

OKLAHOMA MONTHLY CLIMATE SUMMARY FEBRUARY 2005



Overview

February came and went with little fanfare weather-wise. The vast majority of the state hovered near normal for precipitation, resulting in a very non-remarkable ranking of 45th wettest February since 1892. The temperatures managed to liven up the month, as much as temperatures are capable of during February, and ended as the 17th warmest such period on record. Little winter-like precipitation was reported; a few minor snowfalls were the extent of frozen precipitation for the month. Severe weather was a scarcity with only one bout of severe storms late in the month.

Precipitation

Two areas of distinct precipitation surpluses arose during February. The first was associated with a round of thunderstorms, some of which were severe, which moved from southwestern through northeastern Oklahoma on the 23rd. The precipitation accumulations along this corridor were as much as two inches in central Oklahoma, and nearly an inch in surrounding areas. Central Oklahoma finished with an area-averaged precipitation total of nearly two inches, approximately one-tenth of an inch above normal. While that surplus seems a bit meager, it does qualify the month as the 28th wettest since 1895 for the central portion of the state. Southwestern and northeastern Oklahoma had similar surpluses. The Panhandle was the remaining area with a surplus of precipitation. Its area-averaged total of over one inch was enough for a surplus of nearly half of an inch, the 22nd wettest February on record for that region. Southeastern Oklahoma was relatively dry, despite the highest average precipitation total in the state. That area's deficit of nearly an inch resulted in the 41st driest February on record. That region was the lone area of the state to finish with a deficit for the winter season, despite the 11th wettest January on record.

Temperature

February temperatures were significantly above average across virtually the entire state. Combined with the warmth of the previous two months, the winter season finished as the 13th warmest on record at over three degrees above normal. The seasonal temperature averages for all areas of the state were the 11th and 17th warmest since 1895, while the monthly totals were all within the top 27th warmest. The northeast region led the monthly temperature averages with the 16th warmest for February. North central and northeastern Oklahoma both finished with average temperatures that were four degrees above normal.

February 2005 Statewide Extremes

| Description | Extreme | Station | Date |
|--------------------|----------|---------|---------------|
| High Temperature | 82°F | Durant | February 15th |
| Low Temperature | 13°F | Kenton | February 1st |
| High Precipitation | 3.31 in. | Spencer | |
| Low Precipitation | 0.44 in. | Butler | |

February 1-6: Dreary weather greeted the new month, quite fitting for the winter season. An upper-level storm approaching from the southwest brought unsettled weather on the 1st, complete with drizzle, gray skies, and temperatures in the 30s. Snow began falling in the south that evening before traveling northeast overnight, where it fought above-freezing temperatures to lay down an inch in a few locations. The maximum public report of snow was two inches, which occurred at a couple of locations in Delaware County. With the rapid exit of the upper-level storm to the northeast, skies quickly cleared from west to east. Highs rebounded into the 40s, still below normal, but more seasonable than that of the previous day. The days became successively warmer with another approaching upper-level system resulting in southerly winds. Highs in the 60s became common through the 6th. The system generated widespread rains over the state, and a few thunderstorms fired along the associated cold front. Rainfall amounts were greatest in the southeast, although most of the state saw at least some measurable precipitation.

February 7-11: The arrival of the cold front on the 6th ushered out the pleasant weather, returning the state to more seasonable conditions. Light drizzle and freezing drizzle fell in the northwest on the 7th, where temperatures struggled to reach above freezing. Highs plunged to the 30s and 40s, and combined with strong northerly winds to produce wind chills in the 20s. A few showers and thunderstorms formed along the front as it progressed southward on the 8th, although amounts were generally light. A dome of high pressure covered the state in the front's aftermath. Light winds and highs in the 50s and 60s were in place for the remainder of the period.

February 12-15: The warmest portion of the month, temperatures slowly climbed from the 50s on the 12th to the 80s on the 15th. An approaching upper level storm furnished the state with warm southerly winds, decreasing humidity and increasing fire danger. The high temperature of the month, 82 degrees, was recorded by the Durant Mesonet site on the 15th.

February 16-21: A cold front entered the northwestern portion of the state on the 16th, bringing a sudden halt to the spring-like weather. Highs dropped from the 80s to the 40s as a dome of cold air filled in behind the front. Light rain and an occasional thunderstorm popped up throughout the period, and the weather once again turned warm. A deep low pressure system in southwestern Kansas whipped the winds from the south once again, with gusts over 25 mph. A cold front entered the northwest on the 20th and slowly moved southeastward, approaching the Red River by the afternoon of the 21st. High temperatures behind the front once again dipped into the 40s.

February 22-28: An upper level storm quickly crossed over the state on the 23rd, which triggered a rare bout with severe weather during the month. Clusters of thunderstorms moved through much of Oklahoma. Severe thunderstorm warnings were required for several of these storms, as they contained hail to the size of quarters and strong winds, along with torrential rainfall. The heaviest storms traversed the state from the southwest to the northeast, pulsing above severe limits as they did so. The Spencer Mesonet site in Oklahoma County recorded nearly two inches of rainfall with the storms, and other amounts at or above one inch were numerous in the southwest to northeast corridor across the state. A few more bouts with

showers and storms occurred during this period. Another cluster of storms moved across far southern Oklahoma on the 24th, supplying the area with precipitation on the order of one half of an inch. More light rain and drizzle cropped up on the 27th and again on the 28th, both mainly in the northwestern corner of the state. Little accumulation was reported with either round of precipitation. The year's shortest month ended with seasonal temperatures and light winds.

| February 2005 Statewide Statistics | | | |
|---|----------------|----------------|-------------------------|
| Temperature | | | |
| | Average | Depart. | Rank (1892-2005) |
| Month (February) | 45.2°F | 3.5°F | 17th Warmest |
| Season-to-date (Jan-Feb) | 42.0°F | 3.1°F | 13th Warmest |
| Year-to-Date (Jan-Feb) | 42.1°F | 3.3°F | 19th Warmest |
| Precipitation | | | |
| | Total | Depart. | Rank (1892-2005) |
| Month (February) | 1.65 in. | -0.11 in. | 45th Wettest |
| Season-to-Date (Jan-Feb) | 5.84 in. | 0.61 in. | 31st Wettest |
| Year-to-Date (Jan-Feb) | 5.11 in. | 1.90 in. | 13th Wettest |
| Depart. = Departure from 30-year normal | | | |

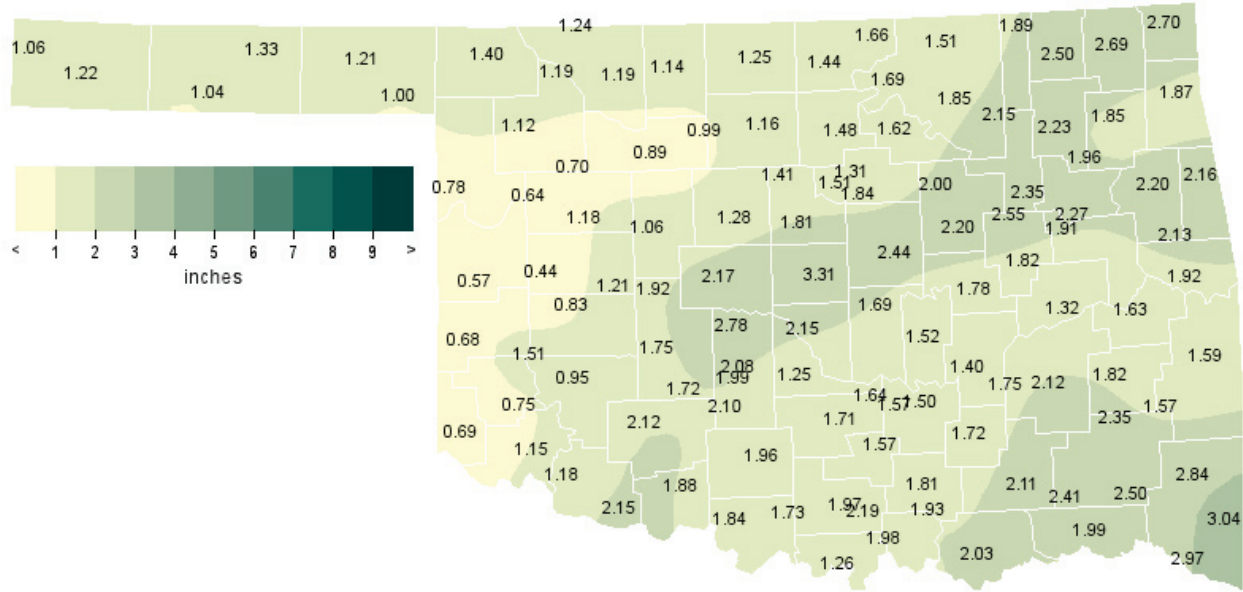
February 2004 Severe Weather

No significant severe weather reported in the state.

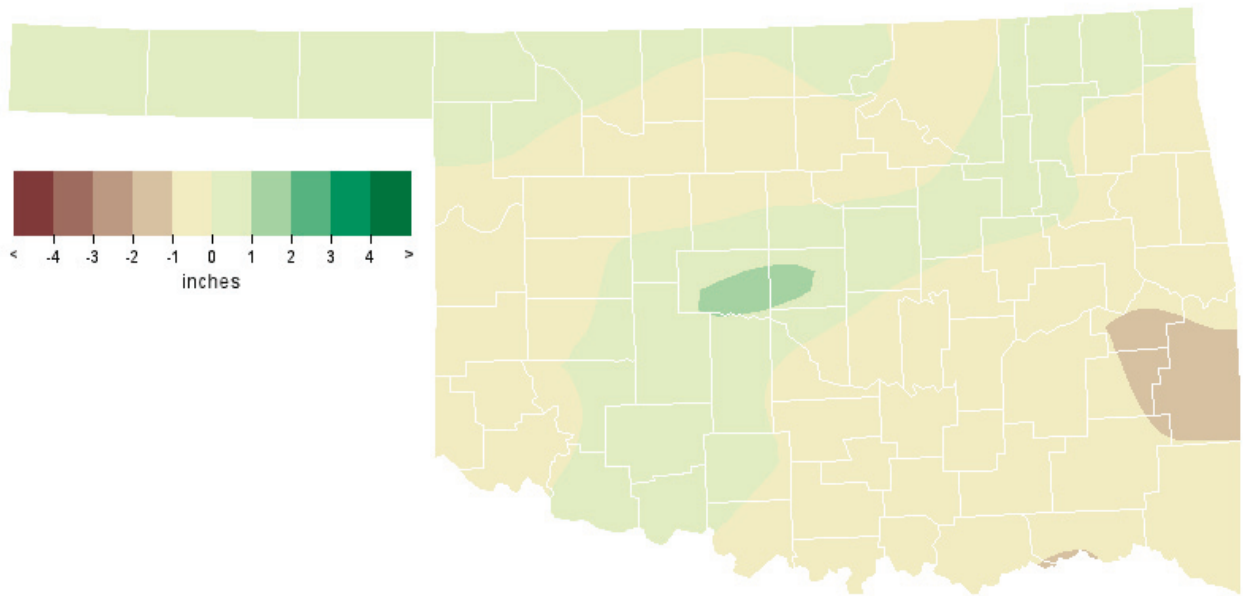
Record Event Reports

| Description | Day | Location | Record | Previous Record | Year |
|-----------------------------------|------------|-----------------|---------------|------------------------|-------------|
| Warmest Maximum Temperature (tie) | 15 | McAlester | 77 degrees | 77 degrees | 2000 |
| Daily Rainfall | 23 | Oklahoma City | 1.44 inches | 1.09 inches | 2001 |

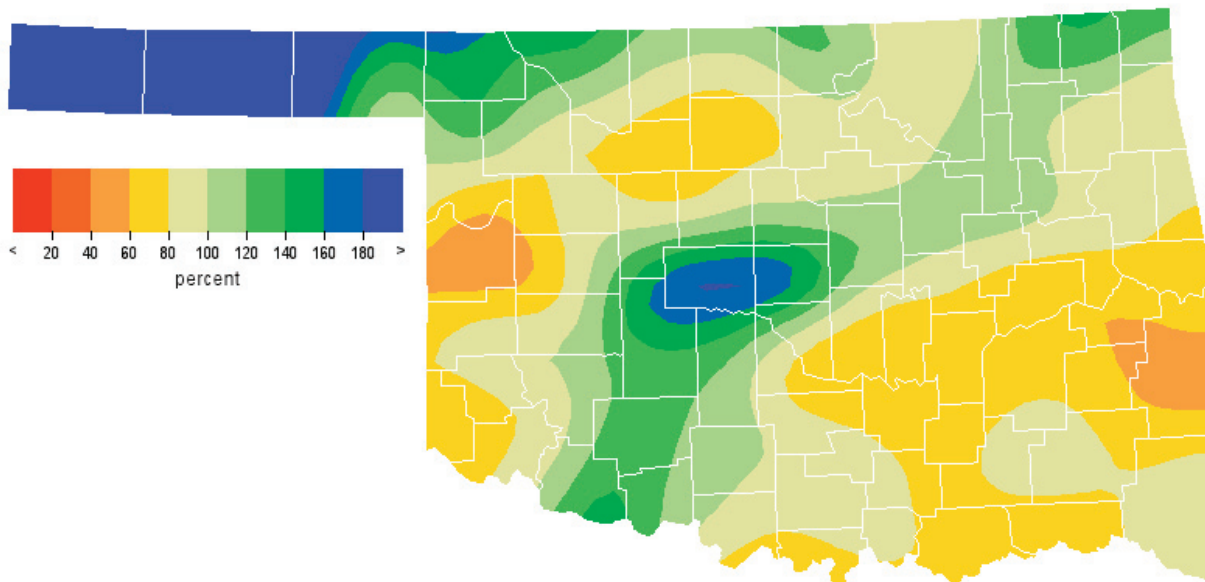
February 2005 Observed Precipitation



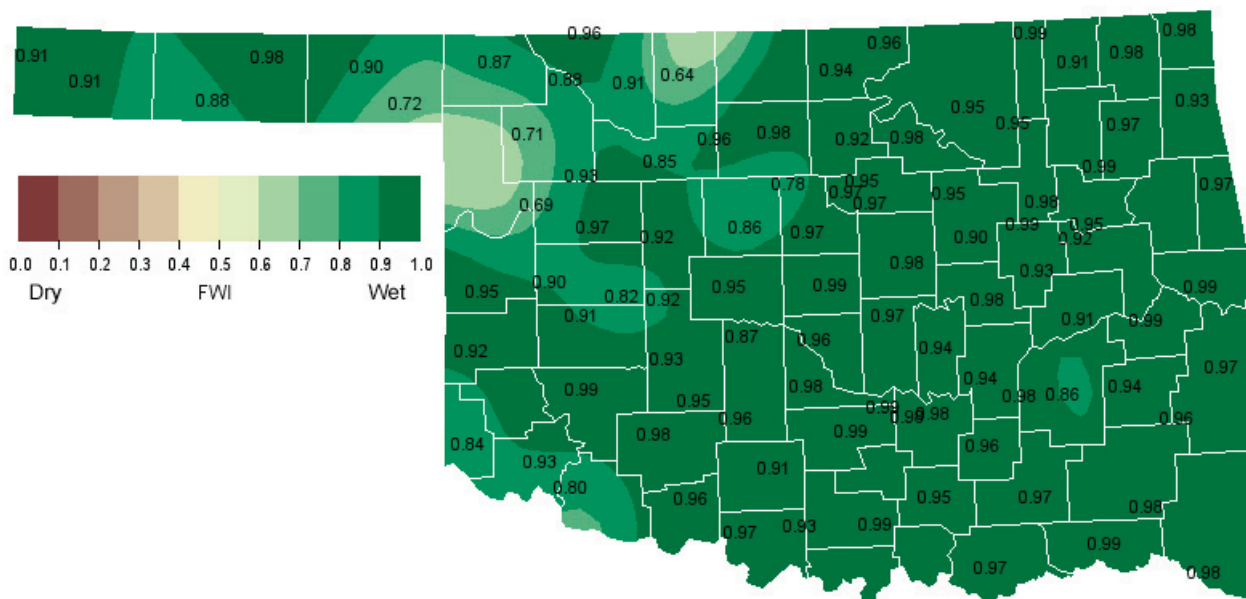
February 2005 Departure from Normal Precipitation



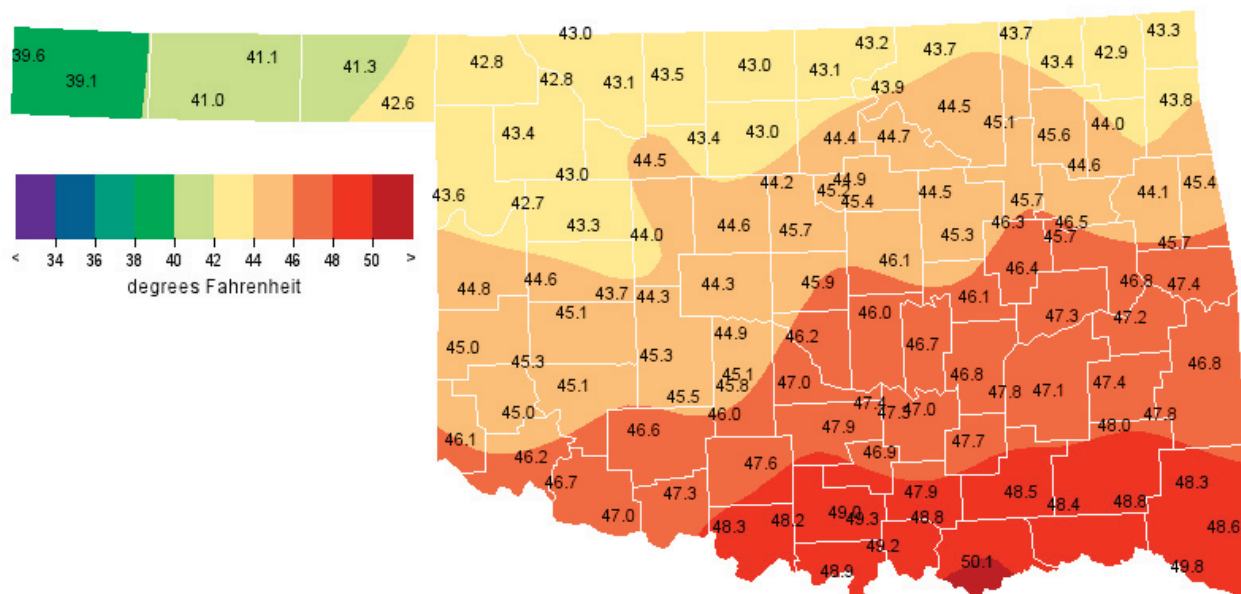
February 2005 Percent of Normal Precipitation



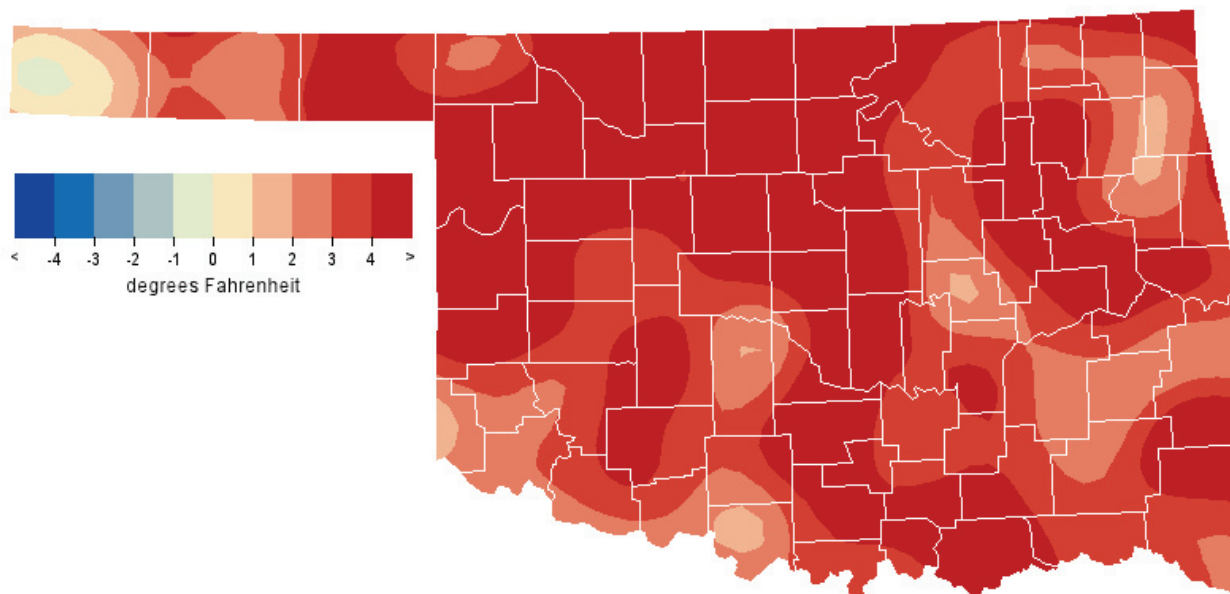
February 2005 Average Soil Moisture at 25cm



February 2005 Average Temperature



February 2005 Departure from Normal Temperature



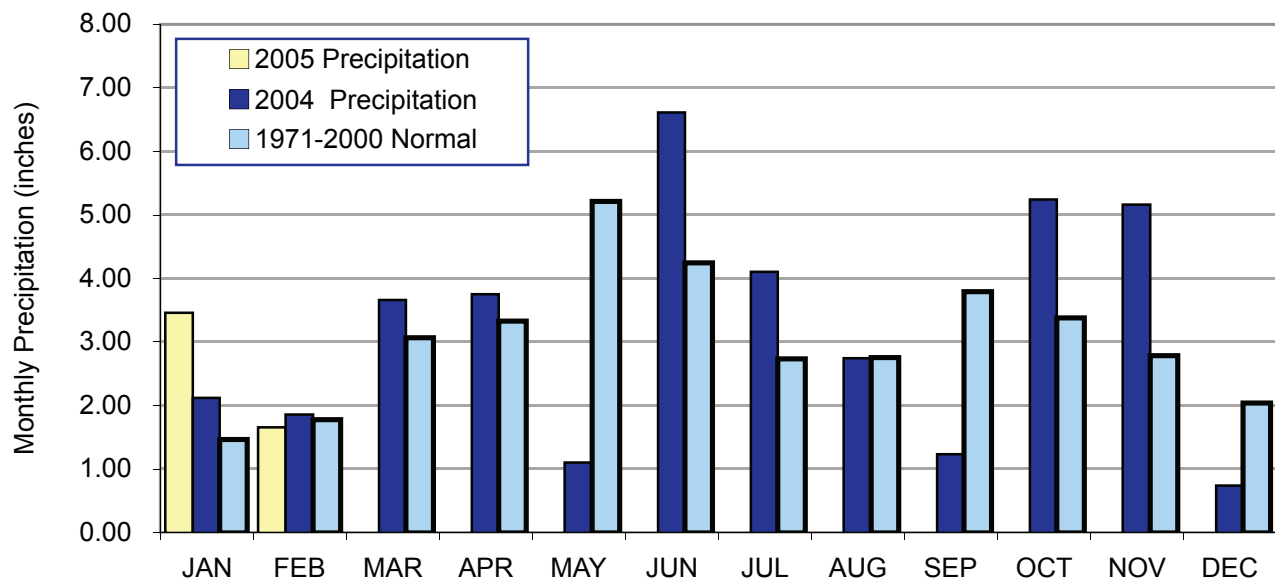
Mesonet Monthly Summary for February 2005

| NAME | MEAN HIGH | | | LOW | | | TOT HIGH | | | NAME | MEAN HIGH | | | LOW | | | TOT HIGH | | | | |
|----------------------|-----------|------|-----|------|-----|------|----------|------|-------|------|---------------|------|------|-----|------|-----|----------|------|------|-------|-----|
| | TEMP | TEMP | DAY | TEMP | DAY | HDD | CDD | PPT | 24-HR | | DAY | TEMP | TEMP | DAY | TEMP | DAY | HDD | CDD | PPT | 24-HR | DAY |
| PANHANDLE | | | | | | | | | | | | | | | | | | | | | |
| Arnett | 43.5 | 73 | 20 | 17 | 9 | 601 | 0 | .78 | .35 | 6 | Goodwell | 41.0 | 74 | 14 | 22 | 9 | 673 | 0 | 1.04 | .60 | 6 |
| Beaver | 41.3 | 75 | 19 | 17 | 9 | 663 | 0 | 1.21 | .56 | 6 | Hooker | 41.1 | 74 | 14 | 21 | 9 | 670 | 0 | 1.33 | .64 | 6 |
| Boise City | 39.1 | 74 | 14 | 18 | 2 | 726 | 0 | 1.22 | .35 | 2 | Kenton | 39.5 | 71 | 19 | 13 | 1 | 713 | 0 | 1.06 | .60 | 6 |
| Buffalo | 42.8 | 76 | 14 | 21 | 9 | 622 | 0 | 1.40 | .46 | 6 | Slapout | 42.6 | 75 | 19 | 16 | 9 | 628 | 0 | 1.00 | .41 | 6 |
| NORTH CENTRAL | | | | | | | | | | | | | | | | | | | | | |
| Blackwell | 43.0 | 75 | 14 | 18 | 9 | 616 | 0 | 1.44 | .48 | 6 | Medford | 43.0 | 72 | 14 | 20 | 9 | 617 | 0 | 1.25 | .43 | 6 |
| Breckenridge | 43.0 | 74 | 14 | 19 | 9 | 615 | 0 | 1.16 | .46 | 23 | Newkirk | 43.2 | 75 | 14 | 16 | 9 | 609 | 0 | 1.66 | .54 | 6 |
| Cherokee | 43.5 | 73 | 14 | 21 | 9 | 603 | 0 | 1.14 | .47 | 23 | Red Rock | 44.3 | 76 | 14 | 18 | 9 | 579 | 0 | 1.48 | .57 | 23 |
| Fairview | 44.4 | 76 | 14 | 20 | 9 | 576 | 0 | .89 | .27 | 6 | Seiling | 43.0 | 73 | 20 | 20 | 9 | 615 | 0 | .70 | .25 | 6 |
| Freedom | 42.8 | 74 | 14 | 18 | 9 | 622 | 0 | 1.19 | .31 | 6 | Woodward | 43.5 | 74 | 14 | 18 | 9 | 603 | 0 | 1.12 | .37 | 23 |
| Lahoma | 43.3 | 74 | 14 | 19 | 9 | 607 | 0 | .99 | .34 | 6 | Alva | 43.1 | 74 | 14 | 18 | 9 | 614 | 0 | 1.19 | .38 | 23 |
| May Ranch | 42.9 | 74 | 14 | 18 | 9 | 617 | 0 | 1.24 | .44 | 6 | | | | | | | | | | | |
| NORTHEAST | | | | | | | | | | | | | | | | | | | | | |
| Bixby | 45.6 | 79 | 20 | 23 | 3 | 543 | 0 | 2.35 | .67 | 23 | Pryor | 44.0 | 78 | 20 | 22 | 10 | 589 | 0 | 1.85 | .45 | 23 |
| Burbank | 43.9 | 78 | 14 | 19 | 9 | 591 | 0 | 1.69 | .57 | 6 | Skiatook | 45.0 | 77 | 20 | 18 | 9 | 559 | 0 | 2.15 | .59 | 6 |
| Copan | 43.6 | 73 | 14 | 18 | 9 | 600 | 0 | 1.89 | .54 | 6 | Vinita | 42.9 | 76 | 20 | 20 | 3 | 618 | 0 | 2.69 | .69 | 23 |
| Foraker | 43.7 | 74 | 14 | 16 | 9 | 596 | 0 | 1.51 | .48 | 6 | Wynona | 44.4 | 76 | 14 | 18 | 9 | 577 | 0 | 1.85 | .61 | 23 |
| Jay | 43.8 | 76 | 20 | 20 | 10 | 593 | 0 | 1.87 | .59 | 23 | Porter | 46.5 | 79 | 20 | 23 | 9 | 521 | 2 | 2.27 | .77 | 23 |
| Miami | 43.4 | 76 | 20 | 23 | 3 | 606 | 0 | 2.70 | .64 | 23 | Inola | 44.6 | 80 | 20 | 22 | 10 | 572 | 0 | 1.96 | .55 | 23 |
| Nowata | 43.4 | 76 | 20 | 19 | 3 | 605 | 0 | 2.50 | .67 | 23 | Claremore | 45.6 | 79 | 20 | 21 | 9 | 545 | 0 | 2.23 | .56 | 6 |
| Pawnee | 44.6 | 76 | 14 | 20 | 9 | 571 | 0 | 1.62 | .52 | 6 | | | | | | | | | | | |
| WEST CENTRAL | | | | | | | | | | | | | | | | | | | | | |
| Bessie | 45.1 | 76 | 14 | 21 | 9 | 558 | 0 | .83 | .25 | 6 | Putnam | 43.4 | 74 | 20 | 20 | 9 | 606 | 0 | 1.18 | .68 | 23 |
| Butler | 44.7 | 78 | 20 | 20 | 9 | 569 | 0 | .44 | .27 | 6 | Retrop | 45.4 | 78 | 14 | 23 | 9 | 549 | 0 | 1.51 | .77 | 22 |
| Camargo | 42.7 | 74 | 20 | 19 | 9 | 624 | 0 | .64 | .30 | 23 | Watonga | 44.0 | 73 | 14 | 20 | 9 | 589 | 0 | 1.06 | .38 | 6 |
| Cheyenne | 44.8 | 76 | 14 | 20 | 9 | 564 | 0 | .57 | .32 | 6 | Weatherford | 43.7 | 73 | 14 | 22 | 9 | 598 | 0 | 1.21 | .38 | 23 |
| Erick | 45.0 | 78 | 14 | 23 | 9 | 561 | 0 | .68 | .32 | 6 | | | | | | | | | | | |
| CENTRAL | | | | | | | | | | | | | | | | | | | | | |
| Bowlegs | 46.7 | 77 | 20 | 22 | 9 | 512 | 0 | 1.52 | .77 | 6 | Okemah | 46.1 | 78 | 20 | 23 | 9 | 530 | 1 | 1.78 | .67 | 6 |
| Bristow | 45.2 | 77 | 20 | 21 | 10 | 553 | 0 | 2.20 | .86 | 23 | Perkins | 45.3 | 74 | 20 | 21 | 9 | 553 | 0 | 1.84 | .50 | 6 |
| Chandler | 46.1 | 78 | 20 | 21 | 9 | 531 | 2 | 2.44 | 1.05 | 23 | Shawnee | 46.0 | 76 | 20 | 21 | 9 | 533 | 1 | 1.69 | .66 | 6 |
| Chickasha | 45.1 | 76 | 20 | 21 | 10 | 557 | 0 | 2.08 | .60 | 6 | Spencer | 45.9 | 76 | 20 | 20 | 9 | 535 | 0 | 3.31 | 1.84 | 23 |
| El Reno | 44.3 | 76 | 14 | 20 | 9 | 579 | 0 | 2.17 | 1.12 | 23 | Stillwater | 45.0 | 77 | 14 | 20 | 9 | 561 | 0 | 1.31 | .50 | 6 |
| Guthrie | 45.7 | 76 | 14 | 20 | 9 | 541 | 0 | 1.81 | .72 | 23 | Washington | 46.8 | 77 | 14 | 22 | 9 | **** | **** | 1.00 | .23 | 23 |
| Kingfisher | 44.6 | 75 | 20 | 22 | 9 | 571 | 0 | 1.28 | .43 | 6 | Ninnekah | 45.9 | 76 | 14 | 23 | 9 | 536 | 0 | 1.99 | .54 | 6 |
| Marena | 45.3 | 76 | 14 | 19 | 9 | 553 | 0 | 1.51 | .49 | 6 | Acme | 46.0 | 77 | 14 | 22 | 9 | 531 | 1 | 2.10 | .66 | 6 |
| Minco | 44.9 | 75 | 20 | 21 | 9 | 562 | 0 | 2.78 | .96 | 23 | Norman | 46.3 | 77 | 14 | 22 | 9 | 527 | 2 | 2.15 | .62 | 6 |
| Oilton | 44.6 | 78 | 20 | 20 | 3 | 573 | 0 | 2.00 | .62 | 6 | Marshall | 44.2 | 75 | 14 | 21 | 9 | 582 | 0 | 1.41 | .41 | 6 |
| EAST CENTRAL | | | | | | | | | | | | | | | | | | | | | |
| Calvin | 46.8 | 79 | 20 | 24 | 3 | 509 | 0 | 1.40 | .58 | 6 | Stigler | 47.2 | 79 | 15 | 24 | 10 | 498 | 1 | 1.63 | .42 | 23 |
| Cookson | 45.6 | 78 | 15 | 20 | 10 | 542 | 0 | 2.13 | .61 | 23 | Stuart | 47.9 | 78 | 15 | 25 | 9 | 480 | 0 | 1.75 | .52 | 6 |
| Eufaula | 47.3 | 78 | 15 | 25 | 9 | 496 | 1 | 1.32 | .49 | 6 | Tahlequah | 44.1 | 75 | 20 | 22 | 3 | 584 | 0 | 2.20 | .67 | 23 |
| Haskell | 45.7 | 79 | 20 | 23 | 9 | 542 | 1 | 1.91 | .51 | 23 | Webbers Falls | 46.8 | 77 | 15 | 24 | 10 | 511 | 0 | **** | **** | *** |
| McAlester | 47.1 | 78 | 15 | 24 | 10 | 501 | 0 | 2.12 | .53 | 6 | Westville | 45.4 | 76 | 15 | 23 | 10 | 547 | 0 | 2.16 | .58 | 23 |
| Okmulgee | 46.3 | 79 | 20 | 24 | 9 | 524 | 2 | 1.82 | .57 | 6 | Hectorville | 46.4 | 78 | 20 | 21 | 9 | 523 | 1 | 2.55 | .84 | 23 |
| Sallisaw | 47.4 | 79 | 15 | 23 | 10 | 494 | 0 | 1.92 | .67 | 23 | | | | | | | | | | | |
| SOUTHWEST | | | | | | | | | | | | | | | | | | | | | |
| Altus | 46.2 | 77 | 20 | 27 | 3 | 527 | 0 | 1.15 | .31 | 6 | Medicine Park | 46.6 | 76 | 20 | 24 | 9 | 515 | 0 | 2.12 | .66 | 6 |
| Fort Cobb | 45.3 | 76 | 14 | 23 | 9 | 553 | 0 | 1.75 | .39 | 27 | Tipton | 46.6 | 77 | 14 | 26 | 3 | 515 | 0 | 1.18 | .34 | 6 |
| Hinton | 44.2 | 76 | 14 | 21 | 9 | 582 | 0 | 1.92 | .79 | 23 | Walters | 47.3 | 78 | 14 | 26 | 10 | 494 | 0 | 1.88 | .69 | 6 |
| Hobart | 45.1 | 76 | 14 | 25 | 9 | 558 | 0 | .95 | .28 | 6 | Apache | 45.5 | 75 | 20 | 23 | 9 | 545 | 0 | 1.72 | .45 | 6 |
| Hollis | 46.0 | 79 | 14 | 25 | 3 | 531 | 0 | .69 | .26 | 6 | Grandfield | 47.0 | 77 | 14 | 27 | 3 | 505 | 0 | 2.15 | .74 | 6 |
| Mangum | 45.0 | 79 | 14 | 20 | 3 | 559 | 0 | .75 | .35 | 6 | | | | | | | | | | | |
| SOUTH CENTRAL | | | | | | | | | | | | | | | | | | | | | |
| Ada | 47.0 | 79 | 20 | 23 | 9 | 503 | 0 | 1.50 | .71 | 6 | Ringling | 48.2 | 77 | 20 | 25 | 4 | 471 | 1 | 1.73 | .70 | 6 |
| Burneyville | 48.9 | 79 | 15 | 22 | 4 | 453 | 3 | 1.26 | .49 | 6 | Sulphur | 46.8 | 77 | 20 | 23 | 3 | 509 | 0 | 1.57 | .72 | 6 |
| Byars | 47.5 | 76 | 20 | 22 | 9 | 493 | 1 | 1.64 | .81 | 6 | Tishomingo | 47.9 | 79 | 15 | 25 | 4 | 478 | 1 | 1.81 | .75 | 6 |
| Centrahoma | 47.7 | 80 | 15 | 23 | 10 | 486 | 0 | 1.72 | .59 | 6 | Waurika | 48.3 | 80 | 20 | 25 | 3 | 470 | 2 | 1.84 | .68 | 6 |
| Durant | 50.1 | 82 | 15 | 28 | 4 | 425 | 8 | 2.03 | .49 | 6 | Vanoss | 47.2 | 79 | 20 | 22 | 3 | 499 | 2 | 1.57 | .72 | 6 |
| Ketchum Ranch | 47.6 | 78 | 14 | 24 | 9 | 489 | 0 | 1.96 | .74 | 6 | Bee | 48.7 | 80 | 15 | 25 | 4 | 459 | 4 | 1.93 | .66 | 6 |
| Lane | 48.6 | 80 | 15 | 24 | 10 | 461 | 0 | 2.11 | .58 | 6 | Newport | 49.0 | 78 | 20 | 25 | 9 | 449 | 3 | 1.97 | .82 | 6 |
| Madill | 49.2 | 80 | 15 | 24 | 10 | 444 | 2 | 1.98 | .79 | 6 | Ardmore | 49.3 | 77 | 15 | 27 | 9 | 443 | 3 | 2.19 | .76 | 6 |
| Pauls Valley | 47.8 | 77 | 20 | 24 | 9 | 482 | 1 | 1.71 | .66 | 6 | | | | | | | | | | | |
| SOUTHEAST | | | | | | | | | | | | | | | | | | | | | |
| Antlers | 48.5 | 80 | 20 | 22 | 10 | 463 | 1 | 2.41 | .71 | 6 | Mt Herman | 48.3 | 77 | 15 | 24 | 10 | 469 | 1 | 2.84 | .99 | 6 |
| Clayton | 48.1 | 80 | 15 | 22 | 10 | 475 | 1 | 2.35 | .61 | 6 | Talihina | 47.8 | 79 | 15 | 21 | 10 | 481 | 0 | 1.57 | .41 | 6 |
| Cloudy | 48.8 | 77 | 15 | 25 | 4 | 453 | 0 | 2.50 | .85 | 6 | Wilburton | 47.5 | 80 | 15 | 22 | 10 | 491 | 0 | 1.82 | .36 | 23 |
| Hugo | **** | *** | *** | *** | *** | **** | **** | 1.99 | .61 | 6 | Wister | 46.9 | 80 | 15 | 21 | 10 | 508 | 0 | 1.59 | .42 | 6 |
| Idabel | 49.8 | 80 | 15 | 26 | 10 | 427 | 0 | 2.97 | 1.19 | 23 | Broken Bow | 48.6 | 80 | 15 | 23 | 10 | 459 | 0 | 3.04 | 1.17 | 6 |

February 2005 Mesonet Precipitation Comparison

| Climate Division | Precipitation (inches) | Departure from Normal (inches) | Rank since 1895 | Wettest on Record (Year) | Driest on Record (Year) | Feb-04 |
|------------------|------------------------|--------------------------------|-----------------|--------------------------|-------------------------|--------|
| Panhandle | 1.13 | 0.49 | 22nd Wettest | 2.94 (1911) | 0.00 (1896) | 0.61 |
| North Central | 1.19 | -0.03 | 48th Wettest | 4.10 (1911) | 0.00 (1904) | 1.33 |
| Northeast | 2.08 | 0.10 | 40th Wettest | 5.80 (1985) | 0.10 (1963) | 1.26 |
| West Central | 0.90 | -0.24 | 53rd Wettest | 3.64 (1997) | 0.00 (1904) | 1.18 |
| Central | 1.93 | 0.07 | 28th Wettest | 5.08 (1938) | 0.00 (1904) | 1.21 |
| East Central | 1.91 | -0.52 | 53rd Driest | 9.15 (1938) | 0.00 (1895) | 1.37 |
| Southwest | 1.48 | 0.15 | 36th Wettest | 3.89 (1997) | 0.00 (1902) | 2.30 |
| South Central | 1.80 | -0.41 | 55th Wettest | 7.66 (1938) | 0.02 (1902) | 2.86 |
| Southeast | 2.31 | -0.83 | 41st Driest | 10.12 (1945) | 0.36 (1895) | 3.10 |
| Statewide | 1.65 | -0.11 | 45th Wettest | 4.66 (1938) | 0.18 (1996) | 1.66 |

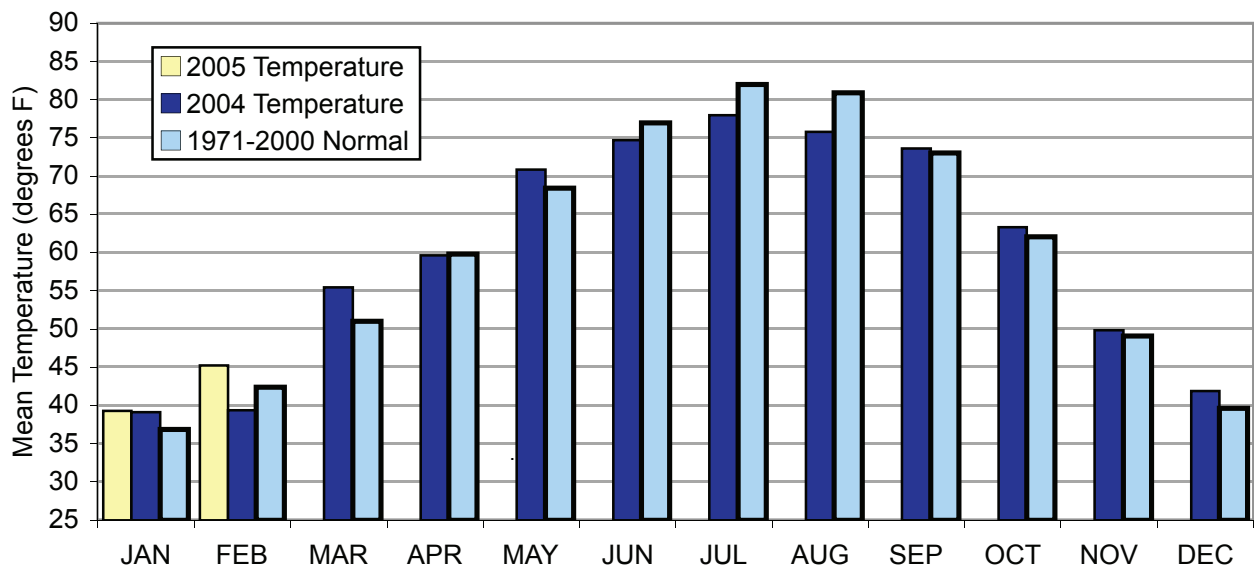
2004 and 2005 Statewide Precipitation Monthly Totals vs. Normal



February 2005 Mesonet Temperature Comparison

| Climate Division | Average Temp (F) | Departure from Normal (F) | Rank since 1895 | Hottest on Record (Year) | Coldest on Record (Year) | Feb-04 (F) |
|------------------|------------------|---------------------------|-----------------|--------------------------|--------------------------|------------|
| Panhandle | 41.4 | 3.1 | 18th Warmest | 47.5 (1954) | 23.1 (1899) | 36.7 |
| North Central | 43.3 | 4.0 | 18th Warmest | 49.6 (1954) | 22.4 (1899) | 36.6 |
| Northeast | 44.4 | 4.0 | 16th Warmest | 49.8 (1976) | 25.6 (1899) | 38.3 |
| West Central | 44.3 | 3.7 | 20th Warmest | 51.0 (1954) | 23.8 (1905) | 38.4 |
| Central | 45.5 | 3.6 | 19th Warmest | 51.6 (1976) | 26.2 (1899) | 38.9 |
| East Central | 46.5 | 3.7 | 19th Warmest | 52.1 (1976) | 28.7 (1899) | 40.0 |
| Southwest | 45.9 | 2.8 | 27th Warmest | 52.5 (1954) | 26.8 (1905) | 40.4 |
| South Central | 48.2 | 3.4 | 22nd Warmest | 53.6 (1976) | 30.0 (1905) | 40.7 |
| Southeast | 48.2 | 3.5 | 22nd Warmest | 52.6 (1976) | 31.4 (1899) | 40.4 |
| Statewide | 45.2 | 3.5 | 17th Warmest | 50.7 (1954) | 26.6 (1899) | 38.9 |

2004 and 2005 Statewide Temperature Monthly Averages vs. Normal



Mesonet Extremes for February 2005

| Climate Division | High | | | Low | | | High Monthly Rainfall | | | High Daily Rainfall | | |
|------------------|----------|------|----------|----------|------|----------|-----------------------|-------------|----------|---------------------|-------------|--|
| | Temp (F) | Day | Station | Temp (F) | Day | Station | (inches) | Station | (inches) | Day | Station | |
| Panhandle | 76 | 14th | Buffalo | 13 | 1st | Kenton | 1.40 | Buffalo | 0.64 | 6th | Hooker | |
| North Central | 76 | 14th | Fairview | 16 | 9th | Newkirk | 1.66 | Newkirk | 0.57 | 23rd | Red Rock | |
| Northeast | 80 | 20th | Inola | 16 | 9th | Foraker | 2.70 | Miami | 0.77 | 23rd | Porter | |
| West Central | 78 | 14th | Erick | 19 | 9th | Camargo | 1.51 | Retrop | 0.77 | 22nd | Retrop | |
| Central | 78 | 20th | Chandler | 19 | 9th | Marena | 3.31 | Spencer | 1.84 | 23rd | Spencer | |
| East Central | 79 | 15th | Sallisaw | 20 | 10th | Cookson | 2.55 | Hectorville | 0.84 | 23rd | Hectorville | |
| Southwest | 79 | 14th | Hollis | 20 | 3rd | Mangum | 2.15 | Grandfield | 0.79 | 23rd | Hinton | |
| South Central | 82 | 15th | Durant | 22 | 3rd | Vanoss | 2.19 | Ardmore | 0.82 | 6th | Newport | |
| Southeast | 80 | 15th | Clayton | 21 | 10th | Talihina | 3.04 | Broken Bow | 1.19 | 23rd | Idabel | |
| Statewide | 82 | 15th | Durant | 13 | 1st | Kenton | 3.31 | Spencer | 1.84 | 23rd | Spencer | |

March Climatological Outlook

The retreat of winter and the onset of spring progress across Oklahoma during March, but the change of season is not smooth. Despite the generally moderating climate, winter intrudes from time-to-time, especially in the first half of the month, bringing with it some frigid weather and, occasionally, some frighteningly heavy snowstorms. By the end of the month, spring is typically in full sway, including occasional full participation in the severe thunderstorm season.

Temperature

Mean: 51.0 degrees
Warmest Location: 55.7 degrees, Ardmore
Coolest Location: 45.1 degrees, Goodwell
Warmest March: 1907, 59.6 degrees
Coolest March: 1915, 39.2 degrees
Hottest recorded: 104 degrees, Frederick, March 27, 1971
Coldest recorded: -18 degrees, Hooker, March 7, 1920
Kenton, March 1, 1922 & March 6, 1948

As befits a transitional month, March is Oklahoma's 5th coolest month. The statewide-average normal monthly temperature of 51.0 degrees is compiled from a collection of station-specific normals that range from 45.1 degrees in the panhandle at Goodwell to 55.7 degrees at Ardmore in south central Oklahoma. Monthly averages of statewide temperatures have included a maximum of 57.9 degrees both 1907 and 1910 and a minimum of 37.6 degrees in 1915. Normal daily maximum temperatures are bounded by southerly Waurika's 68.8 degrees and northerly Arnett's 59.3. Extremes of normal daily minimum temperatures are found in the panhandle at Boise City, 29.8 degrees, and in the south at Ardmore, 43.8 degrees.

Normal statewide-averaged precipitation in March is 3.06 inches, ranking March as the state's 6th wettest month. The extreme monthly statewide averages of March precipitation are 7.46 inches in 1973 and 0.38 inches in 1971. Southeastern Oklahoma's Smithville carries the title of wettest station in March with a normal precipitation total of 5.52 inches. The least normal March precipitation in the state, 1.05 inches, belongs to Regnier in the northwestern panhandle. The northeastern Oklahoma town of Kansas holds the apparent record for the wettest March in the state with a reported 13.37 inches of rain in 1973.

Snow doesn't come every March, but when it does it comes in bunches. Boise City averages 6.6 inches of snow during the month, the greatest average snowfall among the state's reporting locations. Stations in the state's southern half generally average

less than half-an-inch of snow during March. Snowstorms have dropped as much as 20 inches of snow on northern parts of Oklahoma several times. In 1988, Cherokee (29.5 inches), Laverne (27.5 inches), and Waynoka (25 inches) all reported monthly totals of over 2 feet of snow. Gate recorded 27 inches in March 1969 and Vinita noted 24 inches in March 1970. Both the 1988 and 1970 totals are additionally notable as most of the snow was reported on St. Patrick's Day. Beaver reported substantial snow in March 1912 to complete the state's seasonal snowfall record (winter of 1911/12) of 87.3 inches. A late-season snowstorm struck the panhandle in 1926, as Boise City reported 16 inches of snow on the 30th.

Precipitation

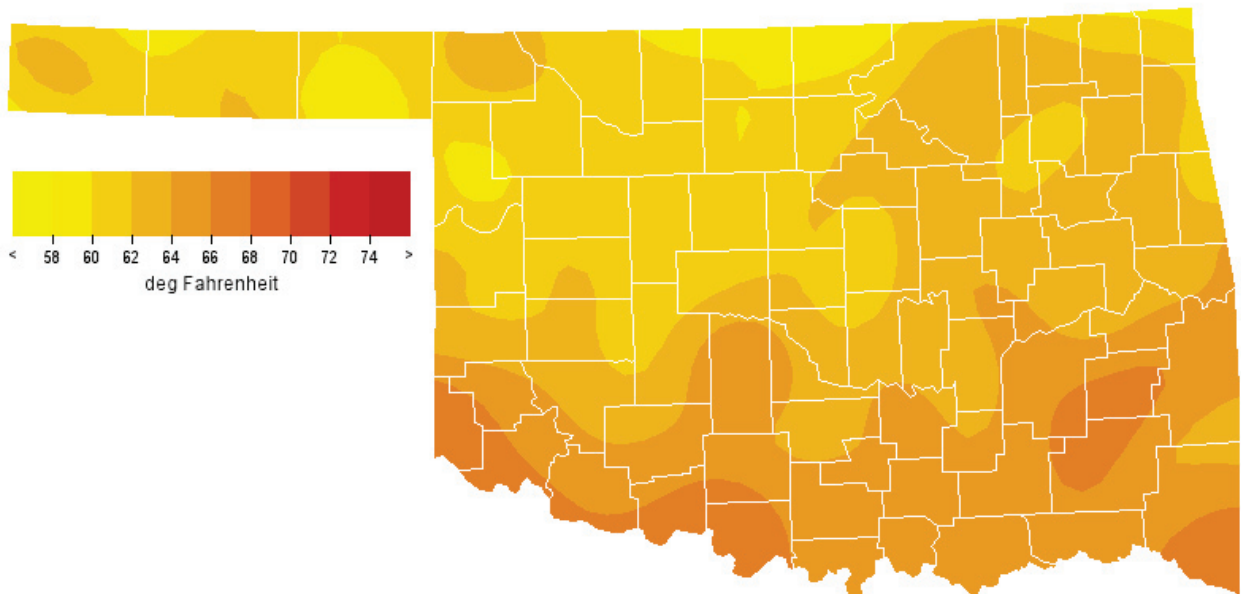
Mean: 3.06 inches
Wettest March: 1973, 7.46 inches
Driest March: 1971, 0.38 inches
Wettest location: Smithville, 5.52 inches
Driest location: Regnier, 1.05 inches
Most recorded: 13.37 inches, Kansas, 1973

The state has averaged 3.7 tornadoes each March since 1950. The actual number has ranged from none (16 times in 55 years, including 2002) to 17 in 1991. Two deadly March tornadoes, each killing 10, were at Gowen on March 13, 1922 and Lenna on March 25, 1948. Two other notable tornadoes struck the Oklahoma City area, including Will Rogers Airport and Tinker Air Force Base, on March 20th and 25th in 1948. The first tornado caused over \$10 million in property damage, much of it to military aircraft. Damage from the second was \$6 million. On the 25th, Air Force meteorologists recognizing the similarity of conditions to those of the 20th, issued what is now accepted to be the first successful and scientific forecast of a tornado.

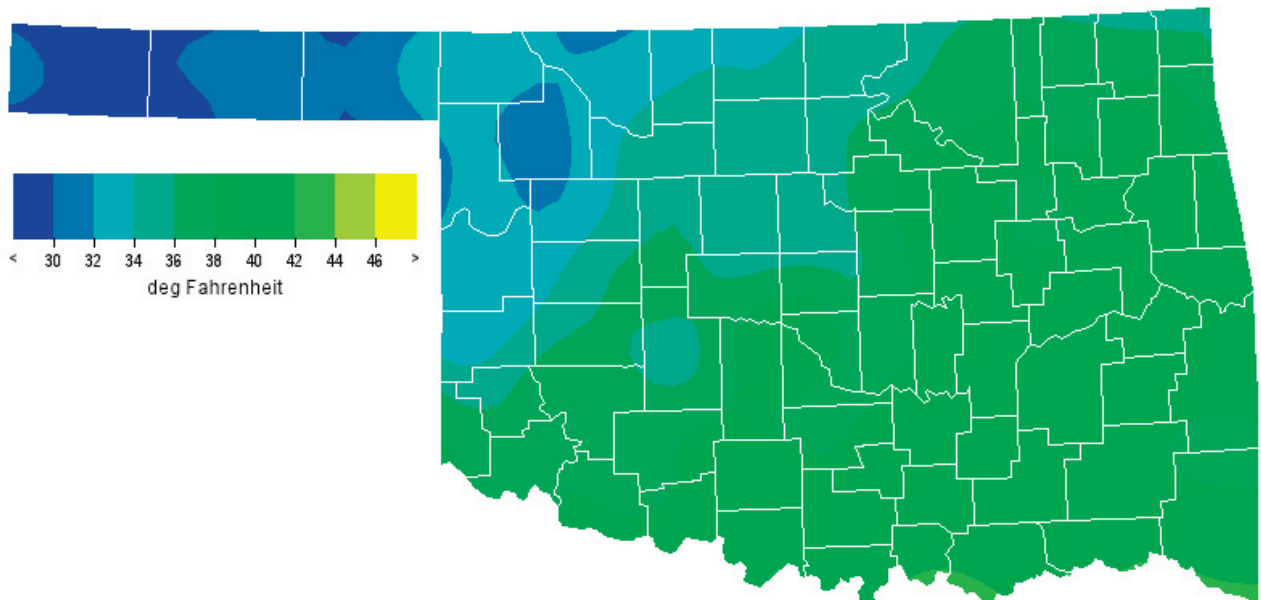
Tornadoes

Average March Tornadoes: 4
Most: 17 (1991)

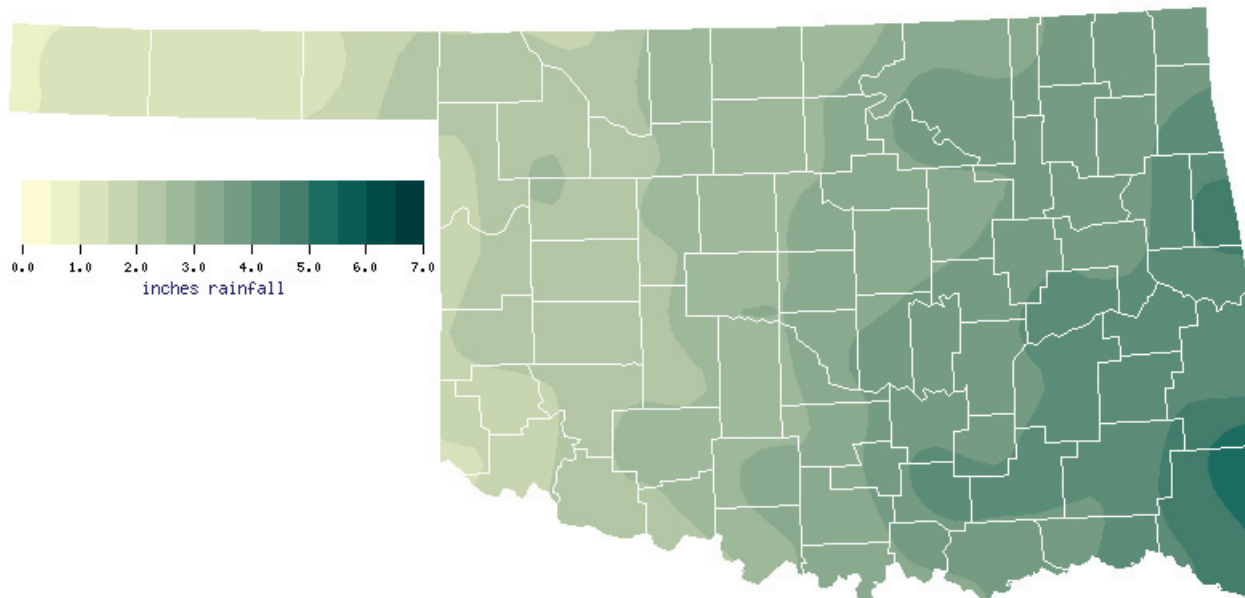
March Normal Monthly Maximum Temperature (1971-2000)



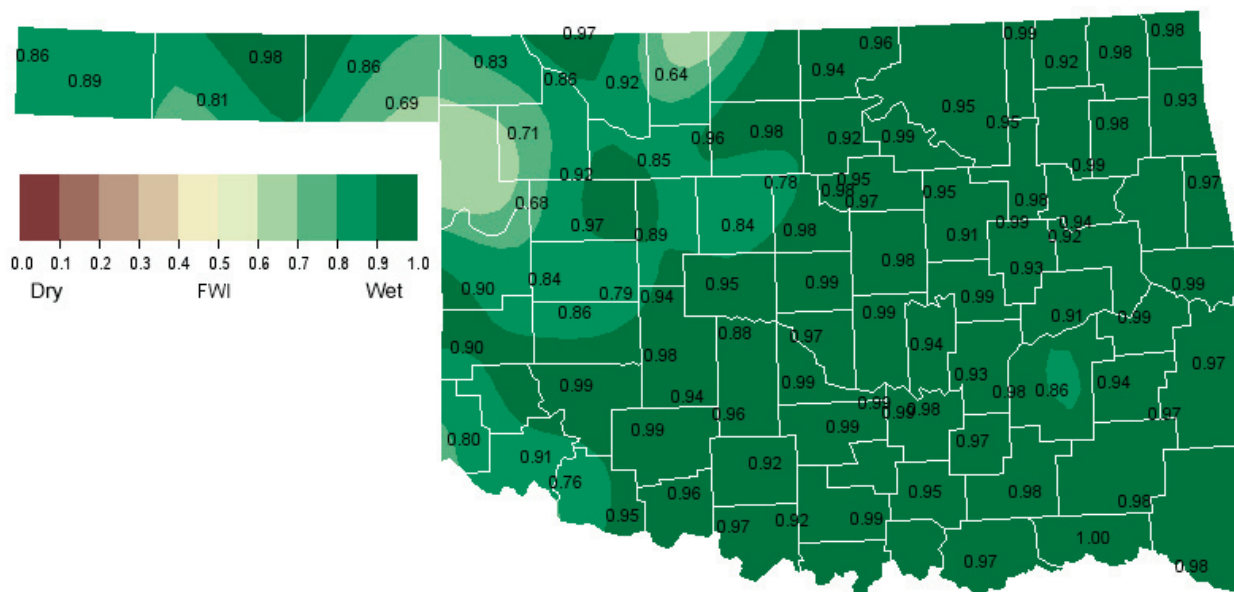
March Normal Monthly Minimum Temperature (1971-2000)



March Normal Precipitation (1971-2000)

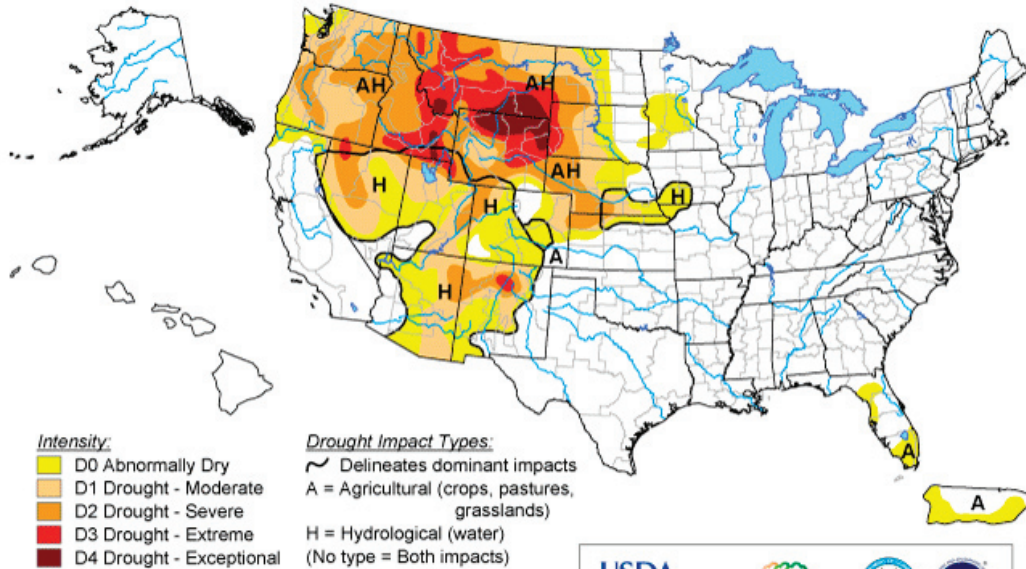


March 1, 2004 Soil Moisture Conditions at 25cm



U.S. Drought Monitor

March 1, 2005
Valid 7 a.m. EST



Intensity:

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

Drought Impact Types:

- Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)
- (No type = Both impacts)

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



Released Thursday, March 3, 2005

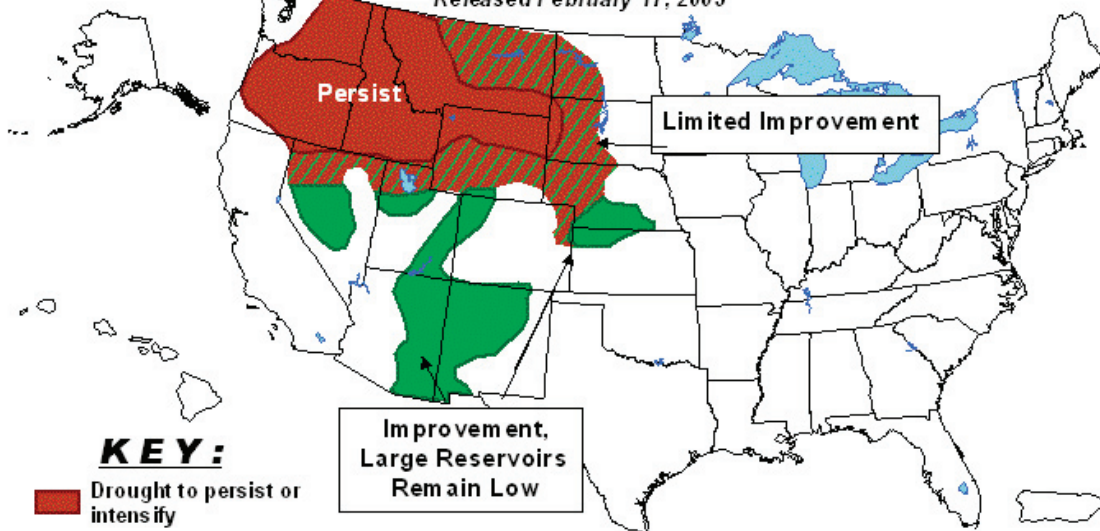
Authors: Richard Heim/Candace Tankersley, NOAA/NESDIS/NCDC

<http://drought.unl.edu/dm>

U.S. Seasonal Drought Outlook

Through May 2005

Released February 17, 2005



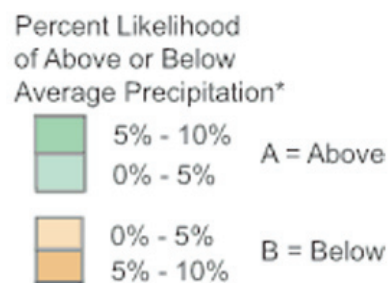
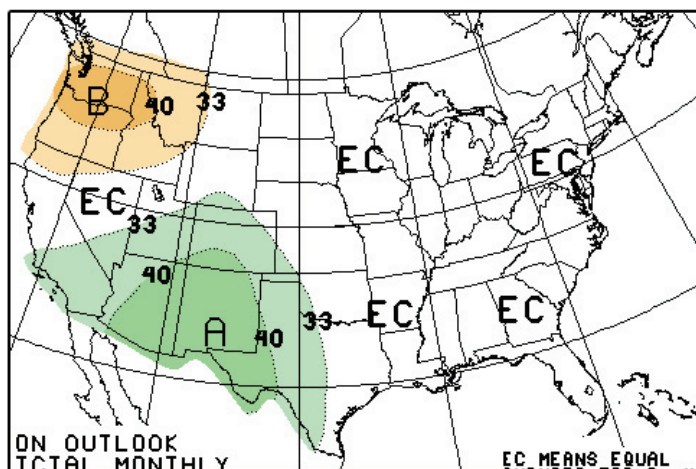
KEY:

- Drought to persist or intensify
- Drought ongoing, some improvement
- Drought likely to improve, impacts ease
- Drought development likely

Improvement,
Large Reservoirs
Remain Low

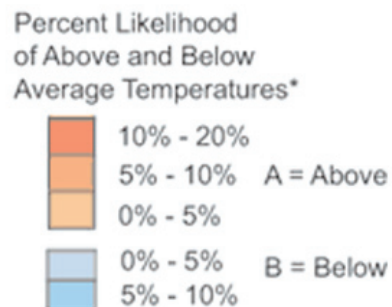
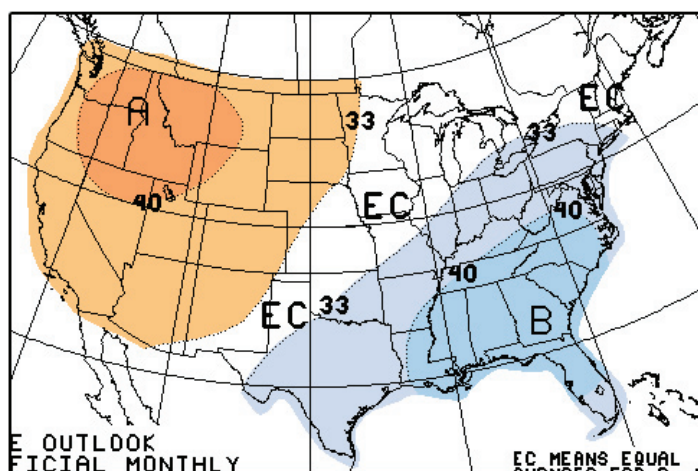
Depicts general, large-scale trends based on subjectively derived probabilities guided by numerous indicators, including short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance, so use caution if using this outlook for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are schematically approximated from the Drought Monitor (D1 to D4). For weekly drought updates, see the latest Drought Monitor map and text. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

March 2005 U.S. Precipitation Forecast



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

March 2005 U.S. Temperature Forecast

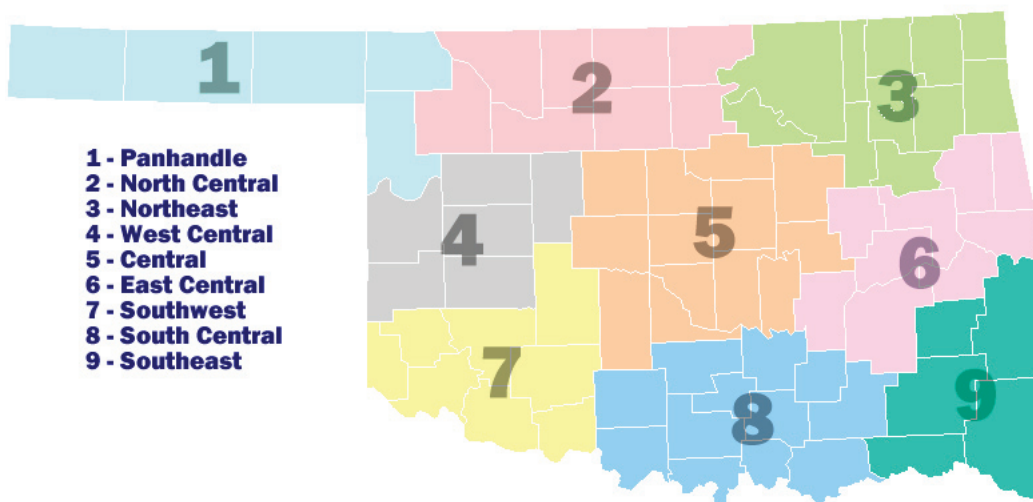


*EC indicates no forecasted anomalies due to lack of model skill.

March Climate Normals

| Climate Division | Max. Temperature (°F) | Min. Temperature (°F) | Avg. Temperature (°F) | Precipitation (inches) |
|------------------|-----------------------|-----------------------|-----------------------|------------------------|
| 1 | 61.5 | 31.6 | 46.5 | 1.58 |
| 2 | 60.4 | 33.7 | 47.1 | 2.67 |
| 3 | 62.5 | 37.9 | 50.2 | 3.61 |
| 4 | 61.7 | 34.7 | 48.2 | 2.29 |
| 5 | 62.6 | 37.6 | 50.2 | 3.15 |
| 6 | 63.3 | 39.6 | 51.5 | 3.99 |
| 7 | 64.5 | 37.0 | 50.8 | 2.29 |
| 8 | 64.9 | 40.0 | 52.5 | 3.50 |
| 9 | 65.5 | 39.9 | 52.7 | 4.45 |
| Statewide | 62.9 | 37.0 | 50.0 | 3.16 |

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: <http://aa.usno.navy.mil/data>

Severe Storm Reports

Storm Prediction Center: <http://spc.noaa.gov/climo/>

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.ocs.ou.edu> or

<http://www.ocs.ou.edu/>

E-mail (ocs@ou.edu) or telephone (405/325-2541)



Oklahoma Climatological Survey is the State
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