

Drought, fire danger, floods, severe storms, multiple bouts with freezing rain, and even a good old fashioned Plains snowstorm – Oklahoma’s weather had a little bit of everything during February. Frequent incursions of arctic air kept Oklahomans guessing what to wear from day to day, although choices from the spring wardrobe were rare. A round of severe storms marched across the state Feb. 6-7 ahead of an arctic front. Hail, damaging winds and flash flooding were reported with the storms, followed by a batch of freezing rain behind the front. Up to a quarter-inch of ice accumulation was noted in parts of northeastern Oklahoma. A strong storm system met up with an arctic air mass over Oklahoma on the 19th and dropped a swath of sleet and snow from southwest through north central Oklahoma. Reports of 3-5 inches were common with Burlington leading the way at 7.5 inches. Those outside of that band received a bit of freezing rain and sleet. The wintry fun didn’t end there,

inches. Climatological winter – December through February – finished with a statewide average of 7.48 inches, 2.03 inches above normal to rank as the ninth wettest such period on record. The only significant deficits during the winter season occurred in the far southwest and northwest, where totals fell to 40-70 percent of normal. The northeast’s winter season was their sixth wettest on record.

The northwestern two-thirds of Oklahoma experienced below normal temperatures during February while the southeast was warmer than normal. Averaged as a whole, the state’s average temperature for the month was 39.7 degrees, 2.4 degrees below normal to rank as the 44th coolest February on record. The Panhandle was 4.7 degrees below normal, their 23rd coolest February on record, but the southeast was 1.7 degrees above normal to rank with their 36th warmest. The Mesonet site at Hollis recorded the highest temperature

February 2019 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	83°F	Hollis	3
Low Temperature	0°F	Beaver, Eva	8
High Precipitation	6.30 in.	Idabel	--
Low Precipitation	0.14 in.	Boise City	--

however. Another arctic intrusion led to an icy glaze over much of the state on the 27th, closing schools and making travel a challenge. Numerous wrecks were reported across western and central Oklahoma, including at least one fatality accident in Blaine County. Oklahoma City police stopped responding to non-injury accidents due to the sheer number of collisions, and area emergency rooms soon filled with slip-and-fall accident victims.

Much of the state finished with a moisture deficit, but that was countered by wet conditions across eastern Oklahoma. According to preliminary data from the Oklahoma Mesonet, the statewide average precipitation total was 1.58 inches, 0.25 inches below normal to rank as the 53rd wettest February on record. The southwest experienced its 32nd driest February, while southeast and east central Oklahoma had their 30th and 34th wettest, respectively. Idabel led the state at 6.3 inches. Boise City had the lowest total with 0.14

February 2019 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2019)
Month (February)	39.7°F	-2.4°F	44th Coolest
Season-to-Date (Dec-Feb)	39.6°F	0.1°F	51st Warmest
Year-to-Date (Jan-Feb)	39°F	-0.8°F	63rd Coolest

Precipitation

	Total	Depart.	Rank (1895-2019)
Month (February)	1.58 in.	-0.25 in.	34th Wettest
Season-to-Date (Dec-Feb)	7.48 in.	2.03 in.	9th Wettest
Year-to-Date (Jan-Feb)	3.68 in.	0.29 in.	40th Wettest

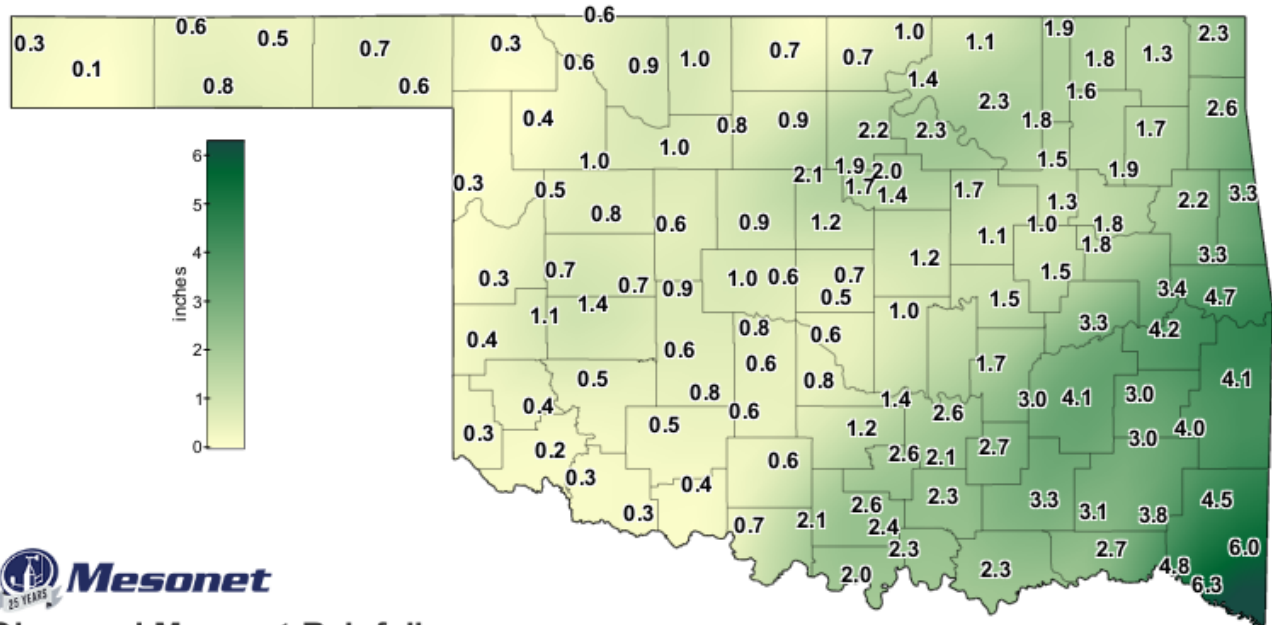
Depart. = departure from 30-year normal

of the month at 83 degrees back on Feb. 3. None of the 120 Mesonet sites recorded a temperature of at least 70 degrees from Feb. 15 through the end of the month. The lowest temperature of zero degrees occurred at Beaver and Eva on Feb. 8. Winter finished just a tad above normal with a statewide average of 39.6 degrees, the 51st warmest on record. The southeast was 1.8 degrees above normal to rank

as their 28th warmest winter.

Oklahoma was free of drought for nine consecutive weeks according to the U.S. Drought Monitor, a streak that ended on February's final day. Only 1 percent of the state was considered in drought, contained in far southwestern Oklahoma. Another 10 percent across far western Oklahoma and the Panhandle was labeled as "Abnormally Dry," a drought precursor. The Climate Prediction Center's (CPC) March outlooks see increased odds of below normal temperatures for the entire state, as well as above normal precipitation for all but the southwest quarter. The March drought outlook indicates no further drought development in the state, but persistence of the small area of drought in the far southwest.

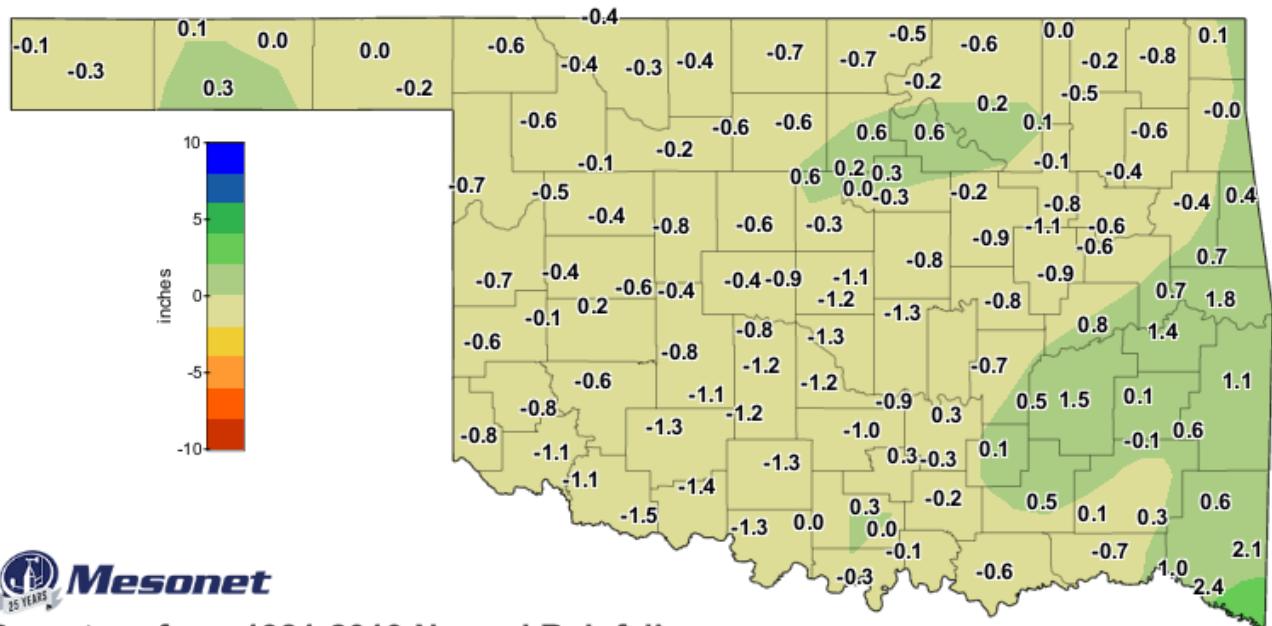
FEBRUARY 2019 OBSERVED PRECIPITATION



Observed Mesonet Rainfall
Calendar Month to Date

Feb 1, 2019 through Feb 28, 2019
Created 12:00:46 PM March 1, 2019 UTC. Copyright 2019

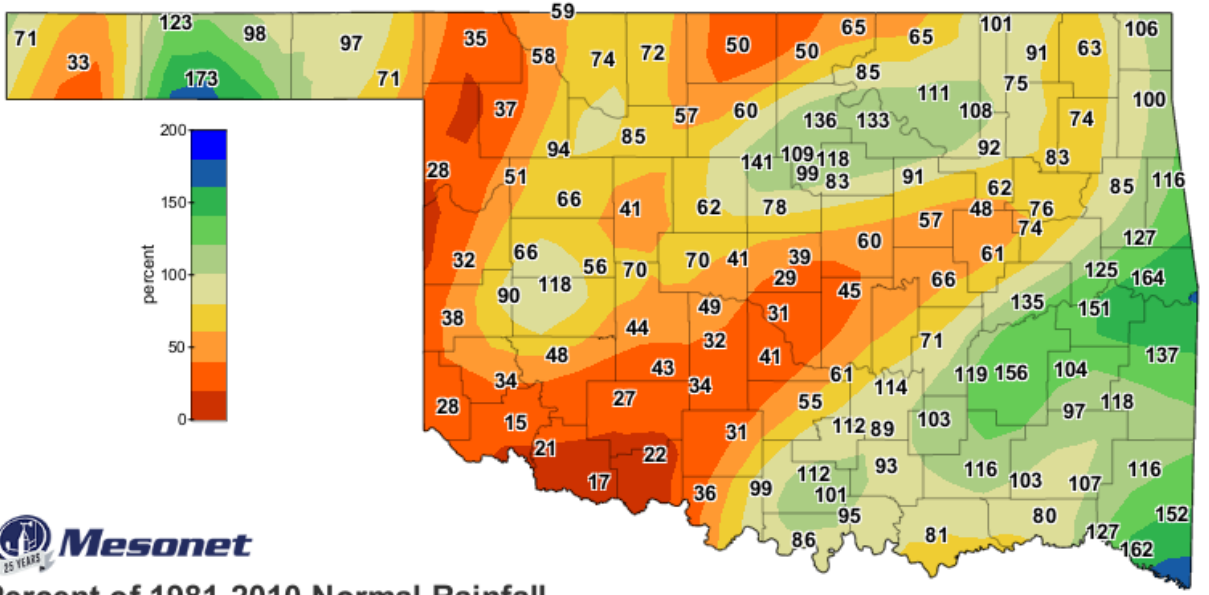
FEBRUARY 2019 DEPARTURE FROM NORMAL PRECIPITATION



Departure from 1981-2010 Normal Rainfall
Calendar Month to Date

Feb 1, 2019 through Feb 28, 2019
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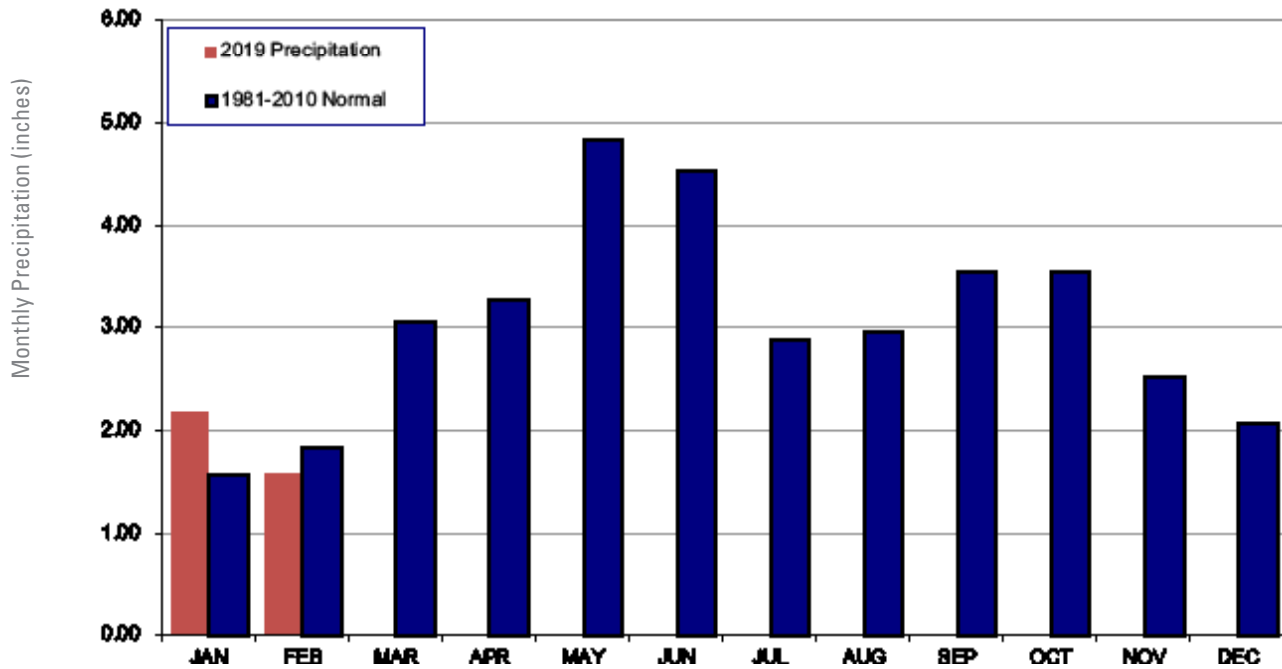
FEBRUARY 2019 PERCENT OF NORMAL PRECIPITATION



MESONET MONTHLY SUMMARY FOR FEBRUARY 2019

NAME	MEAN TEMP	HIGH TEMP	LOW TEMP	DAY	HDD	CDD	TOT PPT	HIGH 24-HR	DAY	NAME	MEAN TEMP	HIGH TEMP	LOW TEMP	DAY	HDD	CDD	TOT PPT	HIGH 24-HR	DAY		
PANHANDLE																					
Arnett	35.8	80	3	4	8	818	0	.27	.11	23	Goodwell	34.3	78	3	4	8	859	0	.76	.73	23
Beaver	33.1	80	3	0	8	894	0	.72	.71	23	Hooker	32.8	79	3	4	8	901	0	.52	.48	23
Boise City	33.4	74	3	4	8	886	0	.14	.11	23	Kenton	33.5	74	3	4	8	882	0	.32	.16	20
Buffalo	34.2	79	3	5	8	863	0	.34	.30	23	Slapout	34.1	79	3	2	8	865	0	.59	.53	23
Eva	31.7	78	3	0	8	932	0	.59	.55	23											
NORTH CENTRAL																					
Alva	34.5	74	3	5	8	855	0	.86	.41	20	May Ranch	33.6	72	3	7	8	878	0	.57	.31	23
Blackwell	35.8	72	3	10	8	817	0	.70	.26	20	Medford	35.3	71	3	8	8	832	0	.70	.26	20
Breckinridge	36.4	71	3	10	8	800	0	.92	.30	20	Newkirk	34.8	70	3	8	8	847	0	1.00	.23	10
Cherokee	35.3	74	3	9	8	832	0	.98	.39	20	Red Rock	37.0	72	3	11	8	783	0	2.21	1.09	6
Fairview	36.4	75	3	8	8	802	0	.98	.37	20	Seiling	35.9	78	3	6	8	816	0	.96	.41	20
Freedom	34.4	75	3	5	8	856	0	.56	.30	23	Woodward	34.9	78	3	6	8	842	0	.35	.21	23
Lahoma	35.7	72	3	9	8	819	0	.77	.27	11											
NORTHEAST																					
Bixby	40.2	69	3	15	8	694	0	1.27	.42	11	Pawnee	37.7	72	3	11	8	764	0	2.34	.80	6
Burbank	36.5	72	3	8	8	799	0	1.38	.42	10	Porter	40.7	69	14	13	8	680	0	1.80	.60	7
Copan	36.4	69	3	9	8	801	0	1.88	.65	6	Pryor	39.0	68	3	13	8	728	0	1.68	.47	11
Foraker	35.2	69	3	8	8	835	0	1.09	.32	11	Skiatook	37.9	68	3	11	8	759	0	1.83	.58	6
Inola	39.8	69	3	15	8	706	0	1.88	.73	7	Talala	37.6	69	3	12	8	767	0	1.59	.47	6
Jay	39.6	66	3	13	8	712	0	2.60	.76	11	Tulsa	39.6	69	3	14	8	710	0	1.48	.67	11
Miami	37.5	65	3	13	8	770	0	2.31	.78	5	Vinita	37.3	68	3	9	8	777	0	1.30	.28	6
Nowata	37.0	68	3	10	8	783	0	1.80	.72	6	Wynona	37.4	69	3	12	8	773	0	2.27	1.09	6
WEST CENTRAL																					
Bessie	38.5	76	3	10	8	742	0	1.41	.72	6	Erick	38.9	80	3	9	8	732	0	.38	.18	11
Butler	38.1	80	3	6	8	754	0	.72	.43	20	Putnam	35.8	75	3	8	8	816	0	.77	.40	20
Camargo	35.9	80	3	5	8	816	0	.54	.32	11	Watonga	36.6	73	3	11	8	795	0	.56	.17	11
Cheyenne	37.3	80	3	7	8	776	0	.32	.11	11	Weatherford	36.4	68	14	12	8	****	****	.70	.35	11
Elk City	38.4	80	3	11	8	745	0	1.06	.43	6											
CENTRAL																					
Acme	41.3	73	3	14	8	663	0	.62	.18	6	Norman	40.5	71	3	14	8	687	0	.60	.18	22
Bristow	39.4	71	14	10	8	716	0	1.13	.46	19	Oilton	38.4	70	3	8	8	744	0	1.74	.78	11
Lake Carl Blac	38.0	72	3	10	8	757	0	1.87	.59	6	OKC East	42.9	70	3	***	12	678	0	.50	.12	20
Chandler	39.7	73	3	12	8	708	0	1.16	.28	23	Okemah	40.7	69	14	15	8	681	0	1.52	.83	7
Chickasha	41.3	73	3	16	8	663	0	.55	.14	19	Perkins	38.4	70	3	13	8	745	0	1.40	.73	11
El Reno	37.8	71	3	10	8	762	0	1.02	.41	6	Seminole	41.4	72	3	15	8	660	0	1.61	.95	7
Guthrie	38.9	71	3	13	8	731	0	1.23	.36	6	Shawnee	40.2	70	3	12	8	696	0	1.02	.38	7
Kingfisher	38.1	71	3	13	8	754	0	.91	.30	11	Spencer	39.4	71	3	12	8	718	0	.69	.16	20
Marena	37.9	72	3	9	8	758	0	1.67	.56	11	Stillwater	38.7	72	3	12	8	736	0	1.97	.65	11
Minco	39.1	71	3	15	8	725	0	.79	.28	7	Washington	41.5	74	14	13	8	657	0	.80	.18	11
Marshall	37.9	72	3	14	8	758	0	2.14	1.06	6	Yukon	38.8	71	3	12	8	733	0	.64	.15	11
EAST CENTRAL																					
Cookson	42.6	75	5	13	8	628	0	3.25	.85	7	Sallisaw	44.1	77	5	17	8	586	0	4.70	1.36	6
Eufaula	42.3	69	14	18	8	636	0	3.27	.73	7	Stigler	42.9	76	5	17	8	620	0	4.18	1.08	7
Haskell	40.6	69	14	15	8	682	0	1.79	.54	7	Stuart	43.3	75	5	16	8	608	0	2.99	.78	7
Hectorville	39.9	69	14	14	8	703	0	1.03	.29	11	Tahlequah	41.5	71	5	11	8	657	0	2.18	.73	11
Holdenville	41.7	72	14	13	8	653	0	1.66	.47	6	Webbers Falls	43.3	77	5	18	8	607	0	3.42	.94	11
McAlester	44.0	76	5	18	8	587	0	4.08	1.09	7	Westville	41.5	72	5	13	8	658	0	3.25	.93	7
Okmulgee	40.5	70	14	14	8	686	0	1.48	.64	7											
SOUTHWEST																					
Altus	42.3	79	3	15	8	637	0	.19	.06	20	Hollis	41.2	83	3	10	8	666	0	.32	.15	11
Apache	40.2	73	3	12	8	694	0	.78	.20	11	Mangum	40.7	80	3	9	8	****	****	.42	.20	20
Fort Cobb	39.8	75	3	15	8	705	0	.64	.25	6	Medicine Park	41.6	74	3	15	8	654	0	.47	.09	7
Grandfield	44.1	77	14	16	8	586	0	.30	.08	19	Tipton	43.2	77	14	17	8	609	0	.31	.11	6
Hinton	37.8	73	3	11	8	761	0	.90	.47	11	Walters	43.8	75	14	15	8	595	0	.39	.12	19
Hobart	40.3	76	3	12	8	****	****	.54	.24	11											
SOUTH CENTRAL																					
Ada	42.5	73	14	13	8	630	0	2.63	1.00	7	Lane	45.4	78	4	17	8	550	0	3.30	.82	7
Ardmore	45.6	77	4	18	8	543	0	2.37	1.00	6	Madill	46.2	79	4	17	8	527	2	2.26	.81	7
Burneyville	46.6	80	4	17	8	518	4	2.03	.47	7	Newport	45.3	77	4	18	8	551	0	2.56	.98	6
Byars	42.3	73	14	13	8	636	0	1.38	.38	19	Pauls Valley	42.9	73	14	16	8	618	0	1.24	.34	7
Centrahoma	44.7	76	4	17	8	569	0	2.71	.74	11	Ringling	45.7	75	4	18	8	541	0	2.06	1.02	6
Durant	46.8	79	4	20	8	514	5	2.33	.60	19	Sulphur	44.2	74	4	15	8	583	0	2.60	1.02	6
Fittstown	43.6	74	4	15	8	600	0	2.14	.51	6	Tishomingo	44.7	77	4	18	8	568	0	2.27	.64	19
Ketchum Ranch	43.6	74	3	17	8	600	0	.59	.16	19	Waurika	46.1	77	14	15	8	530	1	.71	.23	6
SOUTHEAST																					
Antlers	45.7	79	4	16	8	545	5	3.09	.95	19	Mt Herman	46.3	76	4	17	8	532	9	4.45	1.12	19
Broken Bow	47.7	78	4	19	8	493	7	6.00	1.73	19	Talihina	46.2	79	4	18	8	529	2	3.95	.91	19
Clayton	45.4	77	4	16	8	551	1	3.03	.80	19	Valliant	47.8	77	4	20	8	493	12	4.82	1.24	19
Cloudy	46.1	77	4	19	8	536	7	3.78	1.12	19	Wilburton	44.9	77	4	18	8	562	0	3.03	.88	7
Hugo	47.2	79	4	20	8	510	13	2.70	.71	19	Wister	44.6	78	4	17	8	570	0	4.06	1.13	7
Idabel	48.1	77	4	20	8	484	11	6.30	2.20	19											

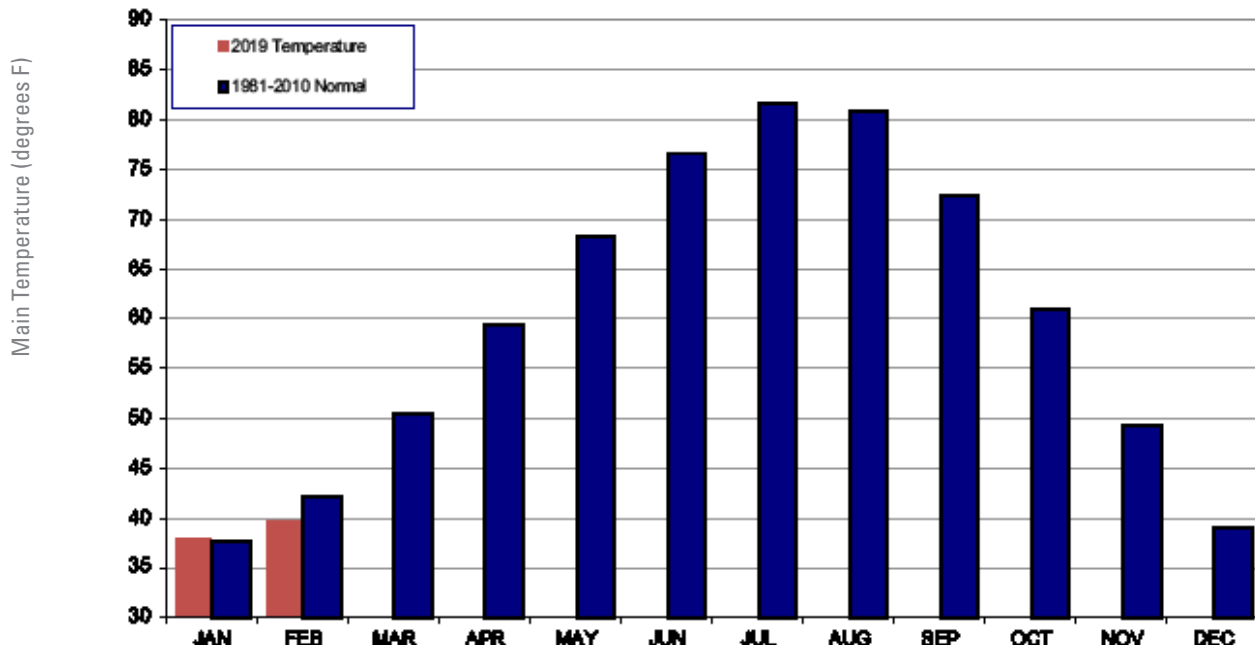
2019 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



February 2019 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Feb-18 (inches)
Panhandle	0.47	-0.16	60th Wettest	2.95 (1911)	0.00 (1904)	0.08
Central	0.89	-0.40	62nd Driest	3.97 (1911)	0.01 (1904)	0.93
Northeast	1.78	-0.27	50th Wettest	5.90 (1985)	0.10 (1963)	4.31
West Central	0.72	-0.38	58th Driest	4.04 (2013)	0.00 (1991)	0.76
Central	1.16	-0.65	57th Driest	4.91 (1938)	0.04 (1947)	3.79
East Central	2.87	0.29	34th Wettest	8.92 (1938)	0.10 (1947)	7.92
Southwest	0.48	-0.91	32nd Driest	3.68 (1997)	0.01 (1916)	1.59
South Central	2.07	-0.32	55th Wettest	7.48 (1938)	0.08 (1996)	6.91
Southeast	4.11	0.74	30th Wettest	10.98 (2018)	0.34 (1895)	10.98
Statewide	1.58	-0.25	53rd Wettest	4.57 (1938)	0.18 (1996)	4.08

2019 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



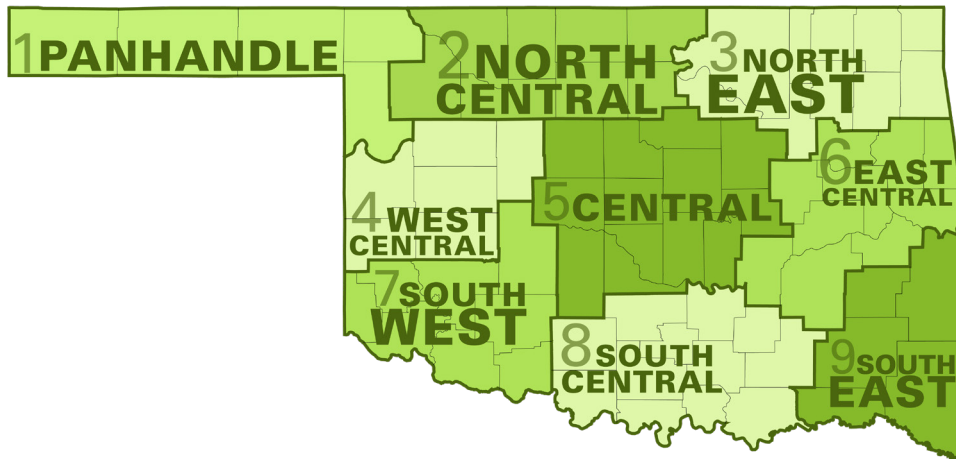
February 2019 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Feb-18 (F)
Panhandle	80.0	0.7	49th Warmest	86.0 (1934)	72.8 (1906)	81.3
North Central	83.1	1.3	37th Warmest	89.6 (2011)	75.9 (1950)	82.8
Northeast	80.6	-0.2	51st Coolest	89.3 (1954)	75.4 (1950)	82.5
West Central	83.0	1.2	40th Warmest	89.6 (2011)	75.9 (1906)	83.4
Central	82.8	0.9	47th Warmest	90.2 (2011)	76.7 (1950)	83.4
East Central	79.8	-1.4	32nd Coolest	88.9 (2011)	76.2 (1906)	83.2
Southwest	82.8	-0.4	56th Coolest	91.7 (2011)	78.0 (1908)	84.7
South Central	81.5	-1.0	37th Coolest	90.5 (2011)	77.9 (1950)	84.6
Southeast	80.0	-0.4	52nd Coolest	87.5 (2011)	76.1 (1905)	83.4
Statewide	81.5	0.0	59th Warmest	89.2 (2011)	76.4 (1906)	83.2

MESONET EXTREMES FOR FEBRUARY 2019

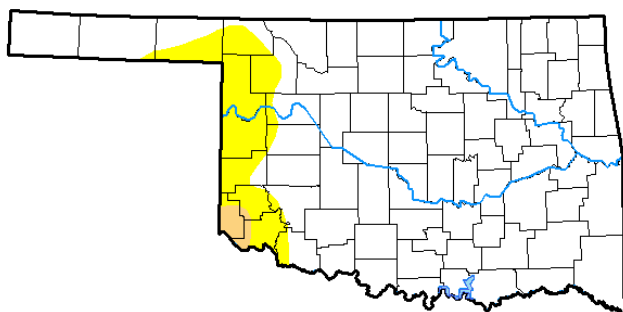
Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	80	3rd	Arnett	0	8th	Eva	0.76	Goodwell	0.73	23rd	Goodwell
North Central	78	3rd	Woodward	5	8th	Freedom	2.21	Red Rock	1.09	6th	Red Rock
Northeast	72	3rd	Burbank	8	8th	Foraker	2.60	Jay	1.09	6th	Wynona
West Central	80	3rd	Butler	5	8th	Camargo	1.41	Bessie	0.72	6th	Bessie
Central	74	14th	Washington	8	8th	Oilton	2.14	Marshall	1.06	6th	Marshall
East Central	77	5th	Webbers Falls	11	8th	Tahlequah	4.70	Sallisaw	1.36	6th	Sallisaw
Southwest	83	3rd	Hollis	9	8th	Mangum	0.90	Hinton	0.47	11th	Hinton
South Central	80	4th	Burneyville	13	8th	Byars	3.30	Lane	1.02	6th	Ringling
Southeast	79	4th	Antlers	16	8th	Clayton	6.30	Idabel	2.20	19th	Idabel
Statewide	83	3rd	Hollis	0	8th	Eva	6.30	Idabel	2.20	19th	Idabel

Oklahoma Climate Divisions



U.S. Drought Monitor Oklahoma

February 26, 2019
(Released Thursday, Feb. 28, 2019)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	88.61	11.39	0.98	0.00	0.00	0.00
Last Week 02-19-2019	92.41	7.59	0.00	0.00	0.00	0.00
3 Months Ago 11-27-2018	81.67	18.33	3.27	0.00	0.00	0.00
Start of Calendar Year 01-01-2019	94.85	5.15	0.00	0.00	0.00	0.00
Start of Water Year 09-25-2018	72.93	27.07	9.11	4.16	0.00	0.00
One Year Ago 02-27-2018	7.72	92.28	66.20	43.87	32.91	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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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 is the State Climate Office for Oklahoma

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