Oklahoma Monthly Climate Summary JANUARY 2020

Although January's weather continued this winter's general

tilt towards unusually mild conditions, that failed to prevent

several bouts of wintry weather from striking the state. In

true Oklahoma fashion, the first bout of snow and ice was

foreshadowed by severe weather, including a couple of

tornadoes. Those weak twisters struck on January 10 near

Prague and Park Hill according to National Weather Service

reports. The Park Hill tornado was the more destructive of the two, damaging roofs, outbuildings and trees. Notably, the

first two tornadoes in 2019, on the way to a record total of 149,

did not come until April 17. The snow and ice that followed

the severe weather was generally light, but it was enough

to disrupt traffic through the 11th. Localized amounts of 2-3

inches were reported in the northeast. Light freezing rain and

snow created hazardous driving conditions across northern

Oklahoma on the 17th and 22nd. The most impressive winter

storm struck in the northwest on the 28th, however. A heavy

of the state had surpluses of 1-5 inches. A very similar pattern emerged for the December-January period, with precipitation totals ranging from just under an inch in the far western Panhandle to more than 8 inches in the southeast. The December-January statewide average finished at 4.54 inches, a surplus of 0.92 inches, to rank as the 20th wettest such period on record.

The statewide average temperature was 41.9 degrees, 4.2 degrees above normal and the 14th warmest January on record. The Panhandle was an outlier at just 2.7 degrees above normal, but still warm enough to rank as the 18th warmest February for that area of the state. Above normal minimum temperatures were responsible for much of the state's positive January temperature anomaly. Lows were 5-6 degrees above normal while highs were generally 1-3 degrees above normal. There was a slew of 70s during

of the state lacked any significant snowfall for the season through January.

According to preliminary data from the Oklahoma Mesonet, the statewide average precipitation total was 3.48 inches, 1.92 inches above normal and ranked as the sixth wettest January since records began in 1895. Totals ranged from 4 to 8 inches across eastern Oklahoma, with the Cloudy Mesonet site leading the way at 8.08 inches. Boise City and Kenton were the only two sites failing to reach an inch of precipitation at 0.17 and 0.23 inches, respectively. Deficits of about a guarter-inch covered that area, while the rest

January 2020 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	77°F	Hugo	5
Low Temperature	5°F	Boise City	11
High Precipitation	8.08 in.	Cloudy	
Low Precipitation	0.17 in.	Boise City	

wet snow - bolstered by half-dollar sized flakes - fell across the northwest guarter of the state. Totals from 3-5 inches were common, with as much as 10 inches being reported from Turpin in the eastern Panhandle. Heavy winds caused

blowing and drifting snow and made for `hazardous driving

conditions. Despite the multitude of winter storms, most

Rank (1895-2020) **Average** Depart. Month (January) 41.9°F 4.2°F 14th Warmest

January 2020 Statewide Statistics Temperature

Season-to-Date (Dec-Jan)	42.5°F	4.2°F	5th Warmest						
Precipitation									
	Total	Depart.	Rank (1895-2020)						
Month (January)	3.48 in.	1.92 in.	6th Wettest						
Season-to-Date (Dec-Jan)	4.54 in.	0.92 in.	20th Wettest						

Depart. = departure from 30-year normal

January, with Hugo's 77 degrees on the 15th leading the pack. The lowest temperature recorded by the Mesonet was 5 degrees at Boise City on the 11th. The December-January statewide average of 42.5 degrees was the fifth-warmest first two months of winter on record, 4.2 degrees above normal. Remarkably, the Mesonet recorded only six singledigit temperatures at its 120 sites over that period.

The abundant moisture continued to slowly whittle away at persistent drought conditions across southwest Oklahoma



JKLAHOMA

and the western Panhandle. Areal coverage of drought dropped about 2% during the month – from 10% to 8%. – according to the U.S. Drought Monitor. Chances for further reductions appear slim according to the Climate Prediction Center (CPC). Their February precipitation outlook indicates Increased odds of below normal precipitation across most of the state, with those odds a bit greater across north central Oklahoma. The temperature outlook shows equal chances for above-, below- and near-normal temperatures across the entire state. CPC's February Drought Outlook expects the remaining drought to either persist or intensify through the month.





JANUARY 2020 DEPARTURE FROM NORMAL PRECIPITATION



JANUARY 2020 PERCENT OF NORMAL PRECIPITATION



JANUARY 2020 AVERAGE TEMPERATURE



JANUARY 2020 DEPARTURE FROM NORMAL TEMPERATURE



MESONET MONTHLY SUMMARY FOR JANUARY 2020

NAME	MEAN TEMP	HIGH TEMP	DAY	LOW TEMP	DAY	HDD	CDD	ТОТ РРТ	HIGH 24-HR	DAY	NAME	MEAN TEMP	HIGH TEMP	DAY	LOW TEMP	DAY	HDD	CDD	ТОТ РРТ	HIGH 24-HR	DAY
PANHANDLE PANHANDLE																					
Arnett Beaver Boise City Buffalo Eva	39.5 37.6 36.3 37.4 37.2	73 69 65 70 67	14 14 14 13 14	14 11 5 14 6	11 11 11 11 11	790 851 891 857 862	0 0 0 0	1.14 1.47 .17 1.60 1.13	.37 .60 .07 .41 .53	28 28 21 17 28	Goodwell Hooker Kenton Slapout	38.3 37.4 35.9 38.8	67 67 70 70	14 14 14 13	9 7 6 12	11 11 11 11	828 854 901 811	0 0 0	1.18 1.25 .23 1.50	.53 .49 .21 .54	28 28 28 17
NORTH CENTRAL Alva Blackwell Breckinridge Cherokee Fairview Freedom Lahoma	38.3 39.2 40.3 38.9 40.4 38.1 40.1	63 69 63 68 64 68	13 9 13 9 26 9	17 17 20 19 19 14 20	20 20 20 11 11 11	829 801 767 808 763 833 772	0 0 0 0 0 0	1.81 1.88 1.69 2.42 1.73 2.39 1.53	.83 .55 .76 1.01 1.11 .67 .92	28 28 10 28 10 28 10 28	May Ranch Medford Newkirk Red Rock Seiling Woodward	38.1 39.1 38.9 40.7 39.1 39.7	64 65 67 70 66 68	13 9 9 9 9 14	14 18 14 17 16 14	11 11 20 20 11 11	834 802 808 755 804 784	0 0 0 0 0	1.91 1.53 1.79 2.24 2.23 2.06	.30 .61 .52 .89 1.10 1.03	31 17 17 28 28 10
NORTHEAST Bixby Burbank Copan Foraker Inola Jay Miami Nowata	42.1 39.8 38.9 38.8 40.8 40.3 39.8 39.1	67 70 68 65 68 68 68	15 9 10 9 10 10 10	20 14 14 19 16 18 15	21 20 21 21 21 21 21 21 21	709 782 811 812 750 765 783 803	0 0 0 0 0 0 0	4.76 2.48 3.79 2.74 4.89 5.46 4.90 4.02	1.70 .79 1.40 .93 2.15 2.66 2.21 1.90	10 17 10 10 10 10 10 10	Pawnee Porter Pryor Skiatook Talala Tulsa Vinita Wynona	41.1 42.3 40.7 41.1 39.8 42.3 39.3 40.5	70 69 70 65 65 67 68 67	9 15 10 10 27 10 9	18 19 17 16 16 19 14 16	21 21 21 21 21 21 21 21 21	741 705 754 741 781 702 796 761	0 0 0 0 0 0 0	3.53 4.90 5.17 5.12 4.03 5.31 4.26 3.51	1.08 1.97 2.52 2.52 1.87 2.12 1.82 1.42	17 10 10 10 10 10 10 10
WEST CENTRAL Bessie Butler Camargo Cheyenne Elk City	42.0 40.5 38.9 42.1 42.2	68 70 66 72 70	9 9 14 14 14	19 18 17 17 18	11 20 11 11 11	714 758 808 709 708	0 0 0 0	1.29 1.35 1.30 1.58 1.08	.62 .77 .50 .53 .59	28 28 28 28 28	Erick Putnam Watonga Weatherford	41.4 40.4 41.2 41.4	74 68 67 67	14 9 9 9	18 17 18 19	11 11 11 11	731 762 739 730	0 0 0 0	1.50 2.37 1.54 1.01	.71 1.11 .76 .59	28 28 28 28
CENTRAL Acme Bristow Lake Carl Blac Chandler Chickasha El Reno Guthrie Kingfisher Marena Minco Marshall	43.7 42.1 40.8 43.5 43.2 41.4 42.8 41.7 41.9 42.8 41.3	72 70 72 69 73 72 71 71 71 71 71	10 10 10 10 10 10 10 10 10 10	20 19 21 22 19 21 22 19 22 22 21	19 20 20 7 20 11 11 20 11 20	661 710 749 668 675 732 688 721 717 688 734	0 0 0 0 0 0 0 0 0	3.82 5.29 2.76 4.43 3.07 2.37 3.28 2.45 3.07 3.04 2.38	1.18 1.83 1.10 1.35 1.27 1.01 1.57 1.43 1.21 1.20 1.44	17 17 28 17 28 28 28 28 28 17 28	Norman Oilton OKC East Okemah Perkins Seminole Shawnee Spencer Stillwater Washington Yukon	43.7 41.4 43.1 42.6 42.4 43.8 43.6 43.4 41.6 44.5 42.8	73 69 70 67 70 70 69 72 71 73 72	10 10 15 10 10 10 10 10 10	23 17 22 21 20 20 20 20 23 20	11 20 20 20 11 20 20 11 20 20 11	661 731 677 693 700 656 675 671 725 636 689	0 0 0 0 0 0 0 0 0	3.63 3.97 3.75 4.84 3.81 4.48 4.82 3.92 3.21 4.09 3.16	1.30 1.40 1.44 1.57 1.42 1.17 1.31 1.65 1.29 1.29 1.17	17 17 28 10 28 17 17 28 28 17 17
EAST CENTRAL Cookson Eufaula Haskell Hectorville Holdenville McAlester Okmulgee	41.7 44.3 41.9 42.7 43.4 43.8 42.4	68 72 68 67 69 74 69	15 15 15 15 15 15	18 23 20 19 22 21 20	21 21 21 20 20 20	723 643 715 693 668 658 702	0 0 0 0 0 0	5.73 6.23 4.88 5.31 4.65 7.23 5.52	2.66 2.98 1.85 1.85 1.67 4.12 2.41	10 10 10 10 10 10 10	Sallisaw Stigler Stuart Tahlequah Webbers Falls Westville	42.3 43.1 44.3 41.7 43.1 41.4	73 72 74 66 71 67	15 15 15 15 15 15	23 21 23 18 24 18	20 20 20 20 20 20	702 679 642 724 677 732	0 0 0 0 0	5.47 5.64 6.89 5.36 5.04 6.45	2.34 2.87 3.54 2.55 2.38 3.23	10 10 10 10 10 10
SOUTHWEST Altus Apache Fort Cobb Grandfield Hinton Hobart	43.9 43.5 42.7 45.5 41.9 42.8	70 71 73 69 68	14 10 10 10 10 9	23 22 25 21 22	7 20 7 7 11 11	654 667 693 604 717 688	0 0 0 0 0	1.58 3.23 2.00 2.97 1.88 1.93	.84 1.06 .80 1.80 .75 1.00	17 17 28 16 17 17	Hollis Mangum Medicine Park Tipton Walters	43.5 42.2 44.6 44.4 45.5	73 70 71 72 74	14 9 10 10 10	22 18 23 22 25	7 7 11 7 20	666 707 634 638 604	0 0 0 0	1.19 1.71 3.23 2.10 3.36	.58 .84 .98 1.03 1.53	17 17 17 16 16
SOUTH CENTRAL Ada Ardmore Burneyville Byars Centrahoma Durant Fittstown Ketchum Ranch	43.8 46.4 46.3 44.8 44.2 46.5 44.2 45.6	71 73 71 74 76 71 74	15 15 10 15 15 15 15	21 26 23 23 23 28 24 24	20 11 19 20 19 20 20 11	656 577 579 627 645 575 645 645 602	0 0 0 0 0 0 0	5.38 4.45 4.39 5.81 6.77 5.33 5.40 4.06	1.53 1.78 2.04 1.29 3.50 2.58 2.59 1.45	10 10 17 10 10 10 10	Lane Madill Newport Pauls Valley Ringling Sulphur Tishomingo Waurika	44.4 46.3 46.4 44.9 46.3 44.1 44.8 46.8	74 70 71 73 70 71 76	15 15 9 10 15 15 10	24 25 23 24 21 24 24 24	19 19 11 20 7 19 19	639 580 577 622 581 648 627 564	0 0 0 0 0 0 0	5.00 6.99 3.49 4.68 3.64 3.98 6.94 3.16	1.88 4.31 .97 1.12 1.15 1.25 3.98 1.10	10 10 17 17 17 10 10 10
SOUTHEAST Antlers Broken Bow Clayton Cloudy Hugo Idabel	44.7 46.0 44.6 45.3 46.3 46.6	76 73 71 72 77 74	15 10 15 15 15 10	22 25 23 26 27 26	20 20 21 20 20 8	630 589 632 610 580 569	1 0 0 1 0	6.32 6.25 4.49 8.08 4.98 5.90	2.06 3.03 1.97 2.93 1.76 3.25	10 10 10 10 10 10	Mt Herman Talihina Valliant Wilburton Wister	44.7 44.4 46.0 44.0 43.1	68 74 75 72 74	15 15 15 15 15	24 22 24 23 19	20 21 20 20 21	631 637 590 650 680	0 0 0 0	7.06 4.25 5.64 5.27 5.63	3.00 1.86 2.44 2.71 2.29	10 10 10 10 10





January 2020 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Jan-19 (inches)
Panhandle	1.07	0.53	14th Wettest	1.94 (2017)	0.00 (1923)	0.53
North Central	1.94	0.97	14th Wettest	4.16 (1949)	0.00 (1986)	1.29
Northeast	4.30	2.58	5th Wettest	6.87 (1916)	0.01 (1986)	3.69
West Central	1.50	0.59	16th Wettest	3.74 (1949)	0.00 (1976)	0.66
Central	3.62	2.18	4th Wettest	5.58 (1949)	0.00 (1986)	2.52
East Central	5.72	3.30	5th Wettest	11.21 (1916)	0.04 (1986)	3.59
Southwest	2.29	1.17	6th Wettest	4.48 (1949)	0.00 (1912)	0.91
South Central	4.97	2.97	5th Wettest	7.70 (1916)	0.03 (1986)	2.37
Southeast	5.81	2.70	10th Wettest	11.13 (1949)	0.20 (1943)	2.93
Statewide	3.48	1.92	6th Wettest	5.35 (1949)	0.03 (1986)	2.10



Main Temperature (degrees F)



January 2020 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Jsn-19 (F)
Panhandle	37.6	2.7	18th Warmest	42.9 (2006)	19.7 (1940)	36.2
North Central	39.3	4.2	14th Warmest	45.0 (2006)	18.8 (1940)	36.6
Northeast	40.4	4.6	12th Warmest	46.2 (2006)	20.6 (1940)	36.1
West Central	41.1	4.1	10th Warmest	46.1 (2006)	21.3 (1930)	38.4
Central	42.6	4.7	10th Warmest	47.7 (2006)	22.8 (1930)	38.3
East Central	42.8	4.2	15th Warmest	48.0 (1923)	24.8 (1918)	38.7
Southwest	43.7	4.3	12th Warmest	48.1 (2006)	23.6 (1930)	40.1
South Central	45.3	4.5	11th Warmest	49.7 (1923)	27.5 (1930)	40.6
Southeast	45.1	4.7	12th Warmest	48.7 (1907)	27.7 (1918)	40.8
Statewide	41.9	4.2	14th Warmest	46.8 (2006)	23.7 (1940)	38.3

MESONET EXTREMES FOR JANUARY 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	73	14th	Arnett	5	11th	Boise City	1.60	Buffalo	0.60	28th	Beaver
North Central	70	9th	Red Rock	14	11th	May Ranch	2.42	Cherokee	1.11	28th	Fairview
Northeast	70	9th	Pawnee	14	21st	Copan	5.46	Jay	2.66	10th	Jay
West Central	74	14th	Erick	17	11th	Cheyenne	2.37	Putnam	1.11	28th	Putnam
Central	73	10th	Norman	17	20th	Oilton	5.29	Bristow	1.83	17th	Bristow
East Central	74	15th	Stuart	18	20th	Westville	7.23	McAlester	4.12	10th	McAlester
Southwest	74	10th	Walters	18	7th	Mangum	3.36	Walters	1.80	16th	Grandfield
South Central	76	15th	Durant	21	19th	Sulphur	6.99	Madill	4.31	10th	Madill
Southeast	77	15th	Hugo	19	21st	Wister	8.08	Cloudy	3.25	10th	Idabel
Statewide	77	15th	Hugo	5	11th	Boise City	8.08	Cloudy	4.31	10th	Madill

Oklahoma Climate Divisions



U.S. Drought Monitor Oklahoma

January 28, 2020 (Released Thursday, Jan. 30, 2020) Valid 7 a.m. EST

	Drought Conditions (Percent Area)									
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4				
Current	81.34	18.66	8.03	0.85	0.00	0.00				
Last Week 01-21-2020	80.50	19.50	9.04	2.52	0.00	0.00				
3 Month s Ago 10-29-2019	75.22	24.78	7.62	0.78	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 01-29-2019	99.22	0.78	0.00	0.00	0.00	0.00				



None D0 Abnormally Dry D1 Moderate Drought D4 Exceptional Drought

D2 Severe Drought D3 Extreme Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.uni.edu/About.aspx

<u>Author:</u> Richard Heim NCEI/NOAA



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: <u>http://aa.usno.navy.mil/data</u>

SEVERE STORM REPORTS Storm Prediction Center: <u>http://spc.noaa.gov/climo/</u>

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: <u>ocs@ou.edu</u> WEBSITE: <u>http://climate.ok.gov</u>