Oklahoma Monthly Climate Summary

FEBRUARY 2020

OKLAHOMA CLIMATOLOGICAL SURVEY

In February, Oklahoma finally received a month worthy of winter. It wasn't tremendously cold, nor was it excessively wet, but it did provide much of Oklahoma with its first decent snow of the season. A strong storm system passed through the state on February 5 and dropped sleet, freezing rain, and 4-6 inches of snow along and around the Interstate 44 corridor. Higher totals of 6-8 inches were reported in the southwest, with a few localized areas receiving as much as 10 inches. There were other minor winter systems throughout the month, but none that packed the punch of the February 5 storm. For the cool season through February, all of Oklahoma has had at least a trace of snow. Portions of northwestern Oklahoma and the western Panhandle have received more than a foot of snow. Severe weather was rare during February, other than some storms in the southeast on the 18th that had large associated with them.

February 2020 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	83°F	Multiple	2
Low Temperature	1°F	Tipton	6
High Precipitation	6.30 in.	Idabel	--
Low Precipitation	0.26 in.	Kenton	--

According to preliminary data from the Oklahoma Mesonet, the statewide average temperature was 41.6 degrees, half of a degree below normal to rank as the 68th coolest February dating back to 1895. That statewide reading was influenced by below normal temperatures in the far southwest, as well as sustained frigid conditions in the far western Panhandle; readings there were 2-3 degrees cooler than normal. The month's high temperature of 83 degrees was recorded at three different Mesonet sites on February 2. The lowest temperature of 1 degree came just four days later at Tipton. Buoyed by unusual warmth during December and January, the climatological winter (December-February) was significantly warm at 42.3 degrees, 2.8 degrees above normal and ranked as the 10th warmest on record. February's highest and lowest temperatures also served as winter's extremes. The first two months of the year ranked as the 28th warmest such period on record at 41.9 degrees, 2.1 degrees above normal.

There were some hefty rainfall totals during February, but those were uncommon. Heavy rainfall for the month was concentrated in the most likely area; far southeastern Oklahoma had totals from 4-6 inches, with the Mt. Herman Mesonet site leading the way at 6.02 inches. The driest area also came as no surprise. The far western Panhandle station of Kenton had the lowest total with 0.26 inches. Most surpluses and deficits were within a half-inch of normal. Combined, the statewide average was 1.81 inches, just 2 hundredths below normal to rank as the 45th wettest February since 1895. Of the Mesonet's 120 sites, 41 recorded less than an inch of moisture for the month. Winter ended as the 28th wettest on record, but only 0.85 inches above normal with a statewide average of 6.3 inches. Cloudy led all sites with 14.46 inches of rainfall for the season. Kenton had the lowest winter total of 1.06 inches. The first two months of 2020 were the 10th wettest January-February on record at 5.25 inches, 1.86 inches above normal.

February 2020 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2020)
Month (February)	41.6°F	-0.5°F	59th Warmest
Season-to-Date (Dec-Feb)	42.3°F	2.8°F	10th Warmest
Year-to-Date (Jan-Feb)	41.9°F	2.1°F	28th Warmest

Precipitation

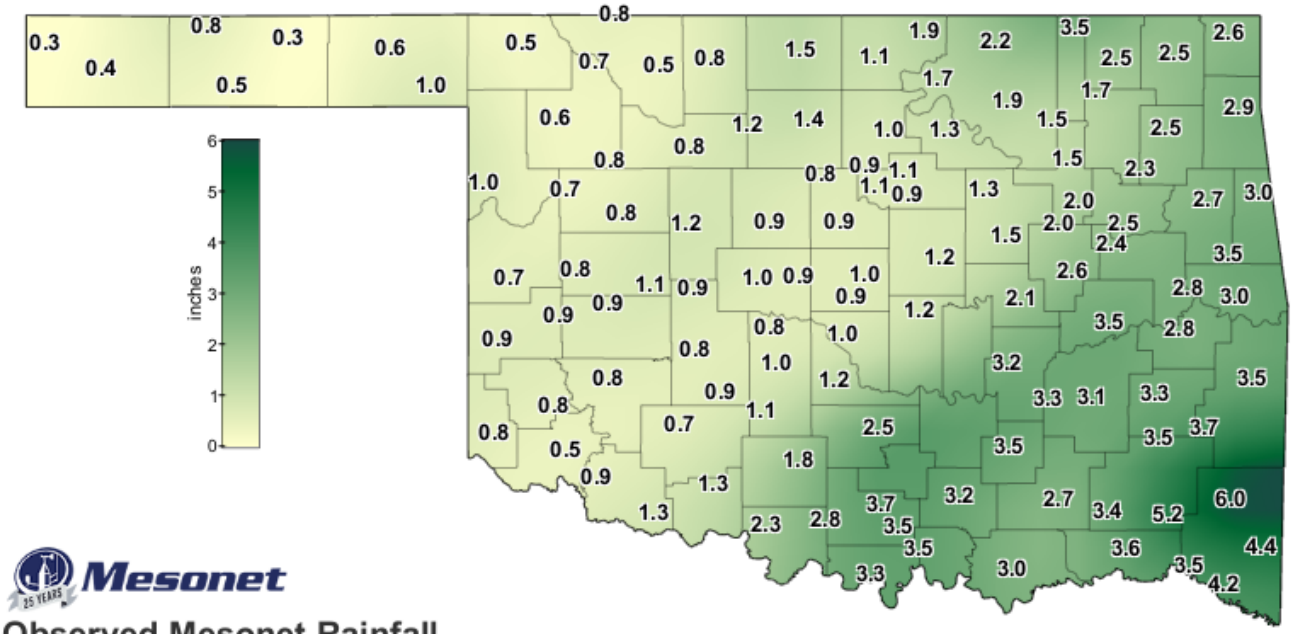
	Total	Depart.	Rank (1895-2020)
Month (February)	1.81 in.	-0.02 in.	45th Wettest
Season-to-Date (Dec-Feb)	6.30 in.	0.85 in.	28th Wettest
Year-to-Date (Jan-Feb)	5.25 in.	1.86 in.	10th Wettest

Depart. = departure from 30-year normal

Oklahoma's drought coverage was cut nearly in half through February according to the U.S. Drought Monitor. The amount of drought stood at 8.03% at the end of January, but had dropped to 4.66% by the end of February. An even larger reduction occurred since the start of climatological winter on December 1, when drought covered 14.27% of the state. All

of the drought over the last three months occurred across the western one-third of the state. The amount of the state in at least "abnormally dry" conditions – areas in drought and additional parts possibly headed towards drought – fell from 35% to 13% through winter. The March temperature outlook from the Climate Prediction Center (CPC) indicates increased odds for above normal temperatures across all of Oklahoma, but those odds are greater in eastern Oklahoma. The precipitation outlook shows enhanced chances of below normal precipitation across the northwestern quarter of the state, but above normal across far eastern Oklahoma. CPC expects the existing drought to persist in the state through March, but no new development is anticipated.

FEBRUARY 2020 OBSERVED PRECIPITATION



Mesonet

Observed Mesonet Rainfall
Calendar Month to Date

Feb 1, 2020 through Feb 29, 2020
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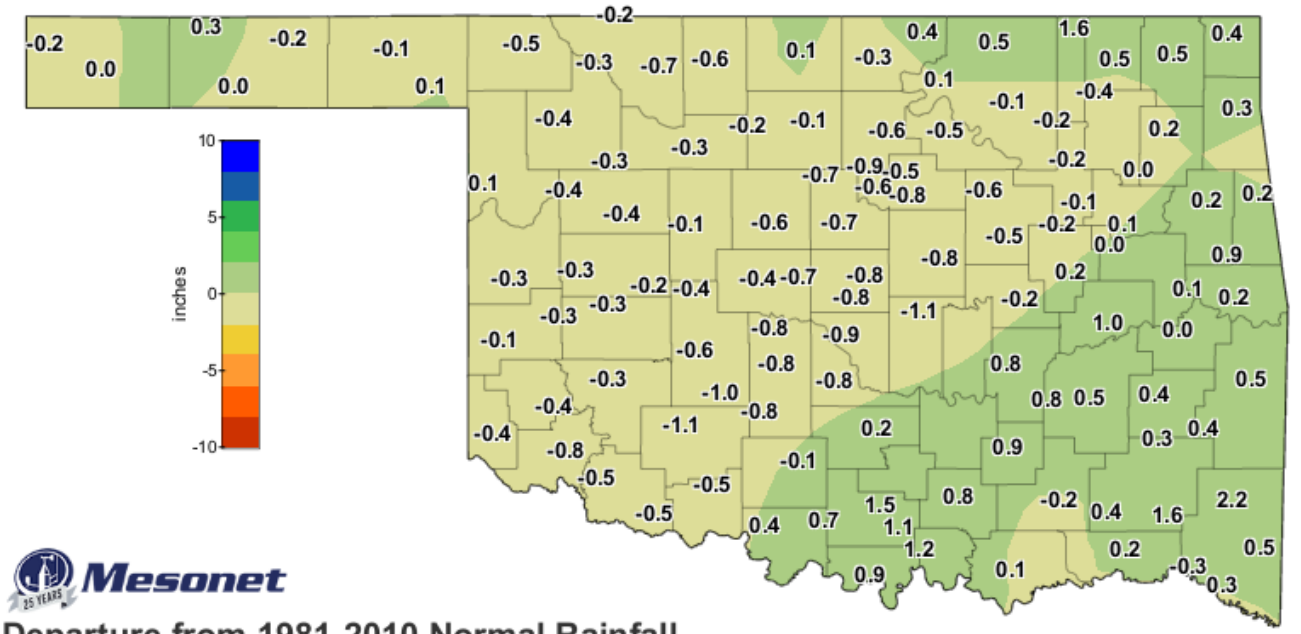
FEBRUARY 2020 DEPARTURE FROM NORMAL PRECIPITATION

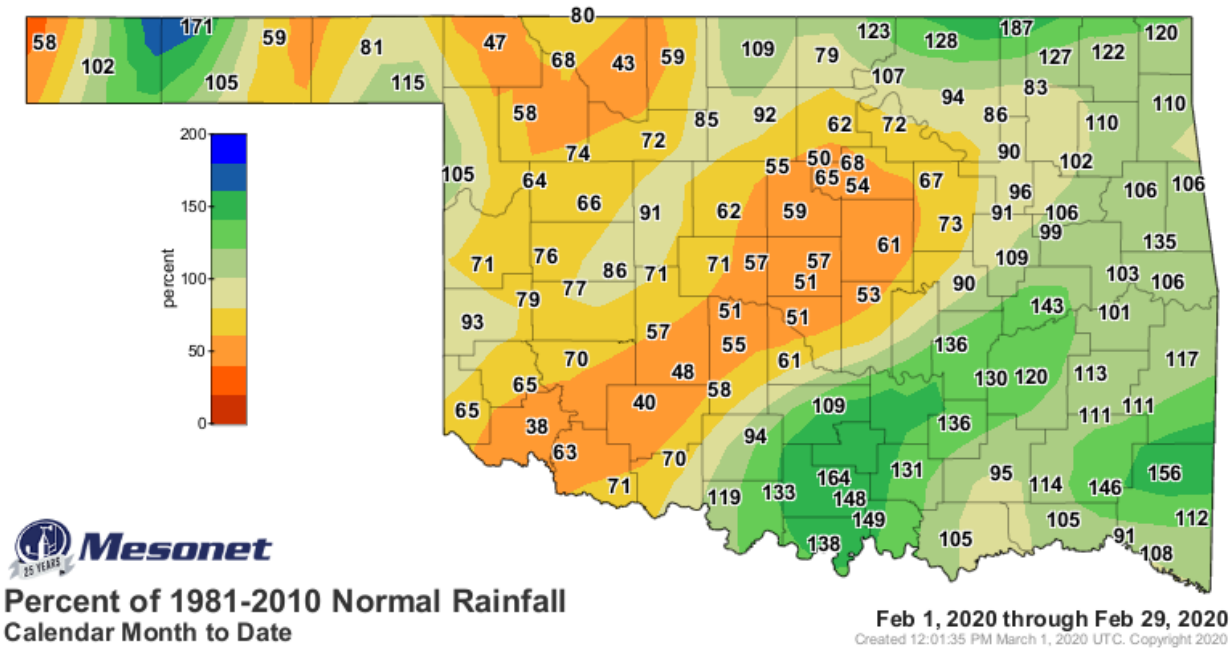


Mesonet

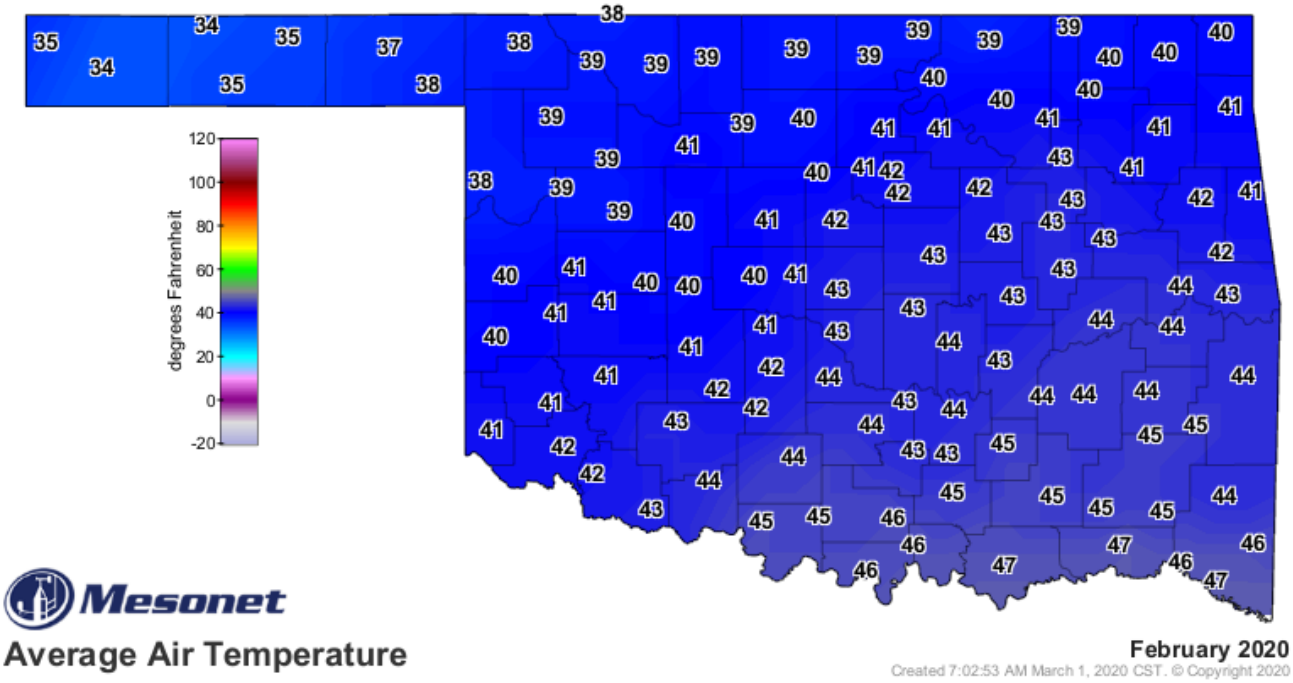
Departure from 1981-2010 Normal Rainfall
Calendar Month to Date

Feb 1, 2020 through Feb 29, 2020
Created 12:01:35 PM March 1, 2020 UTC. Copyright 2020

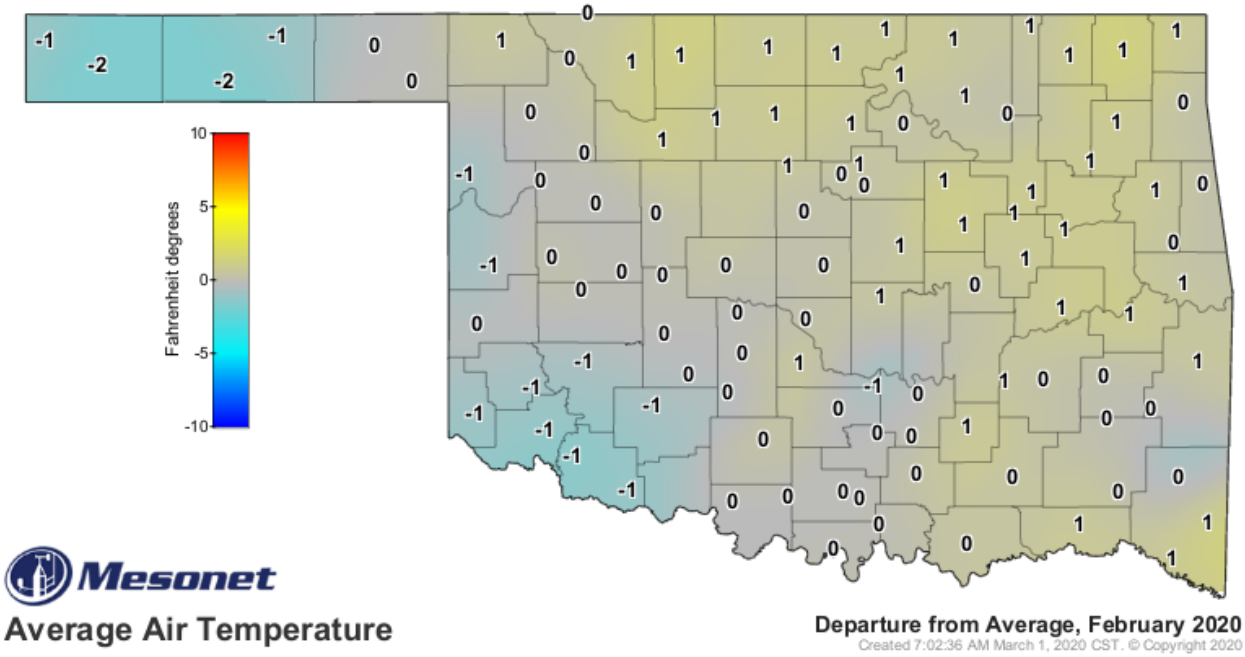
FEBRUARY 2020 PERCENT OF NORMAL PRECIPITATION



FEBRUARY 2020 AVERAGE TEMPERATURE



FEBRUARY 2020 DEPARTURE FROM NORMAL TEMPERATURE

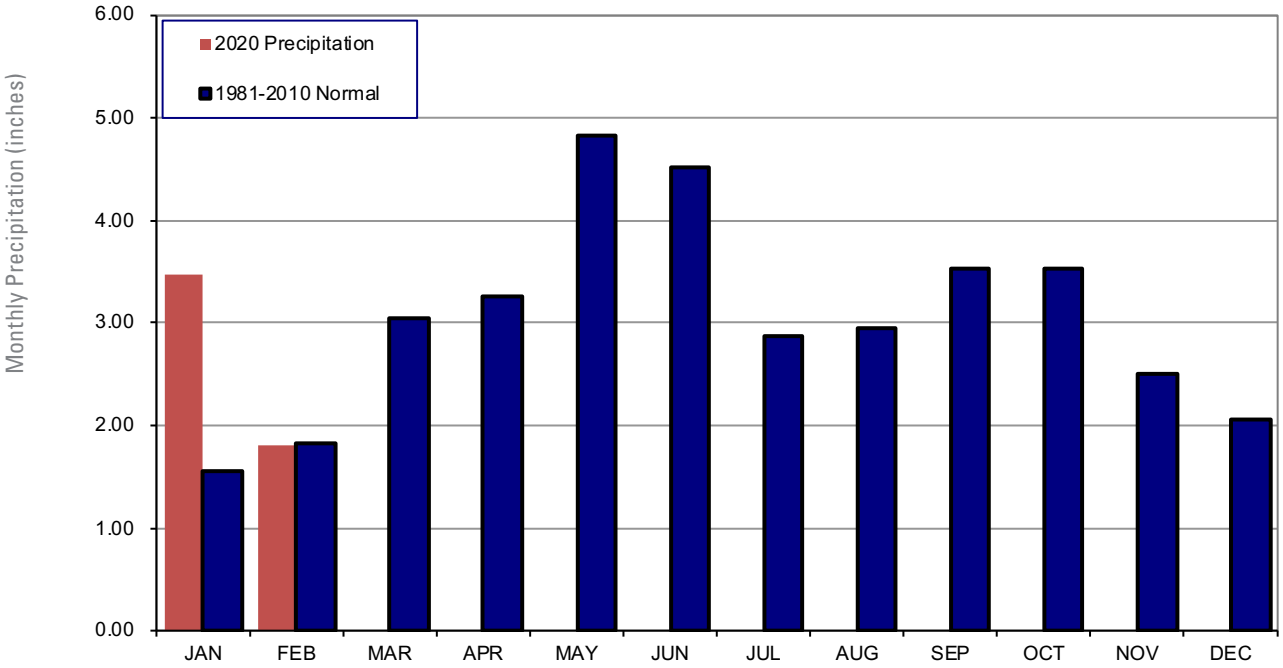


MESONET MONTHLY SUMMARY FOR FEBRUARY 2020

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	39.1	81	2	10	6	751	0	1.00	.32	24
Beaver	37.7	81	2	7	6	793	0	.60	.32	24
Boise City	34.5	76	2	3	5	884	0	.43	.15	23
Buffalo	38.7	78	2	12	21	764	0	.46	.28	24
Eva	35.2	81	2	8	6	865	0	.82	.45	23
NORTH CENTRAL										
Alva	39.4	78	2	12	21	742	0	.50	.25	23
Blackwell	39.4	75	2	12	14	741	0	1.11	.59	23
Breckinridge	39.6	75	2	12	21	737	0	1.40	.88	23
Cherokee	39.9	75	2	14	21	729	0	.81	.57	23
Fairview	41.2	77	2	13	21	689	0	.83	.48	23
Freedom	39.4	80	2	10	13	743	0	.66	.29	24
Lahoma	39.9	76	2	14	21	728	0	1.16	.76	23
NORTHEAST										
Bixby	42.8	78	2	17	14	644	0	1.97	.61	12
Burbank	39.7	78	2	10	21	734	0	1.73	.93	23
Copan	39.5	75	2	11	14	739	0	3.49	1.27	24
Foraker	38.9	77	2	10	14	756	0	2.17	1.03	23
Inola	41.4	73	29	15	21	685	0	2.31	.73	12
Jay	40.1	76	2	12	14	722	0	2.86	1.11	12
Miami	39.7	70	2	13	14	735	0	2.63	.87	23
Nowata	39.6	72	2	13	14	736	0	2.51	.70	23
WEST CENTRAL										
Bessie	41.1	77	2	14	21	692	0	.92	.40	23
Butler	40.8	82	2	13	21	701	0	.83	.36	23
Camargo	39.2	82	2	11	6	749	0	.68	.27	23
Cheyenne	40.8	78	2	17	13	701	0	.71	.15	23
Elk City	41.3	78	2	15	6	686	0	.93	.45	23
CENTRAL										
Acme	42.1	76	2	11	6	665	0	1.07	.37	12
Bristow	42.2	79	2	14	21	660	0	1.45	.50	12
Lake Carl Blac	40.6	79	2	12	21	707	0	.85	.29	12
Chandler	42.4	79	2	16	21	655	0	1.18	.39	12
Chickasha	41.8	76	29	12	6	674	0	.95	.34	12
El Reno	40.3	79	2	11	21	716	0	1.04	.27	12
Guthrie	41.7	78	2	15	21	676	0	.92	.33	12
Kingfisher	41.1	76	2	15	21	693	0	.90	.30	12
Marena	41.1	79	2	14	14	693	0	1.09	.32	23
Minco	41.1	74	2	16	21	692	0	.82	.28	12
Marshall	40.5	77	2	12	21	712	0	.84	.32	23
EAST CENTRAL										
Cookson	42.2	77	2	13	21	662	0	3.46	.82	4
Eufaula	44.5	76	2	20	21	595	0	3.47	1.19	4
Haskell	42.8	76	2	17	14	645	0	2.39	.86	12
Hectorville	43.2	78	2	15	14	631	0	1.96	.65	12
Holdenville	43.4	77	2	19	21	627	0	3.16	.97	12
McAlester	44.4	77	2	17	21	598	0	3.14	1.05	12
Okmulgee	43.0	78	2	17	21	637	0	2.63	.93	12
SOUTHWEST										
Altus	42.0	76	2	10	6	668	0	.47	.15	6
Apache	41.9	75	2	12	6	670	0	.88	.32	12
Fort Cobb	41.5	76	2	13	6	681	0	.81	.27	12
Grandfield	43.1	78	2	8	6	635	0	1.25	.39	12
Hinton	40.7	76	2	15	21	704	0	.92	.37	23
Hobart	41.2	76	29	12	6	691	0	.79	.36	23
SOUTH CENTRAL										
Ada	44.0	79	2	17	21	608	0	*****	1.03	12
Ardmore	45.7	81	2	21	21	560	0	3.47	1.00	12
Burneyville	46.0	83	2	18	21	551	0	3.26	.85	12
Byars	43.9	78	2	18	21	612	0	*****	.63	12
Centrahoma	44.9	78	2	19	27	582	0	3.50	1.04	12
Durant	46.7	78	2	23	27	531	2	3.01	1.15	12
Fittstown	43.9	79	2	18	27	612	0	*****	.98	12
Ketchum Ranch	44.0	79	2	18	6	609	0	1.81	.55	7
SOUTHEAST										
Antlers	45.4	79	2	18	27	****	****	3.40	1.36	12
Broken Bow	46.3	79	2	22	27	541	0	4.41	1.81	12
Clayton	45.1	75	2	20	27	578	0	3.45	1.39	12
Cloudy	45.7	76	2	21	27	559	0	5.16	2.19	4
Hugo	46.9	77	2	24	21	524	0	3.55	1.60	12
Idabel	46.7	78	2	23	7	530	0	4.19	1.78	12

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	36.5	80	2	11	5	826	0	.46	.11	23
Hooker	36.5	77	2	12	5	826	0	.31	.11	24
Kenton	35.2	77	2	2	5	865	0	.26	.08	11
Slapout	38.7	81	2	12	13	764	0	.95	.52	24
May Ranch	39.2	79	2	10	13	749	0	.78	.32	24
Medford	39.0	73	2	12	21	755	0	1.54	1.00	23
Newkirk	39.1	76	2	9	14	752	0	1.89	.95	23
Red Rock	40.3	77	2	13	14	716	0	1.01	.45	23
Seiling	39.3	81	2	13	21	744	0	.75	.35	23
Woodward	40.0	82	2	13	13	725	0	.55	.20	24
Pawnee	40.7	77	2	13	14	705	0	1.27	.37	23
Porter	43.0	77	2	17	14	637	0	2.51	.94	12
Pryor	40.7	73	2	15	21	704	0	2.51	.69	12
Skiatook	41.1	77	2	12	14	692	0	1.46	.42	12
Talala	40.0	74	2	13	14	726	0	1.74	.50	12
Tulsa	42.5	76	2	14	14	653	0	1.45	.49	12
Vinita	39.8	71	2	12	14	****	****	2.51	.86	23
Wynona	40.6	78	2	12	14	708	0	1.92	.68	24
Erick	40.4	79	2	14	21	714	0	.93	.40	10
Putnam	39.9	78	2	15	6	727	0	.76	.38	23
Watonga	40.5	75	2	16	13	710	0	1.24	.80	23
Weatherford	40.5	74	2	15	6	711	0	1.08	.63	23
Norman	42.6	77	2	16	21	650	0	.99	.33	12
Oilton	41.2	80	2	12	21	690	0	1.28	.50	12
OKC East	42.1	78	2	15	21	663	0	.87	.30	12
Okemah	42.7	77	2	18	21	646	0	2.08	.80	12
Perkins	41.5	78	2	16	14	681	0	.90	.40	12
Seminole	43.5	79	2	18	21	624	0	2.23	.72	12
Shawnee	42.7	76	2	18	21	647	0	1.21	.42	12
Spencer	42.1	79	2	13	21	664	0	1.00	.36	12
Stillwater	41.3	81	2	14	21	688	0	1.13	.30	12
Washington	43.6	78	2	17	21	621	0	1.19	.38	12
Yukon	41.3	76	2	15	6	688	0	.88	.31	12
Sallisaw	43.5	78	2	18	21	623	0	3.03	1.16	12
Stigler	43.6	78	2	18	21	620	0	2.78	1.02	12
Stuart	44.3	77	2	19	21	599	0	3.27	.96	12
Tahlequah	41.6	75	2	14	21	679	0	2.72	.78	12
Webbers Falls	44.1	79	2	21	14	605	0	2.82	.76	12
Westville	41.5	74	2	17	14	682	0	2.97	1.13	4
Hollis	42.2	79	2	15	6	662	0	.75	.31	10
Mangum	41.2	77	29	10	6	690	0	.80	.31	23
Medicine Park	42.8	76	2	14	6	645	0	.69	.31	12
Tipton	42.4	79	2	1	6	656	0	.92	.27	12
Walters	43.8	79	2	14	6	614	0	1.27	.37	12
Lane	45.6	79	2	19	27	564	0	2.69	1.07	12
Madill	46.4	81	2	21	27	539	0	3.54	1.05	12
Newport	45.6	83	2	19	6	562	0	3.73	.93	12
Pauls Valley	44.4	80	2	18	6	598	0	2.47	.59	12
Ringling	45.2	81	2	17	6	575	0	2.78	.79	12
Sulphur	43.7	80	2	17	27	617	0	*****	.97	12
Tishomingo	45.0	79	2	19	27	581	0	3.20	.99	12
Waurika	45.3	83	2	14	6	571	0	2.34	.62	12
Mt Herman	44.6	73	2	19	27	591	0	6.02	2.37	4
Talihina	44.9	75	2	18	27	584	0	3.69	1.53	12
Valliant	46.3	77	2	20	27	541	0	3.48	1.40	12
Wilburton	44.2	76	2	18	21	602	0	3.31	1.32	12
Wister	43.8	78	2	18	21	616	0	3.47	1.37	12

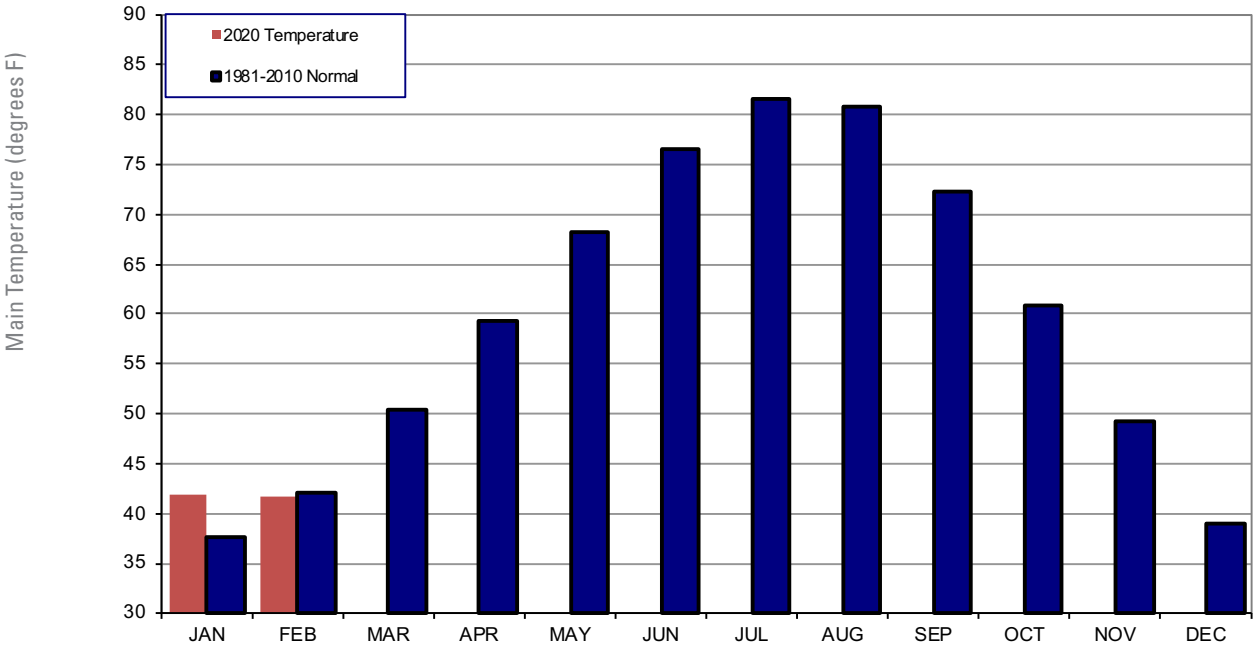
2020 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



February 2020 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Feb-19 (inches)
Panhandle	0.59	-0.04	51st Wettest	2.95 (1911)	0.00 (1904)	0.53
North Central	1.00	-0.29	58th Wettest	3.97 (1911)	0.01 (1904)	0.78
Northeast	2.19	0.14	37th Wettest	5.90 (1985)	0.10 (1963)	1.71
West Central	0.90	-0.20	54th Wettest	4.04 (2013)	0.00 (1991)	0.50
Central	1.14	-0.67	57th Driest	4.91 (1938)	0.04 (1947)	0.94
East Central	2.91	0.33	34th Wettest	8.92 (1938)	0.10 (1947)	2.66
Southwest	0.87	-0.52	61st Driest	3.68 (1997)	0.01 (1916)	0.36
South Central	2.98	0.59	30th Wettest	7.48 (1938)	0.08 (1996)	1.98
Southeast	4.01	0.64	32nd Wettest	10.98 (2018)	0.34 (1895)	4.23
Statewide	1.81	-0.02	45th Wettest	4.57 (1938)	0.18 (1996)	1.48

2020 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



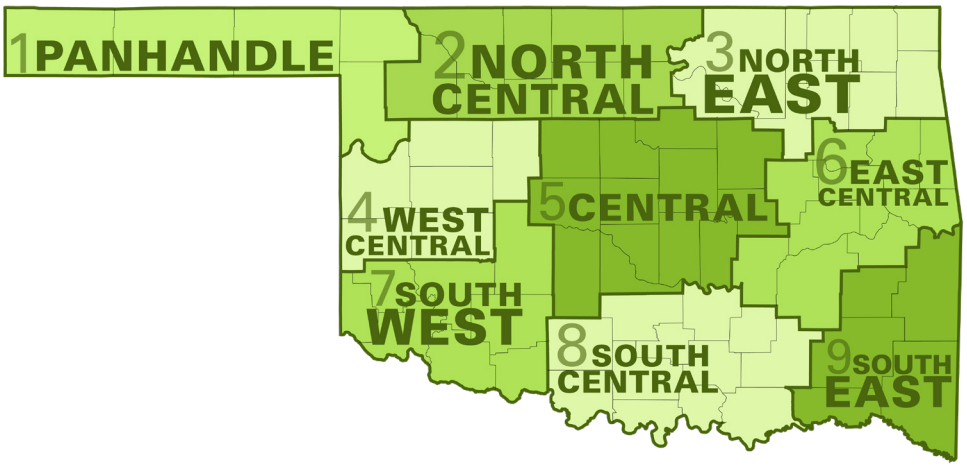
February 2020 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Feb-19 (F)
Panhandle	36.9	-1.5	54th Coolest	47.3 (1954)	23.6 (1899)	34.5
North Central	39.7	0.1	58th Warmest	49.6 (1930)	25.3 (1978)	35.6
Northeast	40.6	-0.1	59th Warmest	49.4 (1976)	25.4 (1905)	38.5
West Central	40.5	-0.6	61st Warmest	50.9 (1954)	26.2 (1905)	38.4
Central	41.8	-0.6	60th Warmest	51.5 (1954)	27.5 (1905)	39.9
East Central	43.2	0.0	55th Warmest	52.5 (2017)	29.5 (1905)	42.6
Southwest	42.1	-1.5	55th Coolest	52.4 (1954)	28.0 (1905)	42.1
South Central	45.0	-0.3	57th Warmest	54.3 (1976)	30.3 (1899)	45.0
Southeast	45.3	0.6	54th Warmest	53.6 (2017)	31.9 (1905)	46.0
Statewide	41.6	-0.5	59th Warmest	50.6 (1954)	27.6 (1905)	40.1

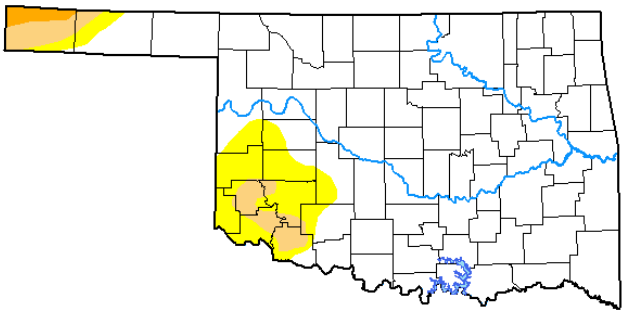
MESONET EXTREMES FOR FEBRUARY 2020

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	81	2nd	Slapout	2	5th	Kenton	1.00	Arnett	0.52	24th	Slapout
North Central	82	2nd	Woodward	9	14th	Newkirk	1.89	Newkirk	1.00	23rd	Medford
Northeast	78	2nd	Bixby	10	14th	Foraker	3.49	Copan	1.27	24th	Copan
West Central	82	2nd	Butler	11	6th	Camargo	1.24	Watonga	0.80	23rd	Watonga
Central	81	2nd	Stillwater	11	21st	El Reno	2.23	Seminole	0.80	12th	Okemah
East Central	79	2nd	Webbers Falls	13	21st	Cookson	3.47	Eufaula	1.19	4th	Eufaula
Southwest	79	2nd	Walters	1	6th	Tipton	1.27	Walters	0.39	12th	Grandfield
South Central	83	2nd	Newport	14	6th	Waurika	3.73	Newport	1.15	12th	Durant
Southeast	79	2nd	Broken Bow	18	27th	Antlers	6.02	Mt Herman	2.37	4th	Mt Herman
Statewide	83	2nd	Newport	1	6th	Tipton	6.02	Mt Herman	2.37	4th	Mt Herman

Oklahoma Climate Divisions



U.S. Drought Monitor
Oklahoma



February 25, 2020
(Released Thursday, Feb. 27, 2020)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	86.53	13.47	4.66	0.84	0.00	0.00
Last Week 02-18-2020	85.83	14.17	4.66	0.85	0.00	0.00
3 Months Ago 11-26-2019	76.05	23.95	12.58	3.67	0.00	0.00
Start of Calendar Year 12-31-2019	76.45	23.55	10.47	3.64	0.00	0.00
Start of Water Year 10-01-2019	71.94	28.06	11.08	1.01	0.00	0.00
One Year Ago 02-26-2019	88.61	11.39	0.98	0.00	0.00	0.00

Intensity:

- None
- 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. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:
David Miskus
NOAA/NWS/NCEP/CPC

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

Dr. Kevin Kloesel Director
Dr. Chris Fiebrich Associate Director

EDITOR
Gary D. McManus State Climatologist

CONTENT AND LAYOUT ASSISTANT
Andrea Dawn Melvin Outreach Coordinator

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