Oklahoma Monthly Climate Summary

MAY 2020

OKLAHOMA CLIMATOLOGICAL SURVEY

Cool weather dominated a good part of May, and possibly robbed Mother Nature of the heat needed for her most exotic springtime menu item; tornadoes. There was still the normal offering of large hail, damaging winds, and flash flooding, but the twister count was below average. The National Weather Service indicated a preliminary total of 13 tornadoes for the month, well below the 1950-2019 average of 24.4, and a relatively minuscule tally compared to last May's all-time Oklahoma monthly record of 105. The 2020 preliminary total of 33 also falls below the January-May average of 41.

The statewide average precipitation total was 5.04 inches according to the Oklahoma Mesonet, 0.22 inches above normal and ranked as the 50th wettest May since records began in 1895. It was an all too familiar rainfall pattern for Oklahoma, with roughly the southeastern half of the state receiving an abundance of moisture while the northwestern half suffered deficits. Those deficits approached 3 inches in parts of central Oklahoma, and were generally 1-2 inches elsewhere. Surpluses of 2-4 inches were common across the southeast. Stigler was 9.5 inches above normal with a state-leading 15.06 inches, although Valliant was just a hair behind at 15.05 inches. Kenton occupied a familiar spot with the state's lowest total of 0.48 inches. The northwest versus southeast rain pattern extended from spring back to the beginning of the year. Spring ended as the 24th wettest on record with a statewide average of 13.1 inches, 1.98 inches above normal, yet the Panhandle suffered its 24th driest at 3.31 inches, 2.58 inches below normal. Spring deficits ranged from 2-4 inches across the northwest quarter, but a bit above that in Blaine and Kingfisher counties. Surpluses peaked at 8-12 inches in far eastern Oklahoma. The first five months of the year ended with a surplus of 4.01 inches, the 14th wettest January-May on record at 18.52 inches averaged statewide.

May 2020 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	106°F	Altus	4
Low Temperature	31°F	Eva, Camargo	9
High Precipitation	15.06 in.	Stigler	--
Low Precipitation	0.48 in.	Kenton	--

The month both began and ended with summer-like conditions, but sandwiched in between was an extended period of much cooler than normal weather. Temperatures soared into the 80s and 90s the first few days of the month, while the southwest saw triple-digits. The airport at Frederick reached 108 degrees on May 4 to become the highest temperature ever recorded in the state that early in the year, topping Buffalo's 107 degrees from May 1, 1992. The weather cooled from there until the final week when highs once again reached the 80s and 90s. Overall, the statewide average temperature as measured by the Oklahoma Mesonet was 66.8 degrees, 1.4 degrees below normal to rank as the 35th coolest May on record. The lowest temperature of the month was 31 degrees at Eva on the ninth – the state's final freeze of the season. Spring finished on the warm side by 0.8 degrees at 60.1 degrees, the 38th warmest on record. The year was still on a warm pace at 52.9 degrees, 1.3 degrees above normal for the 21st warmest January-May in the books.

May 2020 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2020)
Month (May)	66.8°F	-1.4°F	35th Coolest
Season-to-Date (Mar-May)	60.1°F	0.8°F	38th Warmest
Year-to-Date (Jan-May)	52.9°F	1.3°F	21st Warmest

Precipitation

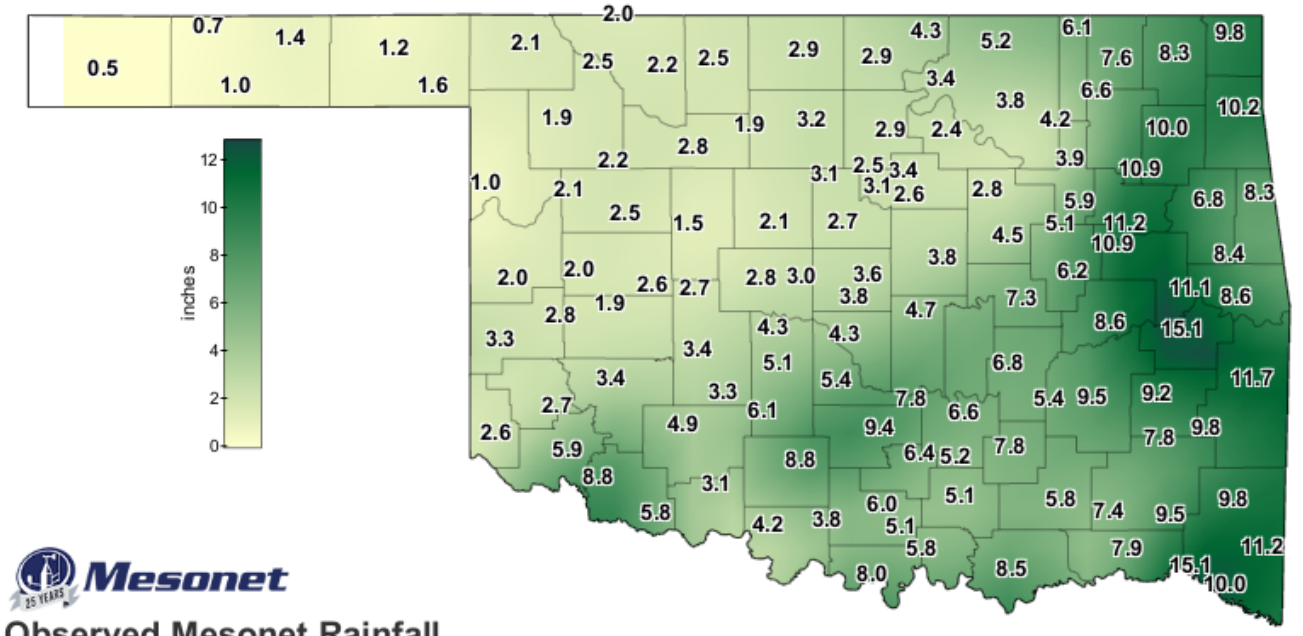
	Total	Depart.	Rank (1895-2020)
Month (May)	5.04 in.	0.22 in.	50th Wettest
Season-to-Date (Mar-May)	13.1 in.	1.98 in.	24th Wettest
Year-to-Date (Jan-May)	18.52 in.	4.01 in.	14th Wettest

Depart. = departure from 30-year normal

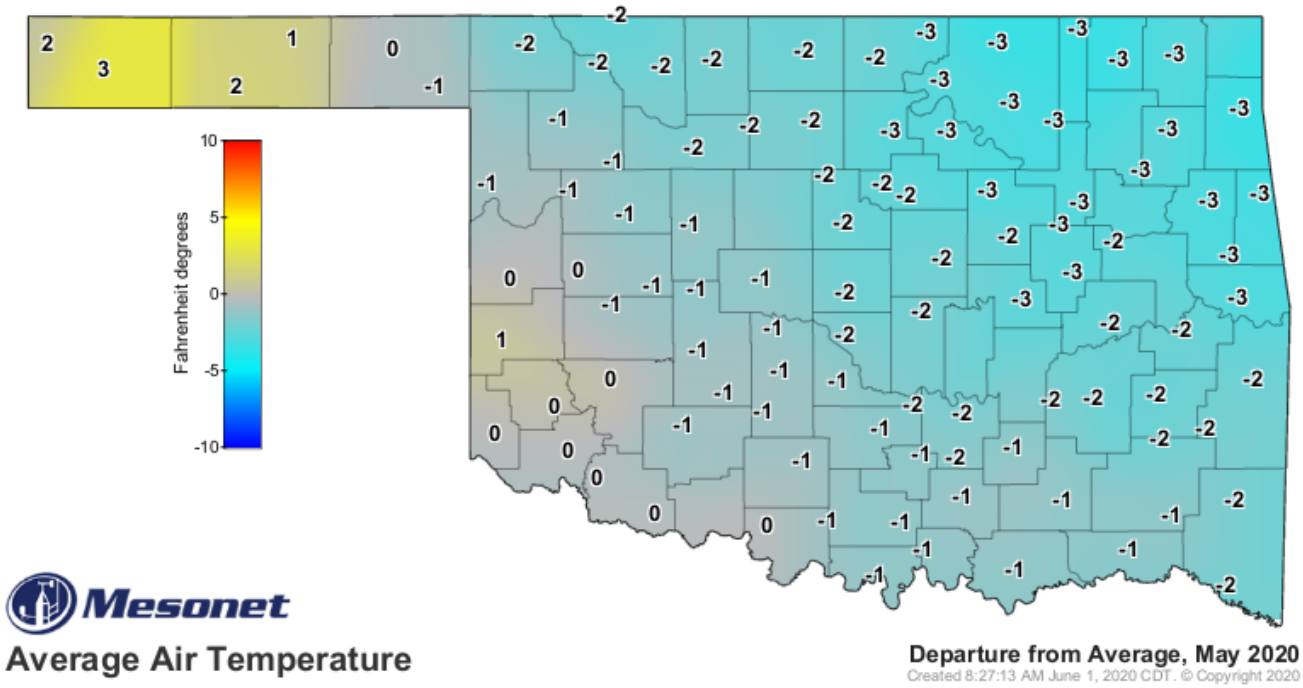
Drought took a large step forward across western into central Oklahoma, increasing its areal coverage from about 4% at the end of April to more than 14% at the end of May. Drought

also increased in severity in the far western Panhandle with most of Cimarron and Texas counties covered by moderate to severe drought by the end of the month. The June temperature and rainfall outlooks from the Climate Prediction Center (CPC) show little hope for substantial drought relief; increased odds of above normal temperatures and below normal precipitation are indicated across all of Oklahoma. Those odds are reflected in CPC's June drought outlook, with those areas of existing drought in the state expected to persist and intensify. Additional drought development is termed "likely" across much the rest of northern and western Oklahoma.

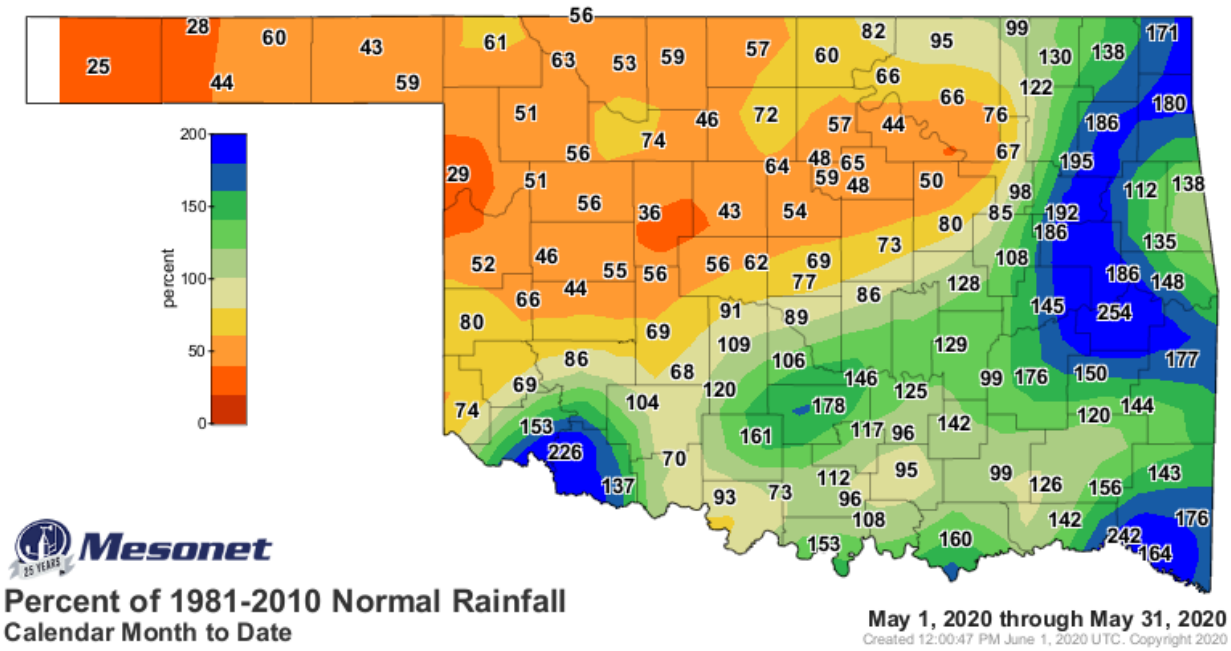
MAY 2020 OBSERVED PRECIPITATION



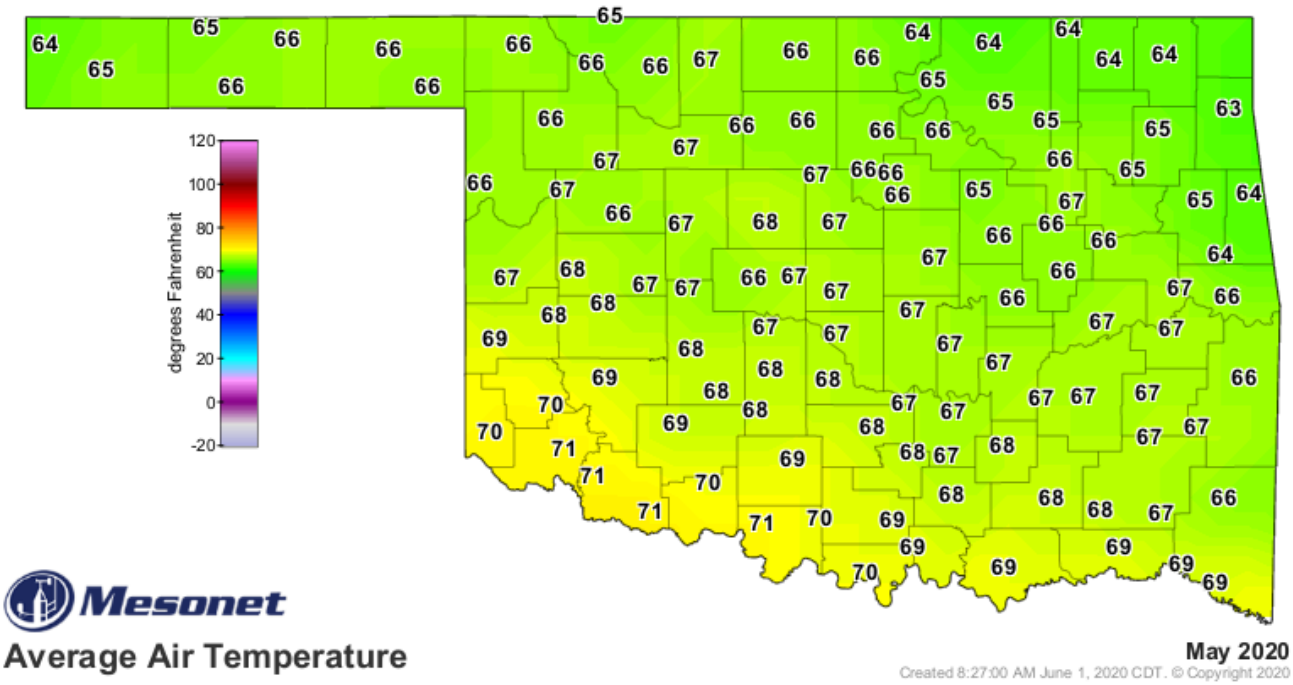
MAY 2020 DEPARTURE FROM NORMAL PRECIPITATION



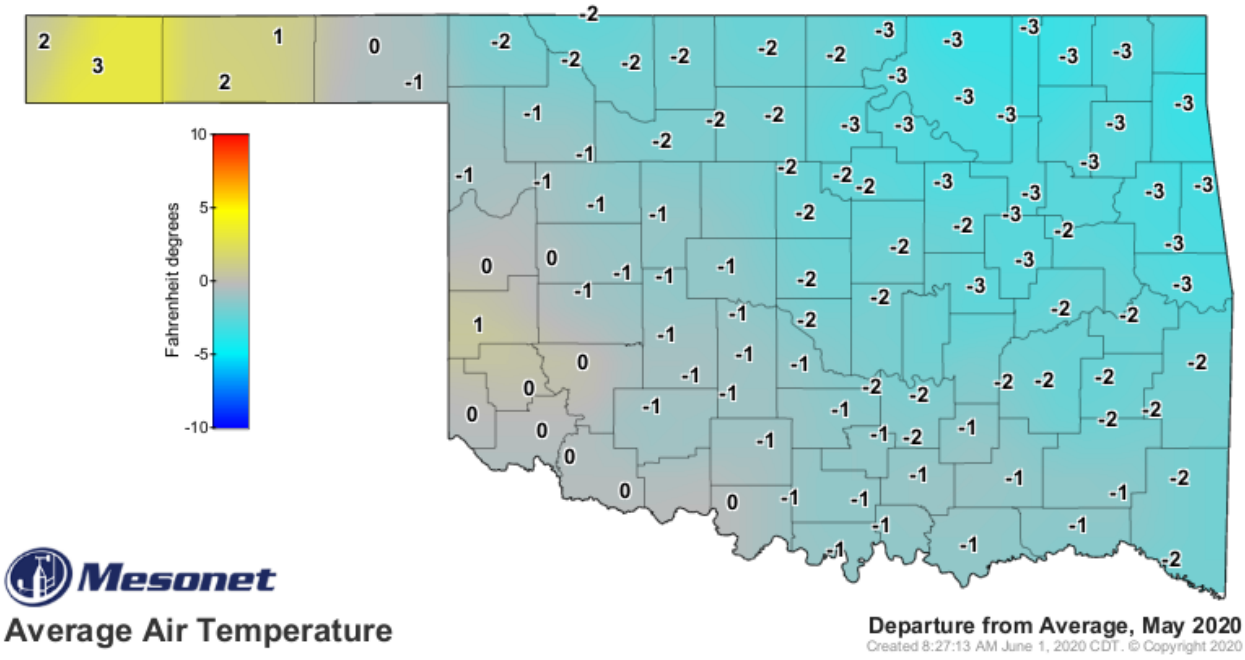
MAY 2020 PERCENT OF NORMAL PRECIPITATION



MAY 2020 AVERAGE TEMPERATURE



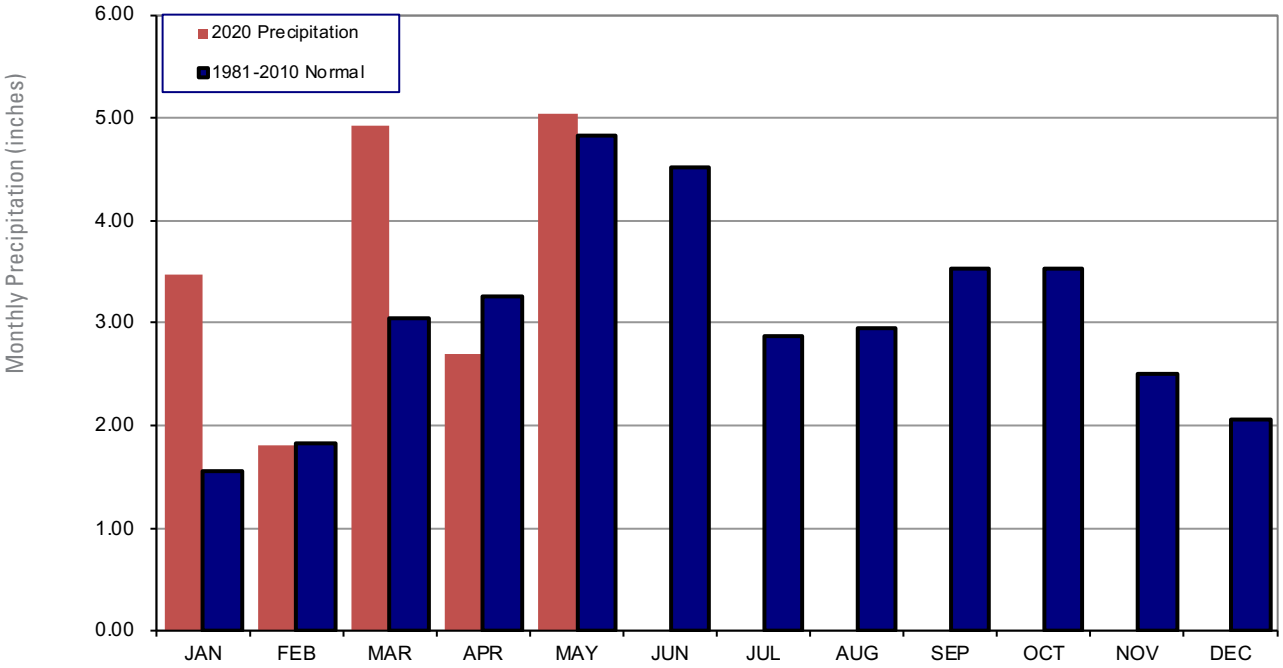
MAY 2020 DEPARTURE FROM NORMAL TEMPERATURE



MESONET MONTHLY SUMMARY FOR MAY 2020

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	66.7	93	1	35	9	75	128	1.04	.65	24
Beaver	66.4	93	13	38	9	85	128	1.15	.55	22
Boise City	64.9	94	30	35	9	100	99	.53	.20	11
Buffalo	66.1	91	23	33	9	89	123	2.12	.71	22
Eva	64.9	96	23	31	9	102	98	.65	.40	25
NORTH CENTRAL										
Alva	66.0	92	1	34	9	86	118	2.16	1.41	22
Blackwell	65.5	89	1	36	9	83	98	2.87	.91	22
Breckinridge	66.2	91	1	37	9	75	114	3.23	1.40	22
Cherokee	66.4	93	1	37	9	79	123	2.48	1.57	22
Fairview	67.0	93	1	35	9	73	135	2.76	1.11	22
Freedom	66.0	90	1	35	9	86	115	2.49	1.30	22
Lahoma	66.1	93	1	36	9	79	115	1.93	.98	22
NORTHEAST										
Bixby	66.4	89	4	39	9	65	109	5.94	1.74	25
Burbank	64.4	88	1	34	9	98	81	3.41	.77	22
Copan	64.0	86	1	36	9	108	78	6.08	1.20	15
Foraker	63.5	86	1	37	9	117	71	5.20	1.28	21
Inola	65.0	86	4	39	9	86	87	10.90	3.21	15
Jay	63.0	85	2	34	9	130	69	10.19	2.85	15
Miami	*****	***	***	***	***	****	****	9.77	1.79	15
Nowata	63.4	84	4	34	9	119	71	7.58	2.32	15
WEST CENTRAL										
Bessie	68.6	96	2	39	9	54	167	1.92	.73	24
Butler	68.7	97	1	34	9	58	173	1.97	.73	24
Camargo	66.6	96	1	31	9	83	134	2.10	.78	22
Cheyenne	67.8	95	1	41	9	65	152	1.98	1.02	24
Elk City	68.7	97	2	43	12	50	165	2.81	.80	24
CENTRAL										
Acme	67.9	97	4	37	9	55	144	6.06	3.11	15
Bristow	65.3	89	4	35	9	83	93	4.46	.93	15
Lake Carl Blac	65.6	92	4	34	9	84	102	2.45	.76	22
Chandler	66.8	93	4	40	9	61	118	3.83	1.15	22
Chickasha	68.6	100	4	38	9	50	160	5.07	1.73	15
El Reno	66.2	95	4	34	9	71	110	2.76	1.13	22
Guthrie	67.1	93	4	40	9	63	128	2.68	.96	22
Kingfisher	68.0	95	4	38	9	62	155	2.05	.59	22
Marena	65.9	91	4	38	9	71	100	3.08	.82	22
Minco	67.5	95	4	43	9	53	131	4.32	1.19	13
Marshall	66.4	91	4	37	9	71	115	3.10	1.05	7
EAST CENTRAL										
Cookson	63.9	84	4	35	9	105	71	8.39	1.89	27
Eufaula	66.8	86	4	41	9	55	110	8.58	2.73	25
Haskell	65.8	87	4	39	9	71	96	10.91	4.86	15
Hectorville	65.7	86	4	40	9	72	93	5.09	1.90	25
Holdenville	66.7	87	4	40	9	56	110	6.81	1.70	15
McAlester	66.7	87	4	40	9	60	112	9.46	3.03	25
Okmulgee	65.6	87	4	37	9	75	93	6.19	2.05	25
SOUTHWEST										
Altus	71.4	106	4	40	9	26	225	5.86	2.25	15
Apache	68.5	100	4	41	9	44	154	3.26	.98	15
Fort Cobb	68.6	100	4	42	9	48	159	3.41	.93	13
Grandfield	71.5	104	4	39	9	21	224	5.77	2.22	22
Hinton	67.1	94	4	38	9	64	129	2.67	.88	22
Hobart	69.9	101	4	39	9	40	192	3.36	1.32	23
SOUTH CENTRAL										
Ada	66.7	89	4	37	9	61	114	6.58	1.69	12
Ardmore	69.1	93	4	44	9	30	159	5.13	1.23	16
Burneyville	69.6	94	4	41	9	30	172	8.00	2.30	16
Byars	67.5	91	4	39	9	52	130	7.77	2.04	15
Centrahoma	67.8	88	4	42	9	47	135	7.83	1.69	12
Durant	69.4	88	4	46	9	30	166	8.45	2.36	12
Fittstown	66.8	88	4	41	9	53	108	5.22	1.54	12
Ketchum Ranch	69.1	95	4	43	9	35	162	8.75	5.38	15
SOUTHEAST										
Antlers	67.7	87	4	40	9	48	134	7.42	2.58	25
Broken Bow	*****	***	***	***	***	****	****	9.98	2.01	16
Clayton	66.9	87	4	40	9	56	115	7.76	2.87	25
Cloudy	67.6	86	4	43	10	46	126	9.51	2.97	25
Hugo	69.1	87	22	44	9	35	161	7.94	1.49	16
Idabel	68.9	88	22	44	9	36	156	9.95	3.00	16
Goodwell	65.8	95	23	37	12	****	****	.99	.65	25
Hooker	66.3	96	23	35	9	89	129	1.43	.58	22
Kenton	64.2	93	29	36	6	****	****	.48	.19	25
Slapout	66.2	91	30	36	9	87	123	1.64	1.12	22
May Ranch	65.2	89	23	39	9	90	96	1.99	1.00	22
Medford	65.7	91	1	37	9	83	105	2.85	1.41	22
Newkirk	64.5	89	1	39	9	97	81	4.26	.90	22
Red Rock	65.6	90	1	37	9	78	98	2.87	1.07	28
Seiling	66.9	95	1	32	9	80	139	2.18	1.14	22
Woodward	66.5	90	1	39	9	80	127	1.91	1.05	22
Pawnee	65.6	89	4	36	9	79	98	2.42	.53	22
Porter	66.1	86	4	40	9	67	102	11.22	4.30	15
Pryor	64.9	87	4	38	9	93	89	9.98	2.23	25
Skiatook	65.0	85	4	41	9	81	80	4.17	1.15	25
Talala	*****	***	***	***	***	****	****	6.32	1.49	25
Tulsa	66.3	87	4	40	9	70	110	3.92	1.45	25
Vinita	63.6	84	4	38	9	116	73	8.33	2.59	15
Wynona	64.6	86	4	37	9	91	80	3.82	.73	25
Erick	69.2	99	4	32	9	55	186	3.33	2.28	24
Putnam	66.8	92	2	40	9	70	126	2.52	.99	7
Watonga	67.3	92	1	39	9	69	142	1.53	.70	7
Weatherford	67.8	94	4	40	9	61	148	2.55	.76	7
Norman	67.2	93	4	38	9	59	128	4.25	1.08	8
Oilton	64.6	90	4	34	9	95	81	2.83	.59	7
OKC East	67.4	95	4	39	9	61	135	3.79	1.15	7
Okemah	65.9	86	4	40	9	67	95	7.30	1.68	8
Perkins	66.5	92	4	38	9	70	117	2.61	.70	22
Seminole	66.7	90	4	40	9	59	112	6.05	1.31	8
Shawnee	66.7	91	4	40	9	59	113	4.70	1.20	8
Spencer	66.6	94	4	37	9	66	117	3.55	1.37	22
Stillwater	66.3	92	1	37	9	72	113	3.44	.97	7
Washington	67.6	94	4	39	9	53	134	5.37	1.17	22
Yukon	67.5	96	4	43	9	58	137	3.01	.94	22
Sallisaw	66.0	87	4	39	9	67	98	8.60	3.68	15
Stigler	66.3	87	4	38	9	61	101	15.06	3.53	15
Stuart	67.2	87	4	43	9	49	116	5.44	1.57	25
Tahlequah	64.2	84	2	36	9	101	77	6.79	1.66	15
Webbers Falls	67.3	89	4	43	9	46	117	11.05	3.75	25
Westville	63.5	84	2	35	9	113	66	8.33	2.15	25
Hollis	70.8	101	4	42	9	29	210	2.55	1.24	24
Mangum	70.2	104	4	36	9	41	202	2.70	.88	24
Medicine Park	69.0	101	4	45	9	35	158	4.85	1.82	15
Tipton	71.2	105	4	42	9	23	216	8.82	2.86	15
Walters	70.3	100	4	43	9	25	188	3.07	1.35	15
Lane	68.1	87	22	40	9	48	144	5.84	1.80	25
Madill	69.0	91	4	46	6	31	155	5.78	1.53	16
Newport	68.8	92	4	46	9	32	151	6.02	1.58	22
Pauls Valley	68.4	93	4	42	9	44	148	9.39	4.10	15
Ringling	69.5	94	4	42	9	30	168	3.82	.89	16
Sulphur	67.8	90	4	41	9	47	134	6.39	1.43	12
Tishomingo	67.9	88	4	44	9	43	133	5.13	1.19	12
Waurika	70.6	100	4	39	9	27	199	4.18	1.01	16
Mt Herman	66.6	84	22	41	9	56	104	9.83	1.67	25
Talihina	66.8	86	4	39	9	58	113	9.80	2.82	25
Valliant	68.5	87	22	42	9	43	150	15.05	3.72	24
Wilburton	66.6	87	4	38	9	61	110	9.23	3.60	25
Wister	65.6	86	4	37	9	75	94	11.69	3.40	22

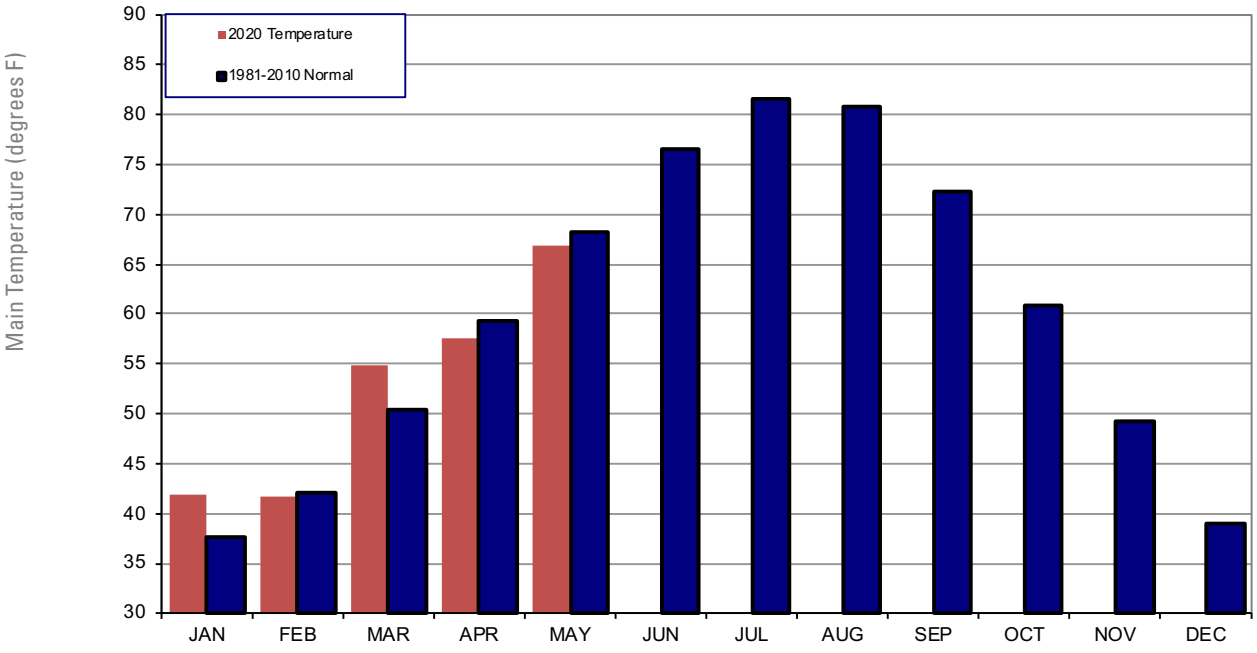
2020 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



May 2020 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Apr-19 (inches)
Panhandle	1.19	-1.51	14th Driest	7.12 (2015)	0.19 (2004)	6.56
North Central	2.61	-1.75	39th Driest	14.72 (2019)	0.63 (1970)	14.72
Northeast	6.85	1.16	31st Wettest	17.98 (1943)	1.45 (1911)	17.1
West Central	2.3	-1.77	28th Driest	12.10 (1982)	0.42 (1966)	11.22
Central	3.94	-1.08	48th Driest	15.50 (2015)	0.92 (1988)	13.48
East Central	8.52	2.69	19th Wettest	17.48 (2015)	1.56 (1921)	9.65
Southwest	4.21	0	58th Wettest	16.40 (2015)	0.44 (1966)	9.18
South Central	6.52	1.2	42nd Wettest	20.69 (2015)	0.58 (1988)	10.14
Southeast	9.95	3.8	13th Wettest	20.03 (2015)	1.21 (1988)	11.02
Statewide	5.04	0.22	50th Wettest	14.42 (2015)	1.23 (1988)	11.63

2020 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



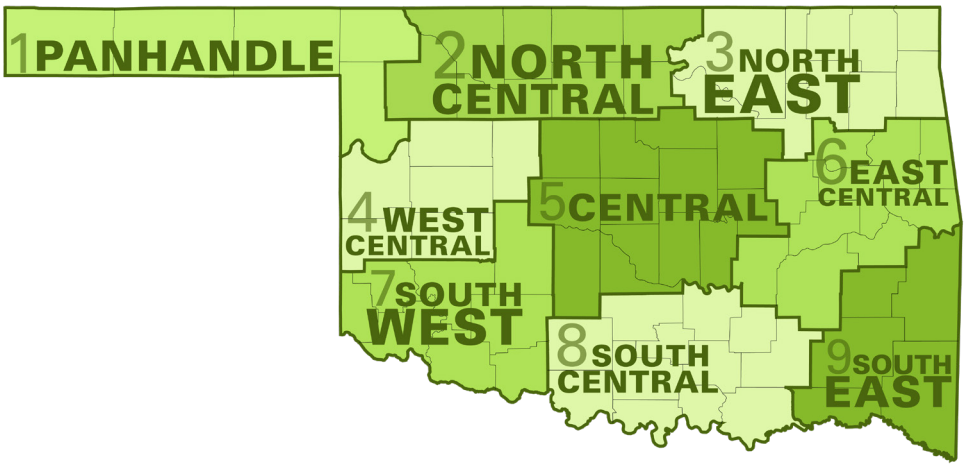
May 2020 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Apr-19 (F)
Panhandle	64.80	-0.30	63rd Coolest	72.6 (2018)	58.0 (1907)	61.2
North Central	66.00	-1.40	45th Coolest	75.5 (2018)	60.6 (1907)	64.40
Northeast	64.70	-2.80	13th Coolest	74.4 (1962)	61.7 (1917)	67.20
West Central	68.00	0.10	58th Warmest	76.2 (2018)	60.9 (1907)	65.30
Central	66.80	-1.80	27th Coolest	75.4 (2018)	62.0 (1907)	67.60
East Central	65.80	-2.70	8th Coolest	75.1 (2018)	63.2 (1917)	69.20
Southwest	69.90	-0.10	57th Warmest	76.9 (2018)	63.5 (1907)	68.20
South Central	68.50	-1.60	27th Coolest	75.5 (2018)	63.5 (1907)	69.60
Southeast	67.40	-1.20	34th Coolest	74.4 (2018)	62.8 (1917)	70.00
Statewide	66.80	-1.40	35th Coolest	75.1 (2018)	61.9 (1907)	66.90

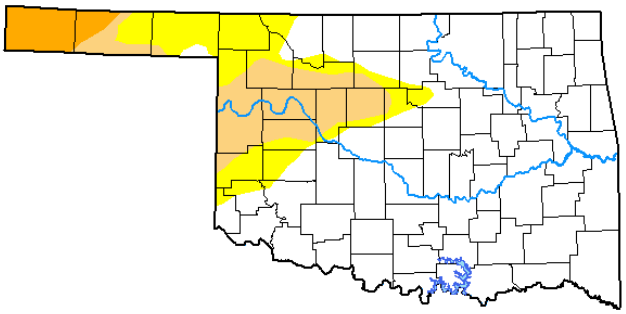
MESONET EXTREMES FOR MAY 2020

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	96	23rd	Hooker	31	9th	Eva	2.12	Buffalo	1.12	22nd	Slapout
North Central	95	1st	Seiling	32	9th	Seiling	4.26	Newkirk	1.57	22nd	Cherokee
Northeast	89	4th	Pawnee	34	9th	Burbank	11.22	Porter	4.3	15th	Porter
West Central	99	4th	Erick	31	9th	Camargo	3.33	Erick	2.28	24th	Erick
Central	100	4th	Chickasha	34	9th	Lake Carl Blackwell	7.3	Okemah	3.11	15th	Acme
East Central	89	4th	Webbers Falls	35	9th	Westville	15.06	Stigler	4.86	15th	Haskell
Southwest	106	4th	Altus	36	9th	Mangum	8.82	Tipton	2.86	15th	Tipton
South Central	100	4th	Waurika	37	9th	Ada	9.39	Pauls Valley	5.38	15th	Ketchum Ranch
Southeast	88	22nd	Idabel	37	9th	Wister	15.05	Valliant	3.72	24th	Valliant
Statewide	106	4th	Altus	31	9th	Eva	15.06	Stigler	5.38	15th	Ketchum Ranch

Oklahoma Climate Divisions



U.S. Drought Monitor
Oklahoma



May 26, 2020
(Released Thursday, May. 28, 2020)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	73.67	26.33	14.44	3.46	0.00	0.00
Last Week *05-19-2020*	72.34	27.66	16.66	3.46	0.00	0.00
3 Months Ago *02-25-2020*	86.53	13.47	4.66	0.84	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 *05-28-2019*	100.00	0.00	0.00	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:
Curtis Riganti
National Drought Mitigation Center

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