Oklahoma Monthly Climate Summary



June managed to pack pieces of three seasons into a single month. The first 10 days were quite springlike, with abundant rainfall and high temperatures in the 70s and 80s. That there was very little in the way of severe weather was a bonus for this period, as was the drought reduction across much of the state. Drought coverage dropped from 43% of Oklahoma at the end of May to 31% at the end of June according to the U.S. Drought Monitor, and the worst two categories of drought-extreme and exceptional-fell from 17% to 5% over that same period. A strong burst of sweltering summer weather dominated for the next couple of weeks that saw relentless sunshine and high temperatures more befitting mid-July than mid-June. High temperatures reached as high as 110 degrees during the month's middle stanza, and heat index values were as high as 120 degrees. While the month ended with more summer heat, a strong cold front during that last week dropped temperatures back down into the

June 2022	Statewide	e Extremes
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Description	Extreme	Station	Day
High Temperature	110°F	Altus	12
Low Temperature	48°F	Eva	28
High Precipitation	9.36 in.	Weatherford	
Low Precipitation	1.16 in.	Lahoma	

70s and 80s for a few days—a nice sneak preview of the fall weather to come in a few months' time.

The statewide average rainfall total finished at 3.76 inches according to data from the Oklahoma Mesonet, falling 0.5 inches below normal and ranking as the 63rd driest June since records began in 1895. Rainfall totals ranged from 9.36 inches at Weatherford—an unusual feat for a western Oklahoma site to have a month's highest rainfall—to 1.16 inches at Lahoma. Twenty-two of the Mesonet's 120 sites collected at least 5 inches of rainfall for the month, although another 14 recorded under 2 inches. The heaviest totals ran in two strips across the state from west to east: the first from west central through southeast Oklahoma, and the second from central through east central Oklahoma. Surpluses ranged from 1-5 inches in these areas. Deficits of 2-3 inches occurred in north central, northwestern, and south central Oklahoma. The January through June period had a statewide

average of 17.62 inches, 1.2 inches below normal and ranked as the 68th driest first 6 months of the year on record.

The statewide average temperature was 78.8 degrees, 1.5 degrees above normal and ranked as the 30th warmest June on record. Heat dominated the month for the most part, although significantly cool weather enveloped the state during June's first 10 days and also part of its final week. High temperatures in the Panhandle failed to escape the 60s during the month's first two days, but also on the 26th and 27th. Low temperatures dropped to a chilly 48 degrees at the Eva Mesonet site on June 28, the lowest reading of the month. The Mesonet recorded triple-digit temperatures on 15 days during June. Altus soared to 110 degrees on June 12 for the month's highest reading. That was also the highest temperature recorded by the Mesonet in the state since Aug. 28, 2020, and the highest June reading since 2013 when

June 2022 Statewide Statistics Temperature

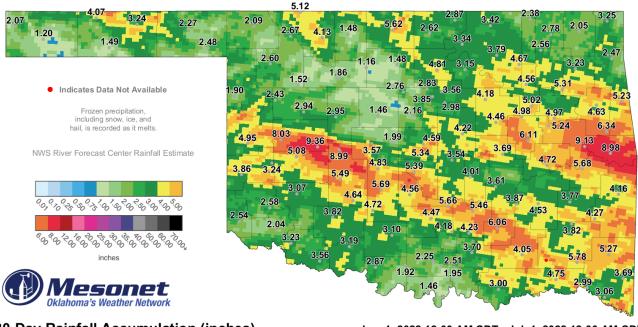
remperatore									
	Average	Depart.	Rank (1895-2022)						
Month (Jun)	78.8°F	1.5°F	30th Warmest						
Year-to-Date (Jan-Jun)	56.2°F	-0.1°F	42nd Warmest						
	Prec	ipitation							
	Total	Depart.	Rank (1895-2022)						
Month (Jun)	3.76 in.	-0.5 in.	63rd Driest						
Year-to-Date (Jan-Jun)	17.62 in.	-1.2 in.	61st Wettest						

Depart. = departure from 30-year normal

Freedom hit 111 degrees on the 27th of that month. Based on statewide averages, June 12 was the hottest day in the state since July 14, 2020, and the hottest June day since June 27, 2012. Heat index values soared during the hottest part of the month. The Mesonet site at Webbers Falls had the month's highest heat index of 120 degrees on the 12th. The highest heat index ever recorded on the Mesonet–dating back to 1997–was 125 degrees from Calvin on Aug. 9, 1999. The Mesonet observed heat index values of at least 110 degrees 103 times during the month. The January-June statewide average temperature was 56.2 degrees, 0.1 degrees below normal and ranked as the 42nd warmest such period on record.

The hopes for a mild and wet July are a bit slim, at least according to the outlooks from the Climate Prediction center. They show increased odds of above normal temperatures and below normal precipitation. CPC's July drought outlook calls for drought to redevelop across western, southeastern, south central, and northeastern sections of the state by the end of July. Rapid drought development, or "flash drought," is of particular concern if prolonged and unusually hot and dry weather materializes.

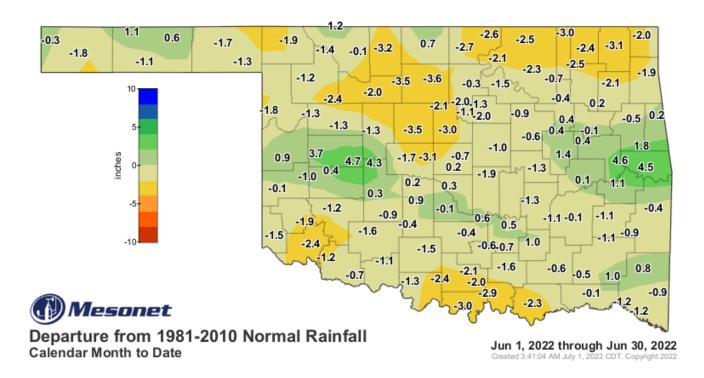
JUNE 2022 OBSERVED PRECIPITATION



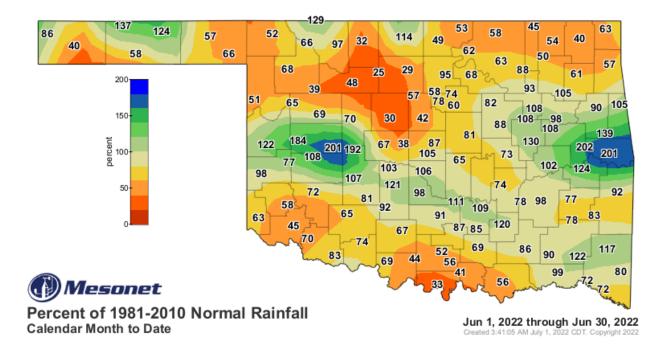
Jun 1, 2022 12:00 AM CDT - Jul 1, 2022 12:00 AM CDT

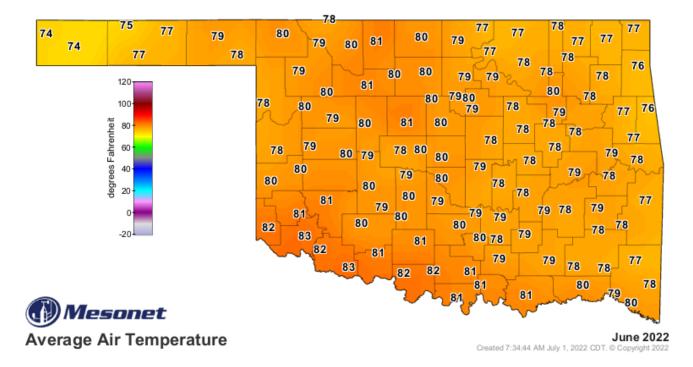
30-Day Rainfall Accumulation (inches)

JUNE 2022 DEPARTURE FROM NORMAL PRECIPITATION

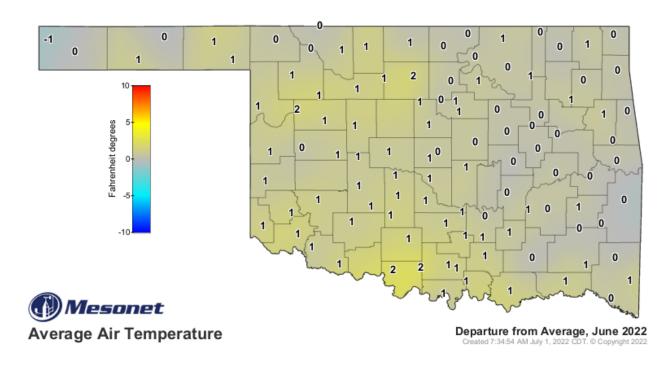


JUNE 2022 PERCENT OF NORMAL PRECIPITATION





JUNE 2022 AVERAGE TEMPERATURE

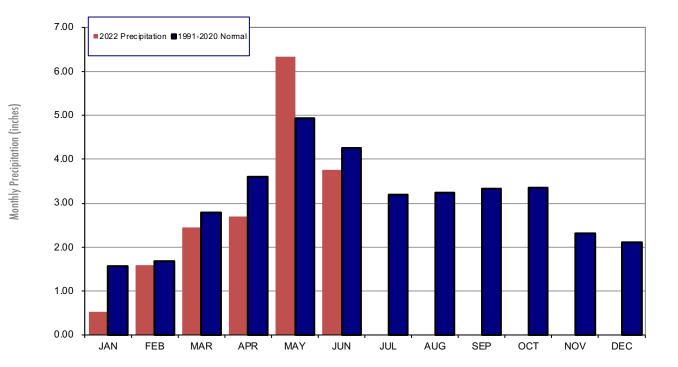


JUNE 2022 DEPARTURE FROM NORMAL TEMPERATURE

MESONET MONTHLY SUMMARY FOR JUNE 2022

NAME	MEAN TEMP		DAY	LOW TEMP	DAY	HDD	CDD		HIGH 24-HR	DAY	NAME	MEAN TEMP		DAY	LOW TEMP	DAY	HDD	CDD		HIGH 24-HR	DAY
PANHANDLE Arnett Beaver Boise City Buffalo Eva	78.2 79.0 73.7 79.9 74.4	105 108 105 107 106	12 12 12 24 12	56 54 49 54 48	2 2 28 2 28	6 13 26 5 27	401 432 286 452 309	1.90 2.27 1.20 2.09 4.07	.71 .92 .62 .88 1.58	26 7 8 26 7	Goodwell Hooker Kenton Slapout	76.9 77.0 73.8 77.8	108 106 106 107	12 12 12 12	52 52 51 53	28 28 5 2	20 17 27 10	377 377 290 395	1.49 3.24 2.07 2.48	.71 .83 .53 .71	8 1 26 7
NORTH CENTRAL Alva Blackwell Breckinridge Cherokee Fairview Freedom Lahoma	79.8 78.8 80.0 80.8 80.7 79.0 79.8	106 104 106 107 105 106 105	12 25 25 24 24 12 25	56 57 56 59 53 57	2 29 2 2 2 29	2 0 1 0 6 0	445 413 449 476 472 425 443	4.13 2.62 1.48 1.46 1.86 2.67 1.16	2.17 1.31 .58 .76 .70 .99 .47	5 5 1 26 1 26 1	May Ranch Medford Newkirk Red Rock Seiling Woodward	78.0 79.7 77.2 78.7 80.0 78.9	103 105 99 102 105 104	12 12 25 25 24 24	53 56 55 58 57 55	2 2 3 27 2	7 0 0 3 6	397 442 366 410 452 423	5.12 5.62 2.87 4.81 1.51 2.60	2.71 1.92 1.74 2.05 .69 1.02	5 26 5 26 1
NORTHEAST Bixby Burbank Copan Foraker Inola Jay Miami Nowata	78.6 77.5 77.5 76.7 77.8 76.4 76.7 76.7	99 99 97 97 95 95 98	24 25 25 25 25 25 25 25	58 56 56 56 54 53 53	29 4 3 4 4 4 3 4	0 0 0 0 0 0 0	409 374 376 350 383 341 351 352	5.02 3.34 2.38 3.42 5.31 2.47 3.25 2.78	2.28 .87 1.21 1.43 2.84 1.02 .89 1.04	6 10 6 10 10 6 6 6	Pawnee Porter Pryor Skiatook Talala Tulsa Vinita Wynona	78.7 78.3 77.4 78.0 77.9 79.7 76.6 77.9	99 98 95 98 99 96 98	25 24 25 25 24 25 24 25 24	58 57 58 57 57 57 54 55	3 4 4 4 4 4 4 4	0 0 0 0 0 0 0	411 400 371 391 388 441 347 387	3.15 4.97 3.23 4.67 2.56 4.56 2.05 3.79	1.46 1.55 1.15 2.13 .90 1.71 1.23 1.41	10 8 10 10 10 10 6 10
WEST CENTRAL Bessie Butler Camargo Cheyenne Elk City	***** 79.3 79.4 78.5 79.6	*** 103 107 103 106	*** 12 12 25 25	*** 57 57 55 57	*** 2 1 2 1	**** 1 1 4 1	**** 430 432 410 440	5.08 8.03 2.43 4.95 3.24	2.83 3.79 1.00 2.01 2.29	1 1 25 1 1	Erick Putnam Watonga Weatherford	79.3 78.9 79.9 80.0	106 105 104 104	25 25 25 12	56 56 56 56	1 1 1	2 3 0 1	430 420 446 449	3.86 2.94 2.95 9.36	1.43 2.31 2.74 4.34	1 1 1
CENTRAL Acme Bristow Lake Carl Blac Chandler Chickasha El Reno Guthrie Kingfisher Marena Minco Marshall	79.7 77.2 78.3 78.5 80.5 77.7 79.9 81.1 77.8 79.0 79.9	101 96 101 98 103 99 102 105 99 99 105	25 24 25 25 25 25 25 25 25 25	59 56 60 59 57 59 58 60	29 30 30 4 30 29 2 29 3 2 2 2 2	0 0 0 1 0 0 0 0 0	442 367 399 404 466 382 446 482 385 420 447	4.38 4.46 2.83 4.22 5.35 3.50 2.15 1.46 3.85 4.82 2.76	1.74 1.93 .73 1.26 1.69 1.43 1.01 1.35 1.05 1.91 1.06	1 10 6 10 1 1 6 1 6 7 26	Norman Oilton OKC East Okemah Perkins Seminole Shawnee Spencer Stillwater Washington Yukon	79.5 77.5 79.7 77.9 79.6 77.8 79.3 78.9 79.2 78.8 79.1	99 97 99 97 101 97 101 100 100 100	24 25 24 25 24 25 25 25 25	59 56 59 57 59 58 59 59 58 59	2 4 30 3 30 2 29 29 29 2	0 0 0 0 0 0 0 0 0 0	434 374 441 387 437 384 429 417 425 415 422	5.39 4.18 5.34 3.69 2.98 4.01 3.54 4.59 3.56 4.56 1.92	1.84 1.89 1.91 .99 1.16 1.54 1.32 1.70 1.26 1.75 1.35	8 10 7 5 6 5 5 10 6 7 1
EAST CENTRAL Cookson Eufaula Haskell Hectorville Holdenville McAlester Okmulgee	76.5 79.0 77.8 78.3 78.3 78.3 78.3 77.5	95 100 97 96 96 97 98	25 24 24 25 25 24	53 57 59 60 55 56	29 29 4 29 29 30	0 0 0 0 0 0	344 419 383 399 398 400 375	6.34 4.72 5.24 4.98 3.61 4.53 6.11	2.80 2.00 1.96 1.54 2.15 2.03 2.50	10 8 10 6 8 8 10	Sallisaw Stigler Stuart Tahlequah Webbers Falls Westville	78.3 78.2 78.5 77.0 78.7 75.9	98 98 97 95 102 94	25 24 25 25 25 12	58 54 57 55 55 54	4 29 29 4 29 4	0 0 0 0 0	399 395 405 360 412 327	8.98 5.68 3.87 4.63 9.13 5.23	4.66 2.50 1.52 1.87 2.99 3.15	10 6 8 10 8 8
SOUTHWEST Altus Apache Fort Cobb Grandfield Hinton Hobart	82.7 79.3 79.9 82.8 79.0 80.9	110 101 104 106 101 104	25 12 12 25	60 58 59 62 57 57	2 2 27 27 2	0 0 0 0 0	531 428 447 535 420 478	1.97 3.75 5.08 3.42 8.98 3.05	.63 1.39 2.49 .87 4.27 1.61	3 1 10 7 1	Hollis Mangum Medicine Park Tipton Walters	81.5 80.5 80.0 82.0 81.1	107 107 102 104 104		58 56 58 60 61	2 27 29 2	0 0 0 0	494 465 451 509 484	2.54 2.58 2.94 2.93 3.19	1.07 1.03 1.86 .94 .86	9 9 2 1 2
SOUTH CENTRAL Ada Ardmore Burneyville Byars Centrahoma Durant Fittstown Ketchum Ranch	78.6 80.2 80.4 78.9 78.8 80.8 77.8 80.8	98 100 103 99 98 99 99 103	24 24 24 24 24 24	58 61 56 60 58 64 58 61	29 29 3 29 28 29	0 0 0 0 0 0 0	409 455 462 418 415 474 384 474	5.46 2.51 1.46 5.66 6.06 3.00 4.23 3.10	1.55 1.09 1.13 2.26 2.64 2.15 1.44 .97	8 2 7 7 2 2 1	Lane Madill Newport Pauls Valley Ringling Sulphur Tishomingo Waurika	78.7 80.7 80.3 79.7 81.7 79.3 79.2 81.8	97 100 101 100 104 99 99 103	25 24 24	58 62 60 63 60 60 60	29 4 29 29 3 29 29	0 0 0 0 0 0 0	412 471 458 442 501 430 425 504	4.05 1.95 2.25 4.47 1.92 4.18 3.70 2.87	1.23 1.23 1.38 1.21 1.12 2.03 1.18 1.22	2 2 8 2 1 2
SOUTHEAST Antlers Broken Bow Clayton Cloudy Hugo Idabel	78.2 78.5 78.3 78.1 79.9 79.6	96 100 98 96 97 99	26 24 24 24	57 56 54 57 62 58	29 29 28	0 0 0 0 0	397 404 399 392 446 439	4.33 3.69 3.82 5.78 4.75 3.06	1.45 1.20 1.11 1.73 1.74 1.07	2 2 2 2 2 2	Mt Herman Talihina Valliant Wilburton Wister	77.8 78.4 79.6 78.5 76.9	96 98 99 97 97	25 26	57 52 58 55 51	29 29 29 29 29	0 0 0 0	383 403 439 406 356		1.72 1.27 1.34 1.11 1.53	2 8 2 10 6

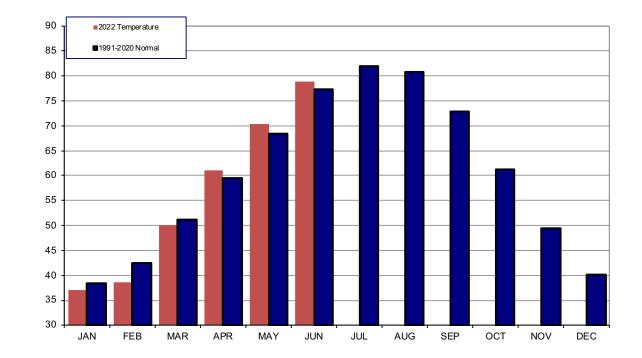




June 2022 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Jun-21 (inches)
Panhandle	2.31	-0.65	49th Driest	7.09 (1962)	0.29 (1911)	2.02
North Central	2.92	-1.48	48th Driest	10.87 (2007)	0.40 (1933)	4.40
Northeast	3.56	-1.42	46th Driest	12.64 (2007)	0.28 (1933)	6.36
West Central	4.76	1.04	35th Wettest	8.90 (1962)	0.30 (1933)	5.17
Central	3.80	-0.88	64th Wettest	12.63 (2007)	0.41 (1933)	8.02
East Central	5.62	0.90	33rd Wettest	12.47 (1935)	0.69 (2011)	4.00
Southwest	3.68	-0.08	56th Wettest	9.96 (2007)	0.43 (1911)	6.35
South Central	3.55	-0.88	55th Driest	11.30 (1908)	0.25 (1933)	3.99
Southeast	4.17	-0.26	57th Wettest	11.51 (1935)	0.77 (1933)	4.33
Statewide	3.76	-0.50	63rd Driest	9.52 (2007)	0.44 (1933)	5.06

2022 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



June 2022 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Jun-21 (F)
Panhandle	76.8	1.6	31st Warmest	82.9 (1953)	67.0 (1903)	76.1
North Central	79.3	1.9	25th Warmest	85.2 (1953)	69.1 (1903)	77.9
Northeast	77.6	1.1	40th Warmest	84.4 (1911)	70.3 (1903)	76.9
West Central	79.4	1.8	24th Warmest	85.7 (1953)	70.0 (1903)	77.8
Central	78.9	1.4	29th Warmest	85.2 (1911)	71.1 (1903)	77.3
East Central	77.9	0.8	42nd Warmest	84.5 (1953)	70.3 (1903)	77.2
Southwest	80.9	1.6	23rd Warmest	87.3 (2011)	72.4 (1903)	78.4
South Central	79.9	1.3	30th Warmest	85.7 (1911)	72.0 (1903)	77.8
Southeast	78.5	1.6	25th Warmest	83.5 (1953)	70.6 (1903)	77.5
Statewide	78.8	1.5	30th Warmest	84.8 (1953)	70.3 (1903)	77.4

MESONET EXTREMES FOR JUNE 2022

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	108	12th	Beaver	48	28th	Ενα	4.07	Ενα	1.58	7th	Ενα
North Central	107	24th	Cherokee	53	2nd	May Ranch	5.62	Medford	2.71	5th	May Ranch
Northeast	99	25th	Copan	53	3rd	Miami	5.31	Inola	2.84	10th	Inola
West Central	107	12th	Camargo	55	2nd	Cheyenne	9.36	Weatherford	4.34	1st	Weatherford
Central	105	25th	Kingfisher	56	4th	Oilton	5.39	Norman	1.93	10th	Bristow
East Central	102	25th	Webbers Falls	53	29th	Cookson	9.13	Webbers Falls	4.66	10th	Sallisaw
Southwest	110	12th	Altus	56	27th	Mangum	8.98	Hinton	4.27	7th	Hinton
South Central	104	25th	Ringling	56	29th	Burneyville	6.06	Centrahoma	2.64	7th	Centrahoma
Southeast	100	26th	Broken Bow	51	29th	Wister	5.78	Cloudy	1.74	2nd	Hugo
Statewide	110	12th	Altus	48	28th	Ενα	9.36	Weatherford	4.66	10th	Sallisaw

Oklahoma Climate Divisions



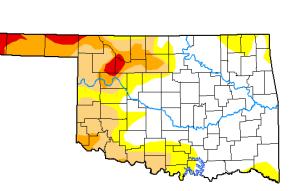
U.S. Drought Monitor Oklahoma

June 28, 2022 (Released Thursday, Jun. 30, 2022) Valid 8 a.m. EDT

Drought Conditions (Percent Area) None D0-D4 D1-D4 D2-D4 D3-D4

D4

1.46



One Year Ago 06-29-2021 84.11 15.89 1.77 Intensity: None

54.09 45.91 30.76 14.79 5.07

58.98 41.02 31.26 15.81 5.45 1.46

13.76 86.24 76.49 63.34 33.90 8.32

5.02 94.98 88.14 72.26 40.44 0.00

93.55 6.45

Current

Last Week

3 Month s Ago

03-29-2022 Start of Calendar Year

Start of Water Year 09-28-2021

D2 Severe Drought D3 Extreme Drought D0 Abnormally Dry D1 Moderate Drought D4 Exceptional Drought

73.23 23.72 2.65 0.00

> 0.24 0.00 0.00

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

<u>Author:</u> 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: <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 is the State Climate Office for Oklahoma

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