

May’s reputation as Oklahoma’s most prolific severe weather month was confirmed within the first week with as many as 21 tornadoes in the month’s first five days. While most of that count were weak EF0 or EF1 tornadoes, they were damaging, nonetheless. That total also included two strong EF2 twisters that struck both Earlsboro and Seminole on May 4. The Earlsboro tornado traveled in nearly a complete circle, producing damage in the southeast side of the city first and then the northeast side along its circuitous route. The Seminole twister grew up to a mile wide with multiple vortices at times and was on the ground for 12 miles. Unfortunately, part of that path took it through downtown Seminole where it produced significant damage to homes, businesses, and two Seminole schools. That same tornadic storm also produced a large damaging EF1 tornado near Cromwell and Okemah. Another large tornado reached nearly a mile wide and produced EF1 damage in Le Flore County

records began in 1895. For the first time since June 2021, all 120 Oklahoma Mesonet sites received at least an inch of rainfall. Those totals ranged from 1.04 inches at Eva to 13.9 inches at Haskell. Nineteen Mesonet sites recorded at least 10 inches of rain for the month, and another 65 reached the 5-inch mark. For some parts of western Oklahoma, it was more moisture than they had in the previous eight months totaled together, dating back to September 2021. The climatological spring (March-May) finished with a statewide average of 11.51 inches, 0.21 inches above normal and ranked as the 43rd wettest March-May on record. The first five months of the year had a statewide average of 13.85 inches, 0.71 inches below normal and ranked as the 56th wettest January-May on record.

The statewide average temperature finished at 70.3 degrees, 1.9 degrees above normal to rank as the 29th warmest May on

May 2022 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	108°F	Grandfield	8
Low Temperature	32°F	Eva	22
High Precipitation	13.9 in.	Haskell	--
Low Precipitation	1.04 in.	Eva	--

earlier on May 2. Nearly 10,000 electric customers were left without power following the multi-day severe weather event, and there were at least 21 storm-related injuries. Reports of large hail were common throughout the month. Hail to the size of grapefruits was reported near Seminole on May 2 and again at Okemah on May 15. Prodigious rains not only took a huge bite out of the drought, but also produced widespread flooding—especially across eastern Oklahoma where more than a foot of precipitation fell. The month ended much as it began with severe storms rolling across the state producing large hail, severe winds, and flooding rainfall on May 31. The Mesonet site at Hollis recorded a wind gust of 99 mph that evening, the highest measured by the network in the previous 5 years.

The statewide average rain total was 6.33 inches according to preliminary data from the Oklahoma Mesonet, 1.4 inches above normal and ranked as the 30th wettest May since

May 2022 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2022)
Month (May)	70.3°F	1.9°F	29th Warmest
Season-to-Date (Mar-May)	60.°F	0.9°F	31st Warmest
Year-to-Date (Jan-May)	51.7°F	-0.4°F	47th Warmest

Precipitation

	Total	Depart.	Rank (1895-2022)
Month (May)	6.33 in.	1.4 in.	30th Wettest
Season-to-Date (Mar-May)	11.51 in.	0.21 in.	43rd Wettest
Year-to-Date (Jan-May)	13.85 in.	-0.71 in.	56th Wettest

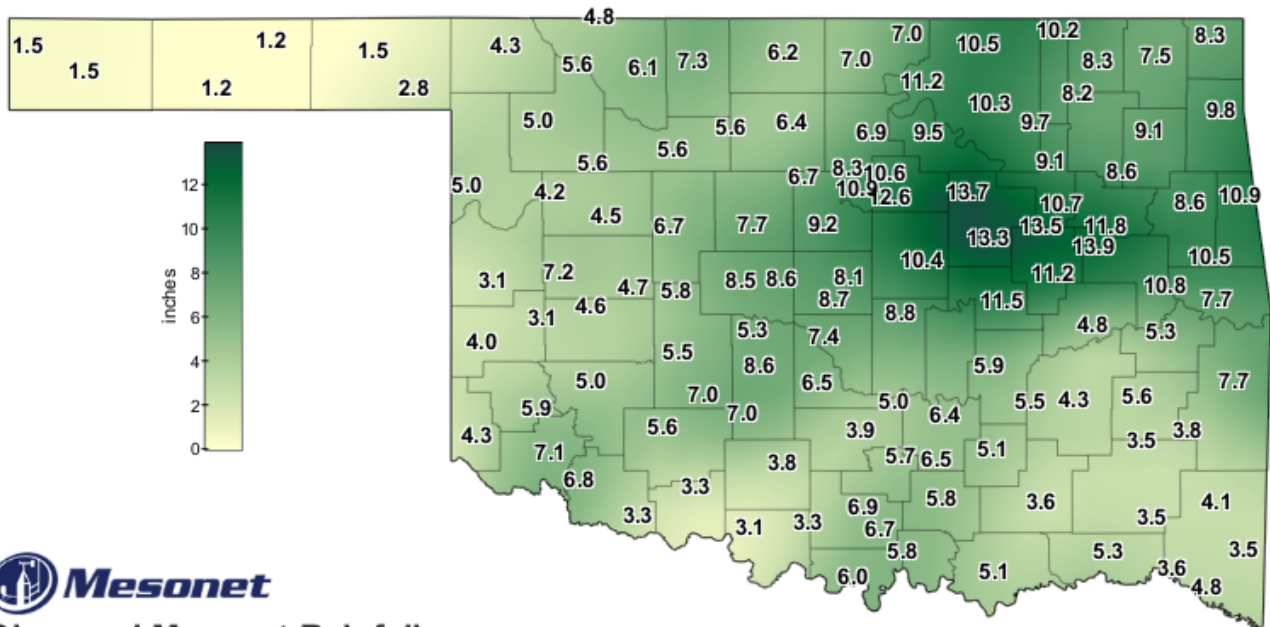
Depart. = departure from 30-year normal

record. Temperatures soared into summer-like territory for much of the middle of the month, with significantly cooler weather bookending that burst of summer. The Mesonet’s 120 sites recorded triple-digit temperatures 82 times on 12 separate days during May. Altus had 11 days at or above 100 degrees during the month to lead the state, although Hollis was close behind at 10 days. Temperatures ranged from a high

of 108 degrees at Grandfield on May 8 to a low of 32 degrees at Eva on the 22nd—undoubtedly Oklahoma’s last freeze of the spring season. Spring ended as the 31st warmest on record at 60.6 degrees, 0.9 degrees above normal. The first five months of the year remained 0.4 degrees below normal with a statewide average of 51.7 degrees, the 47th warmest January-May on record.

Drought took a major hit during May. According to the U.S. Drought Monitor, coverage dropped from 65% at the end of April to 44% at the end of May. The two most intense categories of drought—extreme and exceptional—fell by more than half from 39% to 18%. The June outlooks from the Climate Prediction Center hold some promise for more drought relief. The rainfall outlook shows increased odds of above normal moisture across the northeastern half of the state, while temperatures are expected to be above normal across much of southern and western Oklahoma. With heavy rains forecast for the first week of June, the June drought outlook indicates improvements are likely across all of the state save for the Panhandle and extreme southern Oklahoma where persistence is favored.

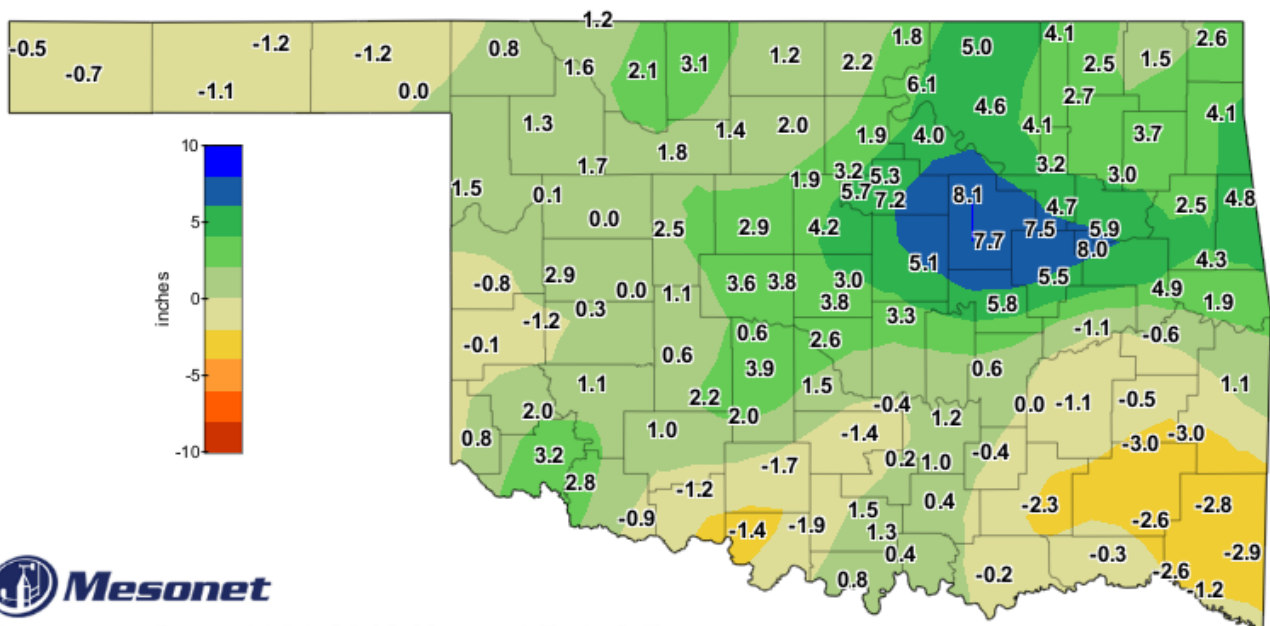
MAY 2022 OBSERVED PRECIPITATION



Observed Mesonet Rainfall
Calendar Month to Date

May 1, 2022 through May 31, 2022
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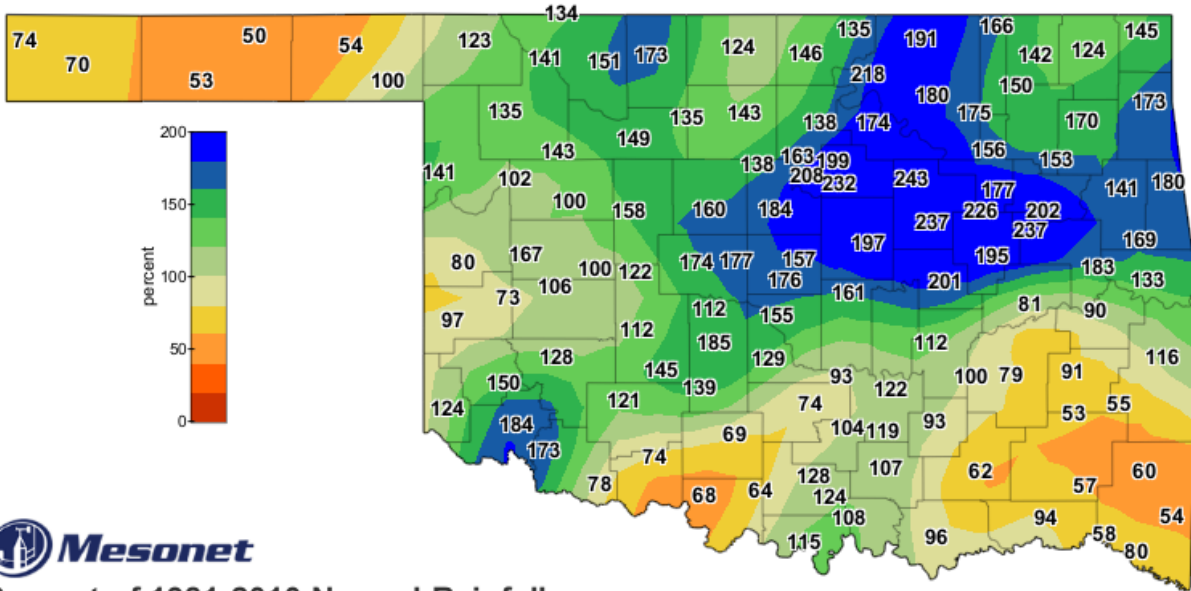
MAY 2022 DEPARTURE FROM NORMAL PRECIPITATION



Departure from 1981-2010 Normal Rainfall
Calendar Month to Date

May 1, 2022 through May 31, 2022
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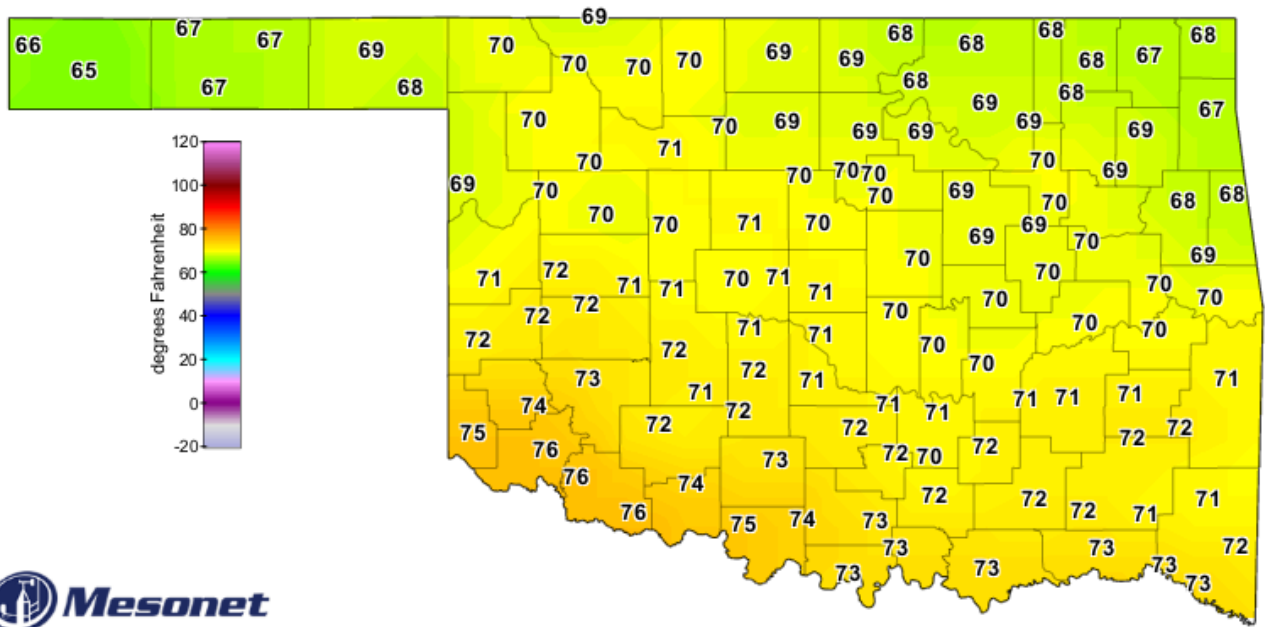
MAY 2022 PERCENT OF NORMAL PRECIPITATION



Percent of 1981-2010 Normal Rainfall
Calendar Month to Date

May 1, 2022 through May 31, 2022
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MAY 2022 AVERAGE TEMPERATURE

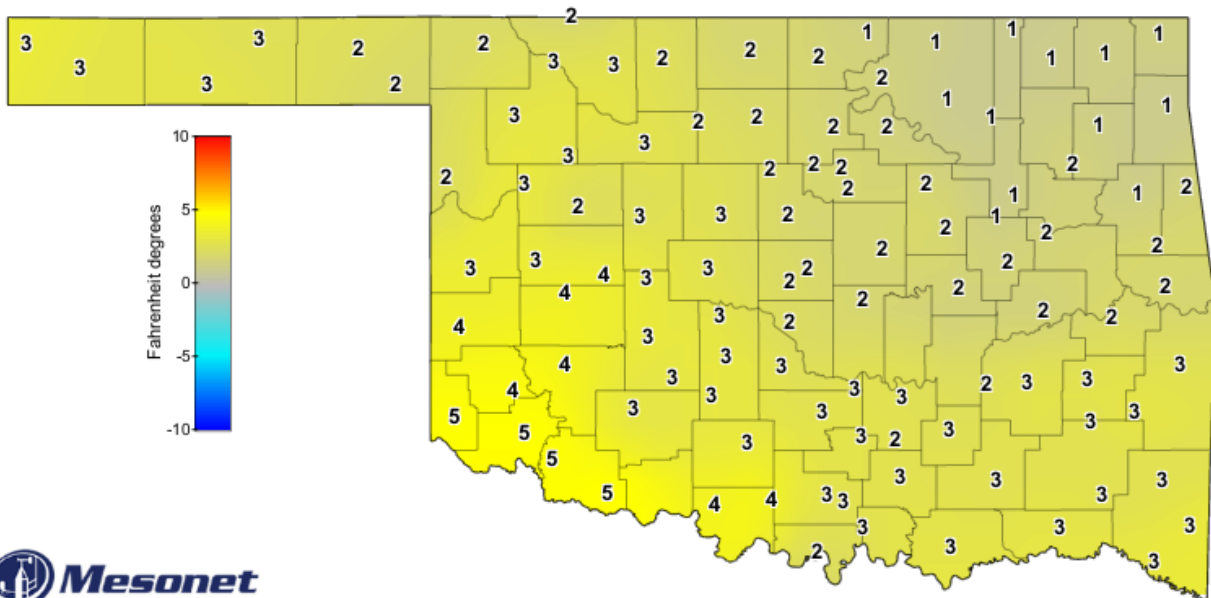


Average Air Temperature

May 2022

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MAY 2022 DEPARTURE FROM NORMAL TEMPERATURE



Average Air Temperature

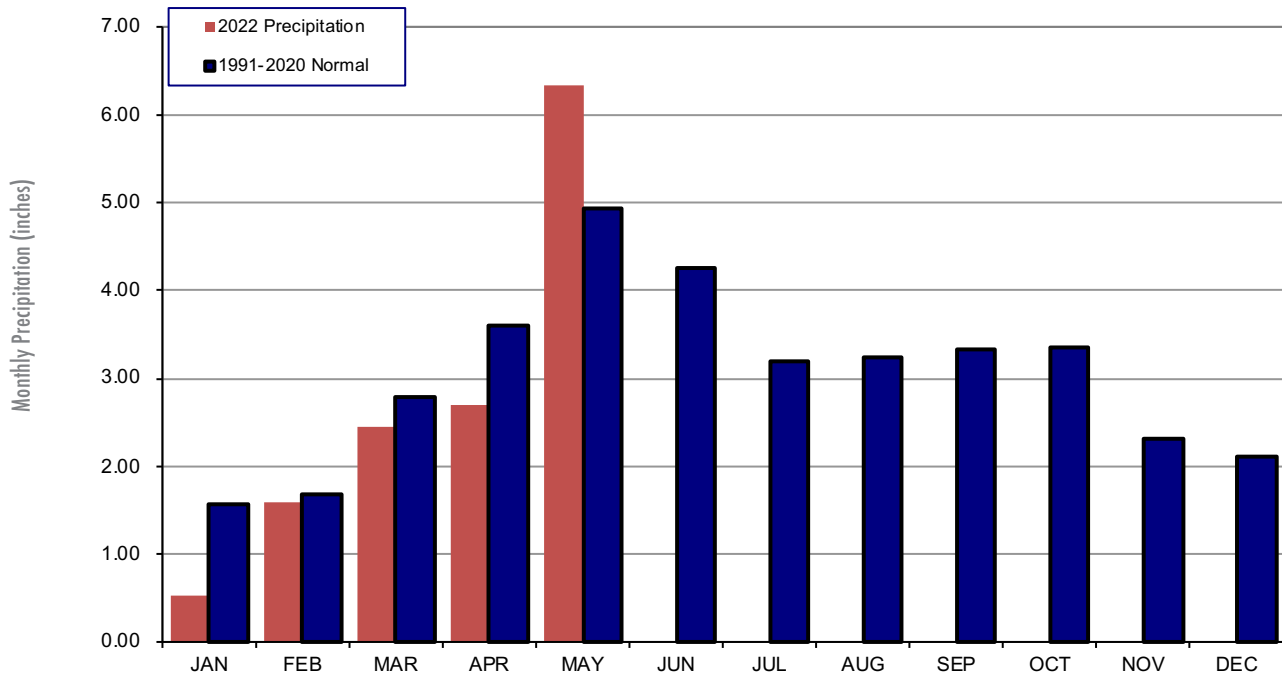
Departure from Average, May 2022

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MESONET MONTHLY SUMMARY FOR MAY 2022

PANHANDLE										NORTH CENTRAL										NORTHEAST										WEST CENTRAL										CENTRAL										EAST CENTRAL										SOUTHWEST										SOUTH CENTRAL										SOUTHEAST																																																																																																																																																																																																																				
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	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	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	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																																																																																																																																																																																																																					
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Arnett	68.8	101	10	40	3	97	216	5.02	1.45	2	Goodwell	67.1	103	28	36	22	111	175	1.18	.53	24	Bixby	70.3	91	12	47	1	58	222	10.73	2.92	4	Porter	70.3	92	12	49	1	58	221	11.78	3.62	4	Blackwell	68.8	105	28	40	6	107	220	1.45	.34	18	Hooker	67.4	103	28	39	3	108	181	1.19	.45	23	Burbank	68.5	91	10	44	22	91	198	11.23	2.24	24	Medford	69.3	96	10	40	1	100	235	6.21	1.34	24	Boise City	64.5	98	28	36	5	142	126	1.48	.85	24	Newkirk	67.7	92	10	42	22	105	189	7.02	1.69	24	Copan	68.0	90	12	43	1	90	181	10.19	3.11	4	Red Rock	69.2	92	8	43	1	89	220	6.90	1.78	2	Foraker	67.6	90	10	44	22	98	180	10.45	2.48	24	Seiling	70.2	101	9	41	3	91	251	5.63	1.24	24	Inola	69.1	91	12	45	1	68	196	8.56	2.68	4	Tulsa	70.2	91	12	49	3	65	226	9.06	1.79	24	Jay	67.5	90	12	43	1	87	165	9.79	2.40	4	Vinita	67.3	90	12	45	23	92	163	7.50	1.17	5	Miami	67.7	90	12	45	1	85	170	8.27	1.59	4	Wynona	68.7	91	12	45	27	87	201	10.32	2.19	24	Nowata	67.8	90	14	41	1	90	177	8.30	1.74	4	WEST CENTRAL										CENTRAL										EAST CENTRAL										SOUTHWEST										SOUTH CENTRAL										SOUTHEAST											
Bessie	72.0	105	9	41	3	68	287	4.62	1.54	24	Erick	71.8	104	9	39	3	64	273	4.01	1.51	24	Cookson	69.0	88	12	45	1	61	186	10.45	3.85	5	Hollis	74.9	106	19	42	3	30	337	4.28	1.47	31	Butler	71.9	105	9	41	3	68	281	7.23	2.97	31	Putnam	69.5	99	9	40	3	91	232	4.51	1.54	24	Eufaula	70.9	90	15	49	1	45	226	4.82	2.79	5	Camargo	69.8	101	10	40	3	90	238	4.18	.87	24	Stigler	70.8	91	15	46	1	37	216	5.32	2.21	5	Cheyenne	70.3	101	9	40	3	80	246	3.05	.98	24	Stuart	71.2	90	15	49	3	37	229	5.46	2.06	2	Elk City	72.0	104	9	40	3	64	281	3.10	1.45	24	Tahlequah	68.8	89	12	45	1	67	185	8.56	2.37	4	CENTRAL										EAST CENTRAL										SOUTHWEST										SOUTH CENTRAL										SOUTHEAST																																																																																																													
Acme	71.4	96	8	44	6	59	257	7.00	1.99	5	Norman	70.8	93	15	46	3	62	241	7.39	2.34	2	Haskell	69.8	90	12	47	1	59	208	13.90	4.71	4	Oilton	69.1	89	12	43	1	77	203	13.70	4.70	23	Bristow	69.5	91	15	44	1	69	210	13.30	4.85	4	OKC East	71.1	94	15	46	3	63	253	8.68	3.16	24	Lake Carl Blac	69.9	95	8	42	1	84	234	8.27	1.78	23	Okemah	69.8	90	15	47	27	63	212	11.45	4.87	4	Chandler	70.4	94	15	46	3	68	235	10.35	4.91	4	Perkins	70.2	93	12	45	1	73	235	12.61	3.21	23	Chickasha	72.1	98	15	43	1	51	273	8.59	2.33	2	Seminole	70.5	92	15	47	6	53	223	6.63	2.28	24	El Reno	69.4	95	8	41	1	85	222	8.49	3.20	23	Shawnee	70.2	92	15	46	3	64	225	8.78	2.46	4	Guthrie	70.5	95	8	45	3	76	245	9.18	3.20	23	Spencer	70.4	93	15	45	3	75	242	8.12	2.27	4	Kingfisher	70.7	94	8	42	1	75	252	7.68	2.04	23	Stillwater	70.3	93	8	45	1	73	237	10.55	2.49	23	Marena	69.7	93	8	45	3	77	222	10.91	2.93	23	Washington	71.0	94	15	46	3	52	237	6.54	1.34	24	Minco	70.7	95	8	44	3	67	242	5.30	1.31	2	Yukon	70.6	95	8	44	3	75	249	8.63	2.85	23	Marshall	70.1	94	8	41	1	85	242	6.72	1.90	23	EAST CENTRAL										SOUTHWEST										SOUTH CENTRAL										SOUTHEAST									
Cookson	69.0	88	12	45	1	61	186	10.45	3.85	5	Sallisaw	70.8	92	12	47	1	39	218	7.73	2.40	2	Hectorville	69.6	90	15	48	3	65	209	13.49	3.94	4	Stigler	70.8	91	15	46	1	37	216	5.32	2.21	5	Holdenville	70.7	91	15	48	1	48	226	5.91	2.05	24	Stuart	71.2	90	15	49	3	37	229	5.46	2.06	2	McAlester	71.7	90	15	46	1	30	237	4.25	1.82	2	Tahlequah	68.8	89	12	45	1	67	185	8.56	2.37	4	Okmulgee	69.9	91	15	44	27	60	212	11.20	4.10	4	Webbers Falls	69.9	90	15	46	1	45	196	10.84	4.13	5	SOUTHWEST										SOUTH CENTRAL										SOUTHEAST																																																																																																																																																																		
Altus	76.0	107	9	45	3	26	367	7.06	3.73	31	Westville	68.2	88	12	46	27	****	****	10.75	4.11	5	Apache	71.2	96	8	44	3	58	250	6.96	1.81	5	SOUTHWEST										SOUTH CENTRAL										SOUTHEAST																																																																																																																																																																																																																																															
Fort Cobb	72.0	99	19	44	3	56	273	5.51	1.16	24	Hobart	72.9	104	9	41	3	51	298	4.98	1.76	24	Grandfield	75.8	108	8	44	3	26	361	3.29	1.57	24	SOUTH CENTRAL										SOUTHEAST																																																																																																																																																																																																																																																									
Grandfield	75.8	108	8	44	3	26	361	3.29	1.57	24	SOUTH CENTRAL										SOUTHEAST																																																																																																																																																																																																																																																																															
Hinton	70.7	98	19	42	3	76	254	5.80	2.26	23	SOUTH CENTRAL										SOUTHEAST																																																																																																																																																																																																																																																																															
Hobart	72.9	104	9	41	3	51	298	4.98	1.76	24	SOUTH CENTRAL										SOUTHEAST																																																																																																																																																																																																																																																																															
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Ada	71.3	92	15	45	1	41	236	6.41	2.57	24	Lane	71.8	90	31	46	1	24	234	3.64	1.51	2	Ardmore	73.0	94	15	47	1	27	273	6.66	2.88	24	Madiill	72.7	93	15	46	1	27	266	5.80	2.76	24	Burneyville	72.6	94	15	44	1	31	265	6.00	3.52	24	Newport	72.3	94	15	46	1	31	258	6.89	2.83	24	Byars	71.3	95	15	47	3	48	242	4.96	2.24	24	Pauls Valley	72.0	95	15	47	1	40	255	3.90	1.97	24	Centrahoma	71.6	91	15	46	1	32	238	5.13	2.44	24	Ringling	74.3	98	15	48	1	25	312	3.32	2.29	24	Durant	73.1	91	15	50	1	18	269	5.09	1.80	24	Sulphur	71.5	93	15	44	1	41	243	5.70	2.53	24	Fittstown	70.4	92	15	44	1	48	215	6.47	2.82	24	Tishomingo	71.5	93	15	46	1	35	237	5.79	2.81	24	Ketchum Ranch	73.1	97	15	47	3	37	286	3.76	2.28	24	Waurika	74.3	97	15	44	1	28	316	3.07	1.83	24	SOUTHEAST																																																																																																																				
Antlers	72.1	91	15	45	1	19	239	****	1.72	24	Mt Herman	71.0	88	31	46	1	26	212	4.10	1.74	2	Broken Bow	72.2	91	31	46	1	5	228	3.47	1.05	5	Talihina	71.8	90	12	45	1	25	237	3.76	1.99	2	Clayton	71.7	90	15	46	1	24	231	3.45	1.49	2	Valliant	72.9	92	31	47	1	9	254	3.62	1.29	2	Cloudy	71.4	89	31	47	1	22	220	3.51	1.62	2	Wilburton	71.7	91	12	45	27	33	240	5.64	3.20	5	Hugo	72.7	90	31	50	1	17	258	5.26	2.51	2	Wister	70.6	91	12	44	1	27	202	7.67	2.92	5	Idabel	73.4	92	21	48	1	6	265	4.84	1.96	21																																																																																																																																																																												

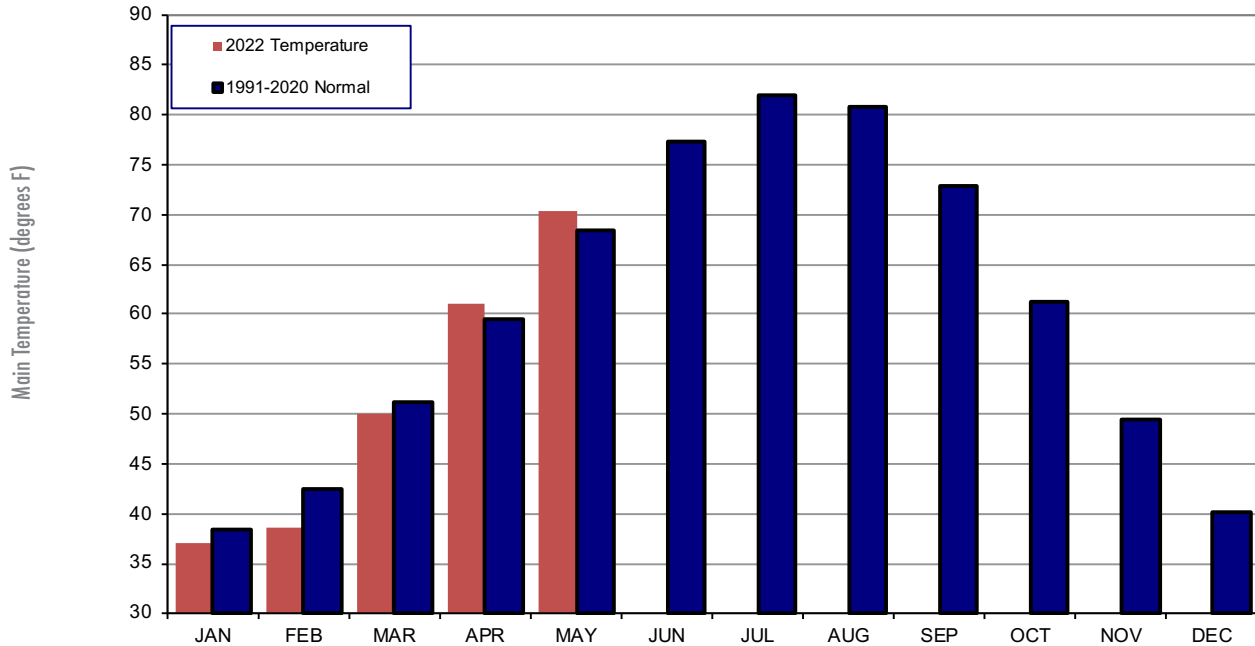
2022 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



May 2022 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	May-21 (inches)
Panhandle	2.36	-0.12	56th Driest	7.12 (2015)	0.19 (2004)	4.32
North Central	6.10	1.67	26th Wettest	14.72 (2019)	0.63 (1970)	3.47
Northeast	9.54	3.43	7th Wettest	17.98 (1943)	1.45 (1911)	5.55
West Central	4.67	0.66	47th Wettest	12.10 (1982)	0.42 (1966)	4.18
Central	9.04	3.84	11th Wettest	15.50 (2015)	0.92 (1988)	5.15
East Central	8.68	2.73	19th Wettest	17.48 (2015)	1.56 (1921)	7.36
Southwest	5.40	1.02	40th Wettest	16.40 (2015)	0.44 (1966)	4.62
South Central	5.16	-0.41	64th Wettest	20.69 (2015)	0.58 (1988)	6.54
Southeast	4.53	-1.58	43rd Driest	20.03 (2015)	1.21 (1988)	9.85
Statewide	6.33	1.40	30th Wettest	14.42 (2015)	1.23 (1988)	5.60

2022 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



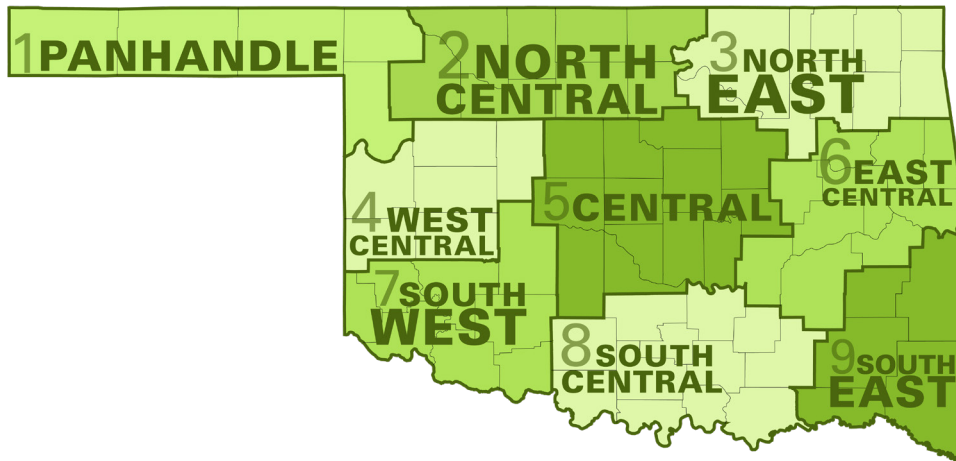
May 2022 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	May-21 (F)
Panhandle	66.5	1.1	29th Warmest	72.6 (2018)	58.0 (1907)	63.5
North Central	69.5	1.9	28th Warmest	75.5 (2018)	60.6 (1907)	64.7
Northeast	68.6	1.0	48th Warmest	74.4 (1962)	61.7 (1917)	64.6
West Central	71.0	2.7	12th Warmest	76.2 (2018)	60.9 (1907)	66.1
Central	70.4	1.7	37th Warmest	75.4 (2018)	62.0 (1907)	66.1
East Central	69.9	1.1	41st Warmest	75.1 (2018)	63.2 (1917)	66.4
Southwest	73.5	3.1	10th Warmest	76.9 (2018)	63.5 (1907)	67.7
South Central	72.3	2.2	24th Warmest	75.5 (2018)	63.5 (1907)	67.4
Southeast	72.0	3.1	12th Warmest	74.4 (2018)	62.8 (1917)	67.2
Statewide	70.3	1.9	29th Warmest	75.1 (2018)	61.9 (1907)	65.9

MESONET EXTREMES FOR MAY 2022

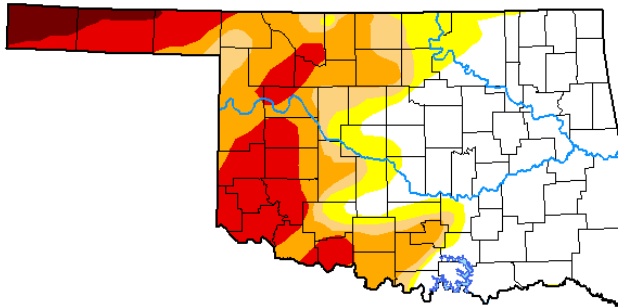
Climate Division	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station
Panhandle	105	28th	Beaver	32	22nd	Eva	5.02	Arnett	1.45	2nd	Arnett
North Central	102	9th	Cherokee	40	3rd	Woodward	7.32	Cherokee	2.66	24th	Cherokee
Northeast	92	12th	Porter	41	1st	Nowata	11.78	Porter	3.62	4th	Porter
West Central	105	9th	Butler	39	3rd	Erick	7.23	Butler	2.97	31st	Butler
Central	98	15th	Chickasha	41	1st	El Reno	13.70	Oilton	4.91	4th	Chandler
East Central	92	12th	Sallisaw	44	27th	Okmulgee	13.90	Haskell	4.71	4th	Haskell
Southwest	108	8th	Grandfield	40	3rd	Mangum	7.06	Altus	3.91	31st	Tipton
South Central	98	15th	Ringling	44	1st	Burneyville	6.89	Newport	3.52	24th	Burneyville
Southeast	92	21st	Idabel	44	1st	Wister	7.67	Wister	3.20	5th	Wilburton
Statewide	108	8th	Grandfield	32	22nd	Eva	13.90	Haskell	4.91	4th	Chandler

Oklahoma Climate Divisions



U.S. Drought Monitor Oklahoma

May 24, 2022
(Released Thursday, May 26, 2022)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	46.90	53.10	43.63	35.97	18.25	2.93
Last Week 05-17-2022	39.49	60.51	53.54	44.86	34.12	10.17
3 Months Ago 02-22-2022	6.69	93.31	86.65	73.94	52.05	2.90
Start of Calendar Year 01-04-2022	5.02	94.98	88.14	72.26	40.44	0.00
Start of Water Year 09-28-2021	6.45	93.55	73.23	23.72	2.65	0.00
One Year Ago 05-25-2021	64.15	35.85	7.84	1.04	0.00	0.00

Intensity:

- None
- 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. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Richard Heim
NCEI/NOAA



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 differs 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 is the State Climate Office for Oklahoma

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