Oklahoma Monthly Climate Summary APRIL 2018

rainfall total. The statewide deficit for the year through April

JKLAHOMA

Wildfires rolled across the Oklahoma prairie for two weeks in April, scorching hundreds of thousands of acres and placing entire towns in jeopardy. The fires came on the heels of more than six months of drought in which western Oklahoma received virtually no significant precipitation. Vegetation that had seen abundant growth during 2017 lay dormant or dead, awaiting a spark. Weather conditions coalesced on the 12th and 17th to produce fire danger labeled "historic." As feared, fires roared to life on the 12th, driven to a frenzy on winds gusting to over 50 mph. The two largest fires began near each other in northwest Oklahoma. The "Rhea Fire" ignited southwest of Leedey in Dewey County and would go on to consume over 286,000 acres. The "34 Complex Fire," began as three separate fires in Woodward and Harper counties that merged into one, eventually burning over 60,000 acres. The fires were not fully contained until the 25th following two helpful rainfall events. Numerous smaller fires dotted the

Description	Extreme	Station	Day
High Temperature	102°F	Several	12
Low Temperature	16°F	Buffalo, Slapout	4, 7
High Precipitation	5.35 in.	Okmulgee	
Low Precipitation	0.52 in.	Tipton	

April 2018 Statewide Extremes

Oklahoma landscape. Nearly 400,000 acres burned across the state during the outbreak, burning dozens of homes and causing tens of millions of dollars in damage. Twenty firerelated injuries were reported by area hospitals, mostly due to smoke inhalation. The fires claimed two lives - a 61-yearold man died in Roger Mills County fighting a small fire that began near Leedey, and a woman died in her vehicle near Seiling.

The drought that began in October 2017 continued on during April, despite some beneficial moisture. According to preliminary numbers from the Oklahoma Mesonet, the statewide average of 2.14 inches was 1.12 inches below normal to rank as the 25th driest April since records began in 1895. Tipton had the lowest total of any Mesonet site with 0.52 inches, although Hollis was close behind at 0.54 inches. Okmulgee led the state with 5.35 inches. Only eight of the Mesonet's 120 sites finished April with an above normal stood at 1.15 inches, the 60th driest January-April on record. The northwestern half of the state was much drier than the southeast through that period, however, with deficits of 3-6 inches common. Boise City recorded a paltry 0.9 inches of precipitation since the beginning of the year, while Broken Bow has had 28.3 inches.

April was remarkably cool with a statewide average of 54.1 degrees, 5.2 degrees below normal to make it the second coolest on record. Only 1983's mark of 53.2 degrees was lower. The lowest April temperature of 16 degrees occurred at Buffalo on the fourth and Slapout on the seventh. The highest temperature 102 degrees was reported at four Mesonet sites across western Oklahoma on the 12th. The January-April statewide average temperature was 46.2 degrees, 1.2 degrees below normal to rank as the 50th coolest such period on record.

April 2018 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2018)
Month (April)	54.1°F	-5.2°F	2nd Coolest
Season-to-Date (Mar-Apr)	53.5°F	-1.3°F	40th Coolest
Year-to-Date (Jan-Apr)	46.2°F	-1.2°F	50th Coolest

Precipitation										
	Total	Depart.	Rank (1895-2018)							
Month (April)	2.14 in.	-1.12 in.	25th Driest							
Season-to-Date (Mar-Apr)	4.10 in.	-2.20 in.	24th Driest							
Year-to-Date (Jan-Apr)	8.54 in.	-1.15 in.	60th Driest							

Depart. = departure from 30-year normal

Despite the modicum of relief experienced by western Oklahoma, the amount of drought in the state remained steady at 47 percent from the end of March through April, according to the U.S. Drought Monitor. The percentage of drought considered extreme-to-exceptional, the two worst categories, also remained unchanged at 35 percent. Exceptional drought, the highest level on the Drought Monitor's intensity scale, actually increased from 15 to 20 percent.

The May temperature and precipitation outlooks from the Climate Prediction Center call for increased odds of above normal temperatures across the entire state, and above normal precipitation across all but the far western Panhandle. The greatest odds for above normal rain amounts fall across far southern Oklahoma. Despite those odds, drought is expected to persist or intensify across much of western Oklahoma due to the severity of the deficits seen in those areas since last October. To the east of that area where drought is not quite as severe, some drought improvement or removal is favored.



APRIL 2018 OBSERVED PRECIPITATION

APRIL 2018 DEPARTURE FROM NORMAL PRECIPITATION



APRIL 2018 PERCENT OF NORMAL PRECIPITATION







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APRIL 2018 DEPARTURE FROM NORMAL TEMPERATURE



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MESONET MONTHLY SUMMARY FOR APRIL 2018

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 Arnett Beaver Boise City Buffalo Eva	54.0 52.3 50.3 53.4 49.6	100 97 89 101 93	12 12 12 12 12	18 17 19 16 17	7 7 7 4 4	373 410 446 387 470	42 30 6 38 8	1.40 1.48 .78 1.48 1.09	.65 .55 .57 .59 .68	20 25 20 20 20	Goodwell Hooker Kenton Slapout	51.2 51.1 50.9 52.8	93 94 89 99	11 12 12 12	18 17 20 16	7 7 7 7	432 433 434 399	19 17 11 33	1.16 1.25 .80 1.52	.63 .75 .59 .66	20 20 20 25
NORTH CENTRAL Alva Blackwell Breckinridge Cherokee Fairview Freedom Lahoma	52.8 51.4 51.4 52.7 53.5 53.2 52.0	101 89 90 95 96 101 93	12 17 17 12 12 12 12	20 21 22 21 21 19 21	7 16 7 7 7 7 7 7	404 424 429 400 382 391 413	38 17 20 30 37 37 24	1.55 2.24 2.29 1.56 1.25 1.92 2.15	.71 1.79 1.91 .66 .65 .81 1.62	25 21 25 21 25 21 25 21	May Ranch Medford Newkirk Red Rock Seiling Woodward	52.4 51.1 51.4 52.2 53.4 53.6	102 89 90 100 101	12 17 13 17 12 12	18 21 22 19 18	7 7 4 4 7	414 433 424 405 393 383	37 18 16 21 44 42	1.56 1.85 2.27 1.84 1.20 1.59	.62 1.33 1.83 1.48 .50 .85	25 21 21 21 21 21 20
NORTHEAST Bixby Burbank Copan Foraker Inola Jay Miami Nowata	53.8 52.5 52.2 51.9 52.3 52.3 51.9 51.4	84 89 83 86 84 83 81 83	17 17 17 17 17 17 17 17	26 22 24 20 25 24 24 23	7 7 16 7 7 16	349 395 393 408 390 394 405 420	13 20 11 15 10 15 12 11	2.62 2.40 1.50 1.76 1.70 1.90 1.65 1.20	1.12 1.88 .95 1.40 .91 .77 .50 .77	21 21 21 21 21 21 21 21 21	Pawnee Porter Pryor Skiatook Talala Tulsa Vinita Wynona	53.2 53.5 52.4 53.1 52.4 53.8 51.4 53.2	89 83 84 85 86 85 81 88	17 17 17 17 17 17 17 17	24 25 23 23 25 22 23	7 7 16 7 16 7 16 7	377 359 393 371 390 353 418 373	24 13 15 16 10 17 9 18	2.10 2.90 1.65 1.52 1.35 1.70 1.17 1.90	1.60 1.28 .89 .98 .80 1.17 .51 1.24	21 21 21 21 21 21 21 21 21
WEST CENTRAL Bessie Butler Camargo Cheyenne Elk City	54.9 54.8 52.5 54.8 55.1	101 102 101 99 100	12 12 12 12 12	21 19 19 19 20	7 4 4 7 7	342 351 408 349 329	39 44 32 42 33	1.76 1.41 1.37 1.90 1.67	.91 .55 .43 .64 .66	21 25 25 25 21	Erick Putnam Watonga Weatherford	54.9 53.7 53.5 54.1	100 100 93 95	12 12 12 12	21 19 20 20	4 7 7 7	344 378 378 359	41 39 33 33	1.25 1.30 1.64 1.80	.64 .67 .99 1.13	21 21 21 21
CENTRAL Acme Bowlegs Bristow Lake Carl Blac Chandler Chickasha El Reno Guthrie Kingfisher Marena Minco	55.3 54.6 53.3 52.6 54.4 54.9 52.7 53.9 52.9 52.9 53.4 54.2	89 84 86 89 90 90 88 91 90 89	12 17 17 17 17 12 12 12 12 17 17	24 26 25 23 24 24 22 24 23 23 22	7 16 4 7 4 7 7 4 7 7	322 334 369 398 343 334 365 393 375 349	30 22 17 25 26 31 26 31 31 28 25	1.80 2.56 3.66 2.01 2.22 1.71 1.96 2.76 1.91 2.32 1.95	1.21 1.45 1.67 1.46 1.43 1.19 1.21 2.21 1.39 1.78 1.19	21 21 21 21 21 21 21 21 21 21 21 21	Marshall Norman Oilton OKC East OKC North Okemah Perkins Shawnee Spencer Stillwater Washington	52.3 55.1 52.6 55.2 55.2 53.9 53.4 54.3 54.3 54.6 53.5 55.8	89 87 88 87 82 88 85 87 90 88	17 17 17 12 28 17 17 12 17 17	23 24 22 24 24 24 24 23 24 23 24 25	7 7 7 7 7 7 7 7 7 7	409 327 390 338 329 350 373 342 345 373 303	29 29 18 31 35 16 23 22 34 29 28	2.15 2.39 2.55 2.47 2.32 3.49 2.59 2.39 2.57 2.06 2.39	1.51 1.70 1.45 1.66 1.63 1.37 1.76 1.43 1.79 1.52 1.85	21 21 21 21 21 21 21 21 21 21 21
EAST CENTRAL Cookson Eufaula Haskell Hectorville Holdenville McAlester Okmulgee	53.4 54.5 53.0 53.6 54.4 54.7 53.3	83 83 83 83 83 83 85	17 17 17 17 17 17 17	25 27 26 25 26 27 26	16 7 7 7 7 7 7	361 334 370 357 338 330 368	14 18 11 16 19 20 16	4.51 4.90 3.61 4.07 3.29 3.18 5.35	1.60 2.73 1.52 2.02 2.31 .96 3.57	6 21 6 21 21 21 6	Sallisaw Stigler Stuart Tahlequah Webbers Falls Westville	55.0 54.4 54.8 52.9 55.3 52.6	84 83 82 83 86 82	17 17 28 17 17 17	28 27 27 24 29 25	16 16 7 16 7 16	318 331 322 375 312 382	17 13 15 12 20 10	3.50 2.32 2.77 2.40 3.41 3.38	1.41 .90 1.20 1.16 1.47 1.06	6 21 21 21 21 21 13
SOUTHWEST Altus Apache Fort Cobb Grandfield Hinton Hobart	57.5 54.7 54.7 56.9 53.8 55.4	101 90 92 94 93 98	12 12 17 12 12	25 23 23 27 21 22	7 7 7 7 7 7	269 334 336 278 367 327	45 26 35 30 38	.97 1.28 1.37 .81 1.62 1.37	.44 .72 .75 .53 .88 .63	25 21 21 21 21 21 21	Hollis Mangum Medicine Park Tipton Walters	57.7 55.6 56.5 57.2 56.7	102 102 91 100 91	12 12 17 12	25 21 22 25 26	7 4 7 4 7	266 319 290 274 275	48 36 34 41 26	.54 .81 1.32 .52 1.20	.26 .31 .82 .24 .93	21 21 21 25 21
SOUTH CENTRAL Ada Ardmore Burneyville Byars Centrahoma Durant Fittstown Ketchum Ranch	55.1 57.1 ***** 55.6 55.4 57.2 55.2 57.0	84 87 *** 85 85 82 83 89	17 17 *** 17 17 17 17 17	27 29 *** 25 28 31 26 26	7 7 *** 8 8 8 7	318 264 **** 305 305 254 308 272	20 26 **** 24 17 19 15 30	2.97 1.93 1.64 2.27 2.29 2.54 2.14 2.05	2.24 .85 .71 1.41 1.17 1.09 1.28 1.46	21 21 21 21 21 21 21 21 21	Lane Madill Newport Pauls Valley Ringling Sulphur Tishomingo Waurika	55.5 56.6 56.9 56.5 57.4 55.8 56.1 58.2	82 84 86 89 84 83 93	17 17 17 13 17 17 17 17	28 29 28 26 28 27 28 28	8 7 7 7 7 7 7 7	298 272 269 280 255 301 286 247	13 21 25 26 28 24 18 42	2.14 1.59 2.01 2.51 2.33 2.23 1.71 1.69	.69 .75 1.08 1.58 1.88 1.54 .91 1.19	21 21 21 21 21 21 21 21 21
SOUTHEAST Antlers Broken Bow Clayton Cloudy Hugo Idabel	55.2 56.9 55.6 55.6 56.8 57.2	82 82 83 81 81 81	17 30 28 28 17 28	27 29 28 29 30	8 16 8 8 8	304 250 297 287 257 241	9 5 14 5 11 7	2.93 4.90 4.60 2.90 2.46 4.15	1.08 2.51 2.14 .84 1.00 1.63	13 13 6 6 13	Mt Herman Talihina Valliant Wilburton Wister	55.4 55.4 56.5 55.2 54.1	81 83 81 83 83	28 28 17 17	28 28 29 28 26	8 8 8 16	293 304 264 313 331	4 16 8 19 5	5.25 4.47 2.78 4.17 4.08	1.81 1.85 .96 2.04 1.81	6 6 6 13





Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Apr-17 (inches)
Panhandle	1.22	-0.44	51st Driest	5.31 (1900)	0.02 (1935)	4.39
North Central	1.79	-1.03	33rd Driest	7.14 (1999)	0.47 (2014)	5.38
Northeast	1.81	-2.26	11th Driest	10.82 (2017)	0.22 (1989)	10.82
West Central	1.57	-0.84	35th Driest	8.43 (1997)	0.16 (1996)	4.74
Central	2.37	-0.98	33rd Driest	9.37 (1942)	0.28 (1989)	7.92
East Central	3.59	-0.64	56th Driest	11.32 (1957)	0.74 (1989)	9.76
Southwest	1.07	-1.56	18th Driest	7.53 (1997)	0.14 (1989)	3.95
South Central	2.13	-1.49	20th Driest	11.33 (1942)	0.40 (1903)	4.78
Southeast	3.88	-0.60	50th Driest	12.81 (1957)	0.80 (1987)	6.76
Statewide	2.14	-1.12	25th Driest	8.32 (1942)	0.55 (1989)	6.60

2018 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL

Main Temperature (degrees F)



April 2018 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Apr-17 (F)
Panhandle	51.8	-3.5	14th Coolest	62.1 (1946)	48.8 (1983)	57.1
North Central	52.4	-5.3	4th Coolest	64.4 (1981)	50.4 (1983)	59.2
Northeast	52.6	-6.4	2nd Coolest	65.7 (1954)	52.5 (1983)	60.8
West Central	54.3	-4.1	10th Coolest	65.1 (2006)	52.2 (1983)	60.0
Central	54.0	-5.9	2nd Coolest	66.9 (2006)	53.6 (1983)	61.6
East Central	54.0	-6.4	1st Coolest	67.8 (1896)	54.5 (1907)	63.0
Southwest	56.1	-4.5	7th Coolest	67.6 (2006)	54.9 (1997)	62.0
South Central	56.4	-5.3	1st Coolest	68.8 (1925)	56.6 (1983)	63.7
Southeast	55.8	-4.8	3rd Coolest	66.7 (2006)	55.3 (1983)	64.2
Statewide	54.1	-5.2	2nd Coolest	65.8 (2006)	53.2 (1983)	61.2

MESONET EXTREMES FOR APRIL 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	101	12th	Buffalo	16	4th	Buffalo	1.52	Slapout	0.75	20th	Hooker
North Central	102	12th	May Ranch	18	7th	Woodward	2.29	Breckinridge	1.91	21st	Breckinridge
Northeast	89	17th	Burbank	20	16th	Foraker	2.90	Porter	1.88	21st	Burbank
West Central	102	12th	Butler	19	4th	Camargo	1.90	Cheyenne	1.13	21st	Weatherford
Central	91	17th	Kingfisher	22	7th	El Reno	3.66	Bristow	2.21	21st	Guthrie
East Central	86	17th	Webbers Falls	24	16th	Tahlequah	5.35	Okmulgee	3.57	6th	Okmulgee
Southwest	102	12th	Mangum	21	4th	Mangum	1.62	Hinton	0.93	21st	Walters
South Central	93	17th	Waurika	25	7th	Byars	2.97	Ada	2.24	21st	Ada
Southeast	83	28th	Talihina	26	16th	Wister	5.25	Mt Herman	2.51	13th	Broken Bow
Statewide	102	12th	Mangum	16	4th	Buffalo	5.35	Okmulgee	3.57	6th	Okmulgee

Oklahoma Climate Divisions



U.S. Drought Monitor Oklahoma

April 24, 2018 (Released Thursday, Apr. 26, 2018) Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	42.23	57.77	47.44	42.07	34.84	19.50
Last Week 04-17-2018	41.71	58.29	47.44	42.07	35.54	19.50
3 Month s Ago 01-23-2018	0.00	100.00	99.17	52.62	14.56	0.00
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 04-25-2017	66.53	33.47	16.81	0.00	0.00	0.00



D0 Abnormally Dry

D3 Extreme Drought D1 Moderate Drought D4 Exceptional Drought

D2 Severe Drought The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

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U.S. Department of Agriculture



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: <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/



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