

The Gulf of Mexico was in a giving mood throughout June, feeding a deep plume of tropical moisture to a succession of storm systems moving across Oklahoma. Not all areas were quite as fortunate as others, but a substantial portion of the state received significant, drought-reducing rainfall. The eastern Panhandle even got an unexpected boost from the remnants of hurricane Bud as it made its journey through the Gulf of California into the Northern Plains. The most prolific June rains fell from the eastern Panhandle through central and east central Oklahoma. Readings of 6-8 inches were common along that corridor with the Oklahoma City East Mesonet site leading the way at 8.74 inches. Beaver received 7.18 inches – nearly a third of their normal annual total – and 8.27 inches fell at Wilburton. Eighteen of the Mesonet’s 120 sites recorded at least 6 inches of rain and 40 reported at least 5 inches.

on record. That lofty mark, combined with the warmest May in Oklahoma history, propelled the May-June period to the warmest on record as well at 77.5 degrees. The previous record of 77.4 degrees was set in 1911. The month’s highest temperature was 106 degrees, recorded at several Mesonet sites on three different dates. The combination of abundant rainfall, Gulf moisture and heat resulted in oppressive conditions at times. The Mesonet’s 120 stations recorded heat index values of at least 110 degrees 84 times during June, with a high of 114 degrees at Nowata on the 28th. Fifty-two of those readings occurred June 27-28. The Eva Mesonet site recorded the lowest temperature, 45 degrees, on June 3. The year thus far continued on the warm side with a statewide average of 56.8 degrees, a degree above normal to rank as the 27th warmest January-June on record.

June 2018 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	106°F	Several	Several
Low Temperature	45°F	Eva	3
High Precipitation	8.74 in.	Oklahoma City East	--
Low Precipitation	0.30 in.	Ringling	--

Significant deficits occurred along the periphery of the state. Areas along the Red River, the far northeast, and the western Panhandle fell 2-4 inches below normal. Ringling received a paltry 0.3 inch, while another 15 sites reported less than 2 inches. The statewide average was 4.07 inches according to preliminary data from the Mesonet, 0.45 inch below normal to rank as the 55th wettest June on record. Year-to-date rainfall remained quite variable, from more than 12 inches above normal in east central Oklahoma to 8-10 inches below normal in the southwest and northeast. The statewide average total of 16.96 inches for the first 6 months of 2018 was 2.07 inches below normal, the 56th driest January-June on record.

Despite the rainy weather, June was still on the hot side. According to preliminary data from the Oklahoma Mesonet, the statewide average temperature finished at 80.1 degrees, 3.6 degrees above normal to rank as the 15th warmest June

June 2018 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2018)
Month (Jun)	80.1°F	3.6°F	15th Warmest
Year-to-Date (Jan-Jun)	56.8°F	1.0°F	27th Warmest

Precipitation

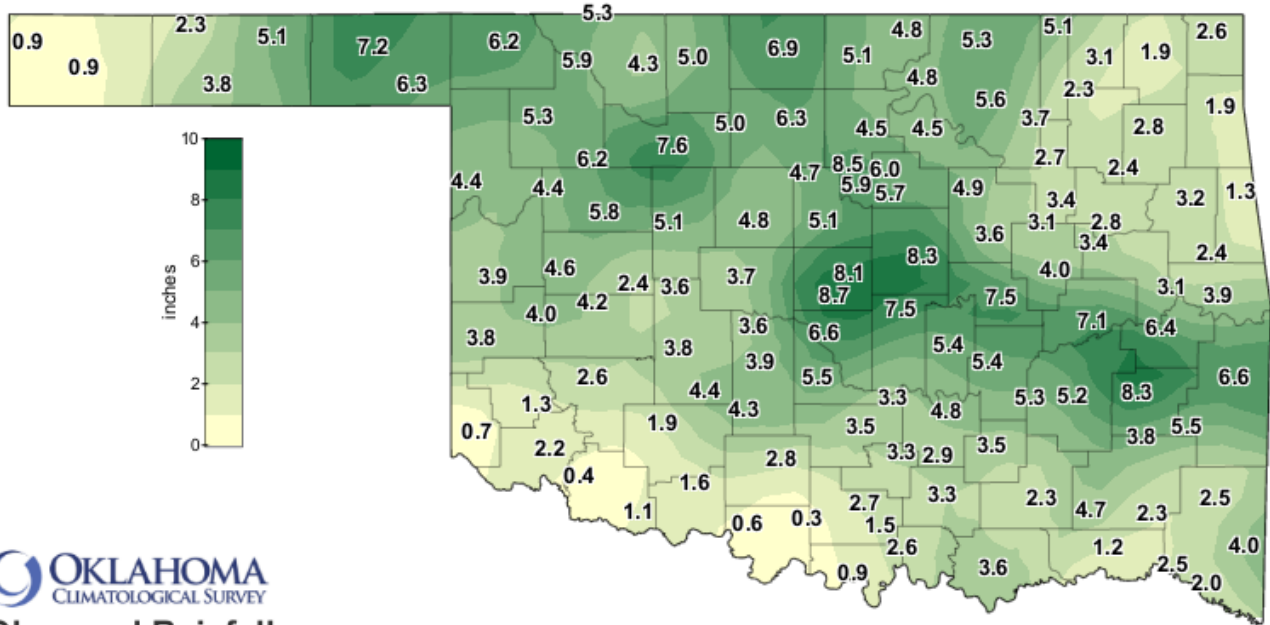
	Total	Depart.	Rank (1895-2018)
Month (Jun)	4.07 in.	-0.45 in.	55th Wettest
Year-to-Date (Jan-Jun)	16.96 in.	-2.07 in.	56th Driest

Depart. = departure from 30-year normal

Mother Nature made significant progress combating the drought during June, at least in the case of its severity. The percentage of the state in some level of drought actually increased by about 9 percent from the end of May, mostly across eastern Oklahoma. The portion in at least “severe” drought decreased, however, from 41 percent to 28 percent. “Exceptional” drought was virtually eliminated during June, down from 10 percent of the state to start the month. The Drought Monitor’s intensity scale slides from moderate-severe-extreme-exceptional, with exceptional being the worst classification.

The temperature and precipitation outlooks from the Climate Prediction Center (CPC) indicate the possibility of more hot, dry weather ahead. The maps for July show increased odds for above normal temperatures and below normal precipitation across the state. Unfortunately, that does not bode well for Oklahoma's ongoing drought. CPC's U.S. Monthly Drought Outlook for July sees drought persisting or intensifying where it already exists, with drought development "likely" across the rest of the state.

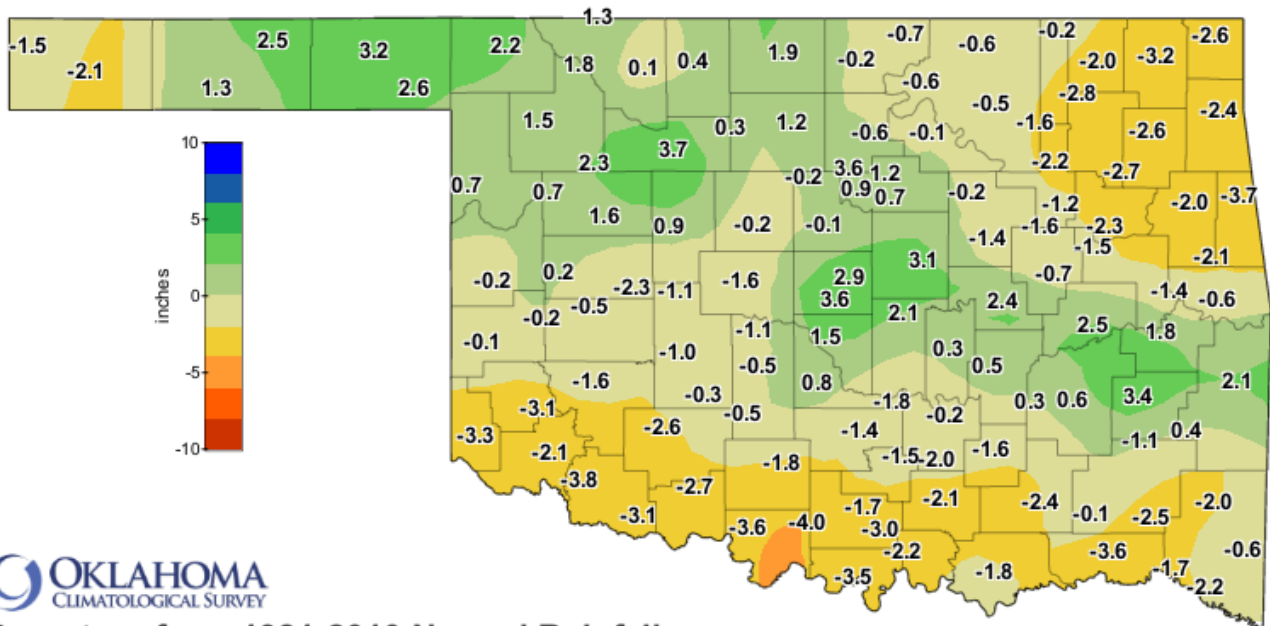
JUNE 2018 OBSERVED PRECIPITATION



OKLAHOMA
CLIMATOLOGICAL SURVEY
Observed Rainfall
Current Month

Jun 01, 2018 through Jun 30, 2018
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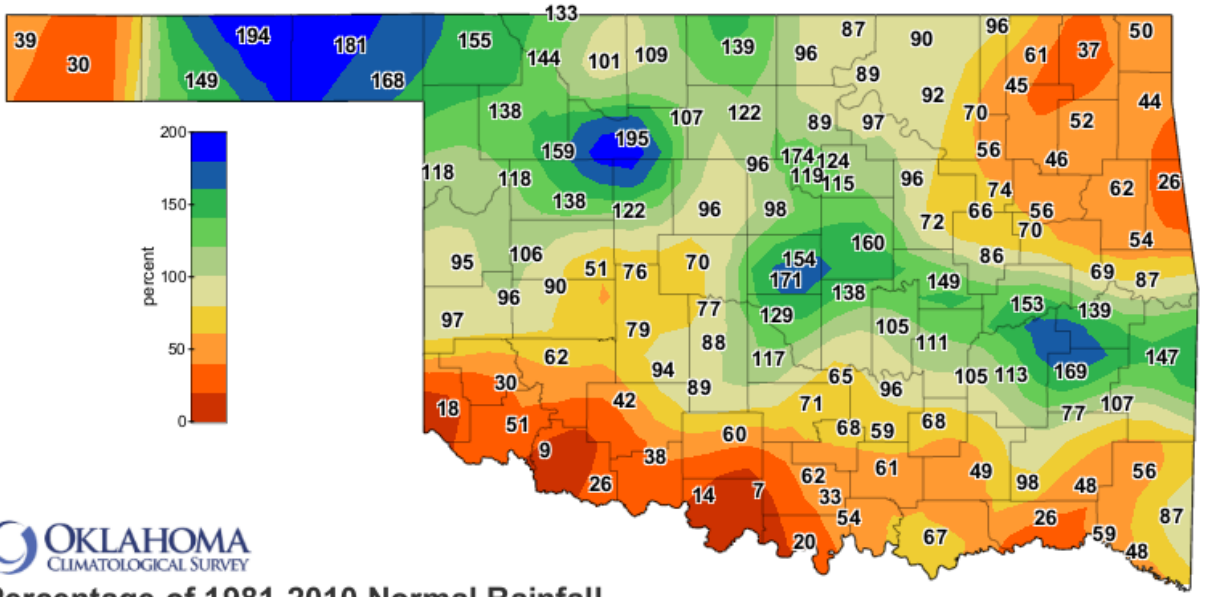
JUNE 2018 DEPARTURE FROM NORMAL PRECIPITATION



OKLAHOMA
CLIMATOLOGICAL SURVEY
Departure from 1981-2010 Normal Rainfall
Current Month

Jun 01, 2018 through Jun 30, 2018
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JUNE 2018 PERCENT OF NORMAL PRECIPITATION

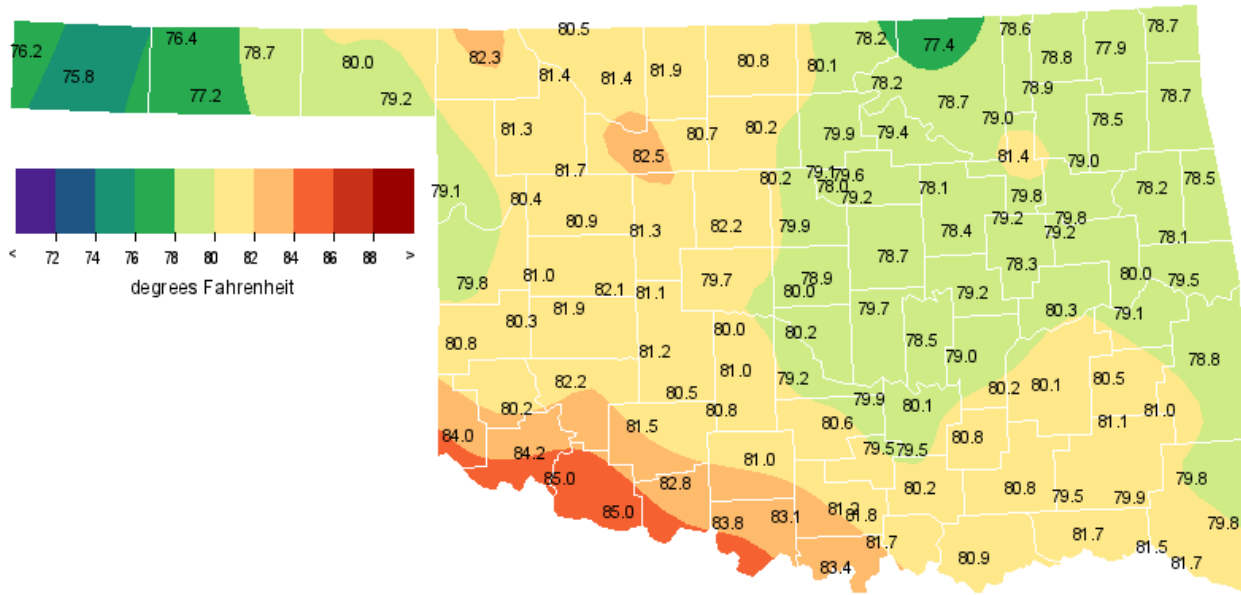


OKLAHOMA
CLIMATOLOGICAL SURVEY

Percentage of 1981-2010 Normal Rainfall
Current Month

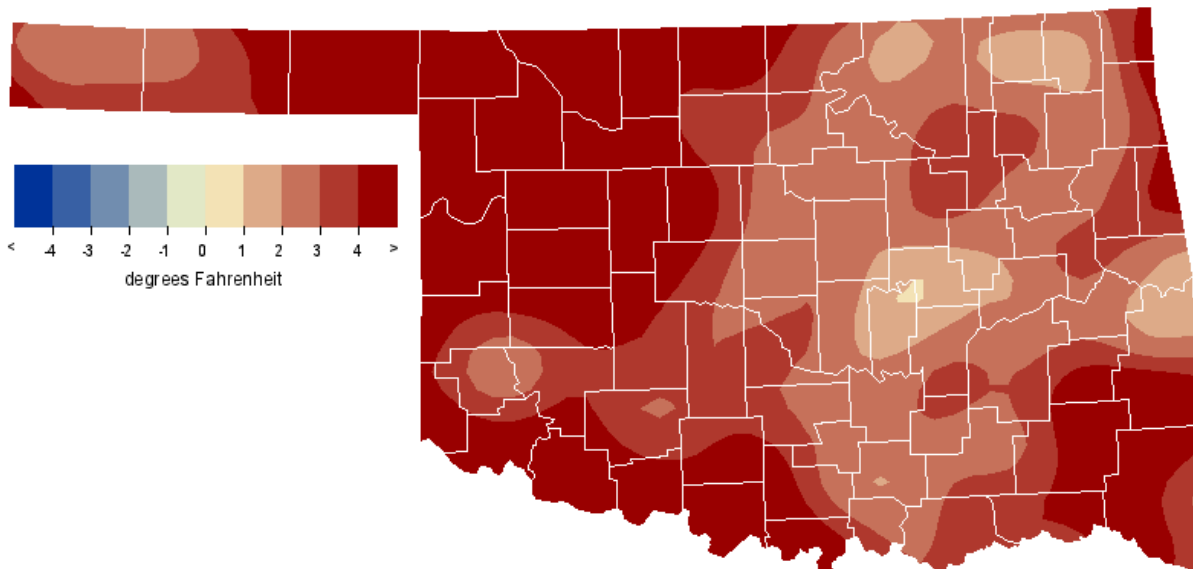
Jun 01, 2018 through Jun 30, 2018
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JUNE 2018 AVERAGE TEMPERATURE



Jun 2018
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JUNE 2018 DEPARTURE FROM NORMAL TEMPERATURE

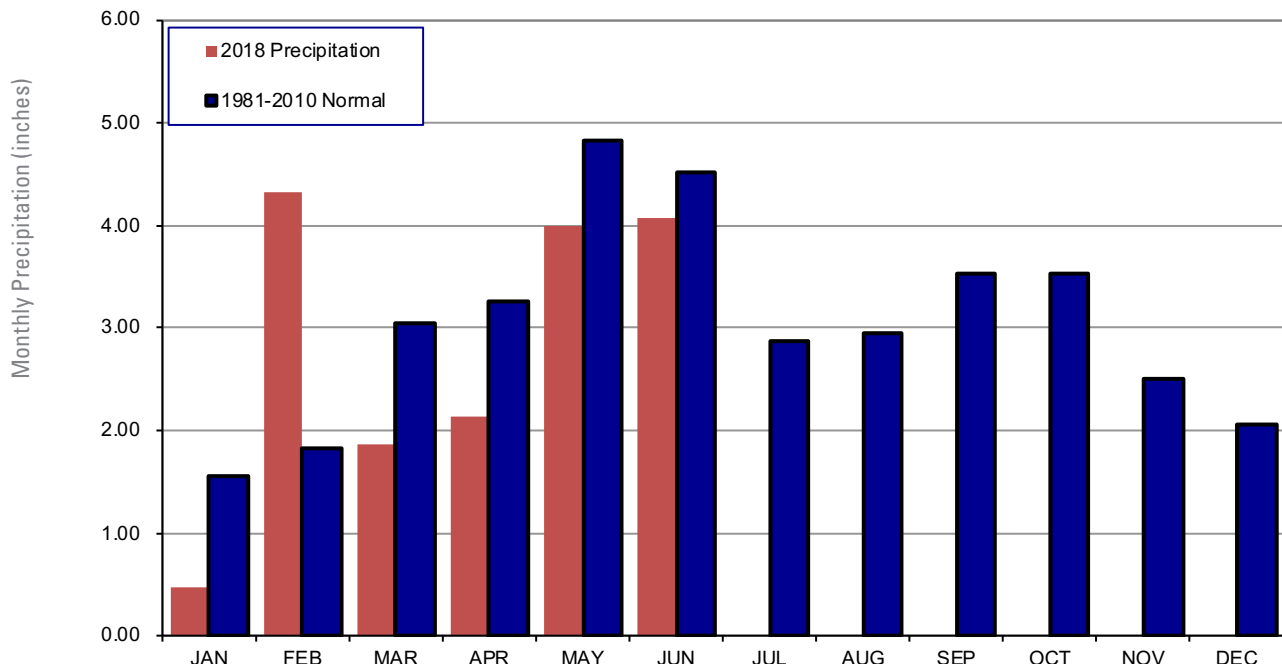


Jun 2018
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MESONET MONTHLY SUMMARY FOR JUNE 2018

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	79.1	98	12	55	3	0	422	4.36	1.73	24	Goodwell	77.2	101	1	48	3	0	365	3.84	1.27	16	
Beaver	80.0	106	1	48	3	0	449	7.18	1.55	16	Hooker	78.6	103	10	49	3	0	410	5.07	1.51	19	
Boise City	75.9	102	27	48	3	1	326	.89	.28	14	Kenton	76.3	104	27	47	3	0	338	.94	.37	14	
Buffalo	82.3	103	1	53	3	0	521	6.23	2.55	24	Slapout	79.2	102	1	53	3	0	426	6.33	2.14	24	
Eva	76.4	102	1	45	3	1	343	2.32	.81	20												
NORTH CENTRAL																						
Alva	81.4	101	11	55	3	0	493	4.32	2.66	24	May Ranch	80.5	99	27	56	3	0	466	5.28	2.90	24	
Blackwell	80.1	99	28	57	3	0	452	5.14	2.13	24	Medford	80.7	101	28	56	3	0	472	6.85	2.20	7	
Breckinridge	80.2	99	27	56	3	0	457	6.27	2.19	7	Newkirk	78.3	96	27	56	3	0	398	4.75	2.08	24	
Cherokee	81.9	102	28	56	3	0	507	5.04	1.90	7	Red Rock	80.0	98	28	56	4	0	449	4.52	1.60	24	
Fairview	82.5	102	11	58	3	0	526	7.58	5.37	24	Seiling	81.6	101	11	53	3	0	497	6.19	3.30	24	
Freedom	81.4	101	11	53	3	0	492	5.86	3.27	24	Woodward	81.3	100	11	54	3	0	489	5.29	3.19	24	
Lahoma	80.7	100	1	57	3	0	470	5.02	2.08	24												
NORTHEAST																						
Bixby	79.8	95	28	58	4	0	445	3.43	1.17	12	Pawnee	79.4	96	27	56	4	0	431	4.51	1.21	25	
Burbank	78.2	95	27	55	4	0	397	4.82	1.46	24	Porter	79.8	95	16	58	4	0	445	2.83	1.16	24	
Copan	78.6	95	28	58	4	0	408	5.14	2.77	12	Pryor	78.4	96	28	55	4	0	403	2.76	1.46	12	
Foraker	77.4	94	28	56	4	0	372	5.30	2.30	24	Skiatook	79.0	95	28	58	3	0	420	3.72	1.02	25	
Inola	79.0	96	28	56	4	0	420	2.35	1.52	20	Talala	78.9	97	28	58	4	0	417	2.30	.88	25	
Jay	78.7	98	28	54	4	0	410	1.91	.82	12	Tulsa	81.4	97	28	59	4	0	492	2.74	.71	22	
Miami	78.7	95	28	56	4	0	411	2.62	1.06	12	Vinita	77.9	95	28	55	4	0	386	1.90	.65	12	
Nowata	78.8	97	28	54	4	0	414	3.14	1.03	26	Wynona	78.7	94	28	57	4	0	412	5.57	1.96	12	
WEST CENTRAL																						
Bessie	81.9	100	27	55	3	0	507	4.24	1.52	25	Erick	80.8	100	1	54	3	0	475	3.83	2.09	22	
Butler	80.9	100	11	55	3	0	478	4.60	1.78	13	Putnam	80.9	100	1	56	3	0	476	5.84	2.43	24	
Camargo	80.4	101	11	53	3	0	462	4.39	2.21	24	Watonga	81.4	101	1	57	3	0	492	5.14	2.14	24	
Cheyenne	79.7	99	1	56	3	0	441	3.87	1.64	25	Weatherford	82.0	101	28	58	3	0	511	2.37	.87	24	
Elk City	80.3	99	27	58	3	0	460	4.04	1.54	25												
CENTRAL																						
Acme	80.8	98	28	54	4	0	475	4.25	1.24	24	Marshall	80.2	99	28	57	3	0	456	4.66	1.95	7	
Bowlegs	78.4	94	27	57	4	0	403	5.43	2.07	24	Norman	80.2	96	28	58	4	0	456	6.55	1.65	7	
Bristow	78.3	94	28	53	4	0	400	3.64	1.32	24	Oilton	78.2	94	28	54	4	0	396	4.88	1.27	12	
Lake Carl Blac	79.1	96	27	54	4	0	423	8.46	3.35	7	OKC East	80.0	96	27	59	4	0	449	8.74	3.04	7	
Chandler	78.6	94	28	59	4	0	409	8.32	2.92	23	Okemah	79.3	94	27	58	4	0	428	7.47	4.74	24	
Chickasha	81.0	99	28	54	3	0	479	3.89	.82	7	Perkins	79.3	96	27	58	4	0	428	5.71	1.84	12	
El Reno	79.7	97	27	52	3	0	442	3.66	1.32	24	Shawnee	79.7	96	28	58	4	0	441	7.48	2.29	24	
Guthrie	79.9	96	27	59	4	0	448	5.08	1.34	25	Spencer	78.9	95	27	57	4	0	417	8.10	2.65	7	
Kingfisher	82.2	101	14	57	4	0	516	4.75	1.79	24	Stillwater	79.6	96	28	57	4	0	439	5.97	2.97	24	
Marena	78.1	95	27	56	4	0	393	5.87	2.91	7	Washington	79.2	95	27	57	4	0	426	5.47	1.10	25	
Minco	80.0	97	28	58	3	0	451	3.59	.90	25	Yukon	*****	***	***	***	***	****	****	****	*****	****	***
EAST CENTRAL																						
Cookson	78.1	94	14	53	4	0	392	2.44	.90	24	Sallisaw	79.5	95	14	58	4	0	435	3.88	1.48	24	
Eufaula	80.3	95	14	57	4	0	460	7.11	2.86	24	Stigler	79.1	96	14	56	4	0	424	6.39	2.43	24	
Haskell	79.2	95	28	57	4	0	425	3.40	1.27	20	Stuart	80.1	94	2	57	4	0	454	5.26	2.32	24	
Hectorville	79.3	94	28	59	4	0	428	3.05	1.12	12	Tahlequah	78.2	93	28	54	4	0	397	3.21	1.62	20	
Holdenville	79.0	93	27	59	4	0	421	5.44	2.73	24	Webbers Falls	80.0	95	1	59	4	0	450	3.12	1.55	24	
McAlester	80.2	96	14	54	4	0	455	5.21	3.10	24	Westville	78.5	97	28	56	4	0	406	1.29	.59	12	
Okmulgee	78.3	94	28	54	4	0	400	4.04	2.19	24												
SOUTHWEST																						
Altus	84.3	105	28	64	3	0	578	2.24	1.62	13	Hollis	83.9	106	28	62	3	0	567	.74	.46	13	
Apache	80.4	98	28	59	4	0	463	4.38	1.01	7	Mangum	82.9	104	28	58	4	****	****	1.34	.79	22	
Fort Cobb	81.3	99	27	59	4	0	488	3.75	1.49	25	Medicine Park	81.5	100	28	62	25	0	495	1.90	.77	22	
Grandfield	85.0	105	28	60	3	0	599	1.05	.61	25	Tipton	85.0	106	28	59	3	0	600	.36	.28	25	
Hinton	81.1	100	13	56	3	0	483	3.56	1.07	22	Walters	82.9	101	28	60	4	0	536	1.64	1.08	25	
Hobart	82.3	101	28	60	3	0	519	2.62	1.40	22												
SOUTH CENTRAL																						
Ada	80.1	95	2	54	4	0	454	4.81	1.74	24	Lane	80.9	96	14	56	4	0	476	2.32	1.01	23	
Ardmore	81.8	99	27	60	4	0	503	1.45	.46	5	Madiill	81.8	99	28	58	4	0	503	2.61	1.69	5	
Burneyville	83.5	102	28	56	4	0	554	.90	.90	7	Newport	81.2	100	28	59	4	0	487	2.68	1.61	5	
Byars	79.9	96	27	57	4	0	448	3.34	.94	22	Pauls Valley	80.6	97	28	58	4	0	469	3.49	1.40	7	
Centrahoma	80.7	96	14	54	4	0	472	3.45	1.41	24	Ringling	83.1	103	28	59	4	0	544	.30	.24	22	
Durant	81.0	95	2	62	4	0	479	3.56	1.96	24	Sulphur	79.5	95	28	55	4	0	436	3.28	1.02	5	
Fittstown	79.5	97	2	56	4	0	435	2.94	1.19	23	Tishomingo	80.2	96	27	58	4	0	455	3.25	1.09	23	
Ketchum Ranch	81.0	99	28	59	4	0	479	2.80	.81	30	Waurika	83.9	104	28	59	4	0	566	.57	.27	25	
SOUTHEAST																						
Antlers	79.5	96	14	54	4	0	435	4.70	3.16	20	Mt Herman	79.9	95	14	58	4	0	447	2.51	1.62	24	
Broken Bow	79.9	95	2	56	4	0	446	4.01	1.92	20	Talihina	81.0	97	14	53	4	0	480	5.52	2.19	24	
Clayton	81.1	99	14	54	4	0	484	3.80	1.94	24	Valliant	81.5	98	14	56	4	0	496	2.47	1.31	20	
Cloudy	79.9	96	28	58	4	0	447	2.28	.78	7	Wilburton	80.4	96	14	56	4	0	463	8.27	3.02	20	
Hugo	81.7	97	28	59	4	0	501	1.23	.47	23	Wister	78.9	96	14	53	4	0	416	6.64	2.07	24	
Idabel	81.8	97	14	58	4	0	503	2.03	.75	20												

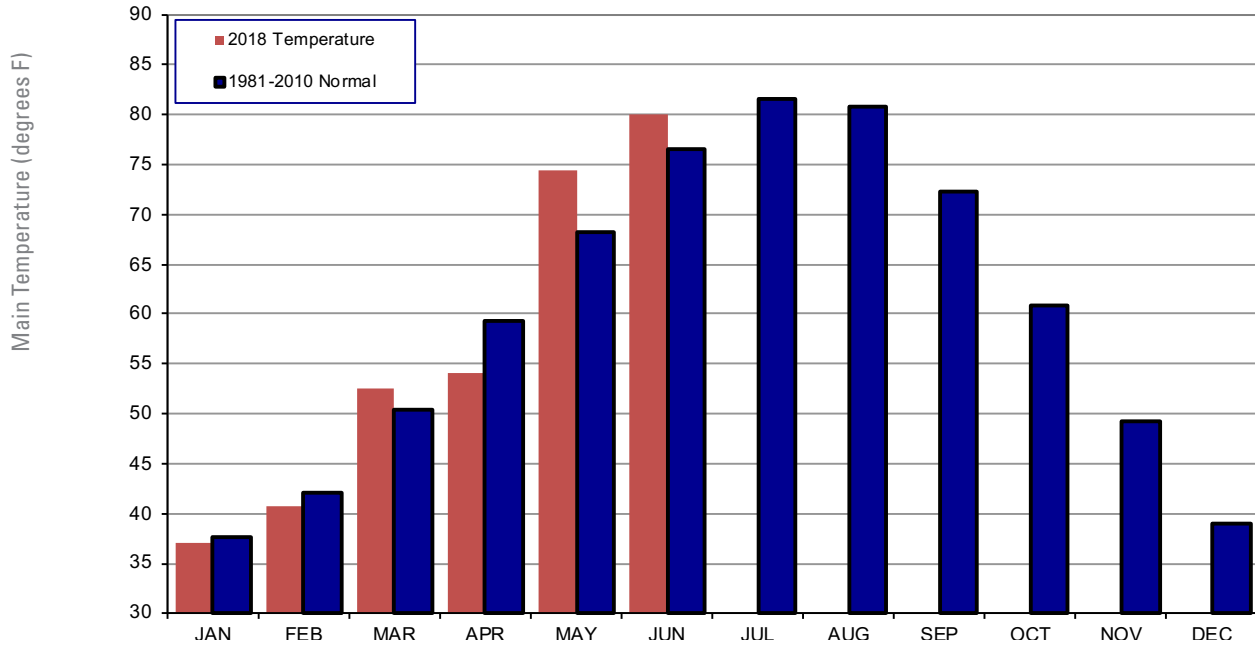
2018 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



June 2018 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Jun-17 (inches)
Panhandle	4.13	0.96	24th Wettest	7.09 (1962)	0.29 (1911)	1.50
North Central	5.55	1.02	24th Wettest	10.87 (2007)	0.40 (1933)	2.57
Northeast	3.44	-1.79	41st Driest	12.64 (2007)	0.28 (1933)	3.53
West Central	4.26	0.11	41st Wettest	8.90 (1962)	0.30 (1933)	1.64
Central	5.81	0.89	29th Wettest	12.63 (2007)	0.41 (1933)	1.29
East Central	4.14	-0.66	54th Driest	12.47 (1935)	0.69 (2011)	4.65
Southwest	2.14	-2.13	35th Driest	9.96 (2007)	0.43 (1911)	2.56
South Central	2.61	-2.12	32nd Driest	11.30 (1908)	0.25 (1933)	2.29
Southeast	3.95	-0.70	61st Wettest	11.51 (1935)	0.77 (1933)	3.55
Statewide	4.07	-0.45	55th Wettest	9.52 (2007)	0.44 (1933)	2.56

2018 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



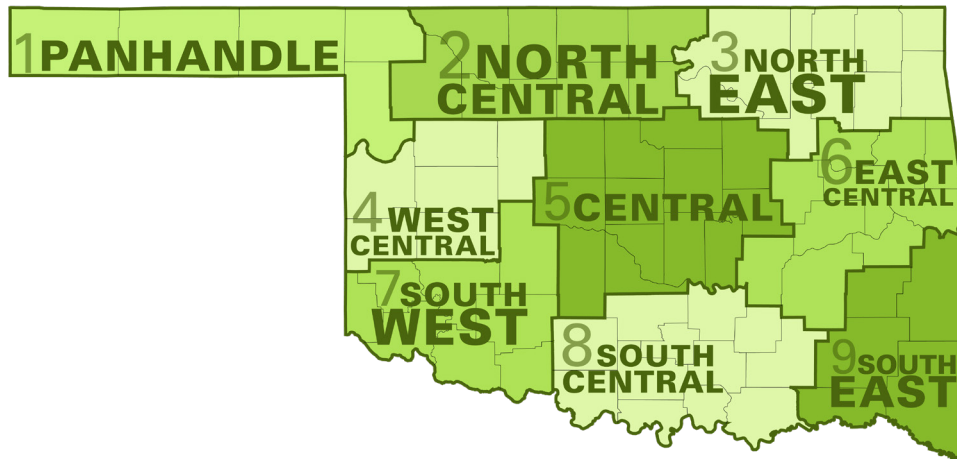
June 2018 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Jun-17 (F)
Panhandle	78.3	4.1	14th Warmest	82.9 (1953)	67.0 (1903)	76.3
North Central	80.8	4.2	11th Warmest	85.2 (1953)	69.1 (1903)	77.6
Northeast	78.9	3.1	19th Warmest	84.4 (1911)	70.3 (1903)	75.9
West Central	80.9	4.2	13th Warmest	85.7 (1953)	70.0 (1903)	78.0
Central	79.6	2.8	24th Warmest	85.2 (1911)	71.1 (1903)	77.9
East Central	79.2	2.8	22nd Warmest	84.5 (1953)	70.3 (1903)	76.8
Southwest	82.5	4.2	13th Warmest	87.3 (2011)	72.4 (1903)	79.0
South Central	81.1	3.2	14th Warmest	85.7 (1911)	72.0 (1903)	77.8
Southeast	80.5	4.4	10th Warmest	83.5 (1953)	70.6 (1903)	76.9
Statewide	80.1	3.6	15th Warmest	84.8 (1953)	70.3 (1903)	77.3

MESONET EXTREMES FOR JUNE 2018

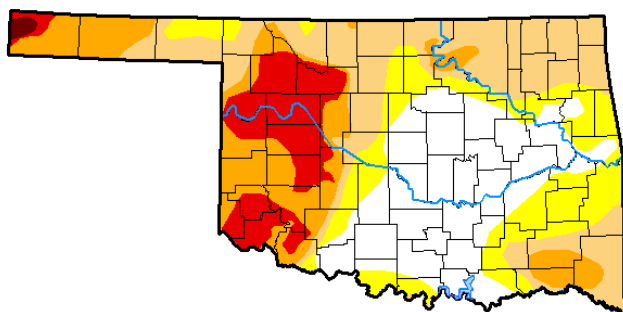
Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	106	1st	Beaver	45	3rd	Eva	7.18	Beaver	2.55	24th	Buffalo
North Central	102	11th	Fairview	53	3rd	Freedom	7.58	Fairview	5.37	24th	Fairview
Northeast	98	28th	Jay	54	4th	Jay	5.57	Wynona	2.77	12th	Copan
West Central	101	28th	Weatherford	53	3rd	Camargo	5.84	Putnam	2.43	24th	Putnam
Central	101	14th	Kingfisher	52	3rd	El Reno	8.74	Oklahoma City East	4.74	24th	Okemah
East Central	97	28th	Westville	53	4th	Cookson	7.11	Eufaula	3.10	24th	McAlester
Southwest	106	28th	Hollis	56	3rd	Hinton	4.38	Apache	1.62	13th	Altus
South Central	104	28th	Waurika	54	4th	Centrahoma	4.81	Ada	1.96	24th	Durant
Southeast	99	14th	Clayton	53	4th	Wister	8.27	Wilburton	3.16	20th	Antlers
Statewide	106	28th	Hollis	45	3rd	Eva	8.74	Oklahoma City East	5.37	24th	Fairview

Oklahoma Climate Divisions



U.S. Drought Monitor Oklahoma

June 26, 2018
(Released Thursday, Jun. 28, 2018)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	27.72	72.28	54.09	28.12	11.75	0.40
Last Week 06-19-2018	17.85	82.15	59.72	38.37	14.56	3.01
3 Months Ago 03-27-2018	40.71	59.29	47.60	42.29	34.93	14.79
Start of Calendar Year 01-02-2018	0.00	100.00	77.15	38.76	0.00	0.00
Start of Water Year 09-26-2017	64.46	35.54	0.77	0.00	0.00	0.00
One Year Ago 06-27-2017	30.33	69.67	12.25	0.00	0.00	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:
Richard Heim
NCEI/NOAA



<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/>



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