Oklahoma Monthly Climate Summary

Oklahoma's exceptionally warm weather continued into April following the warmest March on record, and significant severe weather plagued the state right through the month's final moments. April was not warm enough to earn a number one ranking, but still mustered enough heat to crack the top 10. According to data from the Oklahoma Mesonet, the statewide average temperature finished at 63.9 degrees to rank as the 10th warmest April on record for the state, 4.8 degrees above normal. Statewide statistics date back to 1895. As is often customary during the spring, the abundance of rainfall was accompanied by a surplus of severe weather. According to preliminary counts from the National Weather Service, more than 25 tornadoes touched down during April, doubling the average number of 11 for the month. The most significant of those tornadoes struck Woodward after midnight on the 15th. The tornado tore through the western side of the city, killing six, including three children. The storm damaged 224 homes and businesses in Woodward County and injured 39. The tornado was rated an EF3 on the Enhanced Fujita tornado intensity scale. The northern one-third of the state saw several tornadoes touch down the evening of the 30th. The twisters and associated severe storms left several small towns without power, damaged homes and outbuildings, and produced widespread flooding. Large hail reports, from golf ball to softball size, were numerous with each bout of severe weather throughout the month.

APRIL 2012 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	105°F	Altus, Erick	25
Low Temperature	32°F	Beaver, Boise City	8, 16
High Precipitation	12.61 in.	Blackwell	
Low Precipitation	0.89 in.	Burneyville	

PRECIPITATION

Parts of the state, north central Oklahoma in particular, experienced a two or three month's worth of rainfall in just a few storms. The Mesonet site at Blackwell received 12.6 inches of rainfall during April, shattering that town's previous record for April of 8.59 inches, set back in 1991. Official rain gauges in Ponca City recorded between 11.54 inches and 12.12 inches of rain, breaking that location's April record as well. Normal April rainfall for those locations is approximately 3.5 inches. While much of northern Oklahoma was experiencing deluges, the southeastern half of the state was largely going without. North central Oklahoma recorded an average of 6.03



inches of rainfall during the month and finished with the fifth wettest April on record. In contrast, the southeast recorded an average of 2.63 inches, the 19th driest April on record for that section of the state. The Mesonet site at Burneyville recorded a meager 0.89 inches of rain during April, nearly 3 inches below normal.

TEMPERATURE

April's heat helped propel the January-April period to the warmest on record at 52.3 degrees, 5.5 degrees above normal. The first two months of spring are also on pace to be the warmest on record at 61.5 degrees, 6.9 degrees above normal. The Mesonet sites at Altus and Erick each reached 105 degrees on the 25th, the second highest April temperature ever recorded in Oklahoma dating back to 1893. Mangum holds the record at 106 degrees from April 12, 1972. Frigid weather, normally a frequent visitor during the first half of April, was largely missing during the month. Of the 120 Oklahoma Mesonet stations, only two – Beaver and Boise City – reached the freezing point, and both for less than an hour. The National Weather Service's cooperative observer at Goodwell recorded 30 degrees on April 16.

APRIL 2012 Statewide Statistics Temperature

	Average	Depart.	Rank (1895-2012)
Month (April)	63.9°F	4.8°F	10th Warmest
Season-to- Date (Mar-Apr)	61.5°F	7.0°F	1st Warmest
Year-to-Date (Jan-Apr)	52.3°F	5.5°F	1st Warmest

Precipitation

	Average	Depart.	Rank (1895-2012)
Month (April)	3.81 in.	0.45 in.	42nd Wettest
Season-to-Date (Mar-Apr)	8.70 in.	2.23 in.	12th Wettest
Year-to-Date (Jan-Apr)	12.44 in.	2.76 in.	14th Wettest

Depart. = departure from 30-year normal

APRIL DAILY HIGHLIGHTS

APRIL 1-3: The month's first day was quite muggy as moisture streamed north from the Gulf of Mexico. An approaching storm system kicked off showers and storms in the state on the second. Hooker had over 2 inches of rain on the second while other areas had less than an inch. A cold front entered the on the third and more showers and storms moved across the state. The heaviest rainfall throughout the period occurred in south central Oklahoma. Burneyville recorded over 3 inches of rain. Most of the state had totals of less than an inch. There was not much in the way of severe weather, although reports of large hail and high winds were scattered about. High temperatures rose into the 80s and 90s on the first and second but cooled down in the wake of the front on the third.

APRIL 4-6: This three-day period was cool and mostly dry following the cold front. Lows dipped into the 30s and 40s in spots before warming into the 60s and 70s for highs.

APRIL 7-11: A strong upper-level system and a cold front helped kick off an active weather patter across the state. Showers and storms began early on the seventh in the northwest and then moved into north central and central Oklahoma. The showers and storms continued over the next couple of days. The most severe weather conditions developed on the ninth. A supercell near Woodward dropped hail to the size of softballs in that city, damaging structures and automobiles. A couple of tornadoes were also reported with this particular storm. Highs across the state during these three days were mostly in the 60s and 70s. More showers and storms struck SW OK the morning of the 10th. Those storms came with heavy rains and lots of lightning. The storms continued to form along the stationary front near the Red River. The front moved back to the north on the 11th as a warm front, separating the two air masses - cooler to the north and warmer to the south. More strong storms hit north central Oklahoma that morning, with golf ball size hail and strong winds. Highs were in the 60s north of the front and the 70s and 80s to the south.

APRIL 12-15: The stalled front once again lifted to the north on the 12th. A brief lull in the active weather gave way to a violent outbreak over the next three days. The state would see 28 tornadoes touch down during this period. The storms started on the 13thand dropped lots of large hail in western Oklahoma. A 70-mph wind gust was recorded near Cooperton in Kiowa County as well. Those same storms spawned several weak tornadoes during the day as they marched to the northeast. An EF-1 tornado ripped through west Norman before dissipating on the northeast side of town. Lots of structural damage was reported to go along with 20 injuries, but no fatalities. More storms formed in northwestern Oklahoma the following afternoon. Those storms again dropped lots of large hail and spawned tornadoes. The most significant of those tornadoes would unfortunately become a killer. An EF-3 tornado struck the western side of Woodward, killing six and injuring many more. Major damage was done to the west side of that city. More tornadoes formed as the storms moved into northeastern Oklahoma. While there was some heavy rain with the storms, the more robust totals were confined to the I-44 corridor and northwest Oklahoma. Those totals ranged from 2-4 inches. Other totals of around an inch or less were scattered about the state. The cold front that moved through on the 15th cooled temperatures down into the 60s and 70s.

APRIL 16-20: This period saw a warming trend and mostly tranquil weather. Highs were generally in the 70s and 80s after lows in the 40s and 50s. A cold front on the 20th kicked off a few strong storms. Tennis ball size hail was reported in Caddo County. Rainfall amounts were mostly light with these storms.

APRIL21-27: Dry and hot weather, especially for April, besieged the state during this period. Lows and highs were 15-25 degrees above normal. Erick and Altus reached 105 degrees on the 25th, the highest temperatures for the month. A potent storm system moving west out of Colorado kicked up winds and brought moisture back into the state on the 27th.

APRIL 28-30: Mother Nature ended Oklahoma's April with a bang. A stationary front divided the state on the 28th. Heavy storms formed along and north of that boundary and continually dumped rain over the same area through the 30th. Over 10 inches of rain fell in parts of Grant and Kay Counties. Blackwell recorded 10.9 inches of rainfall and Newkirk received 7.4 inches. Severe weather was widespread on the 29th and 30th. Eleven tornadoes touched won on the 30th to go along with large hail and severe winds. A wind gust of 84 mph was recorded by the Mesonet site at Medford. Widespread flooding was reported across the area.

Hail (2 inches in diameter or greater)

Size (in.)	Location	County	Day
2.75	1 N Woodford	Carter	9
2.75	1 N Woodward	Woodward	9
2.75	10 SE Selman	Harper	9
2.50	2 N Woodward	Woodward	9
4.25	2 N Woodward	Woodward	9
4.00	2 W Woodward	Woodward	9
2.00	4 NW Okesa	Osage	9
2.50	5 N Woodward	Woodward	9
3.50	5 W Sharon	Woodward	9
2.00	6 NE Barnsdall	Osage	9
2.25	6 NW Woodward	Woodward	9
4.25	Woodward	Woodward	9
2.50	1 W Rocky	Washita	13
3.00	12 S Sayre	Beckham	13
2.50	6 SSW Eakly	Caddo	13
2.75	7 S Carter	Greer	13
2.50	Anadarko	Caddo	13
2.00	10 SSW Weatherford	Washita	14
2.75	11 NNE Selman	Woods	14
3.00	15 N Woodward	Harper	14
3.00	6 E Arnett	Ellis	14
2.50	11 N Gracemont	Caddo	19

Wind Gusts (70 mph or greater)

Speed (m.p.h.)	Location	County	Day
70	1 S Cooperton	Kiowa	13
70	10 SSW Weatherford	Washita	14
76	3W Gould	Harmon	30
78	2 SSW Minco	Grady	30
84	Medford Mesonet	Grant	30
70	Wynona Mesonet	Osage	30

Flooding

Location	County	Day
Turner Falls	Murray	8
3 NNW Ponca City	Кау	29
Ponca City	Кау	29
1 W Ponca City	Кау	30
4 NNW Tonkawa	Кау	30
Braman	Кау	30
Burbank	Osage	30
Grainola	Osage	29
Bigheart	Osage	30
Shidler	Osage	30
Fairfax	Osage	30



APRIL 2012 OBSERVED PRECIPITATION

APRIL 2012 DEPARTURE FROM NORMAL PRECIPITATION





APRIL 2012 PERCENT OF NORMAL PRECIPITATION

APRIL 2012 AVERAGE SOIL MOISTURE AT 25CM





APRIL 2012 AVERAGE TEMPERATURE

APRIL 2012 DEPARTURE FROM NORMAL TEMPERATURE



MESONET MONTHLY SUMMARY FOR APRIL 2012

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	TOT PPT	HIGH 24-HR	DAY
PANHANDLE Arnett Beaver Boise City Buffalo	62.6 61.8 57.5 62.0	93 97 91 96	25 24 25 24	38 32 32 33	23 8 16 8	132 151 238 151	60 53 13 61	3.32 1.87 1.53 2.72	1.23 .62 .47 .89	29 14 11 14	Goodwell Hooker Kenton Slapout	59.5 59.7 58.1 62.5	95 95 91 96	24 24 24 24	34 37 33 38	16 16 5 16	193 186 227 142	29 28 21 66	2.28 3.49 3.69 2.00	.53 2.19 1.51 .51	29 2 10 30
NORTH CENTRAL Alva Blackwell Breckinridge Cherokee Fairview Freedom Lahoma	62.1 63.0 61.8 62.7 63.2 62.0 62.4	94 90 95 93 91 91	24 25 25 25 25 25 25	35 37 34 38 35 38	23 23 23 23 23 8 23	150 125 156 141 126 148 140	62 64 70 73 59 60	3.69 12.61 7.06 2.88 5.77 5.54 6.09	2.70 7.18 1.89 1.68 2.06 1.20 2.36	29 29 14 29 14 14 29	May Ranch Medford Newkirk Red Rock Seiling Woodward	62.4 62.4 62.9 63.5 63.3 62.4	94 91 92 93 91	24 25 1 25 24	40 37 38 36 37 39	8 21 23 23 8	144 144 130 125 123 135	66 67 66 79 71 57	2.92 8.39 8.75 3.81 6.67 4.18	1.11 4.46 6.07 .97 2.30 .93	14 29 29 30 29 9
NORTHEAST Bixby Burbank Claremore Copan Foraker Inola Jay Miami	65.3 62.8 64.4 63.2 63.6 62.5 62.2	88 91 88 90 94 85 87 85	1 1 1 26 1	38 37 38 38 38 37 33 36	21 21 21 21 21 21 21 21 21	88 125 98 120 118 110 143 144	97 58 66 65 69 67 59	2.55 8.67 4.29 8.12 10.08 2.48 3.72 7.54	.84 3.85 1.00 2.91 4.32 .92 1.04 2.99	15 29 30 29 29 30 30 14	Nowata Pawnee Porter Pryor Skiatook Vinita Wynona	62.5 63.9 64.9 63.5 64.3 62.0 63.8	87 93 86 86 90 84 92	1 1 1 1 2 1	34 36 40 36 41 37 38	21 21 21 23 21 21 21	135 111 86 116 95 143 106	61 77 84 70 73 52 69	8.89 5.75 2.39 3.00 6.77 7.28 7.08	3.23 2.56 .79 1.16 2.06 2.99 2.61	30 14 11 30 30 14 14
WEST CENTRAL Bessie Butler Camargo Cheyenne Erick	64.3 63.9 62.2 63.9 64.8	97 97 92 96 105	25 25 25 25 25	40 37 37 41 37	23 23 23 4 21	103 116 135 105 101	83 83 52 72 96	1.71 2.10 5.41 2.34 2.12	.73 1.06 2.07 .73 .66	13 29 29 29 13	Putnam Retrop Watonga Weatherford	62.6 64.3 63.4 62.9	94 95 95 94	25 25 25 25	37 42 42 39	23 23 23 23	135 101 127 126	63 80 80 62	4.22 3.12 3.45 3.24	1.80 1.38 1.15 1.40	29 30 29 13
CENTRAL Acme Bowlegs Bristow Lake Carl Blac Chandler Chickasha El Reno Guthrie Kingfisher Marena Minco Marshall	64.9 64.4 63.6 63.4 64.5 62.0 64.5 63.9 64.4 63.9 64.4 63.9 63.3	90 86 89 91 89 91 88 89 94 92 88 90	27 1 1 27 25 1 25 25 25	38 37 34 39 38 34 39 36 39 41 36	23 23 21 23 21 23 21 23 21 23 21 23 23	99 96 117 126 94 103 151 105 118 106 102 133	95 77 74 79 89 60 85 85 87 69 83	3.30 2.56 3.44 4.32 4.19 3.10 3.24 6.62 3.53 4.50 6.39 4.14	1.23 .64 1.09 .91 .96 .92 .74 3.12 .85 2.27 2.59 1.42	3 15 30 14 13 3 14 29 14 13 11	Ninnekah Norman Oilton OKC East OKC North OKC West Okemah Perkins Shawnee Spencer Stillwater Washington	65.4 65.3 63.1 65.3 65.9 64.4 64.2 65.0 64.5 65.1	90 88 90 89 90 85 90 89 90 93 89	25 27 1 1 1 25 1 27 1 27	40 41 34 40 42 43 38 38 40 38 37 41	23 21 23 23 21 23 21 23 21 23 23 23 23	88 84 129 89 88 74 98 109 93 101 108 83	99 94 73 97 95 102 81 86 93 95 92 87	3.71 2.88 2.96 5.18 5.86 6.25 1.65 5.06 2.81 3.58 6.16 1.90	1.52 .92 .88 1.56 1.91 2.80 .51 2.09 .61 .72 2.71 .71	3 30 13 13 13 15 14 3 14 3
EAST CENTRAL Cookson Eufaula Haskell Hectorville Holdenville McAlester Okmulgee	***** 64.8 64.1 65.0 64.7 64.7 63.7	*** 84 85 86 84 86 86	*** 25 25 1 27 25 1	*** 40 38 41 40 39 36	*** 21 21 21 21 23 21	**** 86 102 85 88 99 112	**** 81 73 86 80 88 72	2.87 4.26 2.41 2.22 2.00 4.27 1.57	1.00 1.91 .89 .81 .63 1.65 .44	15 11 15 11 3 11	Sallisaw Stigler Stuart Tahlequah Webbers Falls Westville	64.5 64.0 64.7 62.8 66.1 62.7	87 86 83 85 89 84	1 25 25 1 1 1	37 37 41 33 40 37	21 21 21 21 21 21 21	97 106 85 131 69 129	82 77 76 65 101 61	3.32 3.87 3.36 1.98 2.57 2.41	.92 1.37 1.01 .70 .76 .98	3 3 19 30 11 30
SOUTHWEST Altus Apache Fort Cobb Grandfield Hinton Hobart	67.7 64.1 65.0 67.7 63.1 63.9	105 90 94 103 93 96	25 25 25 25 25 25	43 42 41 43 39 39	23 21 21 23 23 23	59 100 90 61 120 106	141 74 91 143 64 75	1.76 3.69 5.47 3.18 3.48 5.79	.59 .90 2.78 1.24 1.11 2.77	2 3 13 3 13 13	Hollis Mangum Medicine Park Tipton Walters	66.0 64.6 66.0 67.8 ****	101 96 93 103 ***	25 25 25 25 ***	41 37 46 41 ***	4 23 21 23 ***	72 96 65 63 ****	103 83 95 145 ****	4.14 5.08 3.58 1.60 *****	1.56 2.87 .95 .48 ****	9 13 30 3 ***
SOUTH CENTRAL Ada Ardmore Burneyville Byars Centrahoma Durant Fittstown Ketchum Ranch Lane	65.0 67.1 66.9 65.0 65.2 64.6 66.4 65.2	86 90 92 87 84 86 84 90 86	27 25 25 25 25 25 27 27 25	37 43 37 40 38 41 40 43 39	23 23 21 23 21 23 21 23 23 23	87 55 74 87 84 62 88 69 81	87 118 132 86 90 99 76 110 88	2.83 3.64 .89 3.28 2.95 2.56 2.92 2.26 2.45	1.13 1.74 .40 1.37 .97 1.82 .97 .90 .89	8 3 15 8 3 3 3	Madill Newport Pauls Valley Ringling Sulphur Tishomingo Vanoss Waurika	66.6 66.3 66.0 66.1 64.9 65.2 65.3 67.2	86 89 88 90 86 85 87 93	25 27 27 27 27 27 27 27 27	40 42 40 37 40 36 42	21 23 21 23 23 23 23 23	62 67 71 72 90 78 86 65	110 106 102 105 86 83 96 130	2.00 3.55 3.60 2.81 2.79 2.41 2.34 3.58	1.31 1.73 1.78 2.08 1.21 .91 .97 3.12	8 8 3 8 8 8 3
SOUTHEAST Antlers Antlers Broken Bow Clayton Cloudy Hugo	64.7 ***** 63.4 65.3 64.3 65.8	85 *** 85 86 84 84	25 *** 25 25 25	38 *** 36 38 40 42	21 *** 23 21 23 21	89 **** 104 86 90 63	78 **** 56 95 69 87	2.28 ***** 3.51 2.01 1.72 2.85	.90 ***** .95 1.52 .52 1.39	8 *** 3 8 8	Idabel Mt Herman Talihina Wilburton Wister	64.6 63.7 64.4 64.7 63.6	85 82 85 85 86	25 25 25 25 1	38 38 38 38 35	21 23 23 21 21	**** 107 109 95 117	**** 69 91 86 75	***** 1.87 2.61 4.64 2.19	.88 .65 1.35 1.84 .73	20 15 3 11



2011 AND 2012 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL

APRIL 2012 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Apr-11
Panhandle	2.61	0.76	21st Wettest	5.28 (1942)	0.00 (1909)	1.30
North Central	6.03	3.07	5th Wettest	7.43 (1999)	0.55 (1989)	1.60
Northeast	5.91	1.91	21st Wettest	9.67 (1942)	0.17 (1989)	5.50
West Central	3.08	0.48	39th Wettest	8.73 (1997)	0.15 (1996)	0.55
Central	4.06	0.53	34th Wettest	9.49 (1942)	0.24 (1989)	2.55
East Central	2.85	-1.48	26th Driest	11.82 (1957)	0.75 (1989)	6.91
Southwest	3.65	0.98	22nd Wettest	7.30 (1997)	0.14 (1989)	0.72
South Central	2.76	-1.00	42nd Driest	11.43 (1942)	0.53 (1989)	2.62
Southeast	2.63	-1.86	19th Driest	12.79 (1957)	0.53 (1987)	8.81
Statewide	3.81	0.45	42nd Wettest	8.50 (1942)	0.58 (1989)	3.33



2011 AND 2012 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL

April 2012 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Apr-11 (F)
Panhandle	60.5	5.3	5th Warmest	62.2 (1981)	48.2 (1926)	58.5
North Central	62.6	5.0	11th Warmest	65.0 (1981)	50.8 (1983)	59.8
Northeast	63.5	4.6	11th Warmest	66.1 (1981)	52.5 (1907)	61.7
West Central	63.6	5.7	6th Warmest	64.8 (2006)	52.1 (1926)	61.6
Central	64.4	4.8	9th Warmest	66.4 (2006)	53.6 (1983)	63.2
East Central	64.3	4.1	14th Warmest	67.0 (2006)	53.9 (1907)	63.1
Southwest	65.7	5.3	5th Warmest	67.1 (2006)	54.2 (1926)	64.8
South Central	65.8	4.5	12th Warmest	67.6 (2006)	55.9 (1983)	65.1
Southeast	64.4	3.8	14th Warmest	66.7 (1954)	55.3 (2007)	62.7
Statewide	63.9	4.8	10th Warmest	65.5 (2006)	53.2 (1983)	62.3

RECORD EVENT REPORTS

Description	Day	Location	Record	Previous Record	Year
High Temperature	1	McAlester	85	83	2006

MESONET EXTREMES FOR APRIL 2012

Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	97	24th	Beaver	32	16th	Boise City	3.69	Kenton	2.19	2nd	Hooker
North Central	95	25th	Cherokee	34	23rd	Breckinridge	12.61	Blackwell	7.18	29th	Blackwell
Northeast	94	1st	Foraker	33	21st	Jay	10.08	Foraker	4.32	29th	Foraker
West Central	105	25th	Erick	37	21st	Erick	5.41	Camargo	2.07	29th	Camargo
Central	94	25th	Kingfisher	34	23rd	Lake Carl Blackwell	6.62	Guthrie	3.12	14th	Guthrie
East Central	89	1st	Webbers Falls	33	21st	Tahlequah	4.27	McAlester	1.91	11th	Eufaula
Southwest	105	25th	Altus	37	23rd	Mangum	5.79	Hobart	2.87	13th	Mangum
South Central	93	27th	Waurika	36	23rd	Vanoss	3.64	Ardmore	3.12	3rd	Waurika
Southeast	86	25th	Clayton	35	21st	Wister	4.64	Wilburton	1.84	3rd	Wilburton
Statewide	105	25th	Erick	32	16th	Boise City	12.61	Blackwell	7.18	29th	Blackwell

Oklahoma Monthly Climate Summary

Oklahoma's weather reaches something of a crescendo in May as springtime comes to full flower. May is Oklahoma's wettest (statewide-averaged precipitation of 5.13 inches) and certainly its stormiest month (an average of 19.9 tornadoes, more than one-third of the annual average, occurring on 5.5 days, statewide). Its position in the spring transition season is confirmed by a monthly mean temperature, averaged statewide, of 68.4 degrees that ranks fifth highest among the months. Vestiges of winter are occasionally seen in the far northwestern portions of the state, but mostly May is a time for flowering of most plants, full leafing of deciduous trees, planting of row crops, and the maturing and ripening of the winter wheat that was sowed the previous fall.

Temperature

Mean	68.4 degrees
Warmest May	1896, 75.8 degrees
Coolest May	1907, 62.3 degrees
Hottest recorded	114 degrees, Weatherford, May 25, 2000
Coldest recorded	19 degrees, Hooker, May 1, 1909

May usually is characterized by a pleasant range of temperatures across the state, although there are times most years when it is evident that the hot Oklahoma summer is drawing near. Monthly mean temperatures since 1892 have ranged from 62.3 degrees in 1907 to 75.8 degrees in 1896. Normal daily maximum temperatures across the state vary from 84.6 degrees at Waurika to 76.5 degrees at Arnett. Normal daily minimum temperatures fall between 61.2 degrees at Ardmore and 46.8 degrees at Boise City. Historical extremes of temperature during the month are 114 degrees at Weatherford, reported on May 25, 2000 and 19 degrees at Hooker on May 1, 1909. Temperatures in southwestern Oklahoma, the state's hot spot, reach 100 degrees an average of slightly more than once each May. Freezing temperatures are also rare, occurring less than once per year in the panhandle, rarely elsewhere. Freezes have occurred in the state's most northerly regions as late as the end of the month.

The Oklahoma panhandle's climate differs from the rest of the state in that its primary precipitation season is shifted toward summer, being tied to the patterns of the High Plains, of which it is a part. Elsewhere in the state, May is the month of maximum precipitation and May is, in fact, the panhandle's second wettest month by a small margin. May has produced statewide-averaged monthly precipitation totals ranging from 10.68 inches in 1957 to 1.30 inches in 1988. Extremes of individual station-normal precipitation for the month are 7.06 inches in the southeast at Smithville and 2.29 inches in the western panhandle at Regnier. Miami recorded the greatest May monthly total precipitation, 23.95 inches, in 1943. The record-breaking 1957 statewide-averaged precipitation was amplified by the May total of 22.38 inches of rain recorded at Hennessey, most of which fell during the drought-breaking, flood-producing deluge that hammered much of the state on the 15th and 16th. Purcell apparently holds the single reporting-day precipitation record for May, measuring 13.68 inches of rain on May 11, 1950. Interestingly, the events that produced the Purcell and Hennessey precipitation records (and the widespread flooding that occurred after each) bracket the state's driest ever 7-year period.

Precipitation

Mean	5.13 inches
Wettest May	1957, 10.68 inches
Driest May	1988, 1.30 inches
Wettest location	Smithville, 7.06 inches
Driest location	Regnier, 2.02 inches
Most recorded	22.38 inches, Hennessey, 1957

Tornadoes

Average May Tornadoes	21.7
Most	90 (1999, 2010)

Spring brings with it Oklahoma's noted severe weather season. April is Oklahoma's windiest month and ranks second among the 12 months in the number of tornadoes observed across the state. The state has averaged 10.7 tornadoes each April since 1950, a monthly average exceeded only by May. Eight years of wind observations from the statewide Oklahoma Mesonet have revealed an average April wind speed, statewide, of 10.6 miles per hour, which barely edges March for windiest month honors. South winds prevail in most areas, although passing cold fronts are still capable of turning winds to northerly for a day or so at a time.

Comprehensive records of tornado occurrence are available from 1950 to the present. A total of 579 tornadoes are listed as having struck within Oklahoma during April from 1950 through 2003. Forty of those tornadoes were reported in 1957, easily the most of any April during the period.



MAY NORMAL DAILY MAXIMUM TEMPERATURE (1981-2010)

MAY NORMAL DAILY MINIMUM TEMPERATURE (1981-2010)





MAY NORMAL PRECIPITATION (1981-2010)

MAY 1, 2012 SOIL MOISTURE CONDITIONS AT 25CM



MAY 2012 DROUGHT INDICES

U.S. Drought Monitor

May 1, 2012 Valid 7 a.m. EST



MAY 2012 U.S. PRECIPITATION FORECAST



Percent Likelihood of Above or Below Average Precipitation*



*EC indicates no forecasted anomalies due to lack of model skill.

MAY 2012 U.S. TEMPERATURE FORECAST



Percent Likelihood of Above or Below Average Temperatures*



*EC indicates no forecasted anomalies due to lack of model skill.

Climate Division	Max. Temperature (°F)	Min. Temperature (°F)	Avg. Temperature (°F)	Precipitation (inches)
1	78.8	50.8	64.8	3.30
2	79.1	54.9	67.0	4.68
3	78.9	56.6	67.8	5.40
4	79.5	55.0	67.3	4.64
5	79.6	57.5	68.6	5.45
6	79.2	57.8	68.5	5.77
7	81.8	56.8	69.3	4.80
8	80.8	58.8	69.8	5.52
9	80.5	57.5	69.0	6.31
Statewide	79.8	56.3	68.1	5.21

MAY CLIMATE NORMALS

Oklahoma Climate Divisions



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 may 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 may result in an artificially high or low value.

SEVERE WEATHER REPORTS: Only the most significant events are listed. Tornadoes of F2 or greater strength (on the 0-5 Fujita scale), hail of two inches diameter or greater, and wind speeds of 70 miles per hour or above are listed. National Weather Service defines storms as severe when they produce a tornado, hail of three-quarters inch or greater, or wind speeds above 57 miles per hour (50 knots). For additional reports, contact the Oklahoma Climatological Survey, Storm Prediction Center, or your local National Weather Service forecast office.

SOIL MOISTURE: The soil moisture variable displayed is the Fractional Water Index (FWI), measured at a depth of 25 cm. This unitless value ranges from very dry soil having a value of 0, to saturated soils having a value of 1.

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 Climatic Data Center (more than about 4-5 months old): http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storms

SEASONAL OUTLOOKS Climate Prediction Center: http://www.cpc.ncep.noaa.gov/products/OUTLOOKS_index.html

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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