Oklahoma Monthly Climate Summary

APRIL 2019

OKLAHOMA CLIMATOLOGICAL SURVEY

Following a few brief glimpses in March, spring finally arrived in earnest during April. The month was wet for most and warm for all, and came complete with all the spring severe weather hazards Oklahomans are accustomed to. The state's first official tornado of 2019 struck on the 17th near Shattuck. The twister, rated an EF1 by the National Weather Service (NWS), damaged homes, sheds, trees and fences. Baseball size hail fell near Selman in Harper County that same day, and near Gould in Harmon County on April 3. Non-thunderstorm related severe winds damaged scaffolding at a bridge construction site in Moore on the 13th, shutting down Interstate 35 in both directions. The area around Hobart in Kiowa County received 5-7 inches of rain overnight on the 23rd and resulted in severe street flooding. Mother Nature spun a severe tale to end the month as well. Tornadoes, flash flooding, and large hail began before noon on April 30, and the severe weather intensified as the day wore on. As many as a dozen twisters were reported. The official tally will be determined with further investigation by NWS personnel. Flooding was widespread across the southeastern two-thirds of the state, with some areas receiving more than 6 inches of rain in just a few hours. Significant flash flooding was reported in Nowata, Ottawa, and Tulsa counties.

April 2019 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	94°F	Buffalo, Hollis	10
Low Temperature	21°F Eva	14	31
High Precipitation	9.91 in.	Hobart	--
Low Precipitation	0.12 in.	Boise City	--

The deluge to end the month boosted the statewide average rainfall total from the Oklahoma Mesonet to 4.75 inches, 1.49 inches above normal to rank as the 22nd wettest April since records began in 1895. All regions of the state finished above normal for the month save for the Panhandle, which fell 0.67 inches below normal for their 44th driest April on record. Southwestern Oklahoma was the wettest area relative to normal with an average of 6 inches, 3.37 inches above normal – their seventh wettest April on record. Hobart led the state with 9.91 inches of rain, a whopping 7.45 inches above its normal April total. Sixty-three of the Mesonet's 120 stations recorded at least 5 inches of rain during the month, while all six stations in the Panhandle had less than an inch. 2019 was off to a wet start with a January-April statewide average of 10.93 inches, 1.24 inches above normal to rank as the 27th wettest such period on record.

The statewide average temperature was 60.4 degrees, 1.1 degrees above normal to rank as the 45th warmest April on record. The state saw its first 90-degree temperatures of 2019 on April 9 at the Beaver, Stillwater and Waurika Mesonet sites. Those were the first 90s in the state since Oct. 6, 2018. April's last freeze – and possibly the state's final spring freeze – occurred on the 19th in the Panhandle. The month's highest reading of 94 degrees was recorded at both Buffalo and Hollis on April 10. The lowest mark of 21 degrees was reported at Eva on April 14. The first four months of 2019 fell 0.6 degrees below normal at 46.8 degrees to rank as the 56th warmest January-April on record. Southeastern Oklahoma was the only region of the state above normal for that period with an average of 50.2 degrees, 0.6 degrees above normal to rank as their 39th warmest.

April 2019 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2019)
Month (April)	60.4°F	1.1°F	45th Warmest
Season-to-Date (Mar-Apr)	54.1°F	-0.7°F	54th Coolest
Year-to-Date (Jan-Apr)	46.8°F	-0.6°F	54th Coolest

Precipitation

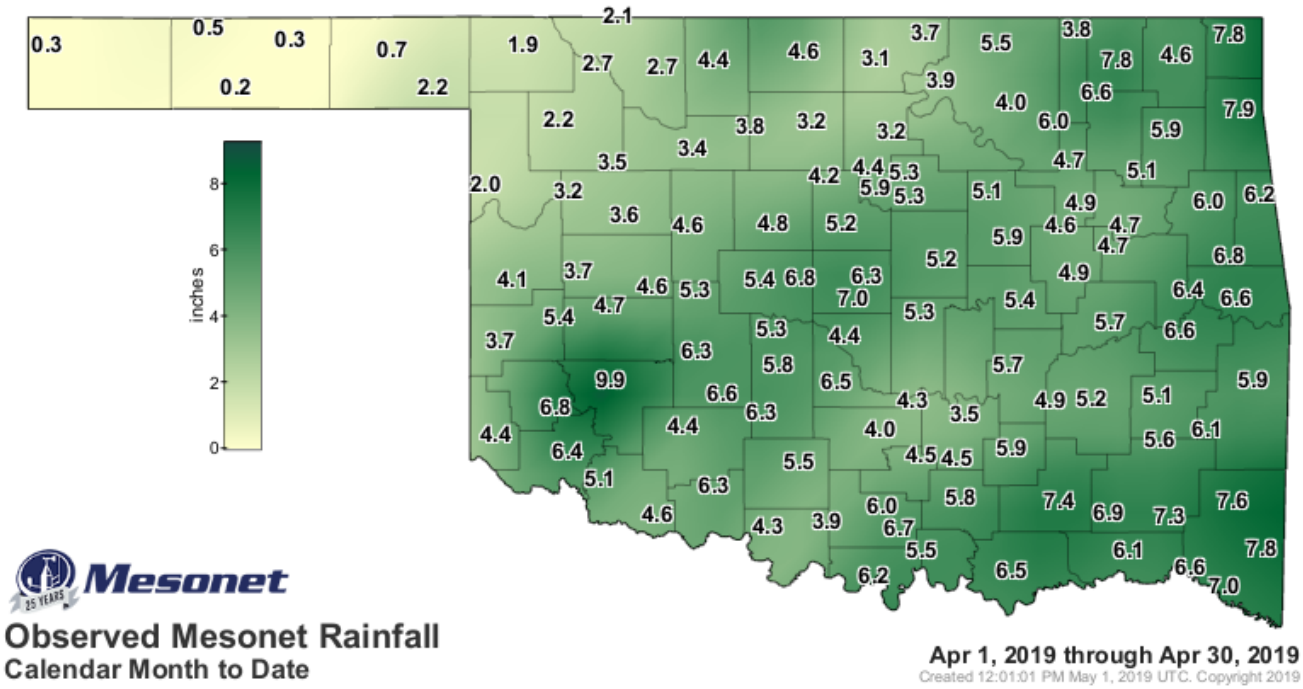
	Total	Depart.	Rank (1895-2019)
Month (April)	4.75 in.	1.49 in.	22nd Wettest
Season-to-Date (Mar-Apr)	7.32 in.	1.02 in.	29th Wettest
Year-to-Date (Jan-Apr)	10.93 in.	1.24 in.	27th Wettest

Depart. = departure from 30-year normal

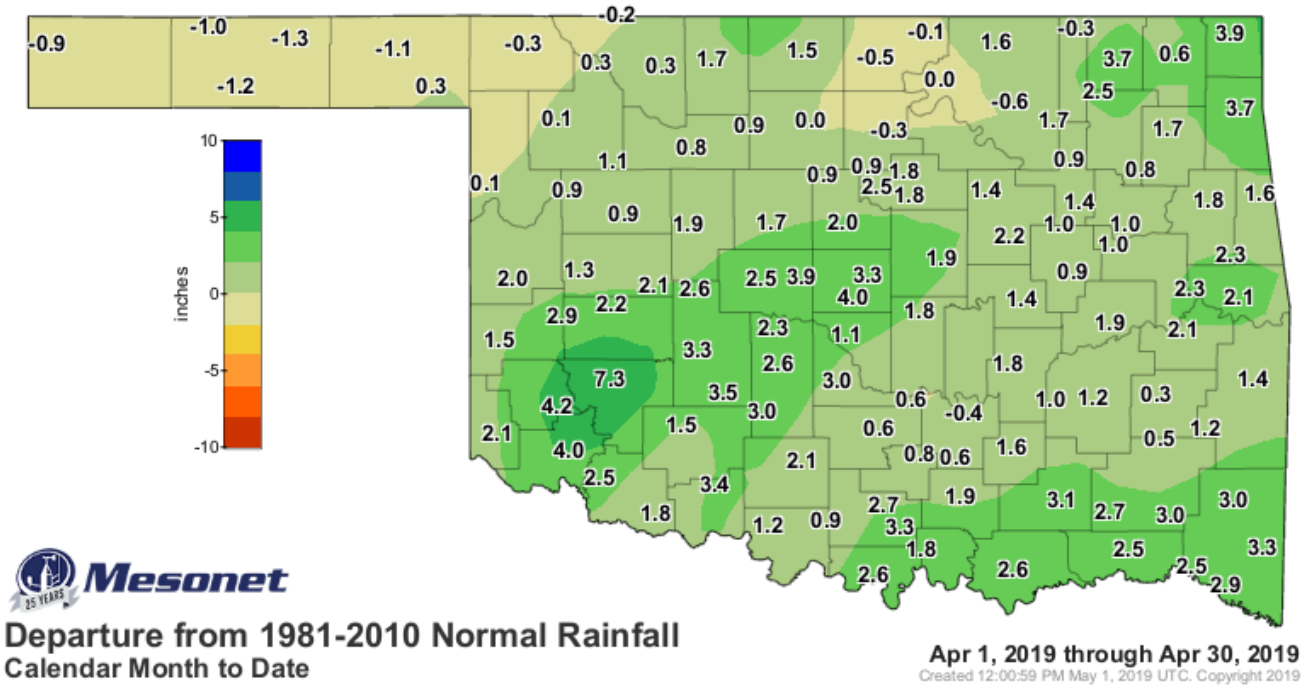
Drought development during April was prevented by the abundant moisture. In areas where moisture was a bit more

scarce, previous rains kept drought at bay. Abnormally dry conditions were present in southwestern Oklahoma on the U.S. Drought Monitor to start the month but were quickly eradicated by heavy rains in that region. The Climate Prediction Center's (CPC) temperature outlook for May indicated increased odds of below normal temperatures across the western half of the state, with the odds a bit greater in the Panhandle. The May precipitation outlook showed increased odds of above normal rainfall across the entire state. Those odds were much greater across far southeastern Oklahoma, however. CPC's drought outlook for May did not foresee new drought development within the Southern Plains or Oklahoma.

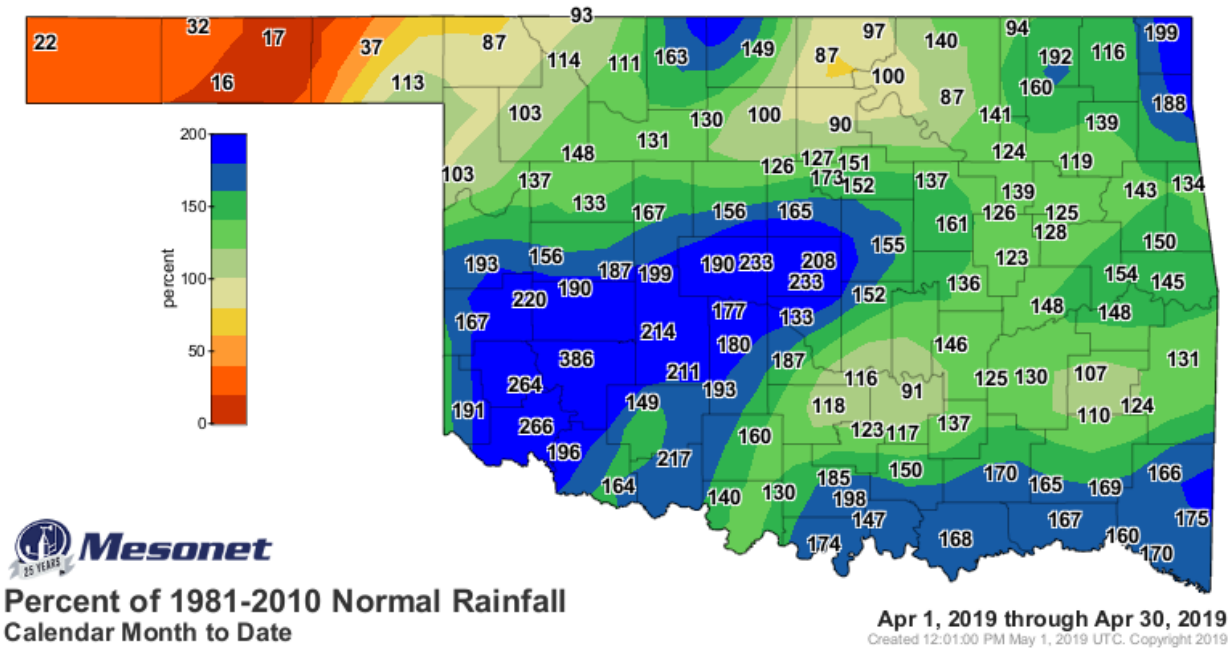
APRIL 2019 OBSERVED PRECIPITATION



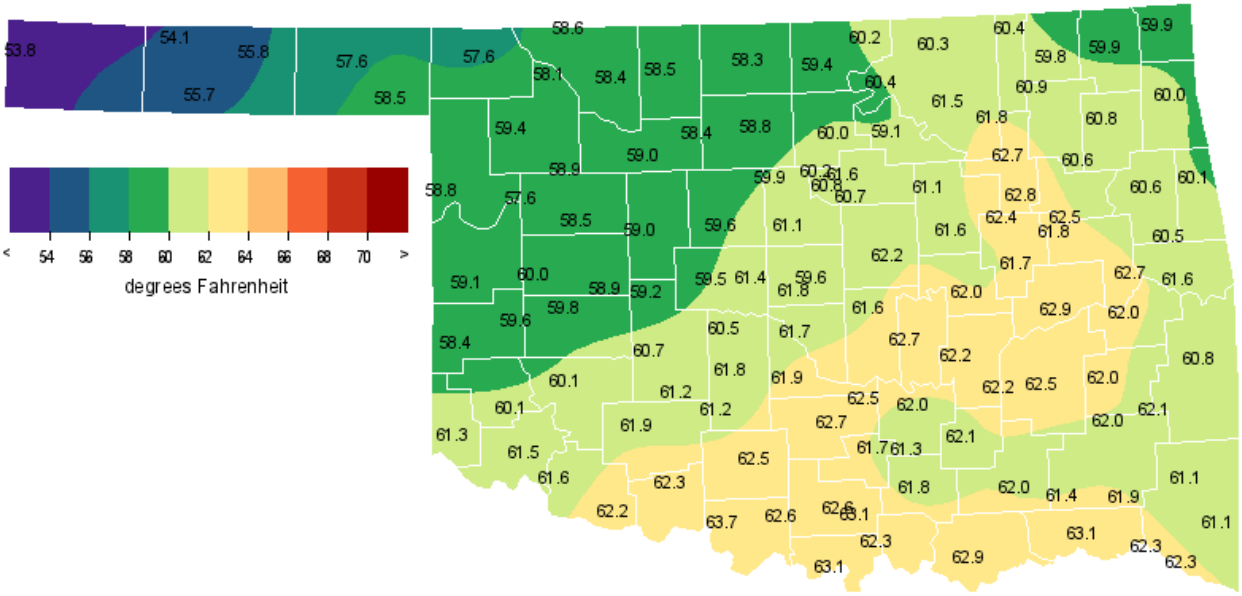
APRIL 2019 DEPARTURE FROM NORMAL PRECIPITATION



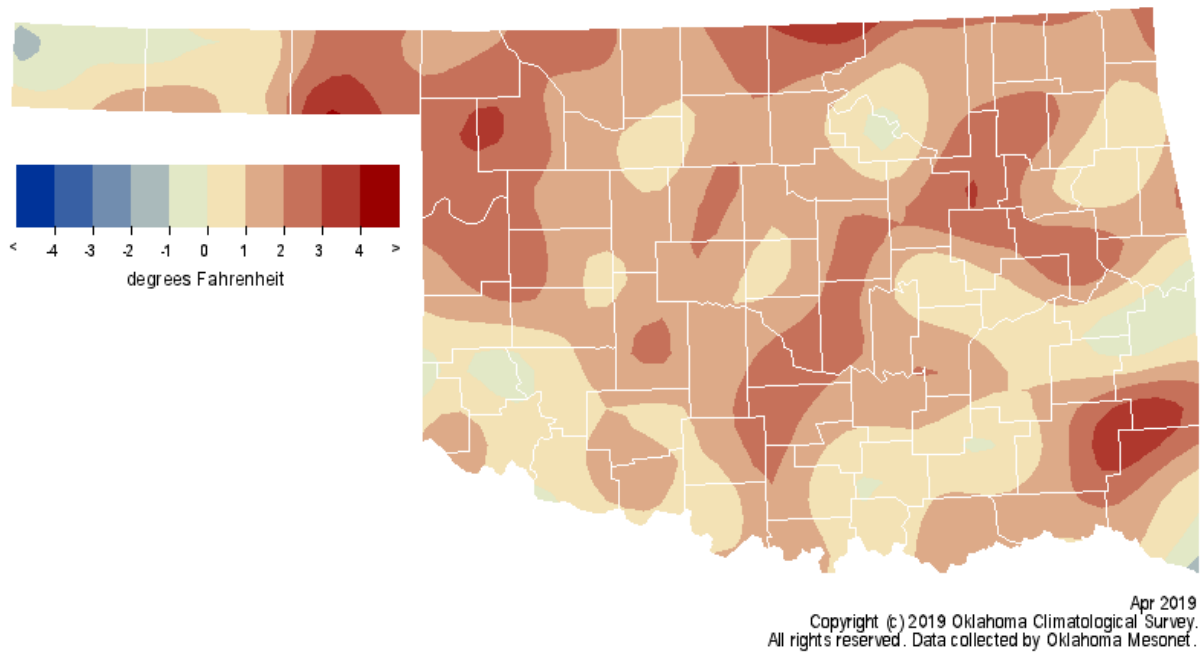
APRIL 2019 PERCENT OF NORMAL PRECIPITATION



APRIL 2019 AVERAGE TEMPERATURE



APRIL 2019 DEPARTURE FROM NORMAL TEMPERATURE

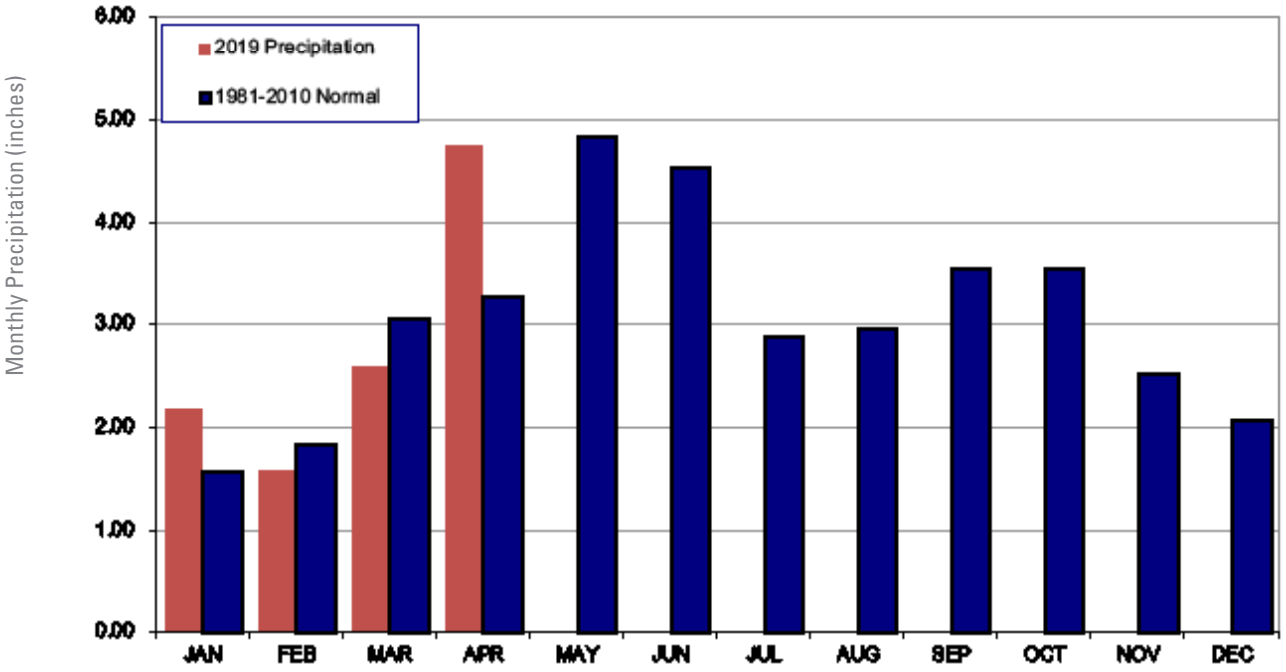


MESONET MONTHLY SUMMARY FOR APRIL 2019

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
PANHANDLE										
Arnett	58.8	93	10	29	12	202	17	2.02	.80	30
Beaver	57.6	93	21	23	14	242	19	.65	.46	30
Boise City	53.3	88	20	22	11	352	0	.12	.10	23
Buffalo	57.6	94	10	28	14	240	18	1.90	.99	17
Eva	54.1	91	20	21	14	330	3	.47	.27	3
NORTH CENTRAL										
Alva	58.3	92	10	30	12	222	22	2.45	1.25	30
Blackwell	59.4	87	9	33	12	192	24	3.06	1.34	30
Breckinridge	58.7	86	9	31	12	205	16	3.18	.98	23
Cherokee	58.5	87	9	31	11	211	17	4.40	1.76	30
Fairview	58.9	87	9	31	12	199	17	3.43	1.90	30
Freedom	58.2	91	10	29	14	224	19	2.65	1.81	17
Lahoma	58.4	85	9	31	12	211	12	3.81	1.83	30
NORTHEAST										
Bixby	62.8	90	10	34	1	129	62	4.85	2.37	30
Burbank	60.4	87	10	30	1	169	32	3.88	1.69	30
Copan	60.4	88	10	30	1	170	32	3.80	1.73	30
Foraker	60.2	88	10	30	12	177	35	5.45	2.89	30
Inola	60.7	87	10	32	1	165	34	5.10	2.81	30
Jay	59.9	86	10	27	1	184	32	7.92	4.81	30
Miami	59.9	87	10	29	1	183	30	7.78	5.43	30
Nowata	59.7	88	10	26	1	195	35	7.77	6.12	30
WEST CENTRAL										
Bessie	59.8	86	10	31	12	175	19	4.54	1.56	3
Butler	60.0	89	10	30	12	172	22	3.72	1.34	23
Camargo	57.6	88	10	29	12	228	5	3.15	.93	30
Cheyenne	59.1	91	10	32	11	194	19	4.12	1.58	17
Elk City	59.7	87	10	32	12	179	19	5.37	1.88	3
CENTRAL										
Acme	61.2	88	10	32	1	151	36	6.30	2.86	13
Bristow	61.6	88	9	31	1	147	45	5.85	2.17	13
Lake Carl Blac	60.1	88	9	30	12	176	30	4.37	1.70	23
Chandler	62.2	89	9	33	12	132	49	5.23	2.45	13
Chickasha	61.7	87	10	34	2	138	40	5.84	2.20	13
El Reno	59.5	87	9	29	12	186	22	5.35	2.47	23
Guthrie	61.1	87	9	32	12	153	34	5.17	2.02	23
Kingfisher	59.6	85	9	31	12	180	16	4.80	1.96	23
Marena	60.8	89	9	32	12	161	34	5.89	2.35	23
Minco	60.4	85	10	32	12	164	26	5.27	1.79	13
Marshall	59.8	87	9	30	12	179	23	4.16	1.58	30
EAST CENTRAL										
Cookson	60.5	86	10	28	1	173	38	6.78	1.84	13
Eufaula	62.8	87	10	32	1	129	64	5.73	2.21	13
Haskell	61.7	87	10	34	12	147	50	4.73	1.63	13
Hectorville	62.3	87	9	35	1	134	53	4.59	1.97	13
Holdenville	62.3	88	9	34	12	133	51	5.72	2.83	13
McAlester	62.5	88	9	33	1	138	63	5.22	2.02	13
Okmulgee	61.7	88	10	31	1	149	49	4.94	1.86	13
SOUTHWEST										
Altus	61.5	90	10	34	2	137	32	6.44	2.67	23
Apache	61.2	86	10	33	12	148	33	6.63	2.54	13
Fort Cobb	60.7	87	9	35	14	160	31	6.27	2.59	23
Grandfield	62.3	88	10	35	12	128	46	4.56	2.64	13
Hinton	59.3	85	9	30	12	189	16	5.26	2.00	23
Hobart	60.1	85	10	32	14	170	24	9.91	3.68	23
SOUTH CENTRAL										
Ada	62.0	88	9	31	12	139	48	3.47	2.55	13
Ardmore	63.1	88	10	36	1	119	63	6.70	2.96	30
Burneyville	63.0	89	10	31	1	121	61	6.20	2.80	13
Byars	62.5	87	9	34	12	127	52	4.29	2.34	13
Centrahoma	62.1	87	9	33	1	140	52	5.86	2.80	30
Durant	63.0	86	10	37	2	117	57	6.48	2.40	13
Fittstown	61.3	87	10	35	1	147	36	4.48	2.51	13
Ketchum Ranch	62.4	88	10	36	1	125	49	5.46	2.30	30
SOUTHEAST										
Antlers	61.4	88	9	29	2	146	36	6.90	2.82	30
Broken Bow	61.1	87	10	28	2	148	30	7.79	2.02	13
Clayton	62.0	88	9	32	1	133	44	5.63	1.82	13
Cloudy	61.9	86	10	31	2	131	40	7.31	2.46	13
Hugo	63.1	87	10	35	2	114	56	6.12	2.12	13
Idabel	62.2	85	9	32	2	126	43	7.03	2.63	13

NAME	MEAN TEMP	HIGH TEMP	HIGH DAY	LOW TEMP	LOW DAY	HDD	CDD	TOT PPT	HIGH 24-HR	HIGH DAY
Goodwell	55.7	89	20	25	11	283	4	.23	.06	1
Hooker	55.9	89	20	25	14	278	4	.26	.11	30
Kenton	53.8	88	20	23	11	336	1	.26	.09	23
Slapout	58.5	93	10	29	11	217	22	2.16	1.41	17
May Ranch	58.6	93	10	30	11	216	25	2.13	1.10	17
Medford	58.3	84	9	30	12	211	11	4.61	2.55	30
Newkirk	60.2	87	10	33	1	177	33	3.70	2.02	30
Red Rock	60.0	88	9	31	12	179	27	3.20	1.20	30
Seiling	59.0	86	10	32	12	196	15	3.54	1.50	30
Woodward	59.4	91	10	30	14	192	24	2.23	.91	17
Pawnee	61.2	88	10	33	1	150	38	3.94	1.50	30
Porter	62.5	87	10	35	1	132	56	4.70	1.76	13
Pryor	60.9	88	10	29	1	163	39	5.88	3.94	30
Skiatook	61.8	88	9	35	12	144	47	6.00	3.94	30
Talala	60.9	89	10	32	1	161	39	6.56	5.01	30
Tulsa	62.6	87	10	35	1	129	58	4.71	2.35	30
Vinita	59.9	88	10	27	1	182	29	4.57	3.23	30
Wynona	61.5	88	10	31	1	149	44	3.96	1.65	30
Erick	58.4	90	10	30	12	208	10	3.67	1.27	23
Putnam	58.5	84	10	31	12	207	11	3.56	1.57	23
Watonga	58.9	84	9	31	12	196	14	4.62	1.37	23
Weatherford	58.8	83	10	31	12	197	11	4.58	1.33	23
Norman	61.7	87	10	35	12	139	40	4.39	2.18	13
Oilton	61.1	89	10	28	1	157	41	4.93	1.76	13
OKC East	61.8	87	10	34	12	137	41	7.03	2.14	30
Okemah	61.9	87	9	33	12	139	48	5.35	2.03	13
Perkins	60.8	86	9	32	12	157	30	5.29	1.61	30
Seminole	62.7	89	9	35	1	123	53	4.80	2.11	13
Shawnee	61.6	86	10	33	12	141	39	5.25	2.42	13
Spencer	61.6	87	9	31	12	****	****	5.61	2.01	13
Stillwater	61.6	90	9	33	1	148	45	5.29	1.89	30
Washington	61.9	87	10	32	1	139	45	6.52	2.52	13
Yukon	61.4	88	10	32	12	151	41	6.77	2.10	23
Sallisaw	61.6	89	10	32	2	146	44	6.63	1.93	13
Stigler	62.0	87	10	33	1	139	48	6.60	2.08	13
Stuart	62.2	86	10	35	12	136	53	4.94	2.25	13
Tahlequah	60.7	86	10	29	1	170	40	5.97	2.58	30
Webbers Falls	62.7	91	10	34	1	129	59	6.43	2.02	13
Westville	60.2	85	10	30	12	178	32	5.90	2.24	30
Hollis	61.3	94	10	34	14	147	35	4.41	1.31	13
Mangum	60.2	90	10	33	1	168	23	6.80	2.92	22
Medicine Park	62.0	87	10	38	1	134	43	4.39	2.07	13
Tipton	61.6	90	10	34	2	137	35	5.12	2.79	13
Walters	62.4	88	10	35	12	123	45	6.25	3.29	30
Lane	62.0	87	10	33	2	133	43	7.43	3.77	30
Madill	62.3	87	10	37	1	130	49	5.49	2.17	13
Newport	62.6	87	10	36	1	121	49	5.95	2.80	13
Pauls Valley	62.7	88	9	35	12	125	56	4.01	2.46	13
Ringling	62.5	88	10	36	1	122	47	3.86	2.33	13
Sulphur	61.7	87	10	34	1	142	42	4.52	2.24	13
Tishomingo	61.8	88	10	32	2	140	43	5.80	3.33	30
Waurika	63.7	92	10	34	1	109	70	4.27	2.38	13
Mt Herman	61.1	85	9	29	2	153	36	7.61	2.21	13
Talihina	62.2	87	9	30	2	141	56	6.10	1.92	13
Valliant	62.3	86	9	32	2	130	49	6.61	2.34	13
Wilburton	62.1	88	9	32	1	140	52	5.14	2.21	13
Wister	60.8	88	9	28	2	160	33	5.90	2.13	13

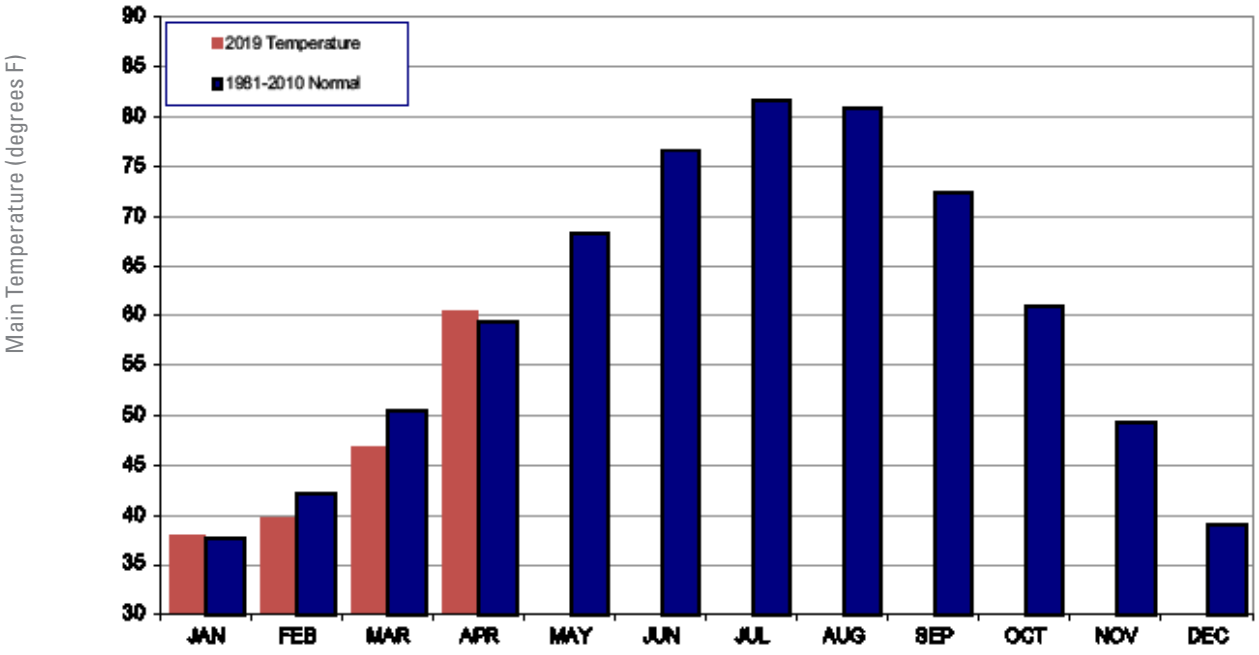
2019 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



April 2019 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Apr-18 (inches)
Panhandle	0.99	-0.67	44th Driest	5.31 (1900)	0.02 (1935)	1.22
North Central	3.28	0.46	42nd Wettest	7.14 (1999)	0.47 (2014)	1.85
Northeast	5.53	1.46	23rd Wettest	10.82 (2017)	0.22 (1989)	1.96
West Central	4.16	1.75	15th Wettest	8.43 (1997)	0.16 (1996)	1.66
Central	5.47	2.12	18th Wettest	9.37 (1942)	0.28 (1989)	2.35
East Central	5.73	1.50	34th Wettest	11.32 (1957)	0.74 (1989)	3.26
Southwest	6.00	3.37	7th Wettest	7.53 (1997)	0.14 (1989)	1.15
South Central	5.27	1.65	27th Wettest	11.33 (1942)	0.40 (1903)	2.48
Southeast	6.56	2.08	29th Wettest	12.81 (1957)	0.80 (1987)	3.82
Statewide	4.75	1.49	22nd Wettest	8.32 (1942)	0.55 (1989)	2.18

2019 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



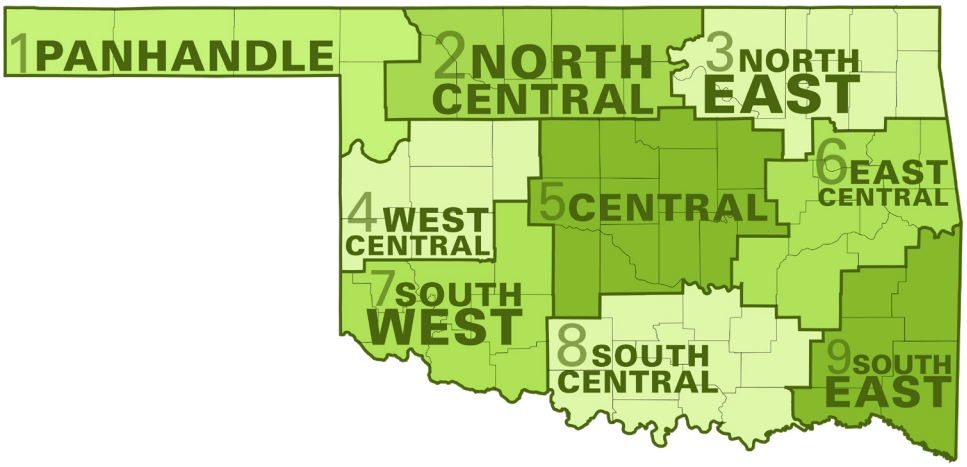
April 2019 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Apr-18 (F)
Panhandle	56.5	1.2	47th Warmest	62.1 (1946)	48.8 (1983)	51.7
North Central	58.9	1.2	43rd Warmest	64.4 (1981)	50.4 (1983)	52.3
Northeast	60.8	1.8	40th Warmest	65.7 (1954)	52.5 (1983)	52.6
West Central	59.0	0.6	54th Warmest	65.1 (2006)	52.2 (1983)	54.3
Central	61.1	1.2	44th Warmest	66.9 (2006)	53.6 (1983)	54.3
East Central	61.8	1.4	46th Warmest	67.8 (1896)	54.5 (1907)	54.5
Southwest	61.1	0.5	56th Warmest	67.6 (2006)	54.9 (1997)	56.8
South Central	62.4	0.7	52nd Warmest	68.8 (1925)	56.1 (2018)	56.1
Southeast	61.8	1.2	48th Warmest	66.7 (2006)	55.3 (1983)	55.7
Statewide	60.4	1.1	45th Warmest	65.8 (2006)	53.2 (1983)	54.2

MESONET EXTREMES FOR APRIL 2019

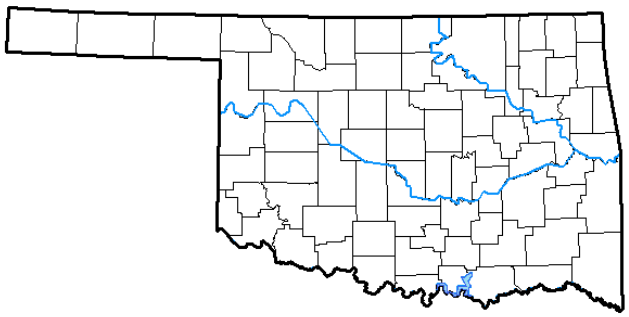
Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	94	10th	Buffalo	21	14th	Eva	2.16	Slapout	1.41	17th	Slapout
North Central	93	10th	May Ranch	29	14th	Freedom	4.61	Medford	2.55	30th	Medford
Northeast	90	10th	Bixby	26	1st	Nowata	7.92	Jay	6.12	30th	Nowata
West Central	91	10th	Cheyenne	29	12th	Camargo	5.37	Elk City	1.88	3rd	Elk City
Central	90	9th	Stillwater	28	1st	Oilton	7.03	Oklahoma City East	2.86	13th	Acme
East Central	91	10th	Webbers Falls	28	1st	Cookson	6.78	Cookson	2.83	13th	Holdenville
Southwest	94	10th	Hollis	30	12th	Hinton	9.91	Hobart	3.68	23rd	Hobart
South Central	92	10th	Waurika	31	1st	Burneyville	7.43	Lane	3.77	30th	Lane
Southeast	88	9th	Antlers	28	2nd	Wister	7.79	Broken Bow	2.82	30th	Antlers
Statewide	94	10th	Hollis	21	14th	Eva	9.91	Hobart	6.12	30th	Nowata

Oklahoma Climate Divisions



U.S. Drought Monitor

Oklahoma



April 23, 2019

(Released Thursday, Apr. 25, 2019)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	100.00	0.00	0.00	0.00	0.00	0.00
Last Week *04-16-2019*	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago *01-22-2019*	100.00	0.00	0.00	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 *04-24-2018*	42.23	57.77	47.44	42.07	34.84	19.50

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:

David Miskus

NOAA/NWS/NCEP/CPC

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

Oklahoma Climatological Survey is the State Climate Office for Oklahoma

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