Oklahoma Monthly Climate Summary

# JULY 2023

OKLAHOMA CLIMATOLOGICAL SURVEY

The unusually wet and mild weather Oklahoma enjoyed through much of May and June continued into July, providing the state with uncharacteristic summertime drought relief. The Southern Plains heat dome still managed to meander its way over Oklahoma for short periods, however, basting the state in intense heat and stifling humidity. The Oklahoma Mesonet site at Pauls Valley reached a network-record heat index of 126 degrees on July 13, besting the previous record of 125 degrees from Calvin back on Aug. 9, 1999. The Mesonet's heat index records date back to 1997. Summer returned in earnest beginning July 23,

### July 2023 Statewide Extremes

| Description | Extreme | Station | Day |
|---|---|---|---|
| High Temperature | 109°F | Grandfield | 18, 19, 25 |
| Low Temperature | 55°F | Several | 2, 3 |
| High Precipitation | 9.71 in. | Sallisaw | -- |
| Low Precipitation | 1.42 in. | Burneyville | -- |

extending through the end of the month with highs in the upper 90s and 100s. July was the first month since September 2022 without a tornado report in the state. The preliminary count through the first seven months of the year stood at 63, already above the 1951-2022 annual average of 57.3 tornadoes with five months remaining.

The statewide average rainfall total for the month was 5.19 inches, 1.99 inches above normal and ranked as the 13th wettest July since records began in 1895. Nearly the entire state finished the month with a surplus, save for localized areas across far southern and northern Oklahoma where deficits of up to an inch were reported. The surplus rain totals from the eastern Panhandle through central Oklahoma were tremendous, however, at 3-7 inches above normal. Each of the 10 highest July rainfall totals were at Mesonet sites within that swath, from Woodward's 9.71 inches to Norman's 7.62 inches. The Panhandle, west central, and central Oklahoma all enjoyed top 10 wettest July rankings of sixth, third, and seventh, respectively. Sixty-one of the Mesonet's 120 sites

### July 2023 Statewide Statistics

#### Temperature

| Period | Average | Departure | Rank (1895-2023) |
|---|---|---|---|
| Month (July) | 81.0°F | -0.9°F | 54th Coolest |
| Season-to-Date (Jun-Jul) | 78.9°F | -0.7°F | 58th Coolest |
| Year-to-Date (Jan-Jul) | 60.5°F | 0.5°F | 30th Warmest |

#### Precipitation

| Period | Total | Departure | Rank (1895-2023) |
|---|---|---|---|
| Month (July) | 5.19 in. | 1.99 in. | 13th Wettest |
| Season-to-Date (Jun-Jul) | 9.48 in. | 2.02 in. | 26th Wettest |
| Year-to-Date (Jan-Jul) | 22.83 in. | 0.81 in. | 43rd Wettest |

Departure from 30-year normal

recorded at least 5 inches of rain for the month, and another 31 saw at least 4 inches. Burneyville in far south central Oklahoma reported the lowest total at 1.42 inches. Grandfield and Hollis also received less than two inches during July at 1.94 and 1.89 inches, respectively. The January-July statewide average of 22.83 inches was 0.81 inches above normal and ranked as the 43rd wettest such period on record.

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The statewide average temperature for the month was 81 degrees, 0.9 degrees below normal and ranked as the 54th Coolest July since records began in 1895. Grandfield recorded the month's highest temperature of 109 degrees on three separate days—July 18th, 19th, and 25th. The lowest reading of 55 degrees occurred at Eva and Kenton on July 2, and again at Eva on July 3. In addition to the 126 degrees at Pauls Valley, the Mesonet recorded heat index values of at least 110 degrees 346 times at its 120 sites during July. The highest recorded Oklahoma temperature of 2023 thus far was 113 degrees, recorded at Altus on June 28. The statewide average temperature for the first seven months of the year was 60.5 degrees, 0.5 degrees above normal and ranked as the 30th warmest January through July on record.

Drought coverage in Oklahoma dropped from 36% of the state at the end of June to about 18% at the end of July, leaving all but far southwestern and north central Oklahoma free of the climate hazard. Still, those regions remained in severe to extreme drought, exacerbated by longer-term deficits that stretch back to August 2021 and amplified by the summer of 2022's disastrous flash drought. The Climate Prediction Center's August outlooks show increased odds for above normal temperatures across the entire state, and above normal precipitation across far north central Oklahoma. CPC's corresponding August drought outlook sees it being relieved—and partially eradicated—across the area of drought in northern Oklahoma, but persisting across far southwestern sections of the state. However, no new areas of drought are expected to develop through August.

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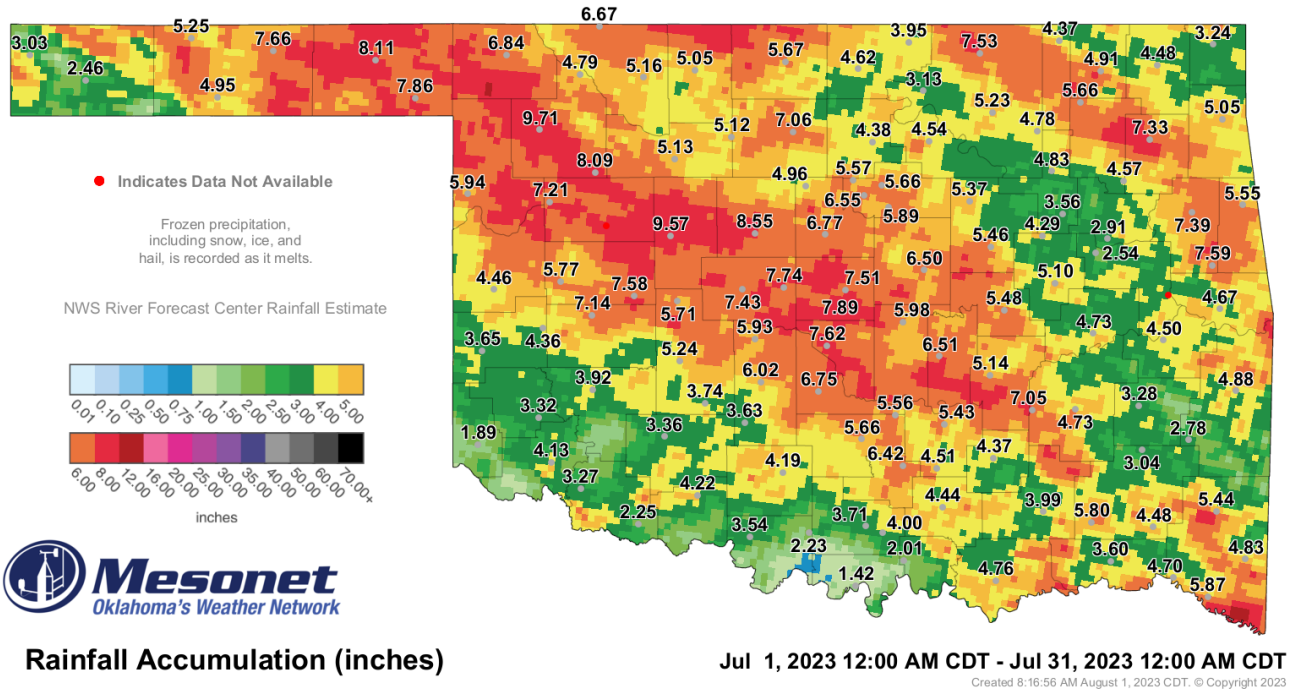
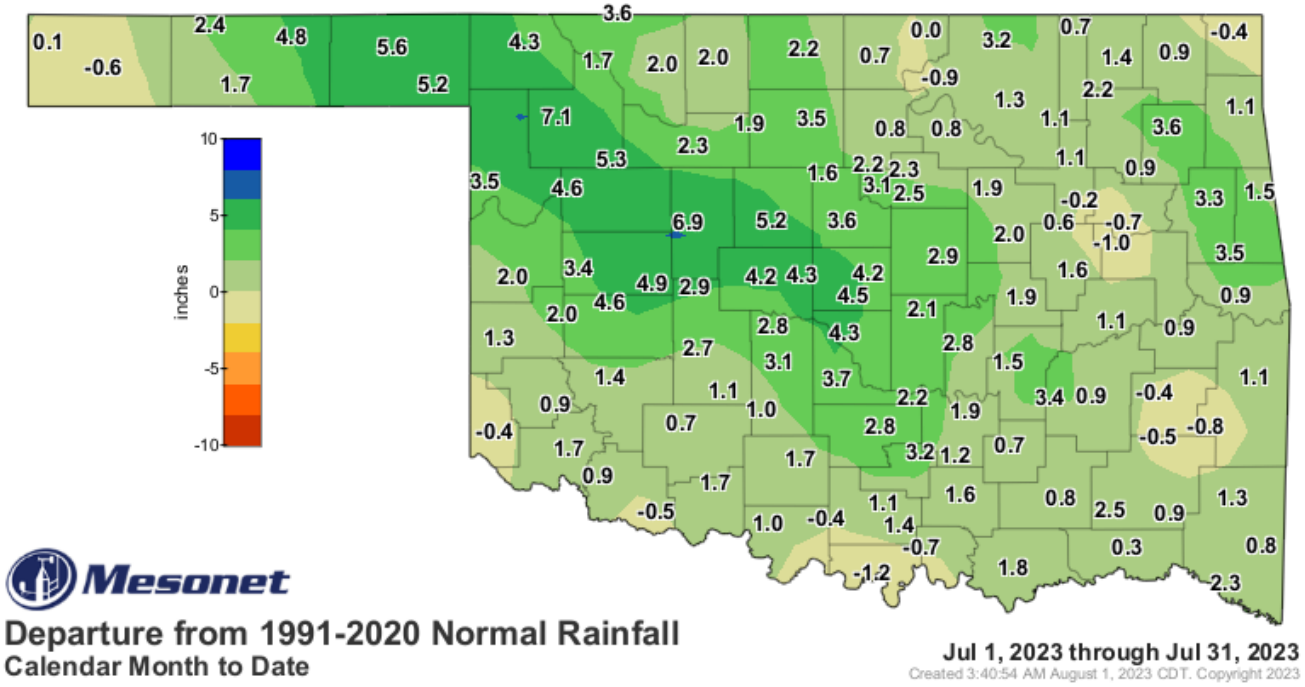
## JULY 2023 OBSERVED PRECIPITATION




The accumulated rainfall for July provided much needed rain statewide. Burneyville received the least amount of rainfall with 1.42 in. and Woodward received the most with 9.71 in. Most sites saw at least 2 in. for the month.

## JULY 2023 DEPARTURE FROM NORMAL PRECIPITATION




Comparing the July rainfall accumulation to the 1991 to 2020 normal rainfall, most sites were above normal with pockets below normal near Burneyville, Eufaula, Grandfield, Haskell, Hollis, and Miami. Burneyville had the highest deficit with 1.2 in. below normal. Woodward had the highest surplus with 7.1 in. above normal.

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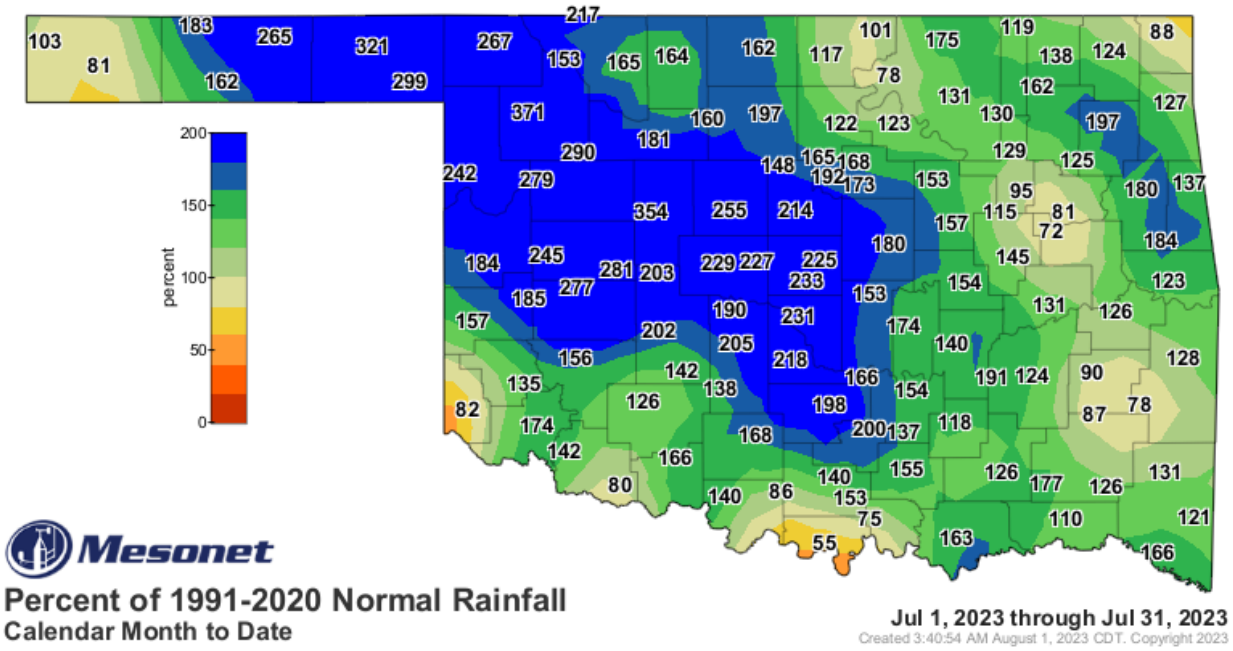
## JULY 2023 PERCENT OF NORMAL PRECIPITATION




The Panhandle percent of normal ranged from 81% at Boise City to 321% of normal at Beaver. The largest increase occurred near Woodward where sites in the area ranged from 181% to 371%. The drier areas near Burneyville and Miami saw 55-88% of normal.

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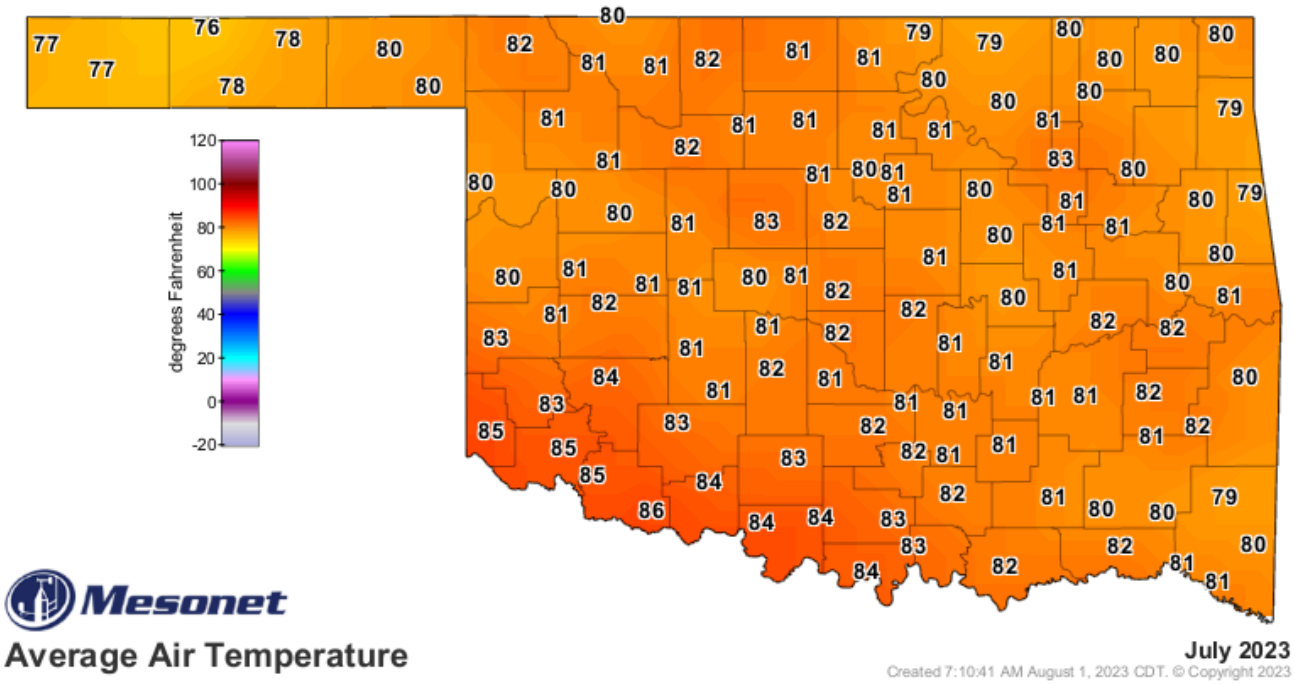
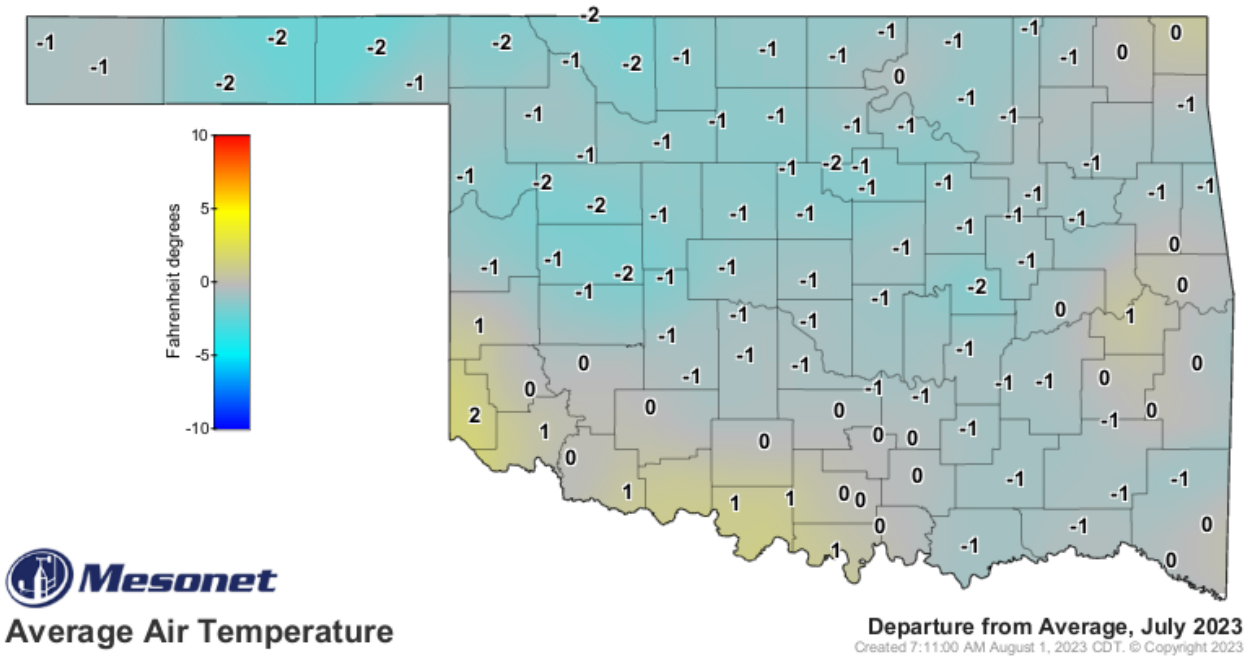
## JULY AVERAGE TEMPERATURE IN DEGREES FAHRENHEIT




Temperatures ranged from the upper 70s in the panhandle to the mid 80s statewide.

## JULY 2023 DEPARTURE FROM NORMAL TEMPERATURE




The temperature departures from normal ranged from -2°F to 2°F statewide. Nearly all sites were below normal with only Hollis seeing an increase by 2 degrees.

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# MESONET MONTHLY SUMMARY FOR JULY 2023

## PANHANDLE

| NAME | MEAN TEMP | HIGH TEMP | DAY | LOW TEMP | DAY | HDD | CDD | TOT PPT | HIGH 24-HR | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| Arnett | 80.1 | 102 | 25 | 60 | 9 | 0 | 468 | 5.94 | 2.09 | 7 |
| Goodwell | 78.5 | 103 | 25 | 56 | 3 | 0 | 418 | 4.54 | 1.85 | 6 |
| Beaver | 79.6 | 101 | 25 | 58 | 9 | 0 | 452 | 8.11 | 1.92 | 6 |
| Hooker | 79.1 | 102 | 25 | 58 | 9 | 0 | 436 | 7.66 | 1.86 | 6 |
| Boise City | 77.1 | 103 | 25 | 57 | 1 | 0 | 374 | 2.41 | .92 | 6 |
| Kenton | 77.2 | 103 | 25 | 55 | 2 | 0 | 380 | 3.03 | 1.03 | 2 |
| Buffalo | 81.7 | 105 | 18 | 60 | 9 | 0 | 517 | 6.84 | 2.26 | 21 |
| Slapout | 80.1 | 104 | 18 | 59 | 9 | 0 | 468 | 7.86 | 2.21 | 7 |
| Eva | 75.8 | 100 | 24 | 55 | 2 | 0 | 336 | 5.23 | 1.43 | 6 |

## NORTH CENTRAL

| NAME | MEAN TEMP | HIGH TEMP | DAY | LOW TEMP | DAY | HDD | CDD | TOT PPT | HIGH 24-HR | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| Alva | 81.2 | 102 | 31 | 62 | 10 | 0 | 502 | 5.16 | 1.76 | 21 |
| May Ranch | 80.1 | 101 | 25 | 60 | 9 | 0 | 468 | 6.67 | 2.35 | 21 |
| Blackwell | 81.1 | 103 | 18 | 62 | 10 | 0 | 498 | 4.62 | 1.75 | 5 |
| Medford | 81.6 | 105 | 18 | 62 | 2 | 0 | 515 | 5.67 | 2.50 | 21 |
| Breckinridge | 81.5 | 102 | 31 | 61 | 10 | 0 | 511 | 7.06 | 2.61 | 11 |
| Newkirk | 79.9 | 101 | 18 | 62 | 10 | 0 | 462 | 3.95 | 1.43 | 5 |
| Cherokee | 82.2 | 105 | 18 | 62 | 2 | 0 | 534 | 5.05 | 1.74 | 21 |
| Red Rock | 81.4 | 103 | 18 | 61 | 10 | 0 | 509 | 4.38 | 1.55 | 21 |
| Fairview | 82.8 | 103 | 18 | 62 | 10 | 0 | 551 | 5.13 | 1.56 | 9 |
| Seiling | 81.0 | 101 | 18 | 61 | 10 | 0 | 497 | 8.08 | 1.95 | 7 |
| Freedom | 81.5 | 105 | 25 | 61 | 2 | 0 | 512 | 4.79 | 1.61 | 21 |
| Woodward | 81.1 | 100 | 18 | 61 | 9 | 0 | 499 | 9.71 | 3.08 | 11 |
| Lahoma | 81.3 | 103 | 18 | 62 | 10 | 0 | 504 | 5.12 | 1.67 | 11 |

## NORTHEAST

| NAME | MEAN TEMP | HIGH TEMP | DAY | LOW TEMP | DAY | HDD | CDD | TOT PPT | HIGH 24-HR | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| Bixby | 81.2 | 100 | 30 | 62 | 10 | 0 | 503 | 3.56 | .93 | 8 |
| Pawnee | 81.0 | 101 | 18 | 62 | 10 | *** | *** | 4.54 | 1.10 | 21 |
| Burbank | 80.8 | 103 | 18 | 59 | 10 | 0 | 490 | 3.13 | 1.35 | 21 |
| Porter | 80.9 | 100 | 30 | 63 | 10 | 0 | 494 | 2.91 | .57 | 21 |
| Copan | 80.0 | 99 | 30 | 60 | 10 | 0 | 465 | 4.37 | 1.39 | 14 |
| Pryor | *** | *** | *** | *** | *** | *** | *** | 7.33 | 3.51 | 14 |
| Foraker | 79.0 | 98 | 18 | 60 | 10 | 0 | 434 | 7.53 | 3.56 | 14 |
| Skiatook | 81.2 | 99 | 30 | 65 | 9 | 0 | 502 | 4.78 | 1.78 | 14 |
| Inola | 80.7 | 98 | 30 | 63 | 22 | 0 | 486 | 4.57 | 1.81 | 14 |
| Talala | 80.4 | 99 | 29 | 62 | 10 | 0 | 479 | 5.66 | 2.25 | 14 |
| Jay | 79.3 | 96 | 12 | 61 | 22 | 0 | 444 | 5.06 | 2.09 | 13 |
| Tulsa | 82.6 | 100 | 18 | 65 | 10 | 0 | 547 | 4.83 | 1.34 | 13 |
| Miami | 80.6 | 101 | 12 | 59 | 10 | 0 | 485 | 3.29 | 1.54 | 13 |
| Vinita | 79.8 | 99 | 18 | 57 | 10 | 0 | 459 | 4.48 | 2.53 | 14 |
| Nowata | 79.9 | 99 | 18 | 58 | 10 | 0 | 462 | 4.91 | 2.95 | 14 |
| Wynona | 80.5 | 101 | 30 | 62 | 10 | 0 | 479 | 5.23 | 1.82 | 21 |

## WEST CENTRAL

| NAME | MEAN TEMP | HIGH TEMP | DAY | LOW TEMP | DAY | HDD | CDD | TOT PPT | HIGH 24-HR | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| Bessie | 82.1 | 103 | 31 | 63 | 9 | 0 | 530 | 7.14 | 2.67 | 7 |
| Erick | 82.8 | 105 | 25 | 60 | 22 | 0 | 552 | 3.65 | 1.15 | 9 |
| Butler | 81.3 | 102 | 25 | 62 | 9 | 0 | 506 | 5.77 | 2.65 | 7 |
| Putnam | 80.2 | 100 | 30 | 62 | 9 | *** | *** | 7.49 | 2.97 | 9 |
| Camargo | 79.9 | 99 | 18 | 62 | 10 | *** | *** | 7.13 | 2.97 | 7 |
| Watonga | 81.5 | 101 | 31 | 62 | 9 | 0 | 510 | 9.57 | 2.62 | 11 |
| Cheyenne | 80.9 | 102 | 31 | 61 | 9 | 0 | 491 | 4.46 | 2.44 | 7 |
| Weatherford | 81.2 | 103 | 31 | 63 | 9 | 0 | 502 | 7.58 | 2.39 | 11 |
| Elk City | 81.2 | 103 | 25 | 62 | 1 | *** | *** | 4.36 | 1.91 | 7 |

## CENTRAL

| NAME | MEAN TEMP | HIGH TEMP | DAY | LOW TEMP | DAY | HDD | CDD | TOT PPT | HIGH 24-HR | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| Acme | *** | *** | *** | *** | *** | *** | *** | 3.63 | 1.19 | 9 |
| Norman | 82.6 | 102 | 25 | 65 | 10 | 0 | 546 | 7.62 | 3.56 | 9 |
| Bristow | 80.0 | 97 | 30 | 61 | 10 | 0 | 464 | 5.46 | 1.55 | 9 |
| Oilton | 80.6 | 99 | 30 | 61 | 10 | 0 | 483 | 5.37 | 1.85 | 3 |
| Lake Carl Blac | 80.4 | 100 | 28 | 60 | 10 | 0 | 476 | 5.57 | 1.66 | 11 |
| OKC East | 82.8 | 100 | 31 | 63 | 22 | 0 | 552 | 7.89 | 2.80 | 9 |
| Chandler | 81.1 | 98 | 30 | 63 | 22 | 0 | 499 | 6.50 | 1.36 | 7 |
| Okemah | 80.4 | 99 | 30 | 63 | 23 | 0 | 477 | 5.48 | 2.02 | 11 |
| Chickasha | 82.4 | 105 | 31 | 61 | 23 | 0 | 540 | 6.02 | 2.32 | 11 |
| Perkins | 81.5 | 100 | 25 | 63 | 10 | 0 | 511 | 5.89 | 2.01 | 11 |
| El Reno | 80.3 | 99 | 25 | 59 | 10 | 0 | 475 | 7.43 | 3.23 | 9 |
| Seminole | 81.2 | 97 | 30 | 64 | 23 | 0 | 501 | 6.51 | 3.10 | 11 |
| Guthrie | 82.3 | 100 | 31 | 64 | 10 | 0 | 538 | 6.77 | 1.85 | 7 |
| Shawnee | 82.0 | 100 | 25 | 64 | 22 | 0 | 527 | 5.98 | 3.01 | 11 |
| Kingfisher | 82.7 | 105 | 31 | 63 | 10 | 0 | 549 | 8.55 | 2.68 | 7 |
| Spencer | 81.8 | 99 | 25 | 63 | 22 | 0 | 522 | 7.51 | 3.25 | 11 |
| Marena | 80.5 | 98 | 18 | 63 | 10 | 0 | 480 | 6.55 | 1.80 | 11 |
| Stillwater | 81.6 | 100 | 18 | 62 | 10 | 0 | 514 | 5.66 | 1.21 | 11 |
| Minco | 81.6 | 101 | 31 | 65 | 22 | 0 | 514 | 5.93 | 2.13 | 9 |
| Washington | 81.7 | 100 | 18 | 63 | 23 | 0 | 517 | 6.75 | 3.17 | 11 |
| Marshall | 81.8 | 101 | 30 | 63 | 10 | 0 | 521 | 4.96 | 1.22 | 21 |
| Yukon | 81.0 | 100 | 31 | 63 | 22 | 0 | 496 | 7.74 | 3.33 | 9 |

## EAST CENTRAL

| NAME | MEAN TEMP | HIGH TEMP | DAY | LOW TEMP | DAY | HDD | CDD | TOT PPT | HIGH 24-HR | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| Cookson | 80.6 | 98 | 18 | 61 | 22 | 0 | 484 | 7.59 | 5.63 | 14 |
| Sallisaw | 81.5 | 100 | 18 | 64 | 23 | 0 | 510 | 4.67 | 1.70 | 9 |
| Eufaula | 82.3 | 99 | 30 | 66 | 22 | 0 | 536 | 4.73 | 1.84 | 6 |
| Stigler | 82.1 | 100 | 30 | 64 | 23 | 0 | 531 | 4.50 | 1.90 | 6 |
| Haskell | 80.8 | 100 | 30 | 63 | 23 | *** | *** | 2.54 | .58 | 6 |
| Stuart | 81.2 | 98 | 30 | 65 | 23 | 0 | 503 | 7.05 | 2.33 | 9 |
| Hectorville | 81.5 | 100 | 31 | 64 | 10 | 0 | 510 | 4.29 | 1.20 | 3 |
| Tahlequah | 79.9 | 96 | 30 | 62 | 22 | 0 | 462 | 7.39 | 3.56 | 14 |
| Holdenville | 81.5 | 98 | 30 | 64 | 22 | 0 | 510 | 5.14 | 2.22 | 9 |
| Webbers Falls | 80.7 | 101 | 30 | 61 | 23 | *** | *** | *** | *** | *** |
| McAlester | 81.1 | 99 | 30 | 62 | 23 | 0 | 500 | 4.73 | 2.11 | 9 |
| Westville | 79.1 | 95 | 18 | 62 | 22 | 0 | 437 | 5.55 | 3.36 | 14 |
| Okmulgee | 80.9 | 99 | 30 | 63 | 23 | 0 | 492 | 5.10 | 2.36 | 9 |

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## SOUTHWEST

| NAME | MEAN TEMP | HIGH TEMP | DAY | LOW TEMP | DAY | HDD | CDD | TOT PPT | HIGH 24-HR | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| Altus | 84.9 | 107 | 31 | 64 | 23 | 0 | 618 | 4.09 | 1.54 | 3 |
| Hollis | 85.4 | 108 | 18 | 65 | 9 | 0 | 632 | 1.89 | .70 | 7 |
| Apache | 81.7 | 101 | 31 | 64 | 22 | 0 | 516 | 3.74 | 1.28 | 7 |
| Mangum | 82.9 | 106 | 31 | 59 | 23 | 0 | 556 | 3.32 | 1.38 | 9 |
| Fort Cobb | 81.6 | 102 | 31 | 64 | 22 | 0 | 514 | 5.24 | 1.77 | 11 |
| Medicine Park | 83.4 | 104 | 31 | 65 | 9 | 0 | 570 | 3.31 | 1.79 | 7 |
| Grandfield | 86.1 | 109 | 18 | 64 | 23 | *** | *** | 1.94 | 1.10 | 9 |
| Tipton | 84.8 | 106 | 30 | 63 | 23 | *** | *** | 3.19 | 1.38 | 9 |
| Hinton | 81.0 | 102 | 25 | 63 | 9 | 0 | 495 | 5.71 | 1.60 | 11 |
| Walters | 84.1 | 105 | 31 | 65 | 23 | 0 | 593 | 4.19 | 1.38 | 3 |
| Hobart | 83.7 | 107 | 24 | 63 | 23 | 0 | 579 | 3.91 | 1.69 | 7 |

## SOUTH CENTRAL

| NAME | MEAN TEMP | HIGH TEMP | DAY | LOW TEMP | DAY | HDD | CDD | TOT PPT | HIGH 24-HR | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| Ada | 82.0 | 100 | 30 | 62 | 23 | 0 | 526 | 5.43 | 2.70 | 11 |
| Lane | 81.4 | 100 | 30 | 62 | 23 | 0 | 509 | 3.99 | 2.10 | 11 |
| Ardmore | 83.3 | 104 | 18 | 64 | 23 | 0 | 568 | 4.00 | 2.22 | 11 |
| Madill | 83.3 | 103 | 31 | 62 | 23 | 0 | 568 | 2.01 | .88 | 11 |
| Burneyville | 83.9 | 107 | 31 | 57 | 23 | 0 | 587 | 1.42 | .74 | 9 |
| Newport | 83.6 | 105 | 31 | 65 | 23 | 0 | 576 | 3.71 | 2.14 | 11 |
| Byars | 82.0 | 99 | 31 | 65 | 22 | 0 | 527 | 5.56 | 1.87 | 9 |
| Pauls Valley | 83.1 | 102 | 19 | 65 | 23 | 0 | 560 | 5.66 | 3.27 | 11 |
| Centrahoma | 81.3 | 99 | 30 | 62 | 23 | 0 | 505 | 4.37 | 2.23 | 11 |
| Ringling | 84.6 | 108 | 18 | 63 | 23 | 0 | 608 | 2.23 | .76 | 3 |
| Durant | 82.4 | 100 | 31 | 64 | 23 | 0 | 539 | 4.76 | 2.09 | 11 |
| Sulphur | 82.2 | 99 | 30 | 61 | 23 | 0 | 534 | 6.42 | 4.62 | 11 |
| Fittstown | 81.2 | 98 | 31 | 61 | 23 | 0 | 503 | 4.51 | 2.15 | 11 |
| Tishomingo | 81.8 | 100 | 31 | 63 | 23 | 0 | 520 | 4.44 | 2.44 | 11 |
| Ketchum Ranch | 83.4 | 105 | 31 | 64 | 23 | 0 | 572 | 4.19 | 1.61 | 7 |
| Waurika | 84.6 | 107 | 31 | 62 | 23 | 0 | 607 | 3.54 | 1.03 | 7 |

## SOUTHEAST

| NAME | MEAN TEMP | HIGH TEMP | DAY | LOW TEMP | DAY | HDD | CDD | TOT PPT | HIGH 24-HR | DAY |
|---|---|---|---|---|---|---|---|---|---|---|
| Antlers | 80.5 | 98 | 30 | 61 | 23 | 0 | 481 | 5.80 | 3.23 | 11 |
| Mt Herman | 79.7 | 97 | 30 | 62 | 23 | 0 | 455 | 5.44 | 1.88 | 9 |
| Broken Bow | 80.8 | 98 | 30 | 63 | 23 | 0 | 491 | 4.83 | 1.57 | 6 |
| Talihina | 82.1 | 104 | 30 | 60 | 23 | 0 | 530 | 2.78 | 1.20 | 11 |
| Clayton | 81.5 | 101 | 30 | 61 | 23 | 0 | 512 | 3.04 | 2.15 | 9 |
| Valliant | 81.6 | 98 | 30 | 63 | 23 | 0 | 516 | 4.70 | 1.09 | 16 |
| Cloudy | 80.6 | 98 | 30 | 61 | 23 | 0 | 484 | 4.48 | 1.37 | 8 |
| Wilburton | 81.6 | 101 | 30 | 60 | 23 | 0 | 514 | 3.28 | 1.44 | 9 |
| Hugo | 82.3 | 98 | 30 | 65 | 23 | 0 | 535 | 3.60 | 1.98 | 11 |
| Wister | 80.6 | 100 | 30 | 62 | 23 | 0 | 484 | 4.88 | 1.50 | 11 |
| Idabel | 82.2 | 99 | 30 | 65 | 23 | 0 | 533 | 5.87 | 2.58 | 8 |

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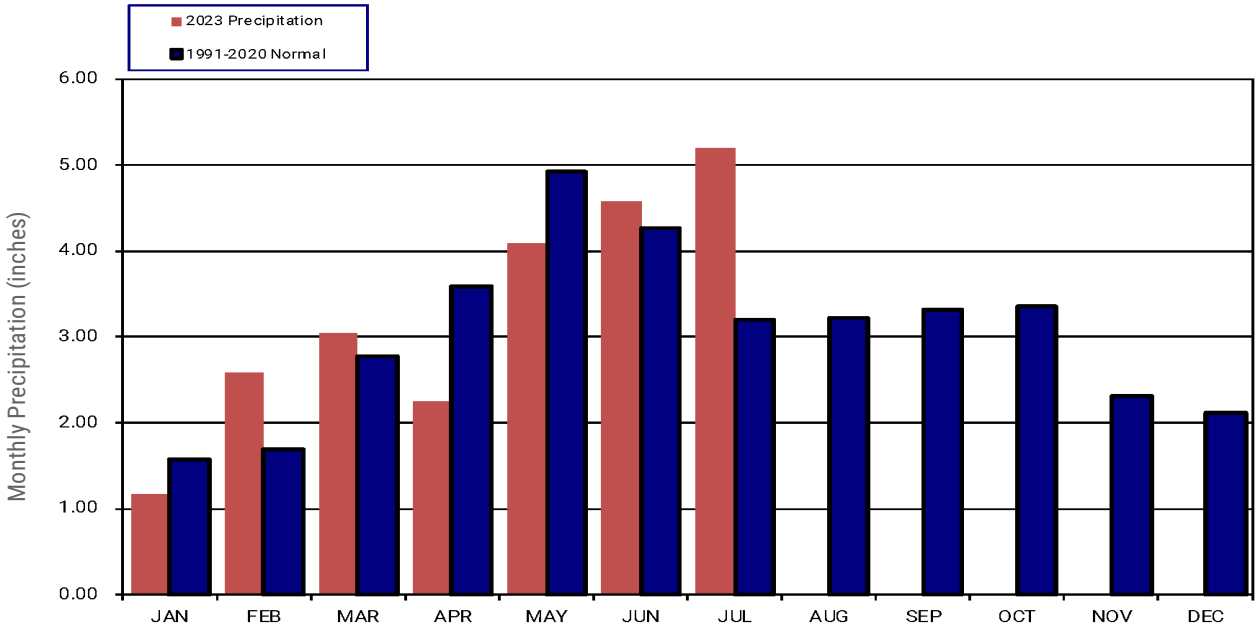
## 2023 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL IN INCHES




## TABLE OF 2023 STATEWIDE PRECIPITATION MONTHLY TOTALS AND NORMALS IN INCHES

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2023 | 1.17 | 2.58 | 3.04 | 2.26 | 4.09 | 4.58 | 5.19 | -- | -- | -- | -- | -- |
| 1991-2020 | 1.57 | 1.69 | 2.78 | 3.59 | 4.93 | 4.26 | 3.20 | 3.23 | 3.32 | 3.36 | 2.32 | 2.11 |

## JULY 2023 MESONET PRECIPITATION COMPARISON

| Climate Division | Precipitation (inches) | Departure from Normal (inches) | Rank since 1895 | Wettest on Record (Year) | Driest on Record (Year) | Jul-22 (inches) |
|---|---|---|---|---|---|---|
| Panhandle | 5.74 | 2.98 | 6th Wettest | 8.81 (1950) | 0.44 (1983) | 2.72 |
| North Central | 5.80 | 2.51 | 7th Wettest | 8.59 (1950) | 0.12 (1983) | 2.87 |
| Northeast | 4.76 | 0.97 | 30th Wettest | 9.52 (1959) | 0.28 (1946) | 2.05 |
| West Central | 6.21 | 3.64 | 3rd Wettest | 7.63 (1950) | 0.04 (1983) | 1.73 |
| Central | 6.35 | 2.97 | 7th Wettest | 9.61 (1950) | 0.16 (1980) | 1.13 |
| East Central | 5.27 | 1.51 | 25th Wettest | 10.03 (1950) | 0.36 (1993) | 1.92 |
| Southwest | 3.68 | 1.20 | 25th Wettest | 6.60 (1950) | 0.03 (1980) | 0.63 |
| South Central | 4.14 | 1.23 | 31st Wettest | 8.46 (1950) | 0.11 (1998) | 0.38 |
| Southeast | 4.43 | 0.72 | 39th Wettest | 12.47 (1950) | 0.19 (1993) | 0.98 |
| Statewide | 5.19 | 1.99 | 13th Wettest | 9.07 (1950) | 0.42 (1980) | 1.61 |

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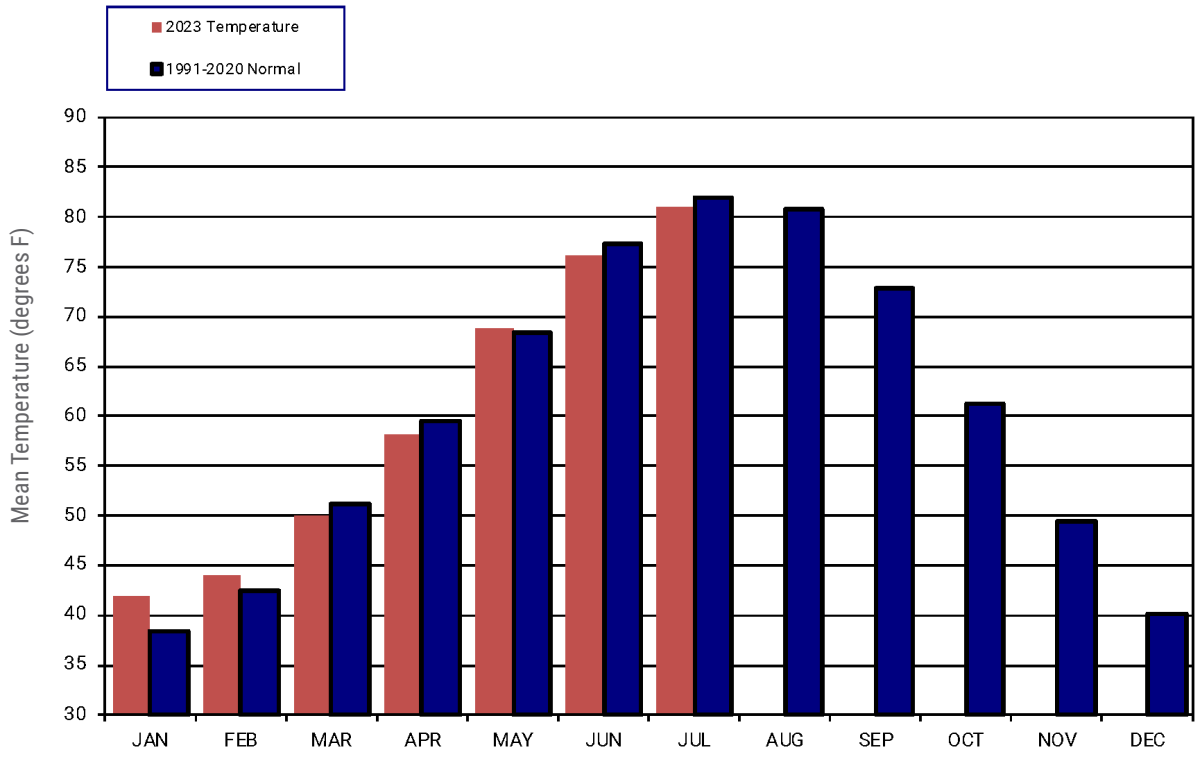
## 2023 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL IN DEGREES FAHRENHEIT




## TABLE OF 2023 STATEWIDE TEMPERATURE MONTHLY TOTALS AND NORMALS IN DEGREES FAHRENHEIT

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2023 | 41.9 | 44.1 | 50.0 | 58.1 | 68.8 | 76.2 | 81.0 | -- | -- | -- | -- | -- |
| 1991-2020 | 38.3 | 42.4 | 51.2 | 59.5 | 68.4 | 77.3 | 81.9 | 80.8 | 72.9 | 61.3 | 49.4 | 40.1 |

## JULY 2023 MESONET TEMPERATURE COMPARISON

| Climate Division | Average Temp (F) | Departure from Normal (F) | Rank since 1895 | Hottest on Record (Year) | Coldest on Record (Year) | Jul-22 (F) |
|---|---|---|---|---|---|---|
| Panhandle | 78.8 | -1.0 | 50th Coolest | 86.0 (1934) | 72.8 (1906) | 83.4 |
| North Central | 81.3 | -0.9 | 57th Coolest | 89.6 (2011) | 75.9 (1950) | 86.2 |
| Northeast | 80.4 | -0.8 | 50th Coolest | 89.3 (1954) | 75.4 (1950) | 85.7 |
| West Central | 80.1 | -2.2 | 37th Coolest | 89.6 (2011) | 75.8 (1906) | 87.0 |
| Central | 81.4 | -1.0 | 53rd Coolest | 90.2 (2011) | 76.7 (1950) | 86.9 |
| East Central | 80.0 | -1.6 | 36th Coolest | 88.9 (2011) | 76.2 (1906) | 86.6 |
| Southwest | 83.1 | -0.7 | 63rd Coolest | 91.7 (2011) | 78.0 (1908) | 88.8 |
| South Central | 82.8 | -0.2 | 64th Warmest | 90.5 (2011) | 77.9 (1950) | 88.2 |
| Southeast | 81.2 | 0.1 | 53rd Warmest | 87.5 (2011) | 76.0 (1905) | 86.9 |
| **Statewide** | **81.0** | **-0.9** | **54th Coolest** | **89.2 (2011)** | **76.3 (1906)** | **86.6** |

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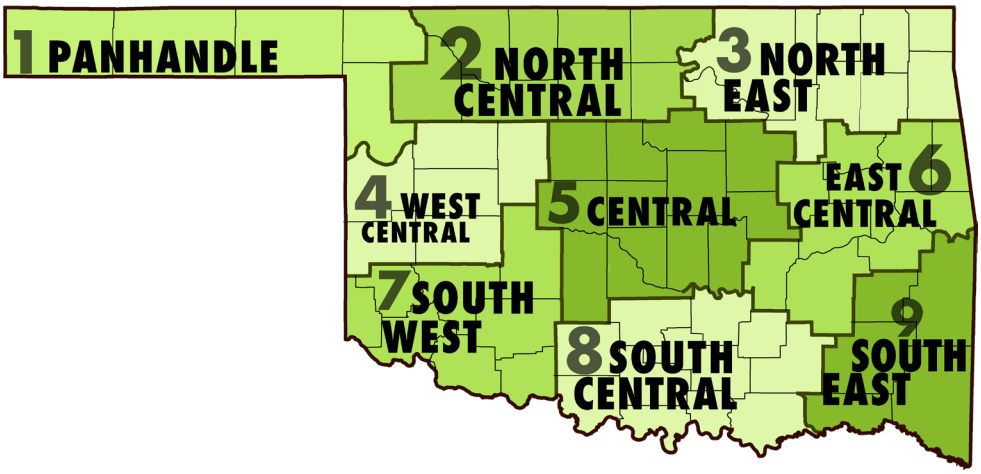
# MESONET EXTREMES FOR JULY 2023

| 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 | 18th | Buffalo | 55 | 2nd | Eva | 8.11 | Beaver | 2.26 | 21st | Buffalo |
| North Central | 105 | 18th | Cherokee | 60 | 9th | May Ranch | 9.71 | Woodward | 3.08 | 11th | Woodward |
| Northeast | 103 | 18th | Burbank | 57 | 10th | Vinita | 7.53 | Foraker | 3.56 | 14th | Foraker |
| West Central | 105 | 25th | Erick | 60 | 22nd | Erick | 9.57 | Watonga | 2.97 | 7th | Camargo |
| Central | 105 | 31st | Kingfisher | 59 | 10th | El Reno | 8.55 | Kingfisher | 3.56 | 9th | Norman |
| East Central | 101 | 30th | Webbers Falls | 61 | 22nd | Cookson | 7.59 | Cookson | 5.63 | 14th | Cookson |
| Southwest | 109 | 18th | Grandfield | 59 | 23rd | Mangum | 5.71 | Hinton | 1.79 | 7th | Medicine Park |
| South Central | 108 | 18th | Ringling | 57 | 23rd | Burneyville | 6.42 | Sulphur | 4.62 | 11th | Sulphur |
| Southeast | 104 | 30th | Talihina | 60 | 23rd | Talihina | 5.87 | Idabel | 3.23 | 11th | Antlers |
| Statewide | 109 | 18th | Grandfield | 55 | 2nd | Eva | 9.71 | Woodward | 5.63 | 14th | Cookson |

## Oklahoma Climate Divisions




| Climate Division | Counties |
|---|---|
| Panhandle - Division 1 | Beaver, Cimarron, Ellis, Harper, and Texas |
| North Central - Division 2 | Alfalfa, Garfield, Grant, Kay, Major, Noble, Woods, and Woodward |
| Northeast - Division 3 | Craig, Delaware, Mayes, Nowata, Osage, Ottawa, Pawnee, Rogers, Tulsa, and Washington |
| West Central - Division 4 | Beckham, Blaine, Custer, Dewey, Roger Mills, and Washita |
| Central - Division 5 | Canadian, Cleveland, Creek, Grady, Kingfisher, Lincoln, Logan, McClain, Okfuskee, Oklahoma, Payne, Pottawatomie, and Seminole |
| East Central - Division 6 | Adair, Cherokee, Haskell, Hughes, McIntosh, Muskogee, Okmulgee, Pittsburg, Sequoyah, and Wagoner |
| Southwest - Division 7 | Caddo, Comanche, Cotton, Greer, Harmon, Jackson, Kiowa, and Tillman |
| South Central - Division 8 | Atoka, Bryan, Carter, Coal, Garvin, Jefferson, Johnston, Love, Marshall, Murray, Pontotoc, and Stephens |
| Southeast - Division 9 | Choctaw, Latimer, LeFlore, McCurtain, and Pushmataha |

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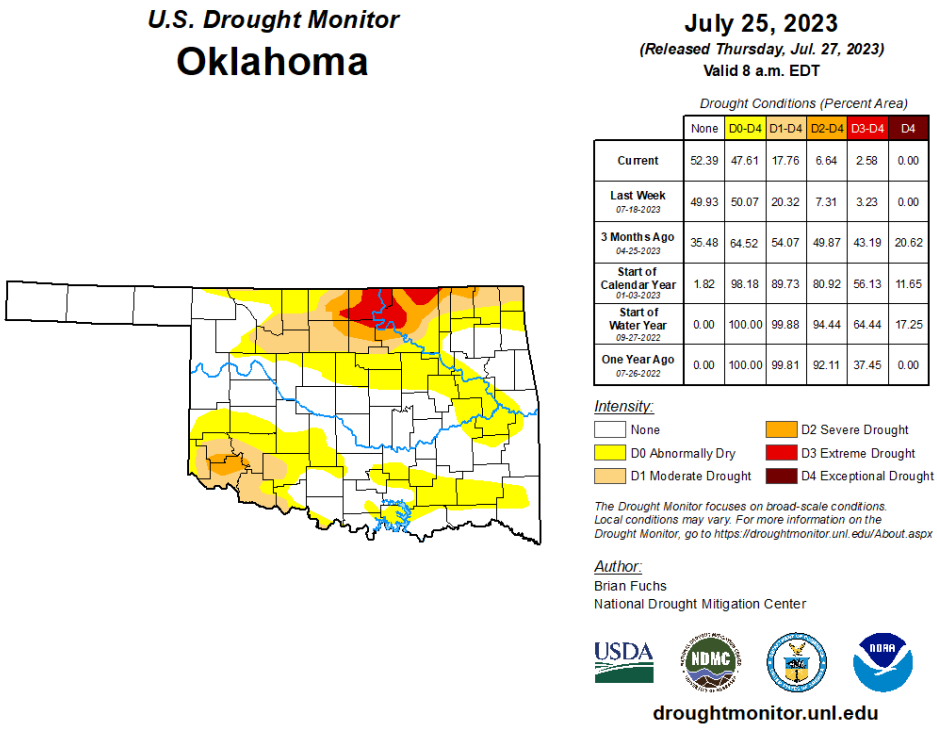


Drought condition intensity levels used for the US Drought Monitor are None, D0 Abnormally Dry, D1 Moderate Drought, D2 Severe Drought, D3 Extreme Drought, and D4 Exceptional Drought.

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.

## U.S. DROUGHT MONITOR FOR OKLAHOMA DROUGHT CONDITIONS (PERCENT AREA)

### JULY 25, 2023 (RELEASED THURSDAY, JUL. 27, 2023) VALID 8 A.M. EDT

| Period | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|---|---|---|---|---|---|
| Current | 52.39 | 47.61 | 17.76 | 6.64 | 2.58 | 0.00 |
| Last Week 07-18-2023 | 49.93 | 50.07 | 20.32 | 7.31 | 3.23 | 0.00 |
| 3 Months Ago 04-25-2023 | 35.48 | 64.52 | 54.07 | 49.87 | 43.19 | 20.62 |
| Start of Current Year 01-03-2023 | 1.82 | 98.18 | 89.73 | 80.92 | 56.13 | 11.65 |
| Start of Water Year 09-27-2022 | 0.00 | 100.00 | 99.88 | 94.44 | 64.44 | 17.25 |
| One Year Ago 07-26-2022 | 0.00 | 100.00 | 99.81 | 92.11 | 37.34 | 0.00 |

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## 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.

## ADDITIONAL RESOURCES

**SUNRISE / SUNSET TABLES**
**U.S. Naval Observatory:** https://aa.usno.navy.mil/data/

**SEVERE STORM REPORTS**
**Storm Prediction Center:** https://spc.noaa.gov/climo/

**National Centers for Environmental Information:**
https://www.ncdc.noaa.gov/stormevents/

**SEASONAL OUTLOOKS**
**Climate Prediction Center:**
https://www.cpc.ncep.noaa.gov/products/OUTLOOKS_index.php/

**CLIMATE CALENDARS AND OTHER LOCAL WEATHER AND CLIMATE INFORMATION**
**Oklahoma Climatological Survey:**
https://climate.ok.gov/


OKLAHOMA CLIMATOLOGICAL SURVEY

Oklahoma Climatological Survey is the State Climate Office for Oklahoma

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