven Mesonet sites recorded at least 4 inches, and 69 garnered at least 2 inches. Parts of the state were exceedingly dry, however. Kenton led the Panhandle with a paltry 0.28 inches while Goodwell and Hooker tied for the lowest at 0.02 inches. In the northeast, Miami came in about 1.5 inches below normal with 0.63 inches. The winter ended as the 43rd wettest with a statewide average of 5.38 inches, about a tenth of an inch above normal.

Although a bit of severe weather made its presence felt during February, fire danger was the most frequent hazard. Weather conditions prompted Gov. Mary Fallin to issue a burn ban for 53 counties on Feb. 10, although the ban was lifted on Feb. 15 after the beneficial rains. Eleven county burn bans remained in place on the month's final day. The

February 2017 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	99°F	Mangum 11	5
Low Temperature	5°F	Eva 25	31
High Precipitation	4.48 in.	El Reno	
Low Precipitation	0.02 in.	Goodwell, Hooker	--

combined with a statewide average of 45.1 degrees, 5.3 degrees above normal, besting 1952's 44.7 degrees.

The lack of substantial cold air was perhaps just as striking as the predominance of the warm extremes. Several cold fronts dropped state temperatures close to seasonal normals, but the truly frigid weather was mostly confined to the western Oklahoma Panhandle. The Mesonet site at Eva recorded a statewide low for the month of 5 degrees on the 25th. The Durant Mesonet site spent 11 hours at or below freezing during February, bottoming out at a relatively mild 29 degrees. In contrast, Eva was below freezing for 215 hours.

Two robust mid-month storm systems boosted the statewide average precipitation total to 2.04 inches, 0.21 inches above normal, to rank as the 34th wettest February on record. Southwestern through central Oklahoma enjoyed the best rains with totals ranging from 2-4.5 inches. Southwestern and

February 2017 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2017)
Month (February)	49.8°F	7.7°F	4th Warmest
Season-to-Date (Dec-Feb)	42.9°F	3.4°F	9th Warmest
Year-to-Date (Jan-Feb)	45.1°F	5.3°F	1st Warmest

Precipitation

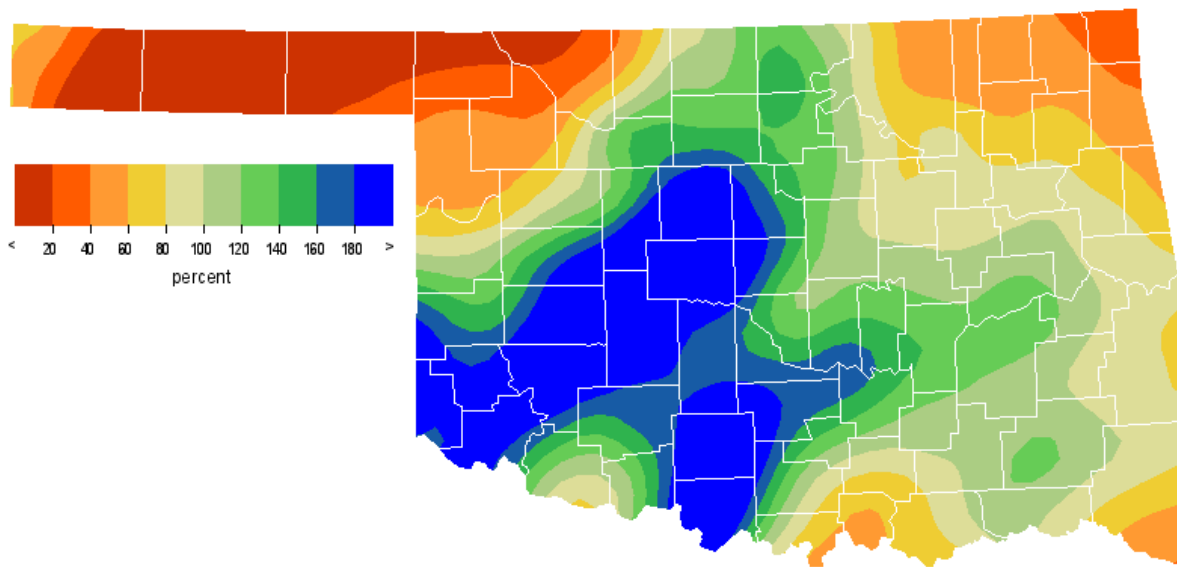
	Total	Depart.	Rank (1895-2017)
Month (February)	2.04 in.	0.21 in.	34th Wettest
Season-to-Date (Dec-Feb)	5.38 in.	-0.07 in.	43rd Wettest
Year-to-Date (Jan-Feb)	4.62 in.	1.23 in.	18th Wettest

Depart. = departure from 30-year normal

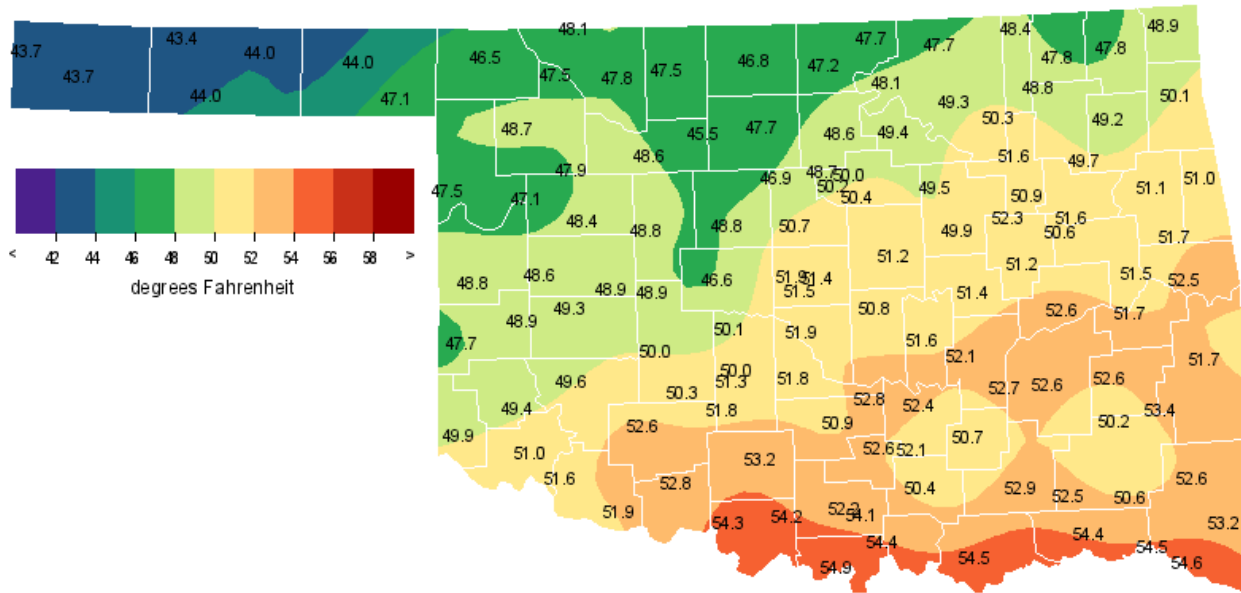
two consecutive storm systems signaled a change in the general weather pattern experienced by Oklahoma since early last fall. The state had been seeing perhaps one good rain a month, allowing for drought intensification in between those systems. The reinforcing moisture allowed for more sustained and significant drought relief. Nearly 80 percent of the state was covered by drought at the end of January

according to the U.S. Drought Monitor. That amount was reduced to 68 percent on the last report for the month.

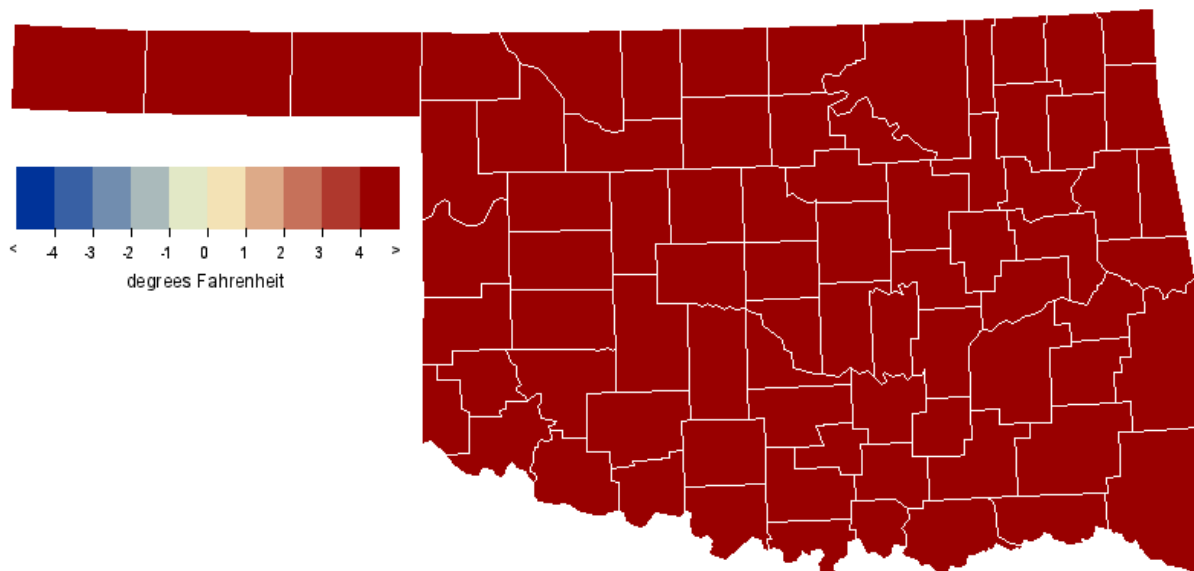
FEBRUARY 2017 PERCENT OF NORMAL PRECIPITATION



FEBRUARY 2017 AVERAGE TEMPERATURE



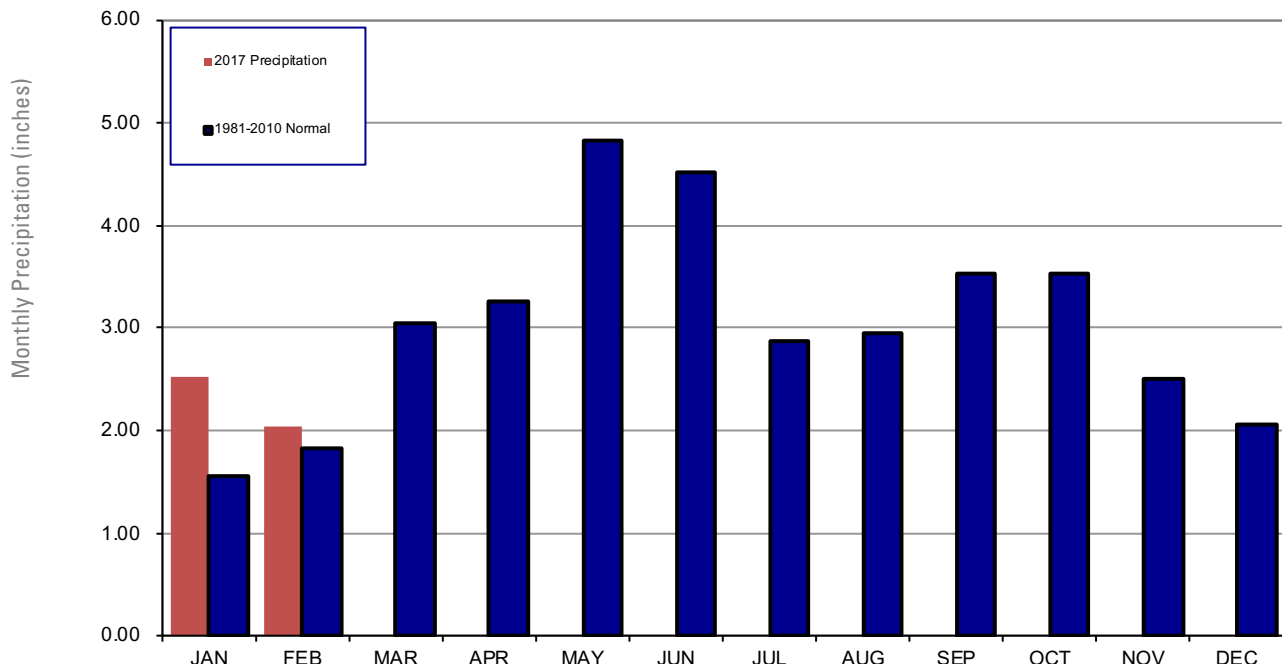
FEBRUARY 2017 DEPARTURE FROM NORMAL TEMPERATURE



MESONET MONTHLY SUMMARY FOR FEBRUARY 2017

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	47.5	93	11	15	25	497	7	.53	.28	13	Goodwell	45.7	91	10	8	25	****	****	.02	.01	12
Beaver	45.6	94	10	9	25	****	****	.10	.06	13	Hooker	45.7	91	10	8	25	****	****	.02	.01	13
Boise City	43.7	86	10	8	25	597	1	.05	.03	13	Kenton	43.7	84	10	9	25	595	0	.28	.27	13
Buffalo	46.5	90	10	9	25	525	6	.13	.10	13	Slapout	47.1	91	10	12	25	506	5	.17	.12	13
Eva	43.4	89	10	5	25	606	2	.08	.07	13											
NORTH CENTRAL																					
Alva	47.8	88	23	14	25	487	5	.37	.23	13	May Ranch	48.1	86	10	16	25	477	5	.13	.07	14
Blackwell	47.1	82	23	17	9	502	1	2.19	1.48	19	Medford	46.9	81	11	18	9	508	0	1.52	.97	19
Breckinridge	47.7	86	11	19	9	485	2	1.79	.95	19	Newkirk	47.7	83	23	17	9	487	2	1.58	.82	20
Cherokee	47.5	84	23	19	3	490	0	.89	.54	19	Red Rock	48.5	87	11	18	9	468	7	2.16	.87	13
Fairview	48.6	92	11	17	3	469	9	1.61	1.00	19	Seiling	47.9	92	11	16	3	483	5	.58	.38	13
Freedom	47.5	88	11	12	25	494	3	.23	.17	13	Woodward	48.7	90	11	14	25	466	10	.46	.31	13
Lahoma	47.1	88	11	19	3	****	****	2.10	1.40	19											
NORTHEAST																					
Bixby	50.8	85	11	23	9	408	12	1.58	.86	14	Pawnee	49.4	87	23	19	9	446	9	1.92	.89	13
Burbank	48.1	85	11	16	9	477	4	1.77	.88	20	Porter	51.6	85	11	22	9	391	15	2.34	1.26	14
Copan	48.4	86	11	18	9	470	7	.79	.40	13	Pryor	49.2	85	23	19	4	452	9	1.45	.61	13
Foraker	47.8	85	11	17	9	487	4	.96	.52	20	Skiatook	50.3	85	23	20	9	424	11	1.14	.68	13
Inola	49.7	85	11	20	4	437	8	1.71	.74	14	Talala	48.7	85	11	18	9	463	8	1.09	.63	13
Jay	50.0	84	23	19	9	432	13	1.11	.47	13	Tulsa	51.7	85	11	23	9	388	16	1.26	.59	13
Miami	48.9	82	23	19	9	460	10	.63	.32	13	Vinita	47.9	82	11	17	9	483	3	.95	.49	13
Nowata	47.7	85	11	18	9	488	3	.98	.60	13	Wynona	49.3	86	11	19	9	447	9	1.42	.84	13
WEST CENTRAL																					
Bessie	49.3	91	11	18	25	445	5	1.93	1.16	13	Erick	47.7	95	11	18	25	487	3	1.77	1.28	13
Butler	48.5	94	11	16	25	463	3	1.28	.92	13	Putnam	48.3	91	11	15	25	474	8	1.20	.77	13
Camargo	47.1	92	11	14	25	503	2	.66	.40	13	Watonga	48.8	89	11	19	3	461	7	1.77	.81	19
Cheyenne	48.8	94	11	16	3	465	11	1.10	.67	13	Weatherford	48.9	90	11	20	3	456	5	3.27	1.89	19
Elk City	48.9	95	11	20	3	456	5	1.77	1.28	13											
CENTRAL																					
Acme	51.8	87	11	23	25	381	12	3.00	1.25	13	Ninnekah	51.3	88	11	23	9	394	11	****	****	***
Bowlegs	51.6	88	11	23	9	392	17	3.48	1.69	14	Norman	51.9	88	11	23	25	380	12	2.70	.77	19
Bristow	49.9	87	23	18	4	436	15	1.77	.86	14	Oilton	49.5	88	23	17	4	444	9	1.66	.65	13
Lake Carl Blac	48.8	87	11	18	9	460	5	2.68	1.28	19	OKC East	51.4	88	11	22	9	390	10	2.87	.93	13
Chandler	51.2	88	23	21	9	400	15	2.08	.75	14	OKC North	51.8	88	11	23	25	379	9	3.62	1.63	19
Chickasha	50.0	87	11	22	9	426	6	2.75	1.02	13	Okemah	51.4	85	11	22	9	396	14	2.58	1.56	14
El Reno	48.3	90	11	16	9	****	****	4.48	2.62	19	Perkins	50.4	87	11	21	25	416	8	1.96	.81	13
Guthrie	50.7	88	11	21	25	411	9	2.63	1.17	19	Shawnee	50.8	86	11	20	25	410	13	2.57	1.03	14
Kingfisher	48.8	90	11	21	3	460	6	3.14	1.84	19	Spencer	51.4	88	11	21	9	390	11	2.67	1.00	13
Marena	50.2	88	23	20	25	424	9	2.59	1.24	19	Stillwater	50.0	87	23	22	9	425	6	2.20	.77	13
Minco	50.1	89	11	22	3	422	5	2.89	1.16	13	Washington	51.8	88	11	22	25	381	12	3.28	1.07	19
Marshall	48.7	87	11	18	25	****	****	2.70	1.63	19											
EAST CENTRAL																					
Cookson	51.7	84	23	21	9	387	14	2.17	1.73	14	Sallisaw	52.5	87	23	25	25	366	15	2.73	2.22	14
Eufaula	52.6	86	23	24	9	365	19	2.96	1.92	14	Stigler	51.7	86	23	23	9	389	18	3.30	2.16	14
Haskell	50.6	85	23	21	25	416	14	2.37	1.41	14	Stuart	52.7	87	23	25	25	362	17	3.35	1.61	14
Hectorville	52.2	86	11	22	9	374	16	1.85	1.03	14	Tahlequah	51.0	85	23	20	9	404	13	2.02	1.39	14
Holdenville	52.1	85	11	22	25	376	14	3.02	1.61	14	Webbers Falls	51.5	85	23	22	9	393	15	2.50	1.81	14
McAlester	52.5	87	23	24	4	369	20	3.05	1.95	14	Westville	51.0	83	23	22	9	402	11	1.54	1.25	14
Okmulgee	51.1	87	23	21	4	407	18	2.61	1.62	14											
SOUTHWEST																					
Altus	50.9	98	11	24	3	400	7	2.36	1.67	13	Hollis	49.9	95	11	22	25	426	4	2.12	1.79	13
Apache	50.3	87	11	21	9	417	6	4.28	2.40	19	Mangum	49.4	99	11	18	9	443	5	2.37	1.65	13
Fort Cobb	50.0	89	11	23	3	423	2	2.73	1.39	13	Medicine Park	52.6	89	11	24	25	355	9	2.73	1.38	13
Grandfield	51.9	91	11	24	25	374	9	1.56	.56	19	Tipton	51.6	97	11	22	3	387	11	2.32	1.27	13
Hinton	49.0	88	11	20	3	452	5	2.74	1.21	13	Walters	52.8	91	11	25	9	352	11	2.49	1.05	19
Hobart	49.7	92	11	19	3	432	4	2.72	1.61	13											
SOUTH CENTRAL																					
Ada	52.3	86	11	25	9	369	14	3.61	1.42	14	Lane	52.9	85	23	26	16	351	13	2.83	2.45	14
Ardmore	54.0	86	11	26	9	319	11	2.12	1.09	14	Madill	54.3	85	11	27	16	312	13	1.49	1.09	14
Burneyville	54.9	88	11	26	16	295	14	1.81	1.01	14	Newport	54.2	88	11	26	25	****	****	2.56	1.18	14
Byars	52.8	88	23	22	25	357	16	4.01	1.69	14	Pauls Valley	52.8	89	11	25	25	****	****	3.98	1.55	14
Centrahoma	52.6	86	23	26	25	****	****	3.03	1.79	14	Risingling	54.1	90	11	26	25	317	13	4.35	1.79	13
Durant	54.5	86	23	29	25	308	15	2.35	1.81	14	Sulphur	52.6	86	11	24	16	361	13	3.37	1.32	14
Fittstown	52.1	84	11	25	25	372	10	3.14	1.31	14	Tishomingo	52.3	85	23	26	16	****	****	1.75	1.18	14
Ketchum Ranch	53.1	88	11	23	25	345	12	3.99	1.55	13	Waurika	54.3	92	11	24	9	314	15	4.17	1.72	19
SOUTHEAST																					
Antlers	52.4	86	23	22	16	366	14	3.72	2.84	14	Mt Herman	52.5	81	23	26	9	359	10	3.93	3.30	14
Broken Bow	53.2	84	23	26	16	338	9	2.54	1.28	14	Talihina	53.4	85	23	23	16	345	21	2.97	2.12	14
Clayton	52.1	86	23	24	16	****	****	3.09	2.47	14	Valliant	54.6	85	23	25	16	308	16	2.81	1.83	14
Cloudy	52.4	81	11	26	16	****	****	4.14	3.13	14	Wilburton	52.6	85	23	24	9	367	20	3.33	2.45	14
Hugo	54.4	86	23	28	9	312	14	3.58	2.85	14	Wister	51.7	84	11	22	4	382	11	2.41	2.19	14
Idabel																					

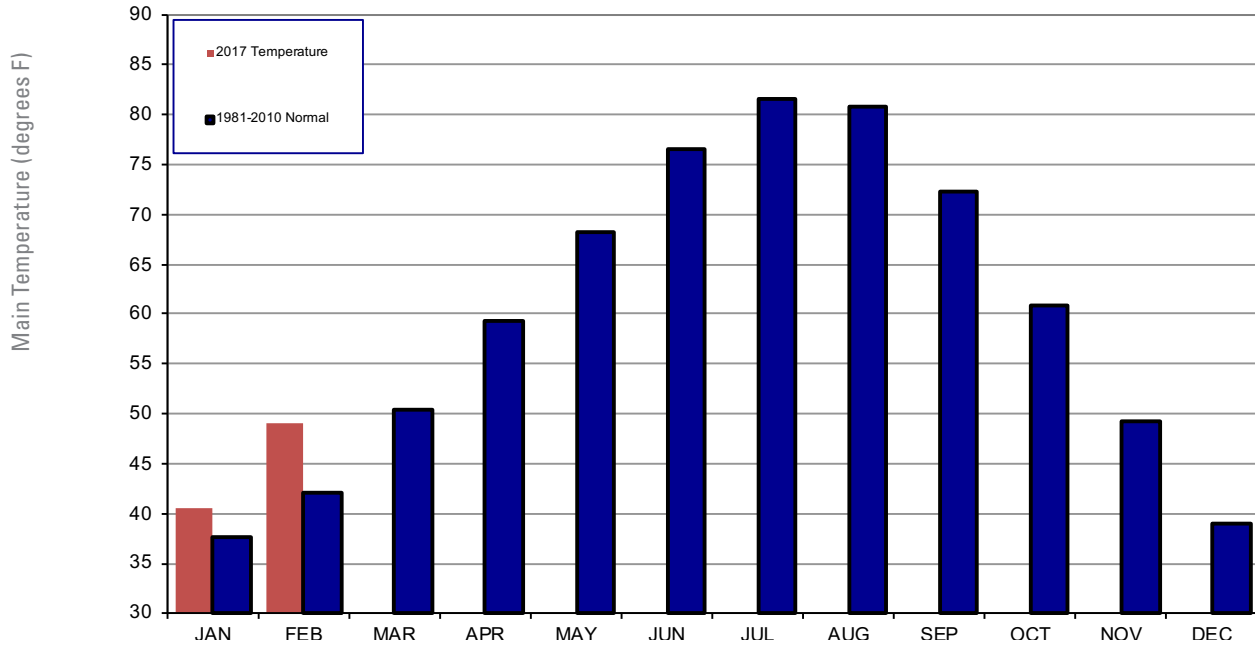
2017 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



February 2017 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Feb-16 (inches)
Panhandle	0.15	-0.48	23rd Driest	2.95 (1911)	0.00 (1904)	0.24
North Central	1.20	-0.09	45th Wettest	3.97 (1911)	0.01 (1904)	0.46
Northeast	1.32	-0.73	52nd Driest	5.90 (1985)	0.10 (1963)	0.70
West Central	1.64	0.54	26th Wettest	4.04 (2013)	0.00 (1991)	0.34
Central	2.74	0.93	15th Wettest	4.91 (1938)	0.04 (1947)	1.27
East Central	2.57	-0.01	40th Wettest	8.92 (1938)	0.10 (1947)	1.42
Southwest	2.58	1.19	12th Wettest	3.68 (1997)	0.01 (1916)	0.99
South Central	3.04	0.65	25th Wettest	7.48 (1938)	0.08 (1996)	1.73
Southeast	3.17	-0.20	46th Wettest	9.53 (1945)	0.34 (1895)	2.17
Statewide	2.04	0.21	34th Wettest	4.57 (1938)	0.18 (1996)	1.03

2017 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



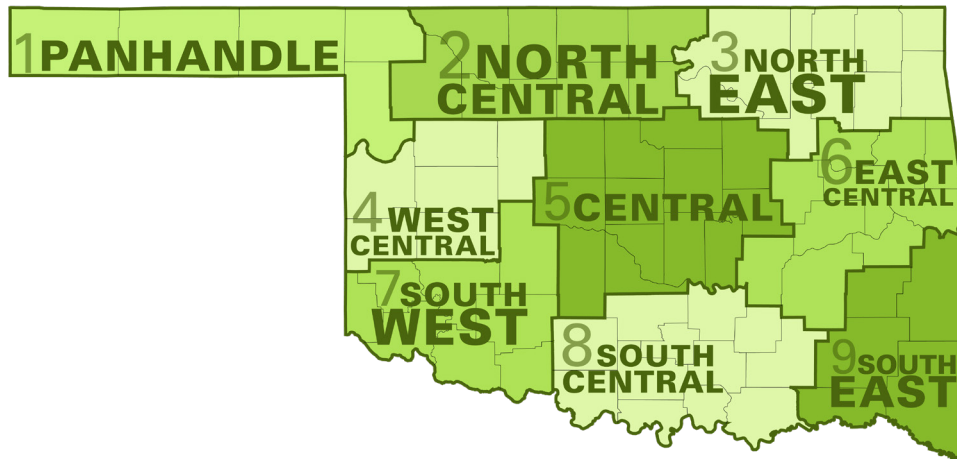
February 2017 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Feb-16 (F)
Panhandle	44.9	6.5	6th Warmest	47.3 (1954)	23.6 (1899)	44.2
North Central	47.7	8.1	4th Warmest	49.6 (1930)	25.3 (1978)	45.5
Northeast	49.2	8.5	2nd Warmest	49.4 (1976)	25.5 (1905)	45.6
West Central	48.5	7.4	4th Warmest	50.9 (1954)	26.2 (1905)	46.7
Central	50.4	8.0	4th Warmest	51.5 (1954)	27.5 (1905)	48.4
East Central	51.8	8.6	1st Warmest	51.8 (1930)	29.5 (1905)	47.7
Southwest	50.7	7.1	3rd Warmest	52.4 (1954)	28.0 (1905)	49.2
South Central	52.9	7.6	3rd Warmest	54.3 (1976)	30.3 (1899)	50.2
Southeast	52.8	8.1	1st Warmest	52.5 (1976)	31.9 (1905)	48.5
Statewide	49.8	7.7	4th Warmest	50.6 (1954)	27.6 (1905)	47.3

MESONET EXTREMES FOR FEBRUARY 2017

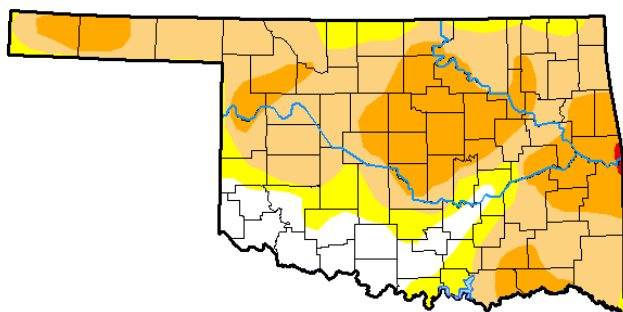
Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	94	10th	Beaver	5	25th	Eva	0.53	Arnett	0.28	13th	Arnett
North Central	92	11th	Fairview	12	25th	Freedom	2.19	Blackwell	1.48	19th	Blackwell
Northeast	87	23rd	Pawnee	16	9th	Burbank	2.34	Porter	1.26	14th	Porter
West Central	95	11th	Elk City	14	25th	Camargo	3.27	Weatherford	1.89	19th	Weatherford
Central	90	11th	Kingfisher	16	9th	El Reno	4.48	El Reno	2.62	19th	El Reno
East Central	87	23rd	Stuart	20	9th	Tahlequah	3.35	Stuart	2.22	14th	Sallisaw
Southwest	99	11th	Mangum	18	9th	Mangum	4.28	Apache	2.40	19th	Apache
South Central	92	11th	Waurika	22	25th	Byars	4.35	Ringling	2.45	14th	Lane
Southeast	86	23rd	Hugo	22	4th	Wister	4.21	Mt Herman	3.51	14th	Mt Herman
Statewide	99	11th	Mangum	5	25th	Eva	4.48	El Reno	3.51	14th	Mt Herman

Oklahoma Climate Divisions



U.S. Drought Monitor Oklahoma

February 28, 2017
(Released Thursday, Mar. 2, 2017)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	12.64	87.36	73.14	28.77	0.18	0.00
Last Week 02-21-2017	11.49	88.51	67.93	26.61	0.18	0.00
3 Months Ago 11-29-2016	15.59	84.41	56.94	18.48	2.80	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 03-01-2016	78.72	21.28	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:
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NCEI/NOAA



<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 differs 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 is the State Climate Office for Oklahoma

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